



# SINGLE PHASE MOTORS

RIGID BASE • CAPACITOR START • GENERAL PURPOSE



## DRIP-PROOF

| HP   | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/12 | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 1/8  | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 1/6  | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|      | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|      | 1140            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 1/4  | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|      | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|      | 1725            | 48            | 101423            | \$294         | A             | 16                     | 115/208-230 | Man.                   | 2.7                  | 8.87                    |
|      | 1725            | 48            | 100115            | 243           | A             | 16                     | 115/208-230 | Auto.                  | 2.7                  | 8.87                    |
|      | 1725            | S56           | 100000            | 278           | A             | 17                     | 115/208-230 | Auto.                  | 2.7                  | 9.24                    |
|      | 1140            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|      | 1140            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 1/3  | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|      | 3450            | S56           | 100336            | 227           | A             | 26                     | 115/208-230 | None                   | 2.8                  | 8.99                    |
|      | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|      | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|      | 1725            | 48            | 100116            | 278           | A             | 17                     | 115/208-230 | Auto.                  | 3.3                  | 8.87                    |
|      | 1725            | S56           | 100006            | 288           | A             | 18                     | 115/208-230 | None                   | 3.3                  | 9.24                    |
|      | 1725            | S56           | 100588            | 330           | A             | 18                     | 115/208-230 | Man.                   | 3.3                  | 9.24                    |
|      | 1725            | S56           | 100001            | 328           | A             | 18                     | 115/208-230 | Auto.                  | 3.3                  | 9.24                    |
|      | 1140            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|      | 1140            | 56            | 110001            | 414           | A             | 29                     | 115/208-230 | None                   | 3.9                  | 10.88                   |
| 1/2  | 3450            | 48            | 100184            | 251           | A             | 19                     | 115/208-230 | None                   | 3.4                  | 9.62                    |
|      | 3450            | S56           | 100337            | 251           | A             | 20                     | 115/208-230 | None                   | 3.4                  | 9.99                    |
|      | 3450            | S56           | 100052            | 271           | A             | 21                     | 115/208-230 | Man.                   | 3.4                  | 9.99                    |
|      | 1725            | 48            | 100338            | 351           | A             | 20                     | 115/208-230 | None                   | 4.4                  | 9.62                    |
|      | 1725            | S56           | 100007            | 317           | A             | 21                     | 115/208-230 | None                   | 4.4                  | 9.99                    |
|      | 1725            | S56           | 100004            | 388           | A             | 21                     | 115/208-230 | Man.                   | 4.4                  | 9.99                    |
|      | 1725            | S56           | 100002            | 369           | A             | 20                     | 115/208-230 | Auto.                  | 4.4                  | 9.99                    |
|      | 1140            | 56            | 110002            | 626           | A             | 32                     | 115/208-230 | None                   | 5.0                  | 11.38                   |
| 3/4  | 3450            | S56           | 100340            | 306           | A             | 24                     | 115/208-230 | None                   | 4.9                  | 10.49                   |
|      | 3450            | S56           | 100053            | 342           | A             | 24                     | 115/208-230 | Man.                   | 4.9                  | 10.49                   |
|      | 1725            | S56           | 100008            | 392           | A             | 26                     | 115/208-230 | None                   | 5.4                  | 10.99                   |
|      | 1725            | S56           | 100005            | 463           | A             | 25                     | 115/208-230 | Man.                   | 5.4                  | 10.99                   |
|      | 1725            | S56           | 101544☆           | 495           | A             | 28                     | 115/208-230 | Man.                   | 4.0                  | 11.24                   |
|      | 1725            | S56           | 100003            | 452           | A             | 25                     | 115/208-230 | Auto.                  | 5.4                  | 10.99                   |
|      | 1140            | 56H           | 110003□           | 705           | A             | 44                     | 115/208-230 | None                   | 6.4                  | 12.88                   |
| 1    | 3450            | 56            | 110360            | 322           | A             | 28                     | 115/208-230 | None                   | 6.0                  | 10.84                   |
|      | 3450            | 56            | 110097            | 355           | A             | 28                     | 115/208-230 | Man.                   | 6.0                  | 10.84                   |
|      | 1725            | 56            | 110004            | 427           | A             | 28                     | 115/208-230 | None                   | 6.4                  | 10.88                   |
|      | 1725            | 56            | 110167            | 501           | A             | 30                     | 115/208-230 | Man.                   | 6.4                  | 10.88                   |
|      | 1725            | 56            | 113630☆           | 537           | A             | 31                     | 115/208-230 | Man.                   | 5.3                  | 10.88                   |
|      | 1725            | 56            | 110000            | 482           | A             | 28                     | 115/208-230 | Auto.                  | 6.4                  | 10.88                   |
|      | 1725            | 143T          | 120044            | 477           | B             | 38                     | 115/208-230 | None                   | 6.4                  | 11.13                   |
|      | 1725            | 143T          | 120003            | 501           | B             | 33                     | 115/208-230 | Man.                   | 6.4                  | 11.13                   |
|      | 1725            | 143T          | 120000            | 500           | B             | 32                     | 115/208-230 | Auto.                  | 6.4                  | 11.13                   |
|      | 1140            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |

## TOTALLY ENCLOSED FAN COOLED (TEFC)

| NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 42            | 092111            | \$251         | A             | 14                     | 115/208-230 | None                   | 1.1                  | 8.94                    |
| 42            | 092114            | 260           | A             | 16                     | 115/208-230 | None                   | 1.6                  | 9.44                    |
| 42            | 092116            | 285           | A             | 17                     | 115/208-230 | None                   | 2.1                  | 9.44                    |
| 48            | 102012            | 283           | A             | 17                     | 115/208-230 | None                   | 2.0                  | 9.06                    |
| 48            | 102013            | 402           | A             | 23                     | 115/208-230 | None                   | 1.9                  | 10.31                   |
| 42            | 092112            | 289           | A             | 19                     | 115/208-230 | None                   | 2.1                  | 9.94                    |
| 48            | 102014            | 278           | A             | 20                     | 115/208-230 | None                   | 2.7                  | 9.06                    |
| 48            | 101446♣           | 320           | A             | 18                     | 115/208-230 | Man.                   | 2.7                  | 9.06                    |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 48            | 102015            | 428           | A             | 23                     | 115/208-230 | None                   | 3.2                  | 11.31                   |
| 56            | 114617            | 452           | A             | 30                     | 115/208-230 | None                   | 2.8                  | 11.81                   |
| 48            | 102016            | 266           | A             | 21                     | 115/208-230 | None                   | 2.8                  | 9.06                    |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 48            | 100955            | 308           | A             | 19                     | 115/208-230 | None                   | 3.3                  | 9.56                    |
| 48            | 102018            | 354           | A             | 20                     | 115/208-230 | Man.                   | 3.3                  | 9.56                    |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| S56           | 102931♣           | 306           | A             | 23                     | 115/208-230 | None                   | 3.1                  | 10.44                   |
| S56           | 102933            | 350           | A             | 23                     | 115/208-230 | Man.                   | 3.1                  | 10.44                   |
| S56           | 102932            | 361           | A             | 23                     | 115/208-230 | Auto.                  | 3.1                  | 10.44                   |
| 48            | 102019            | 472           | A             | 28                     | 115/208-230 | None                   | 3.1                  | 11.56                   |
| 56            | 110009            | 472           | A             | 34                     | 115/208-230 | None                   | 3.6                  | 12.31                   |
| 48            | 102020            | 304           | A             | 27                     | 115/208-230 | None                   | 3.5                  | 9.31                    |
| S56           | 102905            | 302           | A             | 22                     | 115/208-230 | None                   | 3.5                  | 9.94                    |
| S56           | 102904            | 323           | A             | 25                     | 115/208-230 | Man.                   | 3.5                  | 9.94                    |
| 48            | 100956            | 354           | A             | 22                     | 115/208-230 | None                   | 4.0                  | 10.31                   |
| S56           | 102906♣           | 350           | A             | 22                     | 115/208-230 | None                   | 4.0                  | 10.69                   |
| S56           | 102909♣           | 410           | A             | 22                     | 115/208-230 | Man.                   | 4.0                  | 10.69                   |
| S56           | 102908♣           | 420           | A             | 24.5                   | 115/208-230 | Auto.                  | 4.0                  | 10.69                   |
| 56            | 110011            | 672           | A             | 38                     | 115/208-230 | None                   | 4.9                  | 12.81                   |
| 56            | 110276            | 339           | A             | 26                     | 115/208-230 | None                   | 5.0                  | 11.31                   |
| 56            | 110108            | 360           | A             | 26                     | 115/208-230 | Man.                   | 5.0                  | 11.31                   |
| 56            | 110013♣           | 420           | A             | 29                     | 115/208-230 | None                   | 5.4                  | 11.31                   |
| 56            | 110022♣           | 490           | A             | 29                     | 115/208-230 | Man.                   | 5.4                  | 11.31                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 56            | 110017♣           | 512           | A             | 26                     | 115/208-230 | Auto.                  | 5.4                  | 11.31                   |
| 56H           | 110400☆□          | 777           | A             | 43                     | 115/208-230 | None                   | 5.3                  | 13.31                   |
| 56            | 110059            | 395           | A             | 28                     | 115/208-230 | None                   | 6.0                  | 11.81                   |
| 56            | 110142            | 442           | A             | 28                     | 115/208-230 | Man.                   | 6.0                  | 11.81                   |
| 56            | 110209♣           | 481           | A             | 30                     | 115/208-230 | None                   | 7.0                  | 11.81                   |
| 56            | 110023♣           | 555           | A             | 29                     | 115/208-230 | Man.                   | 6.4                  | 11.81                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 56            | 110018♣           | 573           | A             | 29                     | 115/208-230 | Auto.                  | 6.4                  | 12.31                   |
| 143T          | 120025♣           | 530           | B             | 34                     | 115/208-230 | None                   | 6.4                  | 12.75                   |
| 143T          | 120008♣           | 555           | B             | 31                     | 115/208-230 | Man.                   | 6.4                  | 12.75                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 145T          | 120043☆           | 890           | B             | 49                     | 115/230     | None                   | 6.7                  | 14.25                   |

Except as noted by ♣ motors on this page have NEMA Service Factors—see page 308 for details.

□ Combination 56H base motors have mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 56 shaft.

☆ Capacitor start/capacitor run design for reduced amperage, others are capacitor start/induction run.

# SINGLE PHASE MOTORS

## RIGID BASE • CAPACITOR START • GENERAL PURPOSE



Rigid Base

### DRIP-PROOF

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1½ | 3450            | 56            | <b>110361</b>     | \$456         | A             | 29                     | 115/208-230 | None                   | 8.2                  | 10.84                   |
|    | 3450            | 56            | <b>110110</b>     | 463           | A             | 28                     | 115/208-230 | Man.                   | 8.2                  | 10.84                   |
|    | 3450            | 56            | <b>113631</b> ☆   | 470           | A             | 36                     | 115/208-230 | Man.                   | 6.2                  | 11.34                   |
|    | 3450            | 143T          | <b>120107</b>     | 456           | B             | 32                     | 115/208-230 | None                   | 8.2                  | 11.28                   |
|    | 1725            | 56H           | <b>110005</b> ☆□  | 555           | A             | 37                     | 115/208-230 | None                   | 8.6                  | 11.84                   |
|    | 1725            | 56H           | <b>110006</b> ☆□  | 604           | A             | 38                     | 115/208-230 | Man.                   | 8.6                  | 11.84                   |
|    | 1725            | 56H           | <b>113266</b> ☆□  | 626           | A             | 42                     | 115/208-230 | Man.                   | 6.7                  | 12.38                   |
|    | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|    | 1725            | 145T          | <b>120042</b> ☆   | 527           | B             | 38                     | 115/208-230 | None                   | 8.6                  | 12.28                   |
|    | 1725            | 145T          | <b>120004</b> ☆   | 669           | B             | 40                     | 115/208-230 | Man.                   | 8.6                  | 12.28                   |
|    | 1725            | 145T          | <b>120001</b> ☆   | 669           | B             | 40                     | 115/208-230 | Auto.                  | 8.6                  | 12.28                   |
|    | 1140            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 2  | 3450            | 56            | <b>110363</b>     | 604           | A             | 37                     | 115/208-230 | None                   | 10.0                 | 11.84                   |
|    | 3450            | 56            | <b>110362</b>     | 630           | A             | 38                     | 115/208-230 | Man.                   | 10.0                 | 12.34                   |
|    | 3450            | 56            | <b>113632</b> ☆   | 634           | A             | 38                     | 115/208-230 | Man.                   | 8.6                  | 11.34                   |
|    | 3450            | 145T          | <b>120106</b>     | 650           | B             | 40                     | 115/208-230 | None                   | 10.0                 | 12.28                   |
|    | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|    | 1725            | 56H           | <b>116704</b> ☆□  | 669           | A             | 45                     | 115/208-230 | Man.                   | 8.6                  | 12.88                   |
|    | 1725            | 145T          | <b>120067</b> ☆   | 628           | B             | 42                     | 115/230     | None                   | 10.5                 | 13.28                   |
|    | 1725            | 145T          | <b>120879</b> ☆   | 703           | A             | 51                     | 115/208-230 | Man.                   | 8.6                  | 13.31                   |
|    | 1725            | 182T          | <b>131515</b>     | 650           | B             | 56                     | 115/208-230 | None                   | 12.4                 | 13.19                   |
|    | 1725            | 182T          | <b>131536</b>     | 696           | B             | 63                     | 115/208-230 | Man.                   | 12.4                 | 13.19                   |
|    | 1725            | 182T          | <b>131535</b>     | 692           | B             | 63                     | 115/208-230 | Auto.                  | 12.4                 | 13.19                   |
|    | 1140            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 3  | 3450            | 56H           | <b>116706</b> ☆□  | 674           | A             | 39                     | 230         | Man.                   | 15.0                 | 12.38                   |
|    | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|    | 3450            | 182T          | <b>131636</b>     | 748           | B             | 74                     | 115/208-230 | None                   | 14.0                 | 14.18                   |
|    | 1725            | 184T          | <b>131534</b>     | 704           | B             | 69                     | 115/230     | None                   | 16.9                 | 14.19                   |
|    | 1725            | 184T          | <b>131561</b>     | 833           | B             | 76                     | 115/230     | Man.                   | 16.9                 | 14.19                   |
|    | 1725            | 184T          | <b>131851</b> ☆   | 832           | B             | 72                     | 208-230     | Man.                   | 13.7                 | 15.22                   |
|    | 1725            | 184T          | <b>131530</b>     | 833           | B             | 69                     | 115/230     | Auto.                  | 16.9                 | 14.19                   |
|    | ...             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|    | 5               | 56H           | <b>116708</b> ☆□  | 689           | A             | 45                     | 230         | Man.                   | 20.8                 | 13.34                   |
|    | 3450            | 184T          | <b>131616</b>     | 890           | B             | 84                     | 208-230     | None                   | 22.0                 | 14.69                   |
|    | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|    | 1725            | 184T          | <b>131537</b> ☆   | 845           | B             | 83                     | 208-230     | None                   | 21.0                 | 14.69                   |
| 5  | 1725            | 184T          | <b>131560</b> ☆   | 845           | B             | 82                     | 208         | None                   | 23.2                 | 14.69                   |
|    | 1725            | 184T          | <b>131622</b> ☆   | 1010          | B             | 82                     | 208-230     | Man.                   | 21.0                 | 14.69                   |
|    | ...             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|    | 7½              | 3450          | <b>132044</b> ☆   | 814           | B             | 110                    | 208-230     | Tstat                  | 31.0                 | 16.69                   |
|    | 3450            | 213T          | <b>140680</b> ☆   | 1375          | B             | 112                    | 208-230     | None                   | 29.5                 | 16.55                   |
|    | 1740            | 215T          | <b>140155</b> ☆   | 1200          | B             | 113                    | 230         | None                   | 36.0                 | 17.26                   |
|    | ...             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|    | 10              | 3450          | <b>140681</b> ☆   | 1738          | B             | 135                    | 208-230     | None                   | 37.0                 | 18.05                   |
|    | 1740            | 215TZ         | <b>140311</b> ☆✓  | 1754          | B             | 140                    | 230         | None                   | 43.0                 | 19.76                   |
|    | ...             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|    | ...             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|    | ...             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |

### TOTALLY ENCLOSED FAN COOLED (TEFC)

| NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 56            | <b>110094</b>     | \$518         | A             | 31.5                   | 115/208-230 | None                   | 8.5                  | 12.31                   |
| 56            | <b>110109</b>     | 607           | A             | 31                     | 115/208-230 | Man.                   | 8.5                  | 12.31                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 143T          | <b>120130</b>     | 518           | B             | 36                     | 115/208-230 | None                   | 8.5                  | 13.25                   |
| 56H           | <b>110253</b> ☆□  | 547           | A             | 38                     | 115/208-230 | None                   | 8.6                  | 12.81                   |
| 56H           | <b>113333</b> ☆□  | 628           | A             | 38                     | 115/208-230 | Man.                   | 8.6                  | 12.81                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 56H           | <b>110019</b> ☆□  | 681           | A             | 38                     | 115/208-230 | Auto.                  | 8.6                  | 12.81                   |
| 145T          | <b>120026</b> ☆   | 547           | B             | 44                     | 115/208-230 | None                   | 8.6                  | 13.25                   |
| 145T          | <b>120009</b> ☆   | 628           | B             | 42                     | 115/208-230 | Man.                   | 8.6                  | 13.25                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 184T          | <b>131526</b>     | 1443          | B             | 69                     | 115/208-230 | None                   | 11.0                 | 15.46                   |
| 56H           | <b>110352</b> ☆□† | 676           | A             | 41                     | 115/208-230 | None                   | 10.0                 | 13.31                   |
| 56H           | <b>110402</b> ☆□† | 709           | A             | 41                     | 115/208-230 | Man.                   | 10.0                 | 13.31                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 145T          | <b>120036</b> ☆†  | 681           | B             | 42                     | 115/208-230 | None                   | 10.0                 | 13.75                   |
| 145T          | <b>120395</b> ☆†  | 717           | B             | 44                     | 115/208-230 | Man.                   | 10.0                 | 13.75                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 145T          | <b>121507</b> †☆  | 893           | B             | 48                     | 115/208-230 | None                   | 9.2                  | 13.75                   |
| 145T          | <b>120867</b> ☆   | 902           | B             | 48                     | 115/208-230 | Man.                   | 9.2                  | 13.75                   |
| 182T          | <b>131509</b>     | 784           | B             | 65                     | 115/208-230 | None                   | 12.4                 | 14.46                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 215T          | <b>140747</b> ☆   | 2140          | B             | 118                    | 115/208-230 | None                   | 11.2                 | 18.71                   |
| 56H           | <b>116705</b> ☆□  | 739           | A             | 53                     | 208-230     | Man.                   | 14.0                 | 13.81                   |
| 145T          | <b>120341</b> ☆   | 735           | B             | 46                     | 230         | None                   | 13.0                 | 14.25                   |
| 182T          | <b>131637</b>     | 809           | B             | 78                     | 115/208-230 | None                   | 13.4                 | 14.96                   |
| 184T          | <b>131533</b>     | 925           | B             | 83                     | 115/230     | None                   | 16.8                 | 16.46                   |
| 184T          | <b>131855</b> ☆   | 999           | B             | 88                     | 230         | Man.                   | 13.6                 | 14.96                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 184T          | <b>131549</b> ☆   | 1119          | B             | 93                     | 230         | None                   | 19.8                 | 16.96                   |
| 184T          | <b>132042</b> ☆   | 1248          | B             | 103                    | 230         | Man.                   | 19.8                 | 16.97                   |
| 184T          | <b>131538</b> ☆   | 1125          | B             | 95                     | 230         | None                   | 23.0                 | 17.46                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 184T          | <b>131856</b> ☆   | 1161          | B             | 95                     | 230         | Man.                   | 21.0                 | 15.96                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 213T          | <b>140684</b> ☆   | 1438          | B             | 120                    | 208-230     | None                   | 32.0                 | 18.34                   |
| 215T          | <b>140120</b> ☆   | 1459          | B             | 169                    | 230         | None                   | 33.6                 | 20.21                   |
| 215T          | <b>140685</b> ☆   | 1764          | B             | 138                    | 208-230     | None                   | 41.5                 | 19.84                   |
| 215T          | <b>140581</b> ☆   | 1675          | B             | 202                    | 230         | None                   | 40.0                 | 20.71                   |

- Combination 56H base motors have mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 56 shaft.
- ☆ Capacitor start/capacitor run design for reduced amperage, others are capacitor start/induction run.
- ✓ Motor with standard diameter shaft, 1.0" longer than standard.
- † Class F insulated.
- ✦ These totally enclosed single phase motors have 1.15 Service Factors.

All 180 and 210 frame Rolled Steel motors have Class F Insulation.



# THREE PHASE MOTORS

## RIGID BASE • GENERAL PURPOSE



### DRIP-PROOF

| HP    | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1/4   | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|       | 1725            | S56           | <b>100027</b>     | \$246         | A             | 16                     | 208-230/460 | 1.4                  | 58.0              | 9.24                    |
| 1/3   | 3450            | 48            | <b>101447</b>     | 251           | A             | 14                     | 208-230/460 | 1.4                  | 68.0              | 9.00                    |
|       | 1725            | 48            | <b>100446</b>     | 266           | A             | 17                     | 208-230/460 | 1.6                  | 64.3              | 9.12                    |
|       | 1725            | S56           | <b>100028</b>     | 260           | A             | 18                     | 208-230/460 | 1.6                  | 64.3              | 9.49                    |
|       | 1725            | S56           | <b>103017</b> [W] | 348           | A             | 23                     | 208-230/460 | 1.3                  | 77.0              | 10.24                   |
|       | 1140            | 56            | <b>110425</b>     | 422           | A             | 23                     | 208-230/460 | 1.6                  | 65.0              | 9.88                    |
| 1/2   | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|       | 3450            | S56           | <b>101448</b>     | 266           | A             | 17                     | 208-230/460 | 1.8                  | 69.0              | 9.38                    |
|       | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|       | 1725            | S56           | <b>100029</b>     | 297           | A             | 20                     | 208-230/460 | 2.0                  | 68.0              | 9.99                    |
|       | 1725            | S56           | <b>103018</b> [W] | 373           | A             | 26                     | 208-230/460 | 1.8                  | 77.0              | 10.74                   |
|       | 1140            | 56            | <b>110027</b>     | 464           | A             | 22                     | 208-230/460 | 2.8                  | 66.0              | 10.38                   |
|       | 850             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 3/4   | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|       | 3450            | S56           | <b>101449</b>     | 315           | A             | 20                     | 208-230/460 | 2.4                  | 79.0              | 9.88                    |
|       | 1725            | S56           | <b>100030</b>     | 332           | A             | 24                     | 208-230/460 | 2.8                  | 75.0              | 10.49                   |
|       | 1725            | 56            | <b>116738</b> [W] | 379           | A             | 30                     | 208-230/460 | 2.4                  | 81.5              | 10.86                   |
|       | 1140            | 56            | <b>110028</b>     | 501           | A             | 17                     | 208-230/460 | 3.4                  | 75.5              | 10.88                   |
|       | 1140            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|       | 850             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 1     | 3450            | 56            | <b>110426</b>     | 360           | A             | 22                     | 208-230/460 | 3.2                  | 77.0              | 9.84                    |
|       | 3450            | 56            | <b>116128</b> [W] | 456           | A             | 24                     | 208-230/460 | 2.8                  | 80.0              | 10.18                   |
|       | 1725            | 56            | <b>110029</b>     | 374           | A             | 22                     | 208-230/460 | 4.2                  | 78.5              | 10.38                   |
|       | 1725            | 56            | <b>116752</b> [W] | 520           | A             | 36                     | 208-230/460 | 3.2                  | 85.5              | 11.68                   |
|       | 1725            | 56HZ          | <b>115827</b> *   | 358           | A             | 24                     | 208-230/460 | 4.2                  | 78.5              | 11.13                   |
|       | 1725            | 143T          | <b>G120010</b>    | 380           | B             | 30                     | 208-230/460 | 3.1                  | 82.5              | 11.28                   |
|       | 1725            | 143T          | <b>121003</b> [W] | 520           | B             | 36                     | 208-230/460 | 3.2                  | 85.5              | 12.12                   |
|       | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|       | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|       | 1140            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|       | 1140            | 145T          | <b>G120089</b>    | 525           | B             | 35                     | 208-230/460 | 3.6                  | 80.0              | 12.28                   |
|       | 1140            | 145T          | <b>121517</b>     | 593           | B             | 41                     | 208-230/460 | 3.8                  | 82.5              | 12.62                   |
|       | 1140            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|       | 1140            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|       | 850             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 1 1/2 | 3450            | 56            | <b>110429</b>     | 404           | A             | 29                     | 208-230/460 | 4.2                  | 81.5              | 10.84                   |
|       | 3450            | 56            | <b>116753</b> [W] | 508           | A             | 36                     | 208-230/460 | 4.0                  | 84.0              | 11.84                   |
|       | 3450            | 143T          | <b>G120103</b>    | 430           | B             | 35                     | 208-230/460 | 4.0                  | 82.5              | 11.78                   |
|       | 3450            | 143T          | <b>121514</b> [W] | 508           | B             | 36                     | 208-230/460 | 4.0                  | 84.0              | 12.28                   |
|       | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|       | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|       | 1725            | 56            | <b>110430</b>     | 432           | A             | 27                     | 208-230/460 | 5.6                  | 78.5              | 10.88                   |
|       | 1725            | 56            | <b>111309</b> ♦   | 478           | A             | 33                     | 208-230/460 | 5.6                  | 78.5              | 10.88                   |
|       | 1725            | 56            | <b>116754</b> [W] | 543           | A             | 35                     | 208-230/460 | 4.8                  | 86.5              | 12.22                   |
|       | 1725            | 56HZ          | <b>115825</b> *   | 383           | A             | 34                     | 208-230/460 | 5.6                  | 78.5              | 11.13                   |
|       | 1725            | 145T          | <b>G120011</b>    | 404           | B             | 37                     | 208-230/460 | 4.4                  | 84.0              | 12.13                   |
|       | 1725            | 145T          | <b>121004</b> [W] | 543           | B             | 35                     | 208-230/460 | 4.8                  | 86.5              | 12.62                   |
|       | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|       | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|       | 1140            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|       | 1140            | 182T          | <b>G130010</b>    | 616           | B             | 54                     | 208-230/460 | 5.6                  | 84.0              | 13.69                   |
|       | 1170            | 182T          | <b>131971</b> [W] | 713           | B             | 82                     | 208-230/460 | 5.6                  | 86.5              | 14.69                   |
|       | 1170            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|       | 850             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |

□ Combination 56H base motors have mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 56 shaft.

♦ 1.0 Service Factor.

♦ Automatic reset overload protection. Do not use with variable frequency drives.

[W] Premium efficiency WATTSaver® Motors. See page 15 for details.

\* 56HZ motors have mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 143-5T shaft.

All 180 and 210 frame Rolled Steel motors have Class F Insulation.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION



### TOTALLY ENCLOSED FAN COOLED (TEFC)

| NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 48            | <b>101646</b>     | \$269         | A             | 18                     | 208-230/460 | 1.4                  | 58.0              | 9.31                    |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 48            | <b>102684</b>     | 268           | A             | 18                     | 208-230/460 | 1.4                  | 68.0              | 9.93                    |
| 48            | <b>101647</b>     | 322           | A             | 21                     | 208-230/460 | 1.6                  | 64.3              | 9.31                    |
| S56           | <b>101079</b>     | 296           | A             | 22                     | 208-230/460 | 1.6                  | 64.3              | 9.69                    |
| S56           | <b>103019</b> [W] | 432           | A             | 24                     | 208-230/460 | 1.3                  | 77.0              | 10.19                   |
| 56            | <b>110441</b>     | 465           | A             | 23                     | 208-230/460 | 1.6                  | 65.0              | 10.81                   |
| 48            | <b>100905</b>     | 312           | A             | 18                     | 208-230/460 | 1.8                  | 69.0              | 9.94                    |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 48            | <b>100961</b> ♣   | 378           | A             | 21                     | 208-230/460 | 2.0                  | 73.0              | 9.56                    |
| S56           | <b>100913</b>     | 339           | A             | 24                     | 208-230/460 | 2.0                  | 73.0              | 9.94                    |
| S56           | <b>103020</b> [W] | 458           | A             | 27                     | 208-230/460 | 1.8                  | 77.0              | 10.69                   |
| 56            | <b>110353</b>     | 501           | A             | 26                     | 208-230/460 | 2.4                  | 70.0              | 11.31                   |
| 56            | <b>114618</b>     | 738           | A             | 31                     | 208-230/460 | 2.4                  | 69.0              | 11.81                   |
| 48            | <b>100960</b> ♣   | 343           | A             | 21                     | 208-230/460 | 2.4                  | 79.0              | 10.44                   |
| 56            | <b>110313</b>     | 343           | A             | 22                     | 208-230/460 | 2.4                  | 75.5              | 10.81                   |
| 56            | <b>110034</b>     | 361           | A             | 22                     | 208-230/460 | 2.8                  | 77.0              | 10.81                   |
| 56            | <b>116739</b> [W] | 482           | A             | 31                     | 208-230/460 | 2.4                  | 81.5              | 11.31                   |
| 56            | <b>110275</b>     | 501           | A             | 33                     | 208-230/460 | 3.0                  | 75.5              | 11.81                   |
| 143T          | <b>121009</b>     | 512           | B             | 34                     | 208-230/460 | 3.0                  | 75.5              | 12.75                   |
| 145T          | <b>121199</b>     | 851           | B             | 21                     | 208-230/460 | 3.1                  | 70.0              | 12.75                   |
| 56            | <b>110145</b>     | 402           | A             | 24                     | 208-230/460 | 3.2                  | 77.0              | 10.81                   |
| 56            | <b>116129</b> [W] | 532           | A             | 24                     | 208-230/460 | 2.8                  | 80.0              | 11.31                   |
| 56            | <b>110035</b>     | 378           | A             | 30                     | 208-230/460 | 3.8                  | 77.0              | 11.31                   |
| 56            | <b>116757</b> [W] | 592           | A             | 32                     | 208-230/460 | 3.2                  | 85.5              | 12.81                   |
| 56HZ          | <b>115830</b> *   | 400           | A             | 31                     | 208-230/460 | 3.8                  | 77.0              | 12.75                   |
| 143T          | <b>G120014</b>    | 427           | B             | 31                     | 208-230/460 | 3.1                  | 82.5              | 12.75                   |
| 143T          | <b>120921</b> [W] | 592           | B             | 32                     | 208-230/460 | 3.2                  | 85.5              | 13.25                   |
| 143T          | <b>G151696</b>    | 457           | B             | 49                     | 208-230/460 | 3.2                  | 84.0              | 13.46                   |
| 143T          | <b>171640</b>     | 635           | B             | 50                     | 208-230/460 | 3.2                  | 85.5              | 13.46                   |
| 56            | <b>113933</b>     | 519           | A             | 35                     | 208-230/460 | 4.0                  | 77.0              | 12.31                   |
| 145T          | <b>G120087</b>    | 566           | B             | 45                     | 208-230/460 | 3.6                  | 80.0              | 13.25                   |
| 145T          | <b>121520</b> [W] | 700           | B             | 47                     | 208-230/460 | 3.8                  | 82.5              | 13.75                   |
| 145T          | <b>G151699</b>    | 606           | B             | 58                     | 208-230/460 | 3.8                  | 82.5              | 13.46                   |
| 145T          | <b>171643</b>     | 747           | B             | 58                     | 208-230/460 | 3.8                  | 82.5              | 13.46                   |
| 182T          | <b>131478</b>     | 1049          | B             | 57                     | 230/460     | 4.2                  | 74.0              | 12.96                   |
| 56            | <b>110745</b> ♣   | 440           | A             | 30                     | 208-230/460 | 4.2                  | 81.5              | 11.81                   |
| 56            | <b>116758</b> [W] | 604           | A             | 33                     | 208-230/460 | 4.0                  | 84.0              | 12.81                   |
| 145T          | <b>G120086</b>    | 471           | B             | 45                     | 208-230/460 | 4.0                  | 82.5              | 12.76                   |
| 143T          | <b>121518</b> [W] | 604           | B             | 33                     | 208-230/460 | 4.0                  | 84.0              | 13.25                   |
| 143T          | <b>G151698</b>    | 505           | B             | 45                     | 208-230/460 | 4.0                  | 82.5              | 13.46                   |
| 143T          | <b>171642</b>     | 647           | B             | 49                     | 208-230/460 | 4.0                  | 84.0              | 13.46                   |
| 56            | <b>110444</b>     | 425           | A             | 30                     | 208-230/460 | 5.0                  | 78.5              | 11.81                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 56            | <b>116759</b> [W] | 604           | A             | 34                     | 208-230/460 | 4.8                  | 86.5              | 13.31                   |
| 56HZ          | <b>115829</b> *   | 404           | A             | 37                     | 208-230/460 | 5.0                  | 78.5              | 12.75                   |
| 145T          | <b>G120015</b>    | 431           | B             | 36                     | 208-230/460 | 4.4                  | 84.0              | 12.75                   |
| 145T          | <b>120922</b> [W] | 614           | B             | 34                     | 208-230/460 | 4.8                  | 86.5              | 13.75                   |
| 145T          | <b>G151702</b>    | 462           | B             | 53                     | 208-230/460 | 4.5                  | 85.5              | 13.46                   |
| 145T          | <b>171646</b>     | 655           | B             | 54                     | 208-230/460 | 4.8                  | 86.5              | 13.46                   |
| 56H           | <b>114930</b> □   | 597           | A             | 48                     | 208-230/460 | 5.7                  | 77.0              | 13.31                   |
| 56HZ          | <b>116591</b> *   | 597           | A             | 45                     | 208-230/460 | 5.7                  | 77.0              | 13.75                   |
| 182T          | <b>G130015</b>    | 657           | B             | 82                     | 208-230/460 | 5.6                  | 85.5              | 14.96                   |
| 182T          | <b>131980</b> [W] | 1019          | B             | 89                     | 208-230/460 | 5.6                  | 87.5              | 15.96                   |
| 184T          | <b>131479</b>     | 1245          | B             | 68                     | 230/460     | 5.6                  | 77.0              | 13.96                   |

Motors in this column have a 1.15 Service Factor, except as noted by ♣, which have a 1.0 Service Factor.

Catalog numbers in green are EPACT motors.  
Catalog numbers in blue are available in 3rd quarter 2008.

# THREE PHASE MOTORS

## RIGID BASE • GENERAL PURPOSE



Rigid Base

### DRIP-PROOF

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 2  | 3450            | 56            | 113292            | \$475         | A             | 33                     | 208-230/460 | 5.6                  | 82.5              | 11.34                   |
|    | 3450            | 56            | 116755[W]         | 599           | A             | 43                     | 208-230/460 | 4.8                  | 85.5              | 12.18                   |
|    | 3450            | 145T          | G120076           | 486           | B             | 45                     | 208-230/460 | 5.2                  | 84.0              | 11.78                   |
|    | 3450            | 145T          | 121515[W]         | 599           | B             | 43                     | 208-230/460 | 4.8                  | 85.5              | 12.62                   |
|    | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 1725            | 56H           | 113025□           | 452           | A             | 32                     | 208-230/460 | 6.2                  | 78.5              | 11.38                   |
|    | 1725            | 56H           | 111310♦□          | 551           | A             | 36                     | 208-230/460 | 6.2                  | 78.7              | 11.38                   |
|    | 1725            | 56H           | 116756[W]         | 615           | A             | 37                     | 208-230/460 | 5.8                  | 86.5              | 13.22                   |
|    | 1725            | 56HZ          | 115826*           | 411           | A             | 33                     | 208-230/460 | 6.2                  | 78.5              | 11.63                   |
| 3  | 1725            | 145T          | G120012           | 433           | B             | 45                     | 208-230/460 | 6.0                  | 84.0              | 12.12                   |
|    | 1725            | 145T          | 121005[W]         | 615           | B             | 37                     | 208-230/460 | 5.8                  | 86.5              | 13.63                   |
|    | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 1140            | 184T          | G130012           | 595           | B             | 81                     | 208-230/460 | 7.2                  | 85.5              | 14.69                   |
|    | 1170            | 184T          | 131972[W]         | 709           | B             | 88                     | 208-230/460 | 7.2                  | 87.5              | 15.19                   |
|    | 850             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 3450            | 56H           | 113293□           | 490           | A             | 38                     | 208-230/460 | 7.6                  | 84.0              | 11.84                   |
|    | 3450            | 145T          | G120077           | 508           | B             | 45                     | 208-230/460 | 7.6                  | 84.0              | 12.28                   |
|    | 3450            | 145T          | 121516[W]         | 593           | B             | 45                     | 208-230/460 | 7.2                  | 86.5              | 12.62                   |
| 5  | 3510            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 3510            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 1740            | 56HZ          | 116595*           | 490           | A             | 44                     | 208-230/460 | 8.6                  | 82.5              | 13.12                   |
|    | 1740            | 182T          | G130000           | 477           | B             | 57                     | 208-230/460 | 8.4                  | 86.5              | 12.69                   |
|    | 1740            | 182T          | 131519[W]         | 630           | B             | 75                     | 208-230/460 | 7.9                  | 89.5              | 13.69                   |
|    | 1750            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 1750            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 1140            | 213T          | G140550           | 804           | B             | 140                    | 208-230/460 | 11.6                 | 87.5              | 15.76                   |
|    | 1180            | 213T          | 171574[W]         | 940           | C             | 154                    | 208-230/460 | 10.0                 | 88.5              | 16.38                   |
|    | 850             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 7½ | 3490            | 145T          | G121662           | 525           | B             | 45                     | 208-230/460 | 12.4                 | 85.5              | 13.78                   |
|    | 3500            | 184T          | 131986[W]         | 664           | B             | 86                     | 208-230/460 | 12.0                 | 86.5              | 15.19                   |
|    | 3450            | 182T          | G130282           | 538           | B             | 64                     | 208-230/460 | 12.2                 | 85.5              | 13.19                   |
|    | 3510            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 1740            | 184T          | G130004           | 529           | B             | 69                     | 208-230/460 | 13.2                 | 87.5              | 13.69                   |
|    | 1740            | 184T          | 131520[W]         | 709           | B             | 86                     | 208-230/460 | 12.8                 | 89.5              | 15.19                   |
|    | 1750            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 1750            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 1140            | 215T          | G140122           | 936           | B             | 120                    | 208-230/460 | 17.6                 | 87.5              | 16.75                   |
|    | 1140            | 215T          | 171575[W]         | 1190          | C             | 188                    | 208-230/460 | 15.0                 | 90.2              | 16.38                   |
| 7½ | 850             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 3510            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 3450            | 184T          | 131988[W]         | 961           | B             | 106                    | 208-230/460 | 17.6                 | 88.5              | 16.19                   |
|    | 3450            | 184T          | G130284           | 739           | B             | 78                     | 208-230/460 | 17.6                 | 87.5              | 14.69                   |
|    | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 3510            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 3510            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 1740            | 213T          | G140471           | 768           | B             | 144                    | 208-230/460 | 20.0                 | 88.5              | 15.25                   |
|    | 1760            | 213T          | 140470[W]         | 890           | B             | 133                    | 208-230/460 | 20.6                 | 91.0              | 16.25                   |
|    | 1750            | 213T          | G150142           | 783           | C             | 147                    | 208-230/460 | 19.6                 | 88.5              | 16.38                   |
| 7½ | 1760            | 213T          | 170142[W]         | 943           | C             | 160                    | 208-230/460 | 19.8                 | 91.0              | 16.38                   |
|    | 1170            | 254T          | G150145           | 1214          | C             | 240                    | 208-230/460 | 20.2                 | 88.5              | 20.94                   |
|    | 1170            | 254T          | 170145[W]         | 1490          | C             | 291                    | 208-230/460 | 22.4                 | 91.7              | 20.94                   |
|    | 850             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |

Motors in this column have NEMA Service Factors—see page 308 for details.

- ♦ Automatic reset overload protection. Do not use with variable frequency drives.
- Combination 56H base motors have mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 56 shaft.
- \* 56HZ motors have mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 143-5T shaft.
- [W] Premium efficiency WATTSaver® motor. See page 15 for details.

All 180 and 210 frame Rolled Steel motors have Class F Insulation.

### TOTALLY ENCLOSED FAN COOLED (TEFC)

| NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 56            | 111916            | \$495         | A             | 33                     | 208-230/460 | 5.6                  | 82.5              | 12.31                   |
| 56            | 116760[W]         | 661           | A             | 44                     | 208-230/460 | 4.8                  | 85.5              | 13.31                   |
| 145T          | G120088           | 542           | B             | 45                     | 208-230/460 | 5.2                  | 84.0              | 13.26                   |
| 145T          | 121519[W]         | 661           | B             | 44                     | 208-230/460 | 4.8                  | 85.5              | 13.75                   |
| 145T          | G151704           | 580           | B             | 49                     | 208-230/460 | 5.2                  | 84.0              | 13.46                   |
| 145T          | 171648            | 706           | B             | 56                     | 208-230/460 | 4.8                  | 85.5              | 13.46                   |
| 56H           | 113026□           | 461           | A             | 35                     | 208-230/460 | 6.2                  | 81.5              | 12.31                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 56H           | 116761[W]         | 639           | A             | 45                     | 208-230/460 | 5.8                  | 86.5              | 14.32                   |
| 56HZ          | 115828*           | 428           | A             | 37                     | 208-230/460 | 6.2                  | 81.5              | 12.75                   |
| 145T          | G120016           | 456           | B             | 46                     | 208-230/460 | 5.6                  | 84.0              | 13.75                   |
| 145T          | 120923[W]         | 639           | B             | 45                     | 208-230/460 | 5.8                  | 86.5              | 14.76                   |
| 145T          | G151703           | 491           | B             | 56                     | 208-230/460 | 5.8                  | 85.5              | 13.46                   |
| 145T          | 171647            | 683           | B             | 58                     | 208-230/460 | 5.8                  | 86.5              | 13.46                   |
| 184T          | G130016           | 709           | B             | 90                     | 208-230/460 | 7.2                  | 86.5              | 15.46                   |
| 184T          | 131981[W]         | 1038          | B             | 89                     | 208-230/460 | 7.2                  | 88.5              | 15.96                   |
| 213T          | 140516            | 1579          | B             | 107                    | 230/460     | 8.8                  | 77.0              | 17.21                   |
| 56H           | 114614□           | 575           | A             | 40                     | 208-230/460 | 7.6                  | 84.0              | 13.25                   |
| 145T          | G120185           | 619           | B             | 42                     | 230/460     | 7.6                  | 85.5              | 13.76                   |
| 182T          | G130099           | 664           | B             | 60                     | 208-230/460 | 7.6                  | 85.5              | 13.46                   |
| 182T          | G151563           | 713           | C             | 93                     | 208-230/460 | 7.4                  | 85.5              | 16.14                   |
| 182T          | 131985[W]         | 917           | B             | 66                     | 208-230/460 | 7.6                  | 86.5              | 13.96                   |
| 56HZ          | 116594*           | 506           | A             | 45                     | 208-230/460 | 8.6                  | 82.5              | 14.26                   |
| 182T          | G130008           | 540           | B             | 68                     | 208-230/460 | 8.2                  | 87.5              | 13.96                   |
| 182T          | 131463[W]         | 723           | B             | 80                     | 208-230/460 | 7.8                  | 89.5              | 14.96                   |
| 182T          | G151320           | 695           | C             | 94                     | 208-230/460 | 8.5                  | 87.5              | 15.89                   |
| 182T          | 171320[W]         | 812           | C             | 104                    | 208-230/460 | 7.8                  | 89.5              | 15.89                   |
| 213T          | G140551           | 891           | B             | 116                    | 208-230/460 | 12.0                 | 87.5              | 17.71                   |
| 213T          | 171378[W]         | 1148          | C             | 171                    | 208-230/460 | 9.4                  | 89.5              | 18.19                   |
| 215T          | 140518            | 1727          | B             | 114                    | 230/460     | 12.6                 | 80.0              | 17.21                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 184T          | G150299           | 719           | C             | 100                    | 208-230/460 | 12.0                 | 87.5              | 16.80                   |
| 184T          | G130101           | 764           | B             | 73                     | 208-230/460 | 12.0                 | 87.5              | 14.46                   |
| 184T          | 131987[W]         | 819           | B             | 96                     | 208-230/460 | 12.0                 | 88.5              | 16.46                   |
| 184T          | G130027           | 622           | B             | 80                     | 208-230/460 | 13.0                 | 87.5              | 14.96                   |
| 184T          | 131464[W]         | 794           | B             | 94                     | 208-230/460 | 12.8                 | 89.5              | 15.96                   |
| 184T          | G151322           | 738           | C             | 101                    | 208-230/460 | 13.8                 | 87.5              | 15.89                   |
| 184T          | 171322[W]         | 843           | C             | 109                    | 208-230/460 | 12.8                 | 89.5              | 16.80                   |
| 215T          | G140126           | 1073          | B             | 142                    | 208-230/460 | 17.6                 | 87.5              | 18.21                   |
| 215T          | 171379[W]         | 1280          | C             | 176                    | 208-230/460 | 14.4                 | 89.5              | 19.61                   |
| 254T          | 151355            | 2774          | C             | 188                    | 208-230/460 | 14.4                 | 88.3              | 23.23                   |
| 213T          | 170158[W]         | 1170          | C             | 147                    | 208-230/460 | 18.0                 | 91.0              | 18.19                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 184T          | G131082           | 851           | B             | 91                     | 208-230/460 | 16.8                 | 88.5              | 15.96                   |
| S213T         | G130103           | 874           | B             | 101                    | 208-230/460 | 16.8                 | 88.5              | 16.59                   |
| 213T          | 140756[W]         | 1105          | B             | 156                    | 208-230/460 | 17.8                 | 90.2              | 19.84                   |
| 213T          | G150158           | 950           | C             | 150                    | 208-230/460 | 17.8                 | 88.5              | 18.20                   |
| 213T          | G140578           | 833           | B             | 144                    | 208-230/460 | 20.4                 | 89.5              | 17.71                   |
| 213T          | 140450[W]         | 1021          | B             | 144                    | 208-230/460 | 21.4                 | 91.7              | 18.70                   |
| 213T          | G150157           | 857           | C             | 153                    | 208-230/460 | 19.2                 | 89.5              | 18.19                   |
| 213T          | 170157[W]         | 1128          | C             | 155                    | 208-230/460 | 18.6                 | 91.7              | 18.19                   |
| 254T          | G150122           | 1536          | C             | 250                    | 208-230/460 | 20.0                 | 89.5              | 23.23                   |
| 254T          | 170122[W]         | 1668          | C             | 249                    | 208-230/460 | 22.2                 | 91.7              | 23.19                   |
| 256T          | 151356            | 3013          | C             | 300                    | 208-230/460 | 20.0                 | 87.7              | 24.96                   |

Motors in this column have a 1.15 Service Factor, except as noted by ♣, which have a 1.0 Service Factor.

CONTINUED ON NEXT PAGE

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

Catalog numbers in green are EPACT motors.  
Catalog numbers in blue are available in 3rd quarter 2008.





# CAST IRON AND ROLLED STEEL THREE PHASE MOTORS

## RIGID BASE • GENERAL PURPOSE



### DRIP-PROOF

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 10 | 3450            | 213T          | <b>G140682</b>    | \$926         | B             | 138                    | 208-230/460 | 23.4                 | 88.5              | 17.30                   |
|    | 3510            | 213T          | <b>140753</b> [W] | 1012          | B             | 160                    | 208-230/460 | 23.4                 | 89.5              | 17.30                   |
|    | 3510            | 213T          | <b>G150143</b>    | 965           | C             | 168                    | 208-230/460 | 24.0                 | 88.5              | 16.38                   |
|    | 3510            | 213T          | <b>170143</b> [W] | 1017          | C             | 150                    | 208-230/460 | 23.6                 | 91.0              | 16.38                   |
|    | 1740            | 215T          | <b>G140490</b>    | 917           | B             | 132                    | 208-230/460 | 28.0                 | 89.5              | 16.75                   |
|    | 1760            | 215T          | <b>140472</b> [W] | 1051          | B             | 144                    | 208-230/460 | 26.8                 | 91.7              | 17.25                   |
|    | 1750            | 215T          | <b>G150144</b>    | 991           | C             | 168                    | 208-230/460 | 25.0                 | 89.5              | 17.87                   |
|    | 1760            | 215T          | <b>170144</b> [W] | 1113          | C             | 200                    | 208-230/460 | 25.6                 | 91.7              | 17.87                   |
|    | 1170            | 256T          | <b>G150146</b>    | 1573          | C             | 268                    | 208-230/460 | 27.0                 | 90.2              | 22.60                   |
|    | 1170            | 256T          | <b>170146</b> [W] | 1856          | C             | 305                    | 208-230/460 | 29.6                 | 91.7              | 22.60                   |
|    | 850             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 850             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 15 | 3450            | 215T          | <b>G140683</b>    | 1357          | B             | 145                    | 208-230/460 | 34.0                 | 90.2              | 18.35                   |
|    | 3510            | 215T          | <b>140754</b> [W] | 1344          | B             | 170                    | 208-230/460 | 35.0                 | 91.0              | 18.55                   |
|    | 3510            | 215T          | <b>G150064</b>    | 1303          | C             | 173                    | 208-230/460 | 35.0                 | 89.5              | 17.87                   |
|    | 3510            | 215T          | <b>170064</b> [W] | 1446          | C             | 175                    | 208-230/460 | 34.6                 | 91.0              | 17.87                   |
|    | 3525            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 3525            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 1760            | S254T         | <b>G140579</b>    | 1391          | B             | 150                    | 208-230/460 | 39.6                 | 91.0              | 20.07                   |
|    | 1770            | 254T          | <b>G150065</b>    | 1352          | C             | 265                    | 208-230/460 | 37.6                 | 91.0              | 20.94                   |
|    | 1770            | 254T          | <b>170065</b> [W] | 1482          | C             | 279                    | 208-230/460 | 37.0                 | 93.0              | 20.94                   |
|    | 1170            | 284T          | <b>G150067</b>    | 2061          | C             | 365                    | 208-230/460 | 41.0                 | 90.2              | 23.54                   |
|    | 1170            | 284T          | <b>170067</b> [W] | 2443          | C             | 414                    | 208-230/460 | 39.4                 | 92.4              | 23.54                   |
|    | 850             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 850             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 20 | 3525            | 254T          | <b>G150032</b>    | 1591          | C             | 258                    | 208-230/460 | 46.6                 | 90.2              | 20.94                   |
|    | 3525            | 254T          | <b>170032</b> [W] | 1817          | C             | 275                    | 208-230/460 | 46.0                 | 93.0              | 20.94                   |
|    | 1750            | 256T          | <b>G150006</b>    | 1711          | C             | 307                    | 208-230/460 | 48.0                 | 91.7              | 22.60                   |
|    | 1770            | 256T          | <b>170006</b> [W] | 1810          | C             | 324                    | 208-230/460 | 51.0                 | 93.0              | 22.60                   |
|    | 1170            | 286T          | <b>G150000</b>    | 2528          | C             | 385                    | 208-230/460 | 53.0                 | 91.0              | 25.00                   |
|    | 1170            | 286T          | <b>170000</b> [W] | 2977          | C             | 467                    | 208-230/460 | 55.0                 | 92.4              | 25.00                   |
|    | 850             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 850             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 3500            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 3525            | 256T          | <b>G150034</b>    | 1962          | C             | 292                    | 208-230/460 | 57.0                 | 91.0              | 22.60                   |
|    | 3525            | 256T          | <b>170034</b> [W] | 2254          | C             | 327                    | 208-230/460 | 52.4                 | 93.0              | 22.60                   |
|    | 3550            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 3550            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 25 | 1770            | 284T          | <b>G150009</b>    | 1974          | C             | 388                    | 208-230/460 | 59.6                 | 91.7              | 23.54                   |
|    | 1770            | 284T          | <b>170009</b> [W] | 2254          | C             | 404                    | 208-230/460 | 59.6                 | 93.6              | 23.54                   |
|    | 1180            | 324T          | <b>G150002</b>    | 3065          | C             | 529                    | 208-230/460 | 67.0                 | 91.7              | 26.02                   |
|    | 1190            | 324T          | <b>170002</b> [W] | 3545          | C             | 705                    | 208-230/460 | 67.0                 | 93.0              | 26.02                   |
|    | 850             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 850             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 3550            | 284TS         | <b>G150036</b>    | 2310          | C             | 373                    | 208-230/460 | 70.4                 | 91.0              | 22.17                   |
|    | 3550            | 284TS         | <b>170036</b> [W] | 2617          | C             | 396                    | 208-230/460 | 67.0                 | 94.1              | 22.17                   |
|    | 1770            | 286T          | <b>G150013</b>    | 2270          | C             | 434                    | 208-230/460 | 72.0                 | 92.4              | 25.00                   |
|    | 1770            | 286T          | <b>170013</b> [W] | 2443          | C             | 471                    | 208-230/460 | 71.0                 | 94.1              | 25.00                   |
|    | 1180            | 326T          | <b>G150004</b>    | 3445          | C             | 567                    | 208-230/460 | 78.8                 | 92.4              | 27.52                   |
|    | 1190            | 326T          | <b>170004</b> [W] | 3698          | C             | 760                    | 208-230/460 | 78.0                 | 93.6              | 27.52                   |
| 40 | 3550            | 286TS         | <b>G150038</b>    | 2771          | C             | 426                    | 208-230/460 | 93.0                 | 91.7              | 23.62                   |
|    | 3550            | 286TS         | <b>170038</b> [W] | 3446          | C             | 441                    | 208-230/460 | 91.2                 | 93.6              | 23.62                   |
|    | 3550            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 3550            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 1780            | 324T          | <b>G150017</b>    | 2889          | C             | 528                    | 208-230/460 | 96.0                 | 91.0              | 26.02                   |
|    | 1780            | 324T          | <b>170017</b> [W] | 3221          | C             | 560                    | 208-230/460 | 96.0                 | 94.1              | 26.02                   |
|    | 1180            | 364T          | <b>G150147</b>    | 4187          | C             | 654                    | 208-230/460 | 100.0                | 93.0              | 28.01                   |
|    | 1180            | 364T          | <b>170147</b> [W] | 5272          | C             | 892                    | 208-230/460 | 103.0                | 94.1              | 28.01                   |
|    | 1180            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 1180            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 1180            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|    | 1180            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |

### TOTALLY ENCLOSED FAN COOLED (TEFC)

| NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 215T          | <b>G140686</b>    | \$1120        | B             | 126                    | 208-230/460 | 24.0                 | 89.5              | 19.84                   |
| 215T          | <b>140755</b> [W] | 1283          | B             | 170                    | 208-230/460 | 23.6                 | 91.7              | 21.09                   |
| 215T          | <b>G150159</b>    | 1105          | C             | 167                    | 208-230/460 | 23.6                 | 89.5              | 19.61                   |
| 215T          | <b>170159</b> [W] | 1386          | C             | 181                    | 208-230/460 | 23.4                 | 91.7              | 19.61                   |
| 215T          | <b>G140489</b>    | 965           | B             | 167                    | 208-230/460 | 26.0                 | 89.5              | 18.71                   |
| 215T          | <b>140451</b> [W] | 1235          | B             | 161                    | 208-230/460 | 26.6                 | 91.7              | 19.70                   |
| 215T          | <b>G150140</b>    | 1064          | C             | 176                    | 208-230/460 | 25.2                 | 89.5              | 19.61                   |
| 215T          | <b>170140</b> [W] | 1345          | C             | 177                    | 208-230/460 | 25.0                 | 91.7              | 19.61                   |
| 256T          | <b>G150123</b>    | 1918          | C             | 277                    | 208-230/460 | 26.2                 | 89.5              | 24.92                   |
| 256T          | <b>170123</b> [W] | 2385          | C             | 300                    | 208-230/460 | 29.0                 | 91.7              | 24.92                   |
| 284T          | <b>150282</b>     | 3868          | C             | 346                    | 208-230/460 | 26.0                 | 88.8              | 26.26                   |
| 215T          | <b>G140687</b>    | 1405          | B             | 140                    | 208-230/460 | 36.0                 | 90.2              | 20.57                   |
| 215T          | <b>G151317</b>    | 1477          | C             | 168                    | 208-230/460 | 35.0                 | 90.2              | 19.61                   |
| 254T          | <b>G150062</b>    | 1478          | C             | 260                    | 208-230/460 | 35.0                 | 90.2              | 23.19                   |
| 254T          | <b>170062</b> [W] | 1883          | C             | 282                    | 208-230/460 | 35.0                 | 92.4              | 23.19                   |
| 254T          | <b>G150066</b>    | 1522          | C             | 284                    | 208-230/460 | 37.0                 | 91.0              | 23.19                   |
| 254T          | <b>170066</b> [W] | 1822          | C             | 280                    | 208-230/460 | 36.0                 | 92.4              | 23.19                   |
| 284T          | <b>G150068</b>    | 2645          | C             | 359                    | 208-230/460 | 40.4                 | 90.2              | 26.26                   |
| 284T          | <b>170068</b> [W] | 3228          | C             | 333                    | 208-230/460 | 40.6                 | 92.4              | 26.26                   |
| 286T          | <b>150261</b>     | 4571          | C             | 480                    | 208-230/460 | 40.0                 | 91.0              | 27.83                   |
| 256T          | <b>G150033</b>    | 2010          | C             | 296                    | 208-230/460 | 46.2                 | 90.2              | 24.92                   |
| 256T          | <b>170033</b> [W] | 2301          | C             | 316                    | 208-230/460 | 46.0                 | 92.4              | 24.92                   |
| 256T          | <b>G150007</b>    | 1873          | C             | 321                    | 208-230/460 | 48.2                 | 91.0              | 24.92                   |
| 256T          | <b>170007</b> [W] | 2279          | C             | 322                    | 208-230/460 | 49.0                 | 93.0              | 24.92                   |
| 286T          | <b>G150001</b>    | 3159          | C             | 408                    | 208-230/460 | 52.6                 | 90.2              | 27.83                   |
| 286T          | <b>170001</b> [W] | 4037          | C             | 392                    | 208-230/460 | 54.0                 | 91.7              | 27.83                   |
| 324T          | <b>150263</b>     | 5495          | C             | 640                    | 208-230/460 | 54.0                 | 91.0              | 29.53                   |
| 256T          | <b>G151318</b>    | 2369          | C             | 307                    | 208-230/460 | 56.4                 | 91.0              | 24.92                   |
| 284TS         | <b>G150035</b>    | 2428          | C             | 349                    | 208-230/460 | 58.2                 | 91.0              | 24.88                   |
| 284TS         | <b>170035</b> [W] | 2993          | C             | 383                    | 208-230/460 | 56.8                 | 93.0              | 24.88                   |
| 284T          | <b>G150011</b>    | 2203          | C             | 370                    | 208-230/460 | 58.8                 | 92.4              | 26.26                   |
| 284T          | <b>170011</b> [W] | 2827          | C             | 385                    | 208-230/460 | 59.0                 | 93.6              | 26.26                   |
| 324T          | <b>G150003</b>    | 3831          | C             | 494                    | 208-230/460 | 64.8                 | 91.7              | 29.53                   |
| 324T          | <b>170003</b> [W] | 4724          | C             | 545                    | 208-230/460 | 66.0                 | 93.0              | 29.53                   |
| 326T          | <b>150265</b>     | 6408          | C             | 700                    | 208-230/460 | 63.0                 | 90.2              | 31.02                   |
| 286TS         | <b>G150037</b>    | 2675          | C             | 375                    | 208-230/460 | 69.2                 | 91.0              | 26.46                   |
| 286TS         | <b>170037</b> [W] | 3534          | C             | 385                    | 208-230/460 | 67.6                 | 93.0              | 26.46                   |
| 286T          | <b>G150015</b>    | 2680          | C             | 428                    | 208-230/460 | 69.8                 | 92.4              | 27.83                   |
| 286T          | <b>170015</b> [W] | 3294          | C             | 432                    | 208-230/460 | 70.0                 | 94.1              | 27.83                   |
| 326T          | <b>G150005</b>    | 4149          | C             | 528                    | 208-230/460 | 77.0                 | 91.7              | 31.02                   |
| 326T          | <b>170005</b> [W] | 5303          | C             | 615                    | 208-230/460 | 77.2                 | 93.6              | 31.02                   |
| 324TS         | <b>G150039</b>    | 3506          | C             | 496                    | 208-230/460 | 93.0                 | 91.7              | 28.03                   |
| 324TS         | <b>170039</b> [W] | 4408          | C             | 504                    | 208-230/460 | 89.0                 | 93.6              | 28.03                   |
| 324T          | <b>G150019</b>    | 3460          | C             | 528                    | 208-230/460 | 90.0                 | 93.0              | 29.53                   |
| 324T          | <b>170019</b> [W] | 4375          | C             | 528                    | 208-230/460 | 92.0                 | 94.1              | 29.53                   |
| 364T          | <b>G150096</b>    | 5981          | C             | 638                    | 208-230/460 | 101.0                | 93.0              | 32.64                   |
| 364T          | <b>170096</b> [W] | 7269          | C             | 636                    | 208-230/460 | 102.0                | 94.1              | 32.64                   |

**NOTE:** 150 and 170 Series Drip-Proof and TEFC motors in NEMA frames 180T thru 447T can be field converted, by reassembly, to F2 conduit box locations.

[W] Premium efficiency WATTSaver® motor. See page 15 for details.

All 180 and 210 frame Rolled Steel motors have Class F Insulation.

All 150 & 170 Series motors on pages 8-11 have a 1.15 Service Factor, Class F insulation.

CONTINUED ON NEXT PAGE

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

Catalog numbers in green are EPACT motors.

# CAST IRON THREE PHASE MOTORS

## 150 & 170 SERIES • RIGID BASE • GENERAL PURPOSE



Rigid Base

### DRIP-PROOF

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number  | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|--------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 50  | 3550            | 324TS         | <b>G150040</b>     | \$3416        | C             | 511                    | 208-230/460 | 112.0                | 92.4              | 24.53                   |
|     | 3550            | 324TS         | <b>170040</b> [W]  | 4203          | C             | 548                    | 208-230/460 | 112.0                | 94.1              | 24.53                   |
|     | 1780            | 326T          | <b>G150021</b>     | 3267          | C             | 612                    | 208-230/460 | 120.0                | 93.0              | 27.52                   |
|     | 1780            | 326T          | <b>170021</b> [W]  | 3891          | C             | 614                    | 208-230/460 | 118.0                | 94.5              | 27.52                   |
|     | 1180            | 365T          | <b>G150148</b>     | 5338          | C             | 716                    | 208-230/460 | 125.0                | 93.0              | 31.18                   |
|     | 1180            | 365T          | <b>170148</b> [W]  | 6031          | C             | 918                    | 208-230/460 | 128.0                | 94.5              | 33.62                   |
| 60  | 3550            | 326TS         | <b>G150042</b>     | 3821          | C             | 560                    | 208-230/460 | 134.0                | 93.0              | 26.02                   |
|     | 3550            | 326TS         | <b>170042</b> [W]  | 5026          | C             | 590                    | 208-230/460 | 136.0                | 94.1              | 26.02                   |
|     | 3570            | ...           | ...                | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|     | 3570            | ...           | ...                | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|     | 1780            | 364T          | <b>G150025</b>     | 4129          | C             | 715                    | 208-230/460 | 141.0                | 93.6              | 28.01                   |
|     | 1780            | 364T          | <b>170025</b> [W]  | 4283          | C             | 716                    | 208-230/460 | 139.0                | 94.1              | 28.01                   |
| 75  | 1190            | 404T          | <b>G150149</b>     | 6102          | C             | 1010                   | 208-230/460 | 142.0                | 93.6              | 32.76                   |
|     | 1190            | 404T          | <b>170149</b>      | 6676          | C             | 1031                   | 208-230/460 | 159.0                | 94.5              | 32.76                   |
|     | 3570            | 364TS         | <b>G150044</b>     | 5492          | C             | 707                    | 208-230/460 | 173.0                | 93.0              | 26.89                   |
|     | 3570            | 364TS         | <b>170044</b> [W]  | 6641          | C             | 720                    | 208-230/460 | 176.0                | 94.1              | 26.89                   |
|     | 1780            | 365T          | <b>G150029</b>     | 5032          | C             | 765                    | 208-230/460 | 177.0                | 94.1              | 31.18                   |
|     | 1780            | 365T          | <b>170029</b> [W]  | 5282          | C             | 766                    | 208-230/460 | 172.0                | 94.5              | 31.18                   |
| 100 | 1190            | 405T          | <b>G150150</b>     | 7648          | C             | 1017                   | 208-230/460 | 181.0                | 93.6              | 34.25                   |
|     | 1190            | 405T          | <b>170150</b>      | 7227          | C             | 1095                   | 208-230/460 | 196.0                | 94.5              | 34.25                   |
|     | 3570            | 365TS         | <b>G150151</b>     | 6444          | C             | 752                    | 208-230/460 | 236.0                | 93.0              | 29.06                   |
|     | 3570            | 365TS         | <b>170151</b> [W]  | 7508          | C             | 775                    | 208-230/460 | 226.0                | 94.5              | 29.06                   |
|     | 1780            | 404T          | <b>G150152</b>     | 6418          | C             | 988                    | 208-230/460 | 240.0                | 94.1              | 32.76                   |
|     | 1780            | 404T          | <b>170152</b> [W]  | 7227          | C             | 1141                   | 208-230/460 | 225.0                | 95.4              | 32.76                   |
| 125 | 1190            | 444T          | <b>G150153</b>     | 9345          | C             | 1975                   | 460         | 118.0+               | 95.4              | 40.00                   |
|     | 3570            | 404TS         | <b>G150154</b>     | 7352          | C             | 987                    | 230/460     | 282.0                | 93.6              | 29.76                   |
|     | 3570            | 404TS         | <b>170154</b> [W]  | 8678          | C             | 1015                   | 208-230/460 | 284.0                | 94.5              | 29.76                   |
|     | 1780            | 405T          | <b>G150155</b>     | 7437          | C             | 1083                   | 230/460     | 280.0                | 94.5              | 34.25                   |
|     | 1780            | 405T          | <b>170155</b> [W]  | 9146          | C             | 1292                   | 230/460     | 280.0                | 95.4              | 34.25                   |
|     | 1790            | ...           | ...                | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 150 | 1190            | 445T          | <b>G150156</b> [W] | 12148         | C             | 2022                   | 460         | 148.0+               | 95.8              | 40.00                   |
|     | 3570            | 405TS         | <b>G151449</b>     | 10873         | C             | 1073                   | 460         | 167.0+               | 93.6              | 31.26                   |
|     | 3570            | 405TS         | <b>171449</b> [W]  | 10707         | C             | 1085                   | 460         | 169.0+               | 94.5              | 31.26                   |
|     | 1790            | 444T          | <b>G151522</b>     | 9924          | C             | 1852                   | 460         | 164.0+               | 95.0              | 40.00                   |
|     | 1780            | 444T          | <b>171522</b> [W]  | 10800         | C             | 2000                   | 460         | 164.0+               | 95.8              | 40.00                   |
|     | 1780            | ...           | ...                | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 200 | 1190            | 445T          | <b>G151523</b>     | 13033         | C             | 2040                   | 460         | 206.0+               | 95.8              | 40.00                   |
|     | 3570            | 444TS         | <b>G151523</b>     | 12134         | C             | 1765                   | 460         | 216.0+               | 95.4              | 36.25                   |
|     | 1785            | 445T          | <b>G151523</b>     | 11995         | C             | 1860                   | 460         | 229.0+               | 95.0              | 40.00                   |
|     | 1790            | 445T          | <b>171523</b> [W]  | 12455         | C             | 2037                   | 460         | 229.0+               | 95.8              | 40.00                   |
|     | 1190            | 447T          | <b>G151524</b>     | 17132         | C             | 2820                   | 460         | 239.0+               | 96.2              | 43.12                   |
|     | 1785            | 445T          | <b>151524</b>      | 13980         | C             | 1940                   | 460         | 284.0+               | 94.5              | 40.00                   |
| 250 | 1785            | 445T          | <b>151525</b>      | 16038         | C             | 1962                   | 460         | 329.0+               | 95.0              | 40.00                   |
|     | 300             | 1785          | <b>151525</b>      | 16038         | C             | 1962                   | 460         | 329.0+               | 95.0              | 40.00                   |
| 350 | 1780            | 445T          | <b>151518</b>      | 17701         | C             | 2041                   | 460         | 392.0+               | 94.1              | 40.00                   |
|     | 1790            | ...           | ...                | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |

### TOTALLY ENCLOSED FAN COOLED (TEFC)

| NEMA<br>Frame | Catalog<br>Number  | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|---------------|--------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 326TS         | <b>G150041</b>     | \$4342        | C             | 637                    | 208-230/460 | 112.0                | 92.4              | 29.53                   |
| 326TS         | <b>170041</b> [W]  | 5353          | C             | 554                    | 208-230/460 | 111.0                | 94.5              | 29.53                   |
| 326T          | <b>G150023</b>     | 4266          | C             | 561                    | 208-230/460 | 117.8                | 93.0              | 31.02                   |
| 326T          | <b>170023</b> [W]  | 5284          | C             | 587                    | 208-230/460 | 117.0                | 94.5              | 31.02                   |
| 365T          | <b>G150097</b>     | 6982          | C             | 686                    | 208-230/460 | 123.0                | 93.0              | 33.62                   |
| 365T          | <b>170097</b> [W]  | 8724          | C             | 672                    | 208-230/460 | 124.0                | 94.1              | 33.62                   |
| ...           | ...                | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 364TS         | <b>G150043</b>     | 6709          | C             | 695                    | 208-230/460 | 137.0                | 93.0              | 30.51                   |
| 364TS         | <b>170043</b> [W]  | 7939          | C             | 735                    | 208-230/460 | 136.0                | 94.1              | 30.51                   |
| 364T          | <b>G150027</b>     | 6229          | C             | 687                    | 208-230/460 | 138.0                | 93.6              | 32.64                   |
| 364T          | <b>170027</b> [W]  | 7516          | C             | 666                    | 208-230/460 | 137.0                | 95.4              | 32.64                   |
| 404T          | <b>G150098</b>     | 8071          | C             | 888                    | 208-230/460 | 145.0                | 93.6              | 36.42                   |
| 404T          | <b>170098</b> [W]  | 10290         | C             | 870                    | 208-230/460 | 142.0                | 94.5              | 36.42                   |
| 365TS         | <b>G150045</b>     | 7904          | C             | 850                    | 208-230/460 | 172.0                | 93.0              | 31.50                   |
| 365TS         | <b>170045</b> [W]  | 9725          | C             | 780                    | 208-230/460 | 169.0                | 94.5              | 31.50                   |
| 365T          | <b>G150031</b>     | 7191          | C             | 723                    | 208-230/460 | 173.0                | 94.1              | 33.62                   |
| 365T          | <b>170031</b> [W]  | 9380          | C             | 733                    | 208-230/460 | 171.0                | 95.8              | 33.62                   |
| 405T          | <b>G150099</b>     | 9503          | C             | 973                    | 208-230/460 | 179.0                | 93.6              | 37.91                   |
| 405T          | <b>170099</b> [W]  | 10846         | C             | 975                    | 208-230/460 | 176.0                | 95.0              | 37.91                   |
| ...           | ...                | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 405TS         | <b>G150160</b>     | 9915          | C             | 985                    | 208-230/460 | 220.0                | 93.6              | 34.92                   |
| 405TS         | <b>170160</b> [W]  | 11975         | C             | 955                    | 208-230/460 | 218.0                | 95.0              | 34.92                   |
| 405T          | <b>G150087</b>     | 9660          | C             | 1050                   | 208-230/460 | 229.0                | 94.5              | 37.91                   |
| 405T          | <b>170087</b> [W]  | 11664         | C             | 1070                   | 208-230/460 | 225.0                | 95.4              | 37.91                   |
| 444T          | <b>G151367</b>     | 13646         | C             | 1655                   | 460         | 114.5+               | 94.1              | 42.87                   |
| 444T          | <b>170256</b> [W]  | 15440         | C             | 1457                   | 460         | 121.0+               | 95.0              | 42.87                   |
| ...           | ...                | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 444TS         | <b>G151368</b>     | 14089         | C             | 1282                   | 460         | 134.0+               | 94.5              | 39.10                   |
| 444TS         | <b>171580</b>      | 14298         | C             | 1316                   | 460         | 132.0                | 95.0              | 39.10                   |
| ...           | ...                | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 444T          | <b>G151369</b>     | 12826         | C             | 1920                   | 460         | 139.0+               | 94.5              | 42.87                   |
| 444T          | <b>170369</b> [W]  | 15486         | C             | 1950                   | 460         | 137.5+               | 95.4              | 42.87                   |
| 445T          | <b>G151370</b>     | 15609         | C             | 2179                   | 460         | 147.0+               | 94.1              | 44.88                   |
| 445T          | <b>170260</b> [W]  | 17445         | C             | 1596                   | 460         | 155.0+               | 95.4              | 44.88                   |
| ...           | ...                | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 445TS         | <b>171578</b>      | 17647         | C             | 1445                   | 460         | 161.0                | 95.0              | 44.88                   |
| 445T          | <b>G151371</b>     | 14391         | C             | 1900                   | 460         | 169.0+               | 95.0              | 44.88                   |
| ...           | ...                | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 445T          | <b>170371</b> [W]  | 17718         | C             | 1627                   | 460         | 163.0+               | 95.8              | 44.88                   |
| 445T          | <b>171315</b> [W]  | 19672         | C             | 2230                   | 460         | 185.5+               | 95.8              | 48.00                   |
| ...           | ...                | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 447TS         | <b>171579</b>      | 20325         | C             | 1977                   | 460         | 216.5                | 95.4              | 48.00                   |
| 447T          | <b>G170352</b> [W] | 20294         | C             | 2227                   | 460         | 216.0+               | 96.2              | 48.00                   |
| 447T          | <b>G150352</b>     | 18346         | C             | 2053                   | 460         | 223.0+               | 95.0              | 48.00                   |
| 449T          | <b>171316</b> [W]  | 25766         | C             | 2542                   | 460         | 241.5+               | 96.2              | 52.80                   |
| 449T          | <b>151516</b>      | 21939         | C             | 2425                   | 460         | 274.0+               | 95.0              | 52.80                   |
| ...           | ...                | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 449T          | <b>151529</b>      | 24675         | C             | 2558                   | 460         | 327.0+               | 95.4              | 52.80                   |
| ...           | ...                | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 449T          | <b>151530</b>      | 25712         | C             | 2710                   | 460         | 402.0+               | 95.4              | 52.80                   |

♦ Full Load Amps 460 volt

[W] Premium efficiency WATTS-AVER® motor. See page 15 for details.

All 150 & 170 Series motors on pages 10-13 have a 1.15 Service Factor, Class F insulation.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

Catalog numbers in green are EPACT motors.

# LEESON® CAST IRON • THREE PHASE MOTORS

## 150 & 170 SERIES • RIGID BASE • GENERAL PURPOSE

For reliable performance in heavy-duty industrial applications, nothing beats the LEESON Heavyweights. With their cast iron construction and 1.15 Service Factor, they are ideal for "tough to handle" applications.

But that's only part of the story. LEESON 150 and 170-series cast iron motors are extremely versatile and can be field converted in minutes to a number of different configurations, including:

- Severe Duty TEFC (using cast iron fan guard kit)
- F2 mounting (by reassembly)
- C face with rigid base (from stock or using C face kit)
- D flange with base (using D flange kit)

CSA certified under report number LR62104

CSA Energy Efficiency Verification report number EEV78720-1

**UL recognized insulation system, file number E55555 and UL recognized construction, file number E57948 on all cast iron motors produced in June 2003 and later.**

### LEESON's Inverter Rated Insulation System (IRIS™)

provides superior motor protection against voltage spikes induced by variable frequency drives. This *total insulation system* protects better than spike-resistant magnet wire alone. Specially formed phase insulation, cushioned and sleeved connections (from the leads all the way into the turns), and deep-penetrating, non-hygroscopic, high temperature varnish are just a few features contributing to the extra protection. All this plus second generation, spike-resistant magnet wire. The IRIS™ *total insulation system* is standard at no extra cost in all LEESON stock NEMA three-phase motors, 1 HP and larger.



**Stainless steel "full fact" nameplate** with information on motor efficiency and power factor. Includes wiring diagram, bearing sizes, and motor weight.

**Heavy-duty cast iron** frame, endbells and conduit box.

### High torques for hard-to-start loads.

Torques exceed NEMA performance standards.

**Energy performance verified** by LEESON's NVLAP-Certified testing laboratory.

**100% copper-wound Inverter Rated Insulation System** is double-dipped and baked. Stator press-fitted and pinned to housing.

**1.15 Service Factor** provides extra margin of power. Class F insulation system with Class B or lower temperature rise. Many suitable for 50 Hz operation at 1.0 service factor. Contact factory for details.

**Dynamically balanced rotor assembly** is keyed to shaft.

**Lubrication fittings** on each end of motor (254T frame and larger). New Exxon POLYREX® EM lubricant for extended bearing life. Oversized bearings. Slotted-head pipe plug reliefs. Bearing caps protect against entry of grease into the motor.

**Cast iron endplates** for maximum rigidity and long bearing life.

**Neoprene shaft slinger** protects bearings by repelling moisture and other contaminants. Internal protection against rust and corrosion.

**One-way, corrosion resistant condensate drains.** (TEFC models) release condensation and moisture.

**Internal caps on shaft-end and lead-end bearings** 254T frame and larger. 182T through 215T frame motors with C-faces have locked bearing on the shaft end only. Motors are suitable for all mounting positions.

**Cast iron mounting feet.** Precision-machined for accurate alignment. Dual mounting provisions (six mounting holes) on 184T, 215T, 256T, 286T, 326T, 365T, 405T, 445T, 447T and 449T frames.

**12-Lead Delta windings** (254T to 405T frame and larger) for across-the-line or wye delta starts. (182T & 215T frame motors are dual voltage with nine leads. Motors above 405T frame are single voltage with six leads. 575V motors have six leads, except 213T-215T which have three leads) Permanently marked leads with lugs for easy connection. Normally-closed thermostat standard on WATTSaver® designs.

**Oversized cast iron conduit box** is gasketed and may be rotated in 90° increments. NPT threaded entrance.

**Steel fan cover** for optimum strength. Cast iron cover available for severe service.

**Non-sparking fan.** Small size reduces noise and enhances efficiency. Fan keyed to shaft.





**WATTSaver®**  
Inverter-Duty Premium Efficiency Motor

The WATTSaver® line of premium efficiency motors is now *inverter capable*. LEESON's unique IRIS™ voltage-spike-resistant insulation system is standard at no extra cost. WATTSaver® motors carry a three-year warranty in general purpose and inverter fed applications. These motors meet or exceed most utility rebate programs and the EPCACT federally mandated efficiency levels. The efficiency ratings

have been verified to IEEE 112B test standards by LEESON's NVLAP-Certified lab.

Cast iron 170 series motors can be field modified for forced ventilation service to extend the inverter-fed operating range and an encoder package is stocked for closed-loop vector inverter systems. These motors can be converted to IEEE841 compliant using the Custom PDQ Program. Contact LEESON.



**LEESON's Inverter Rated Insulation System (IRIS™)** provides superior protection against voltage spikes induced by variable frequency drives. This *total insulation system* protects better than spike-resistant magnet wire alone. Specially formed phase insulation, cushioned and sleeved connections (from the leads all the way into the turns), and deep-penetrating, non-

hygroscopic, high temperature varnish are just a few features contributing to extra protection. All this plus second generation spike-resistant magnet wire. The IRIS™ *total insulation system* is standard at no extra cost in all LEESON stock NEMA three-phase motors, 1 HP and larger.

### UL and CSA Recognition

CSA certified under report number LR62104  
CSA Energy Efficiency Verification report number EEV78720-1  
UL recognized insulation system, file number E55555  
UL recognized construction, file number E57948





# WATTSaver® PREMIUM EFFICIENCY MOTORS

GENERAL PURPOSE • THREE PHASE



## THREE PHASE • DRIP-PROOF • RIGID BASE 208-230/460V

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Meets<br>NEMA<br>Premium | F.L.<br>Amps<br>230V | 3/4<br>Load<br>Eff. | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|--------------------------|----------------------|---------------------|-------------------|-------------------------|
| 1/3 | 1725            | S56           | 103017            | \$348         | A             | 23                     | N/A                      | 1.3                  | 73.5                | 77.0              | 10.24                   |
| 1/2 | 1725            | S56           | 103018            | 373           | A             | 26                     | N/A                      | 1.8                  | 73.8                | 77.0              | 10.74                   |
| 3/4 | 1725            | 56            | 116738            | 379           | A             | 30                     | N/A                      | 2.4                  | 80.4                | 81.5              | 10.86                   |
| 1   | 3450            | 56            | 116128            | 456           | A             | 29                     | ✓                        | 2.8                  | 78.5                | 80.0              | 10.18                   |
|     | 1725            | 56            | 116752            | 520           | A             | 36                     | ✓                        | 3.2                  | 84.7                | 85.5              | 11.68                   |
|     | 1725            | 143T          | 121003            | 520           | B             | 36                     | ✓                        | 3.2                  | 84.7                | 85.5              | 12.12                   |
|     | 1160            | 145T          | 121517            | 605           | B             | 41                     | ✓                        | 3.8                  | 81.5                | 82.5              | 12.62                   |
| 1½  | 3450            | 56            | 116753            | 508           | A             | 36                     | ✓                        | 4.0                  | 83.5                | 84.0              | 11.84                   |
|     | 3450            | 143T          | 121514            | 508           | B             | 36                     | ✓                        | 4.0                  | 83.5                | 84.0              | 12.28                   |
|     | 1725            | 56            | 116754            | 543           | A             | 35                     | ✓                        | 4.8                  | 86.1                | 86.5              | 12.22                   |
|     | 1725            | 145T          | 121004            | 543           | B             | 35                     | ✓                        | 4.8                  | 86.1                | 86.5              | 12.62                   |
|     | 1170            | 182T          | 131971            | 713           | B             | 70                     | ✓                        | 5.6                  | 86.0                | 86.5              | 14.69                   |
| 2   | 3450            | 56            | 116755            | 599           | A             | 43                     | ✓                        | 4.8                  | 86.8                | 85.5              | 12.18                   |
|     | 3450            | 145T          | 121515            | 599           | B             | 43                     | ✓                        | 4.8                  | 86.8                | 85.5              | 12.62                   |
|     | 1725            | 56H           | 116756            | 615           | A             | 37                     | ✓                        | 5.8                  | 86.7                | 86.5              | 13.22                   |
|     | 1725            | 145T          | 121005            | 615           | B             | 37                     | ✓                        | 5.8                  | 86.7                | 86.5              | 13.62                   |
|     | 1170            | 184T          | 131972            | 725           | B             | 81                     | ✓                        | 7.2                  | 87.5                | 87.5              | 15.19                   |
| 3   | 3450            | 145T          | 121516            | 605           | B             | 45                     | ✓                        | 7.2                  | 85.5                | 86.5              | 12.62                   |
|     | 1760            | 182T          | 131519            | 630           | B             | 75                     | ✓                        | 7.8                  | 90.2                | 89.5              | 13.69                   |
|     | 1190            | 213T          | 171574            | 940           | C             | 154                    | ✓                        | 10.0                 | 87.5                | 88.5              | 16.38                   |
| 5   | 3450            | 184T          | 131986            | 664           | B             | 92                     | ✓                        | 12.0                 | 86.8                | 86.5              | 15.19                   |
|     | 1760            | 184T          | 131520            | 709           | B             | 86                     | ✓                        | 12.8                 | 89.4                | 89.5              | 14.69                   |
|     | 1190            | 215T          | 171575            | 1190          | C             | 291                    | ✓                        | 15.0                 | 89.5                | 90.2              | 16.38                   |
| 7½  | 3450            | 184T          | 131988            | 961           | B             | 106                    | ✓                        | 17.6                 | 88.0                | 88.5              | 16.19                   |
|     | 1760            | 213T          | 140470            | 890           | B             | 133                    | ✓                        | 20.6                 | 91.7                | 91.0              | 16.25                   |
|     | 1760            | 213T          | 170142            | 943           | C             | 160                    | ✓                        | 19.8                 | 91.7                | 91.0              | 16.38                   |
|     | 1170            | 254T          | 170145            | 1490          | C             | 281                    | ✓                        | 22.4                 | 91.0                | 91.7              | 20.94                   |
| 10  | 3515            | 213T          | 140753            | 1012          | B             | 160                    | ✓                        | 23.4                 | 89.5                | 89.5              | 17.30                   |
|     | 3510            | 213T          | 170143            | 1078          | C             | 150                    | ✓                        | 23.6                 | 91.0                | 91.0              | 16.38                   |
|     | 1760            | 215T          | 140472            | 1051          | B             | 144                    | ✓                        | 26.8                 | 91.0                | 91.7              | 17.25                   |
|     | 1760            | 215T          | 170144            | 1113          | C             | 200                    | ✓                        | 25.6                 | 91.7                | 91.7              | 17.87                   |
|     | 1190            | 256T          | 170146            | 1856          | C             | 305                    | ✓                        | 29.6                 | 91.7                | 91.7              | 22.60                   |
| 15  | 3510            | 215T          | 140754            | 1344          | B             | 170                    | ✓                        | 35.0                 | 91.0                | 91.0              | 18.55                   |
|     | 3510            | 215T          | 170064            | 1446          | C             | 175                    | ✓                        | 34.6                 | 91.0                | 91.0              | 17.87                   |
|     | 1770            | 254T          | 170065            | 1482          | C             | 279                    | ✓                        | 37.0                 | 93.0                | 93.0              | 20.94                   |
|     | 1170            | 284T          | 170067            | 2443          | C             | 414                    | ✓                        | 39.4                 | 92.4                | 92.4              | 23.54                   |
| 20  | 3525            | 254T          | 170032            | 1817          | C             | 275                    | ✓                        | 46.0                 | 93.0                | 93.0              | 20.94                   |
|     | 1770            | 256T          | 170006            | 1810          | C             | 324                    | ✓                        | 51.0                 | 93.0                | 93.0              | 22.60                   |
|     | 1190            | 286T          | 170000            | 2977          | C             | 467                    | ✓                        | 55.0                 | 92.4                | 92.4              | 25.00                   |
| 25  | 3525            | 256T          | 170034            | 2254          | C             | 327                    | ✓                        | 57.4                 | 93.0                | 93.0              | 22.60                   |
|     | 1770            | 284T          | 170009            | 2254          | C             | 404                    | ✓                        | 59.6                 | 93.6                | 93.6              | 23.54                   |
|     | 1190            | 324T          | 170002            | 3545          | C             | 705                    | ✓                        | 67.0                 | 93.0                | 93.0              | 26.02                   |
| 30  | 3550            | 284TS         | 170036            | 2617          | C             | 396                    | ✓                        | 67.0                 | 94.1                | 94.1              | 22.17                   |
|     | 1770            | 286T          | 170013            | 2443          | C             | 471                    | ✓                        | 71.0                 | 94.5                | 94.1              | 25.00                   |
|     | 1190            | 326T          | 170004            | 3698          | C             | 760                    | ✓                        | 78.0                 | 93.6                | 93.6              | 27.52                   |
| 40  | 3550            | 286TS         | 170038            | 3446          | C             | 441                    | ✓                        | 91.2                 | 94.1                | 93.6              | 23.62                   |
|     | 1780            | 324T          | 170017            | 3221          | C             | 560                    | ✓                        | 96.0                 | 94.1                | 94.1              | 26.02                   |
|     | 1190            | 364T          | 170147            | 5272          | C             | 892                    | ✓                        | 103.0                | 94.1                | 94.1              | 28.01                   |

All WATTSaver® motors have normally closed thermostats for over-temperature alert.

All 180 and 210 frame Rolled Steel motors have Class F Insulation.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

## THREE PHASE • TEFC • RIGID BASE 208-230/460V

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Meets<br>NEMA<br>Premium | F.L.<br>Amps<br>230V | 3/4<br>Load<br>Eff. | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|--------------------------|----------------------|---------------------|-------------------|-------------------------|
| 1/3 | 1725            | S56           | 103019            | \$432         | A             | 24                     | N/A                      | 1.3                  | 73.5                | 77.0              | 10.19                   |
| 1/2 | 1725            | S56           | 103020            | 458           | A             | 27                     | N/A                      | 1.8                  | 73.8                | 77.0              | 10.69                   |
| 3/4 | 1725            | 56            | 116739            | 482           | A             | 31                     | N/A                      | 2.4                  | 80.2                | 81.5              | 11.31                   |
| 1   | 3450            | 56            | 116129            | 532           | A             | 29                     | ✓                        | 2.8                  | 80.0                | 80.0              | 11.31                   |
|     | 1725            | 56            | 116757            | 592           | A             | 32                     | ✓                        | 3.2                  | 84.7                | 85.5              | 12.81                   |
|     | 1725            | 143T          | 120921            | 592           | B             | 32                     | ✓                        | 3.2                  | 84.7                | 85.5              | 13.25                   |
|     | 1725            | 143T          | 171640            | 635           | B             | 50                     | ✓                        | 3.2                  | 84.7                | 85.5              | 13.46                   |
|     | 1160            | 145T          | 121520            | 700           | B             | 47                     | ✓                        | 3.8                  | 81.5                | 82.5              | 13.75                   |
|     | 1140            | 145T          | 171643            | 747           | B             | 58                     | ✓                        | 3.8                  | 81.5                | 82.5              | 13.46                   |
| 1½  | 3450            | 56            | 116758            | 604           | A             | 33                     | ✓                        | 4.0                  | 83.0                | 84.0              | 12.81                   |
|     | 3450            | 143T          | 121518            | 604           | B             | 33                     | ✓                        | 4.0                  | 83.0                | 84.0              | 13.25                   |
|     | 3450            | 143T          | 171642            | 647           | B             | 49                     | ✓                        | 4.0                  | 83.0                | 84.0              | 13.46                   |
|     | 1725            | 56            | 116759            | 604           | A             | 34                     | ✓                        | 4.8                  | 86.1                | 86.5              | 13.31                   |
|     | 1725            | 145T          | 120922            | 614           | B             | 34                     | ✓                        | 4.8                  | 86.1                | 86.5              | 13.75                   |
|     | 1725            | 145T          | 171646            | 655           | B             | 54                     | ✓                        | 4.8                  | 86.1                | 86.5              | 13.46                   |
|     | 1170            | 182T          | 131980            | 1019          | B             | 89                     | ✓                        | 5.6                  | 87.4                | 87.5              | 15.96                   |
| 2   | 3450            | 56            | 116760            | 661           | A             | 44                     | ✓                        | 4.8                  | 84.8                | 85.5              | 13.31                   |
|     | 3450            | 145T          | 121519            | 661           | B             | 44                     | ✓                        | 4.8                  | 84.8                | 85.5              | 13.75                   |
|     | 3450            | 145T          | 171648            | 706           | B             | 56                     | ✓                        | 4.8                  | 84.8                | 85.5              | 13.46                   |
|     | 1725            | 56H           | 116761            | 639           | A             | 45                     | ✓                        | 5.8                  | 86.7                | 86.5              | 14.32                   |
|     | 1725            | 145T          | 120923            | 639           | B             | 45                     | ✓                        | 5.8                  | 86.7                | 86.5              | 14.76                   |
|     | 1725            | 145T          | 171647            | 683           | B             | 58                     | ✓                        | 5.8                  | 86.5                | 86.5              | 13.46                   |
|     | 1170            | 184T          | 131981            | 1038          | B             | 92                     | ✓                        | 7.2                  | 88.4                | 88.5              | 15.96                   |
| 3   | 3450            | 182T          | 131985            | 917           | B             | 66                     | ✓                        | 7.6                  | 86.1                | 86.5              | 13.96                   |
|     | 1760            | 182T          | 131463            | 723           | B             | 80                     | ✓                        | 7.8                  | 89.0                | 89.5              | 14.96                   |
|     | 1760            | 182T          | 171320            | 812           | C             | 104                    | ✓                        | 7.8                  | 89.5                | 90.2              | 16.14                   |
|     | 1180            | 213T          | 171378            | 1148          | C             | 170                    | ✓                        | 9.4                  | 88.5                | 89.5              | 18.19                   |
| 5   | 3450            | 184T          | 131987            | 819           | B             | 88                     | ✓                        | 12.0                 | 89.0                | 88.5              | 16.46                   |
|     | 1760            | 184T          | 131464            | 794           | B             | 94                     | ✓                        | 12.8                 | 90.1                | 89.5              | 15.96                   |
|     | 1760            | 184T          | 171322            | 843           | C             | 109                    | ✓                        | 12.8                 | 89.9                | 89.5              | 16.80                   |
|     | 1180            | 215T          | 171379            | 1280          | C             | 176                    | ✓                        | 14.4                 | 89.5                | 89.5              | 19.61                   |
| 7½  | 3510            | 213T          | 140756            | 1105          | C             | 156                    | ✓                        | 17.8                 | 89.5                | 90.2              | 19.84                   |
|     | 3510            | 213T          | 170158            | 1170          | C             | 147                    | ✓                        | 18.0                 | 91.0                | 91.0              | 18.19                   |
|     | 1760            | 213T          | 140450            | 1021          | C             | 144                    | ✓                        | 21.4                 | 90.6                | 91.7              | 18.70                   |
|     | 1760            | 213T          | 170157            | 1128          | C             | 155                    | ✓                        | 18.6                 | 91.7                | 91.7              | 18.19                   |
|     | 1170            | 254T          | 170122            | 1668          | C             | 249                    | ✓                        | 22.2                 | 91.0                | 91.7              | 23.19                   |
| 10  | 3510            | 215T          | 140755            | 1283          | B             | 170                    | ✓                        | 23.6                 | 92.4                | 91.7              | 21.09                   |
|     | 3510            | 215T          | 170159            | 1386          | C             | 181                    | ✓                        | 23.0                 | 91.7                | 91.7              | 19.61                   |
|     | 1760            | 215T          | 140451            | 1235          | B             | 161                    | ✓                        | 26.6                 | 91.6                | 91.7              | 19.70                   |
|     | 1760            | 215T          | 170140            | 1345          | C             | 177                    | ✓                        | 25.0                 | 91.7                | 91.7              | 19.61                   |
|     | 1170            | 256T          | 170123            | 2385          | C             | 300                    | ✓                        | 29.0                 | 91.7                | 91.7              | 24.92                   |
| 15  | 3525            | 254T          | 170062            | 1883          | C             | 282                    | ✓                        | 34.6                 | 92.4                | 92.4              | 23.19                   |
|     | 1770            | 254T          | 170066            | 1822          | C             | 280                    | ✓                        | 36.0                 | 92.4                | 92.4              | 23.19                   |
|     | 1170            | 284T          | 170068            | 3228          | C             | 333                    | ✓                        | 40.6                 | 92.0                | 92.4              | 26.26                   |
| 20  | 3525            | 256T          | 170033            | 2301          | C             | 316                    | ✓                        | 46.0                 | 92.4                | 92.4              | 24.92                   |
|     | 1770            | 256T          | 170007            | 2279          | C             | 322                    | ✓                        | 49.0                 | 93.0                | 93.0              | 24.92                   |
|     | 1170            | 286T          | 170001            | 4037          | C             | 392                    | ✓                        | 54.0                 | 92.4                | 92.4              | 27.83                   |
| 25  | 3550            | 284TS         | 170035            | 2993          | C             | 383                    | ✓                        | 56.8                 | 93.0                | 93.0              | 24.88                   |
|     | 1770            | 284T          | 170011            | 2827          | C             | 385                    | ✓                        | 59.0                 | 93.6                | 93.6              | 26.26                   |
|     | 1190            | 324T          | 170003            | 4724          | C             | 545                    | ✓                        | 66.0                 | 92.4                | 93.0              | 29.53                   |
| 30  | 3550            | 286TS         | 170037            | 3534          | C             | 385                    | ✓                        | 67.6                 | 93.6                | 93.0              | 26.46                   |
|     | 1770            | 286T          | 170015            | 3294          | C             | 432                    | ✓                        | 70.0                 | 94.1                | 94.1              | 27.83                   |
|     | 1190            | 326T          | 170005            | 5303          | C             | 615                    | ✓                        | 77.2                 | 93.6                | 93.6              | 31.02                   |

All WATTSaver® motors have normally closed thermostats for over-temperature alert.



# WATTSaver® PREMIUM EFFICIENCY MOTORS



GENERAL PURPOSE • THREE PHASE



WATTSaver®

## THREE PHASE • DRIP-PROOF • RIGID BASE 208-230/460V • CONTINUED

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Meets<br>NEMA<br>Premium | F.L.<br>Amps<br>230V | 3/4<br>Load<br>Eff. | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|--------------------------|----------------------|---------------------|-------------------|-------------------------|
| 50  | 3550            | 324TS         | 170040            | \$4203        | C             | 548                    | ✓                        | 112.0                | 95.0                | 94.1              | 24.53                   |
|     | 1780            | 326T          | 170021            | 3891          | C             | 614                    | ✓                        | 118.0                | 94.5                | 94.5              | 27.52                   |
|     | 1190            | 365T          | 170148            | 6031          | C             | 918                    | ✓                        | 128.0                | 94.7                | 94.5              | 31.18                   |
| 60  | 3550            | 326TS         | 170042            | 5026          | C             | 590                    | ✓                        | 136.0                | 95.0                | 94.1              | 26.02                   |
|     | 1780            | 364T          | 170025            | 4283          | C             | 716                    | ✓                        | 139.0                | 95.0                | 95.4              | 28.01                   |
|     | 1190            | 404T          | 170149            | 6676          | C             | 1031                   | ✓                        | 159.0                | 94.0                | 94.5              | 32.76                   |
| 75  | 3570            | 364TS         | 170044            | 6641          | C             | 720                    | ✓                        | 176.0                | 94.5                | 93.6              | 26.89                   |
|     | 1780            | 365T          | 170029            | 5282          | C             | 766                    | ✓                        | 172.0                | 95.4                | 95.4              | 31.18                   |
|     | 1190            | 405T          | 170150            | 7913          | C             | 1095                   | ✓                        | 196.0                | 94.0                | 94.5              | 34.25                   |
| 100 | 3570            | 365TS         | 170151            | 7508          | C             | 775                    | ✓                        | 234.0                | 94.5                | 94.5              | 29.06                   |
|     | 1780            | 404T          | 170152            | 7227          | C             | 1141                   | ✓                        | 225.0                | 95.4                | 95.4              | 32.76                   |
|     | 1190            | 444T          | 170255*           | 9345          | C             | 1975                   | ✓                        | 118.0♦               | 95.4                | 95.4              | 40.00                   |
| 125 | 3570            | 404TS         | 170154            | 8678          | C             | 1015                   | ✓                        | 284.0                | 94.5                | 94.5              | 29.76                   |
|     | 1780            | 405T          | 170155            | 9146          | C             | 1236                   | ✓                        | 280.0                | 95.4                | 95.4              | 34.25                   |
|     | 1190            | 445T          | 170259*           | 12148         | C             | 2022                   | ✓                        | 148.0♦               | 95.8                | 95.8              | 40.00                   |
| 150 | 3570            | 405TS         | 171449*           | 10707         | C             | 1085                   | ✓                        | 169.0♦               | 94.5                | 94.5              | 31.26                   |
|     | 1780            | 444T          | 171522*           | 10800         | C             | 2000                   | ✓                        | 164.0♦               | 95.8                | 95.8              | 40.00                   |
|     | 1190            | 445T          | 171576*           | 13033         | C             | 2040                   | ✓                        | 206.0♦               | 95.8                | 95.8              | 40.00                   |
| 200 | 3570            | 444TS         | 171573*           | 12134         | C             | 1765                   | ✓                        | 216.0♦               | 95.4                | 95.4              | 36.25                   |
|     | 1780            | 445T          | 171523*           | 12455         | C             | 2037                   | ✓                        | 220.0♦               | 95.8                | 95.8              | 40.00                   |
|     | 1190            | 447T          | 171577*           | 17132         | C             | 2820                   | ✓                        | 239.0♦               | 95.8                | 96.2              | 43.12                   |

All WATTSaver® motors have normally closed thermostats for over-temperature alert.

## BLOWER FAN KITS



Used for extended low speed operation of inverter-fed motors, these kits can be field-installed to provide constant velocity cooling.

The 115 volt single phase, fan-drive motor is totally enclosed. The blower is mounted after removing the standard fan and fan cover. No shaft or other modifications to the motor are required.

## FOR CAST IRON 150 & 170 SERIES MOTORS

| Blower<br>Motor<br>Voltage | Phase | For<br>NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | Blower<br>CFM | App.<br>Wgt.<br>(lbs.) |
|----------------------------|-------|----------------------|-------------------|---------------|---------------|---------------|------------------------|
| 115                        | 1     | 180T                 | 175674            | \$744         | C             | 260           | 10                     |
| 115                        | 1     | 210T                 | 175675            | 777           | C             | 260           | 11                     |
| 115                        | 1     | 250T                 | 175676            | 835           | C             | 260           | 17                     |
| 115                        | 1     | 280T                 | 175677            | 1004          | C             | 500           | 24                     |
| 115                        | 1     | 320T                 | 175678            | 1069          | C             | 500           | 28                     |
| 230/460                    | 3     | 360T                 | 175879            | 2221          | C             | 500           | 35                     |
| 230/460                    | 3     | 400T                 | 175880            | 2464          | C             | 500           | 45                     |
| 230/460                    | 3     | 440T                 | 175558♦           | 2819          | C             | 500           | 55                     |

♦ For 444T/445T motors

## FOR ROLLED STEEL TEFC MOTORS

| Blower<br>Motor<br>Voltage | Phase | For<br>NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | Blower<br>CFM | App.<br>Wgt.<br>(lbs.) |
|----------------------------|-------|----------------------|-------------------|---------------|---------------|---------------|------------------------|
| 115                        | 1     | 56-145T              | 175876            | \$664         | C             | 115           | 4                      |
| 115                        | 1     | 56-145T              | 175775□           | 664           | A             | 115           | 4                      |
| 115                        | 1     | 182-4T               | 175895            | 744           | C             | 115           | 4                      |
| 115                        | 1     | 213-5T               | 175896            | 777           | C             | 235           | 5                      |

□ For 56/145T motors having face mounted (plastic) fan guards.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

## THREE PHASE • TEFC • RIGID BASE 208-230/460V • CONTINUED

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Meets<br>NEMA<br>Premium | F.L.<br>Amps<br>230V | 3/4<br>Load<br>Eff. | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|--------------------------|----------------------|---------------------|-------------------|-------------------------|
| 40  | 3550            | 324TS         | 170039            | \$4408        | C             | 504                    | ✓                        | 90.0                 | 93.6                | 93.6              | 28.03                   |
|     | 1780            | 324T          | 170019            | 4375          | C             | 528                    | ✓                        | 92.0                 | 93.6                | 94.1              | 29.53                   |
|     | 1180            | 364T          | 170096            | 7269          | C             | 636                    | ✓                        | 102.0                | 94.1                | 94.1              | 32.64                   |
| 50  | 3550            | 326TS         | 170041            | 5353          | C             | 554                    | ✓                        | 111.0                | 95.0                | 94.5              | 29.53                   |
|     | 1780            | 326T          | 170023            | 5284          | C             | 587                    | ✓                        | 117.0                | 94.5                | 94.5              | 31.02                   |
|     | 1180            | 365T          | 170097            | 8724          | C             | 672                    | ✓                        | 124.0                | 94.1                | 94.1              | 33.62                   |
| 60  | 3570            | 364TS         | 170043            | 7939          | C             | 735                    | ✓                        | 136.0                | 93.6                | 94.1              | 30.51                   |
|     | 1780            | 364T          | 170027            | 7516          | C             | 666                    | ✓                        | 137.0                | 95.0                | 95.4              | 32.64                   |
|     | 1190            | 404T          | 170098            | 10290         | C             | 870                    | ✓                        | 142.0                | 94.5                | 94.5              | 36.42                   |
| 75  | 3570            | 365TS         | 170045            | 9725          | C             | 780                    | ✓                        | 169.0                | 94.5                | 94.5              | 31.50                   |
|     | 1780            | 365T          | 170031            | 9380          | C             | 733                    | ✓                        | 171.0                | 95.8                | 95.8              | 33.62                   |
|     | 1190            | 405T          | 170099            | 10846         | C             | 975                    | ✓                        | 176.0                | 95.0                | 95.0              | 37.91                   |
| 100 | 3570            | 405TS         | 170160            | 10975         | C             | 955                    | ✓                        | 218.0                | 94.5                | 95.0              | 34.92                   |
|     | 1780            | 405T          | 170087            | 11664         | C             | 1070                   | ✓                        | 225.0                | 95.4                | 95.4              | 37.91                   |
|     | 1190            | 444T          | 170256*           | 15440         | C             | 1457                   | ✓                        | 121.0♦               | 95.0                | 95.0              | 42.87                   |
| 125 | 1790            | 444T          | 170369*           | 15486         | C             | 1950                   | ✓                        | 137.5♦               | 95.4                | 95.4              | 42.87                   |
|     | 1190            | 445T          | 170260*           | 17445         | C             | 1596                   | ✓                        | 155.0♦               | 95.4                | 95.4              | 44.88                   |
|     | 3570            | 444TS         | 171580*           | 14298         | C             | 1316                   | ✓                        | 132.0                | 94.5                | 95.0              | 39.10                   |
| 150 | 1790            | 445T          | 170371*           | 17718         | C             | 1627                   | ✓                        | 163.0♦               | 95.8                | 95.8              | 44.88                   |
|     | 1190            | 447T          | 171315*           | 19672         | C             | 2230                   | ✓                        | 185.5♦               | 95.8                | 95.8              | 48.00                   |
|     | 3570            | 445TS         | 171578*           | 17647         | C             | 1445                   | ✓                        | 161.0                | 94.5                | 95.0              | 44.88                   |
| 200 | 1790            | 447T          | 170352*           | 20294         | C             | 2227                   | ✓                        | 216.0♦               | 96.2                | 96.2              | 48.00                   |
|     | 1190            | 449T          | 171316*           | 25766         | C             | 2542                   | ✓                        | 241.5♦               | 95.8                | 95.8              | 52.80                   |
|     | 3570            | 447TS         | 171579*           | 20325         | C             | 1977                   | ✓                        | 216.5                | 95.0                | 95.4              | 48.00                   |

All WATTSaver® motors have normally closed thermostats for over-temperature alert.

\* 460V only

♦ Full Load Amps 460V

## ENCODER KITS • 150 & 170 SERIES



These kits include the parts and encoder for field assembly of a slim-line, through-shaft encoder to LEESON standard TEFC Motors. Designed to slip over the motor's fan end shaft. Blower kit sold separately.

Output is 1024 pulses per revolution, quadrature, 5 to 28 VDC line driver output. Short circuit protection is standard. Inputs are over voltage and reverse voltage protected. Electrical noise immunity exceeds international standards. Encoders are isolated from shaft currents using hard anodized sleeves and non metallic anti-rotation hardware. Designed for long life in industrial environments using an all metal, shock resistant code disk. The encoder is protected by the motor's fan cover after mounting. Using a blower fan kit is suggested for proper motor cooling.

## FOR CAST IRON 150 & 170 SERIES TEFC MOTORS

| For<br>NEMA<br>Frame | Encoder Kit<br>Catalog No. | List<br>Price | Disc.<br>Sym. |
|----------------------|----------------------------|---------------|---------------|
| 182-4T               | 175684                     | \$1157        | C             |
| 213-5T               | 175685                     | 1157          | C             |
| 254-6T               | 175686                     | 1869          | C             |
| 284-6T               | 175687                     | 1869          | C             |
| 320T                 | 175641                     | 1906          | C             |
| 360T                 | 175642                     | 1906          | C             |
| 400T                 | 175643                     | 1906          | C             |
| 440T (2 pole)        | 175644                     | 1906          | C             |
| 440T (4/6 pole)      | 175645                     | 1906          | C             |

## FOR ROLLED STEEL TEFC MOTORS

| For<br>NEMA<br>Frame | Encoder Kit<br>Catalog Number | List<br>Price | Disc.<br>Sym. |
|----------------------|-------------------------------|---------------|---------------|
| 56/145T              | 175960                        | \$934         | A             |
| 182-4T               | 175897                        | 1353          | B             |
| 213-5T               | 175898                        | 1353          | B             |



# WATTSaver® PREMIUM EFFICIENCY MOTORS

GENERAL PURPOSE • THREE PHASE



## THREE PHASE • DRIP-PROOF • C FACE LESS BASE 208-230/460V

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Meets<br>NEMA<br>Premium | F.L.<br>Amps<br>230V | 3/4<br>Load<br>Eff. | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|--------------------------|----------------------|---------------------|-------------------|-------------------------|
| 1/3 | 1725            | S56C          | 102695            | \$343         | A             | 22                     | N/A                      | 1.3                  | 73.5                | 77.0              | 10.24                   |
| 1/2 | 1725            | S56C          | 102200            | 368           | A             | 25                     | N/A                      | 1.8                  | 73.8                | 77.0              | 10.74                   |
| 3/4 | 1725            | 56C           | 114934            | 394           | A             | 29                     | N/A                      | 2.4                  | 80.4                | 81.5              | 10.86                   |
| 1   | 1725            | 56C           | 116740            | 572           | A             | 32                     | ✓                        | 3.4                  | 84.7                | 85.5              | 11.68                   |
|     | 1725            | 143TC         | 121064            | 572           | B             | 32                     | ✓                        | 3.4                  | 84.7                | 85.5              | 12.12                   |
| 1½  | 1725            | 56C           | 116741            | 597           | A             | 36                     | ✓                        | 5.6                  | 86.1                | 86.5              | 12.68                   |
|     | 1725            | 145TC         | 121063            | 597           | B             | 36                     | ✓                        | 5.6                  | 86.1                | 86.5              | 13.12                   |
| 2   | 1725            | 56C           | 116742            | 671           | A             | 41                     | ✓                        | 5.8                  | 86.7                | 86.5              | 13.18                   |
|     | 1725            | 145TC         | 121071            | 671           | B             | 41                     | ✓                        | 5.8                  | 86.7                | 86.5              | 13.62                   |
| 3   | 1760            | 182TC         | 131518            | 719           | B             | 75                     | ✓                        | 7.8                  | 90.2                | 89.5              | 14.20                   |
| 5   | 1760            | 184TC         | 131517            | 845           | B             | 96                     | ✓                        | 12.8                 | 90.1                | 89.5              | 15.20                   |
| 7½  | 1760            | 213TC         | 140483            | 936           | B             | 132                    | ✓                        | 20.6                 | 91.7                | 91.0              | 16.25                   |
| 10  | 1760            | 215TC         | 140485            | 1058          | B             | 144                    | ✓                        | 26.8                 | 92.2                | 91.7              | 17.25                   |

All WATTSaver® motors have normally closed thermostats for over-temperature alert.



## THREE PHASE • TEFC • C FACE LESS BASE 208-230/460V

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Meets<br>NEMA<br>Premium | F.L.<br>Amps<br>230V | 3/4<br>Load<br>Eff. | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|--------------------------|----------------------|---------------------|-------------------|-------------------------|
| 1/3 | 1725            | S56C          | 102696            | \$430         | A             | 22                     | N/A                      | 1.3                  | 73.5                | 77.0              | 10.19                   |
| 1/2 | 1725            | S56C          | 101780            | 461           | A             | 25                     | N/A                      | 1.8                  | 73.8                | 77.0              | 10.69                   |
| 3/4 | 1725            | 56C           | 114213            | 497           | A             | 27                     | N/A                      | 2.7                  | 80.2                | 81.5              | 11.31                   |
| 1   | 1725            | 56C           | 116748            | 545           | A             | 29                     | ✓                        | 2.8                  | 80.0                | 80.0              | 11.31                   |
|     | 1725            | 56C           | 114638            | 691           | A             | 34                     | N/A                      | 3.4                  | 84.7                | 85.5              | 12.81                   |
|     | 1725            | 143TC         | 121067            | 691           | B             | 36                     | ✓                        | 3.4                  | 84.7                | 85.5              | 13.25                   |
|     | 1160            | 56C           | 116749            | 726           | A             | 47                     | ✓                        | 3.8                  | 81.5                | 82.5              | 13.75                   |
| 1½  | 1725            | 56C           | 116750            | 619           | A             | 33                     | ✓                        | 4.0                  | 83.0                | 84.0              | 13.25                   |
|     | 1725            | 56C           | 116743            | 729           | A             | 41                     | ✓                        | 4.8                  | 86.1                | 86.5              | 13.31                   |
|     | 1725            | 145TC         | 121066            | 729           | B             | 41                     | ✓                        | 5.6                  | 86.1                | 86.5              | 13.75                   |
| 2   | 1725            | 56C           | 116751            | 717           | A             | 44                     | ✓                        | 4.8                  | 84.8                | 85.5              | 14.25                   |
|     | 1725            | 56C           | 116744            | 765           | A             | 45                     | ✓                        | 5.8                  | 86.7                | 86.5              | 13.82                   |
|     | 1725            | 145TC         | 121065            | 765           | B             | 45                     | ✓                        | 5.8                  | 86.7                | 86.5              | 14.26                   |
| 3   | 1760            | 182TC         | 131503            | 819           | B             | 72                     | ✓                        | 7.8                  | 89.0                | 89.5              | 14.96                   |
| 5   | 1760            | 184TC         | 131501            | 886           | B             | 90                     | ✓                        | 12.8                 | 90.1                | 89.5              | 15.97                   |
| 7½  | 1760            | 213TC         | 140486            | 1029          | B             | 144                    | ✓                        | 21.4                 | 90.6                | 91.7              | 18.70                   |
| 10  | 1760            | 215TC         | 140484            | 1242          | B             | 160                    | ✓                        | 26.6                 | 91.6                | 91.7              | 19.70                   |

All WATTSaver® motors have normally closed thermostats for over-temperature alert.

All 180 and 210 frame Rolled Steel motors have Class F Insulation.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

## THREE PHASE • DRIP-PROOF • C FACE WITH BASE 208-230/460V

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Meets<br>NEMA<br>Premium | F.L.<br>Amps<br>230V | 3/4<br>Load<br>Eff. | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|--------------------------|----------------------|---------------------|-------------------|-------------------------|
| 1/3 | 1725            | S56C          | 103021            | \$361         | A             | 23                     | N/A                      | 1.3                  | 73.5                | 77.0              | 10.24                   |
| 1/2 | 1725            | S56C          | 103022            | 381           | A             | 26                     | N/A                      | 1.8                  | 73.8                | 77.0              | 10.74                   |
| 3/4 | 1725            | 56C           | 116762            | 404           | A             | 30                     | N/A                      | 2.4                  | 80.4                | 81.5              | 10.86                   |
| 1   | 1725            | 56C           | 116763            | 577           | A             | 33                     | ✓                        | 3.4                  | 84.7                | 85.5              | 11.68                   |
|     | 1725            | 143TC         | 121674            | 577           | B             | 34                     | ✓                        | 3.4                  | 84.7                | 85.5              | 12.12                   |
| 1½  | 1725            | 56C           | 116764            | 599           | A             | 37                     | ✓                        | 5.6                  | 86.1                | 86.5              | 12.68                   |
|     | 1725            | 145TC         | 121675            | 599           | B             | 37                     | ✓                        | 5.6                  | 86.1                | 86.5              | 13.12                   |
| 2   | 1725            | 56HC          | 116765            | 676           | A             | 42                     | ✓                        | 5.8                  | 86.7                | 86.5              | 13.18                   |
|     | 1725            | 145TC         | 121676            | 676           | B             | 42                     | ✓                        | 5.8                  | 86.7                | 86.5              | 13.62                   |
| 3   | 1760            | 182TC         | 132081            | 732           | B             | 76                     | ✓                        | 7.8                  | 90.2                | 89.5              | 14.20                   |
| 5   | 1760            | 184TC         | 132082            | 858           | B             | 97                     | ✓                        | 12.8                 | 90.1                | 89.5              | 15.20                   |
| 7½  | 1760            | 213TC         | 140767            | 943           | B             | 132                    | ✓                        | 20.6                 | 91.7                | 91.0              | 16.25                   |
| 10  | 1760            | 215TC         | 140768            | 1070          | B             | 144                    | ✓                        | 26.8                 | 91.7                | 91.7              | 17.25                   |

All WATTSaver® motors have normally closed thermostats for over-temperature alert.



## THREE PHASE • TEFC • C FACE WITH BASE 208-230/460V

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Meets<br>NEMA<br>Premium | F.L.<br>Amps<br>230V | 3/4<br>Load<br>Eff. | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|--------------------------|----------------------|---------------------|-------------------|-------------------------|
| 1/3 | 1725            | S56C          | 102697            | \$439         | A             | 22                     | N/A                      | 1.3                  | 73.5                | 77.0              | 10.19                   |
| 1/2 | 1725            | S56C          | 102024            | 472           | A             | 23                     | N/A                      | 1.8                  | 73.8                | 77.0              | 10.69                   |
| 3/4 | 1725            | 56C           | 114624            | 507           | A             | 25                     | N/A                      | 2.7                  | 80.2                | 81.5              | 11.31                   |
| 1   | 1725            | 56C           | 116745            | 715           | A             | 34                     | ✓                        | 3.4                  | 84.7                | 85.5              | 12.81                   |
|     | 1725            | 143TC         | 121179            | 715           | B             | 34                     | ✓                        | 3.4                  | 84.7                | 85.5              | 13.25                   |
| 1½  | 1725            | 143TC         | 121672            | 645           | B             | 33                     | ✓                        | 3.6                  | 83.0                | 84.0              | 13.25                   |
|     | 1725            | 56C           | 116746            | 741           | A             | 37                     | ✓                        | 5.6                  | 86.1                | 86.5              | 13.31                   |
|     | 1725            | 145TC         | 121180            | 741           | B             | 37                     | ✓                        | 5.6                  | 86.1                | 86.5              | 13.75                   |
| 2   | 1725            | 145TC         | 121673            | 661           | B             | 44                     | ✓                        | 4.8                  | 84.8                | 85.5              | 13.75                   |
|     | 1725            | 56HC          | 116747            | 775           | A             | 43                     | ✓                        | 5.8                  | 86.7                | 86.5              | 13.82                   |
|     | 1725            | 145TC         | 121181            | 775           | B             | 43                     | ✓                        | 5.8                  | 86.7                | 86.5              | 14.26                   |
| 3   | 1760            | 182TC         | 132079            | 954           | B             | 70                     | ✓                        | 7.6                  | 86.1                | 86.5              | 13.96                   |
|     | 1760            | 182TC         | 131504            | 836           | B             | 75                     | ✓                        | 7.8                  | 89.0                | 89.5              | 14.96                   |
| 5   | 1760            | 184TC         | 132080            | 943           | B             | 100                    | ✓                        | 12.8                 | 88.0                | 88.5              | 16.46                   |
|     | 1760            | 184TC         | 131502            | 905           | B             | 99                     | ✓                        | 12.8                 | 90.1                | 89.5              | 15.97                   |
| 7½  | 1760            | 213TC         | 140770            | 1166          | B             | 160                    | ✓                        | 21.4                 | 90.6                | 91.7              | 18.70                   |
|     | 1760            | 213TC         | 140521            | 1035          | B             | 144                    | ✓                        | 21.4                 | 90.6                | 91.7              | 18.70                   |
| 10  | 1760            | 215TC         | 140769            | 1317          | B             | 175                    | ✓                        | 23.6                 | 92.4                | 91.7              | 21.09                   |
|     | 1760            | 215TC         | 140522            | 1250          | B             | 160                    | ✓                        | 26.6                 | 91.6                | 91.7              | 19.70                   |
| 15  | 3525            | 254TC         | 171586            | 2084          | C             | 292                    | ✓                        | 34.6                 | 92.0                | 92.7              | 23.19                   |
|     | 1770            | 254TC         | 171587            | 2184          | C             | 290                    | ✓                        | 36.0                 | 92.4                | 92.4              | 23.19                   |
| 20  | 3525            | 256TC         | 171588            | 2560          | C             | 326                    | ✓                        | 46.0                 | 93.0                | 92.4              | 24.92                   |
|     | 1770            | 256TC         | 171589            | 2608          | C             | 332                    | ✓                        | 49.0                 | 93.0                | 93.0              | 24.92                   |
| 25  | 3550            | 284TSC        | 171590            | 3217          | C             | 393                    | ✓                        | 56.8                 | 93.3                | 93.0              | 24.88                   |
|     | 1770            | 284TC         | 171591            | 3328          | C             | 395                    | ✓                        | 59.0                 | 94.0                | 93.6              | 26.26                   |
| 30  | 1770            | 286TC         | 171592            | 4010          | C             | 442                    | ✓                        | 70.0                 | 94.1                | 94.1              | 27.83                   |
| 40  | 1780            | 324TC         | 171593            | 5184          | C             | 538                    | ✓                        | 92.0                 | 94.0                | 94.1              | 29.53                   |
| 50  | 1780            | 326TC         | 171594            | 5695          | C             | 597                    | ✓                        | 117.0                | 94.6                | 94.5              | 31.02                   |
| 60  | 1780            | 364TC         | 171595            | 9032          | C             | 676                    | ✓                        | 137.0                | 95.0                | 95.0              | 32.64                   |
| 75  | 1780            | 365TC         | 171596            | 10392         | C             | 743                    | ✓                        | 170.0                | 95.8                | 95.8              | 33.62                   |
| 100 | 1780            | 405TC         | 171597            | 12725         | C             | 1002                   | ✓                        | 225.0                | 95.4                | 95.4              | 37.91                   |

All WATTSaver® motors have normally closed thermostats for over-temperature alert.



# WATTSaver® PREMIUM EFFICIENCY MOTORS

GENERAL PURPOSE • SINGLE PHASE • FHP THREE PHASE



WATTSaver®

## WATTSaver® PREMIUM EFFICIENCY HIGH TORQUE

WATTSaver® Premium Efficiency Motors provide enhanced operating efficiencies, cooler operating temperatures, and reduced running amperage. See page 13 for complete list of features.



## SINGLE PHASE • TEFC • RIGID BASE

| HP    | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------|-------------------------|
| 1/3   | 1725            | 56            | 113765☆           | \$425         | A             | 27                     | 115/208-230 | Man.                   | 1.7                  | 76.0              | 10.81                   |
| 1/2   | 1725            | 56            | 113766☆           | 472           | A             | 30                     | 115/208-230 | Man.                   | 2.5                  | 78.0              | 11.31                   |
| 3/4   | 1725            | 56            | 113767☆           | 557           | A             | 35                     | 115/208-230 | Man.                   | 3.2                  | 82.0              | 11.81                   |
| 1     | 1725            | 56            | 113768☆           | 639           | A             | 37                     | 115/208-230 | Man.                   | 4.2                  | 83.0              | 12.31                   |
| 1 1/2 | 1725            | 56H           | 113769☆□          | 726           | A             | 43                     | 115/208-230 | Man.                   | 6.5                  | 84.0              | 13.31                   |
| 2     | 1725            | 56HZ          | 113770☆■          | 999           | A             | 49                     | 230         | Man.                   | 8.2                  | 85.0              | 14.25                   |

## WATTSaver® PREMIUM EFFICIENCY FAN MOTORS

Premium efficiency motors for agricultural and industrial belted-fan applications.

Features include quiet bearings, resilient cradle base, and quiet flow-through ventilation. Class "F" insulated, with spade connectors on terminal board for quick and easy installation.



## SINGLE PHASE • DRIP-PROOF • RESILIENT BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>115V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------|-------------------------|
| 1/4 | 1725            | 48            | 101602            | \$319         | A             | 19                     | 115     | Auto.                  | 2.5                  | 71.0              | 10.39                   |
| 1/3 | 1725            | 48            | 101405            | 378           | A             | 19                     | 115     | Auto.                  | 3.2                  | 75.0              | 10.39                   |
|     | 1725/<br>1140   | 56HZ          | 113771 ②D         | 505           | A             | 30                     | 115     | Auto.                  | 3.0                  | 73.0              | 11.44                   |
|     | 1725/<br>1140   | 56HZ          | 113970 ②D         | 464           | A             | 30                     | 115     | Auto.                  | 3.2                  | 73.0              | 11.94                   |
|     | 1725/<br>850    | 56HZ          | 113674 ②D         | 505           | A             | 30                     | 115     | Auto.                  | 3.1                  | 70.0              | 11.44                   |
|     | 1725/<br>850    | 56HZ          | 113969 ②D         | 464           | A             | 30                     | 115     | Auto.                  | 3.2                  | 73.0              | 11.94                   |
| 1/2 | 1725            | 48            | 101585            | 431           | A             | 25                     | 115     | Auto.                  | 4.6                  | 76.0              | 11.39                   |

② These combination 56H base motors have mounting holes for 56 and 143-5T, and a 1/2" diameter shaft with flat 1 1/2" long.

☆ Capacitor start/capacitor run design for reduced amperage, others are capacitor start/induction run.

□ Combination 56 H base motors have mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 56 shaft.

■ Combination 56 HZ base has mounting holes for NEMA 56 and 143-5T and a standard NEMA 145T frame shaft of 7/8" diameter.

D Motors are to be discontinued once the inventory is depleted.

## FHP MOTORS FOR AC DRIVES

- Compact 48-frame design with keyed shaft
- Class F insulation
- 20:1 Constant torque rated
- Inverter IRIS™ insulation system
- 1/2" diameter keyed shaft with 48-C Face
- 115/230V 3-phase design optimized for FHP drives



## THREE PHASE • TEFC • C FACE WITH BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|----------------------|-------------------|-------------------------|
| 1/6 | 1725            | 48CZ          | 102792            | \$273         | A             | 25                     | 1.25                 | 56.0              | 8.94                    |
| 1/4 | 1725            | 48CZ          | 102793            | 310           | A             | 26                     | 1.4                  | 58.0              | 8.94                    |
| 1/3 | 1725            | 48CZ          | 102794            | 339           | A             | 28                     | 1.6                  | 64.3              | 9.19                    |
| 1/2 | 1725            | 48CZ          | 102795            | 380           | A             | 30                     | 1.8                  | 77.0              | 10.19                   |



## OTHER GENERAL PURPOSE MOTORS

RIGID BASE • SINGLE AND THREE PHASE



### TENV MOTORS

General purpose, totally enclosed non-vent motors with rigid base.

#### SINGLE PHASE • RIGID BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/6 | 3450            | 42            | 092011            | \$270         | A             | 16                     | 115/208-230 | None                   | 1.0                  | 9.56                    |
|     | 1725            | 42            | 092012            | 286           | A             | 21                     | 115/208-230 | None                   | 1.8                  | 10.56                   |
| 1/4 | 3450            | 42            | 092013            | 290           | A             | 21                     | 115/208-230 | None                   | 1.7                  | 10.56                   |
|     | 1725            | 48            | 100361            | 278           | A             | 17                     | 115/208-230 | None                   | 2.2                  | 9.43                    |
|     | 1725            | S56           | 102914*           | 281           | A             | 24                     | 115/208-230 | None                   | 2.3                  | 9.81                    |
|     | 1725            | S56           | 102915*           | 317           | A             | 23                     | 115/208-230 | Auto.                  | 2.3                  | 9.81                    |
| 1/3 | 3450            | 48            | 100362            | 268           | A             | 24                     | 115/208-230 | None                   | 2.0                  | 9.93                    |
|     | 1725            | S56           | 102912*           | 308           | A             | 25                     | 115/208-230 | None                   | 2.6                  | 10.81                   |
|     | 1725            | S56           | 102913*           | 353           | A             | 25                     | 115/208-230 | Man.                   | 2.6                  | 10.31                   |
|     | 1725            | S56           | 102911*           | 349           | A             | 24                     | 115/208-230 | Auto.                  | 2.6                  | 10.31                   |
| 1/2 | 3450            | 48            | 100366            | 306           | A             | 27                     | 115/208-230 | None                   | 2.9                  | 10.43                   |

#### THREE PHASE • RIGID BASE

| HP    | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1/6   | 3450            | 42            | 092014            | \$330         | A             | 13                     | 208-230/460 | 0.7                  | 65.0              | 7.56                    |
|       | 1725            | 42            | 092015            | 366           | A             | 14                     | 208-230/460 | 0.9                  | 61.0              | 7.81                    |
| 1/4   | 3450            | 42            | 092016            | 348           | A             | 15                     | 208-230/460 | 0.9                  | 62.0              | 8.06                    |
|       | 1725            | 48            | 100123            | 278           | A             | 16                     | 208-230/460 | 1.0                  | 78.0              | 9.18                    |
|       | 1725            | S56           | 101649            | 278           | A             | 16                     | 208-230/460 | 1.0                  | 78.0              | 9.56                    |
| 1/3   | 3450            | 48            | 101013            | 262           | A             | 17                     | 208-230/460 | 1.2                  | 72.0              | 9.06                    |
|       | 1725            | 48            | 100443            | 308           | A             | 19                     | 208-230/460 | 1.4                  | 78.0              | 9.56                    |
|       | 1725            | S56           | 102920            | 306           | A             | 20                     | 208-230/460 | 1.3                  | 77.0              | 9.56                    |
| 1/2   | 3450            | 56            | 110143            | 304           | A             | 25                     | 208-230/460 | 1.5                  | 67.0              | 10.38                   |
|       | 1725            | S56           | 102918†           | 357           | A             | 21                     | 208-230/460 | 1.8                  | 77.0              | 10.06                   |
| 3/4   | 1725            | 56            | 114309            | 388           | A             | 30                     | 208-230/460 | 2.5                  | 80.0              | 10.89                   |
| 1     | 1725            | 143T          | 121098            | 445           | B             | 35                     | 208-230/460 | 3.2                  | 80.0              | 11.83                   |
| 1 1/2 | 1725            | 145T          | 121099            | 466           | B             | 47                     | 208-230/460 | 4.2                  | 80.0              | 13.33                   |

Motors in this column have a 1.15 Service Factor.

### F2 MOUNT MOTORS

General purpose, three-phase motors with NEMA F2 conduit box location.



#### DRIP-PROOF • THREE PHASE

| HP    | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 3     | 1760            | 182T          | G131240           | \$495         | B             | 63                     | 208-230/460 | 8.4                  | 86.5              | 11.69                   |
| 5     | 1760            | 184T          | G131239           | 549           | B             | 76                     | 208-230/460 | 13.2                 | 87.5              | 13.69                   |
| 7 1/2 | 1760            | 213T          | G140609           | 773           | B             | 96                     | 208-230/460 | 20.0                 | 88.5              | 15.26                   |

Motors in this column have NEMA Service Factors—see page 308 for details.

#### TEFC • THREE PHASE

| NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 182T          | G131237           | \$560         | B             | 74                     | 208-230/460 | 8.2                  | 87.5              | 13.96                   |
| 184T          | G131236           | 649           | B             | 86                     | 208-230/460 | 13.0                 | 87.5              | 14.96                   |
| 213T          | G140604           | 819           | B             | 119                    | 208-230/460 | 20.4                 | 89.5              | 17.71                   |

Motors in this column have a 1.15 Service Factor.

Note: For larger F2 mount motors, 150 & 170 Series cast iron motors may be converted to F2 by reassembly.

### AUTOMATIC OVERLOAD MOTORS

General purpose, drip-proof motors with automatic reset thermal overload protection. Not for use with variable frequency drives.



#### THREE PHASE • DRIP-PROOF • RIGID BASE

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 3  | 1760            | 182T          | G131338           | \$664         | B             | 58                     | 208-230/460 | 8.4                  | 86.5              | 12.69                   |
| 5  | 1760            | 184T          | G130565           | 762           | B             | 78                     | 208-230/460 | 13.2                 | 87.5              | 13.69                   |

- \* 1.0 Service Factor.
- † Class F insulated.
- \* These totally enclosed single phase motors have 1.15 Service Factors.

All 180 and 210 frame Rolled Steel motors have Class F Insulation.

Catalog numbers in green are EPACT motors.

**SPEEDMASTER®  
INVERTER-DUTY/  
VECTOR DUTY MOTORS**  
2000:1 CONSTANT TORQUE



**Features:**

Class H inverter-rated IRIS™ insulation system  
Constant torque operation from 0 to base RPM rating on Vector Drives  
Constant HP operation to twice base RPM rating for 143T-256T frame, 1.5 x base RPM for all other sizes  
Designed for optimum performance with IGBT inverters – not for across-the-line starting  
C-face with rigid base through 100HP  
Normally closed thermostats (one per phase)  
Continuous duty at 40° C ambient  
1.0 Service Factor (Class “B” rise on TEBC motors)  
Premium quality, cast iron frame and endbells  
284T and larger are blower-cooled with a separately powered three-phase blower motor to provide added cooling at low speeds  
Ball bearings (Roller bearings available 360-frame and larger)  
Field convertible to F2 mounting  
Encoder provisions included on opposite drive end (See Encoder Kits this page)  
UL Recognized and CSA Certified  
Three-year warranty  
Meets NEMA MG1, parts 30 and 31

**Applications:**

Designed for inverter or vector applications where up to a 2000:1 constant torque speed range is required. Typical uses include: material handling, machine tools, conveyors, crane and hoist, metal processing, test stands, pumps, compressors, textile processing, and other industrial machinery installed in dusty or dirty environments.

**THREE PHASE • TOTALLY ENCLOSED • RIGID BASE**

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | F.L.<br>Amps<br>230V | RPM<br>Max.† | “C”<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|----------------------|--------------|-------------------------|
| 1   | 1725            | 143TC         | <b>810548●</b>    | \$1177        | C             | 61                     | 230/460 | 3.0                  | 5400         | 13.68                   |
| 1½  | 1725            | 145TC         | <b>810547●</b>    | 1296          | C             | 68                     | 230/460 | 4.6                  | 5400         | 14.68                   |
| 2   | 1750            | 145TC         | <b>810546●</b>    | 1354          | C             | 70                     | 230/460 | 6.0                  | 5400         | 14.68                   |
| 3   | 1750            | 182TC         | <b>811320●</b>    | 1617          | C             | 110                    | 230/460 | 8.0                  | 5400         | 16.68                   |
| 5   | 1750            | 184TC         | <b>811322●</b>    | 1792          | C             | 118                    | 230/460 | 13.4                 | 5400         | 17.69                   |
| 7½  | 1760            | 213TC         | <b>810157●</b>    | 2411          | C             | 180                    | 230/460 | 21.0                 | 4200         | 20.56                   |
| 10  | 1760            | 215TC         | <b>810140●</b>    | 2848          | C             | 290                    | 230/460 | 26.0                 | 4200         | 22.74                   |
| 15  | 1765            | 254TC         | <b>810066●</b>    | 3414          | C             | 320                    | 230/460 | 39.0                 | 4200         | 25.12                   |
|     | 1170            | 284TC         | <b>810068</b>     | 7212          | C             | 440                    | 230/460 | 40.0                 | 3600         | 37.48                   |
| 20  | 1765            | 256TC         | <b>810007●</b>    | 4653          | C             | 435                    | 230/460 | 52.0                 | 4200         | 27.13                   |
|     | 1170            | 286TC         | <b>810001</b>     | 8641          | C             | 450                    | 230/460 | 52.4                 | 3600         | 37.48                   |
| 25  | 1770            | 284TC         | <b>810011</b>     | 5799          | C             | 438                    | 230/460 | 65.0                 | 3600         | 37.48                   |
|     | 1180            | 324TC         | <b>810003</b>     | 10165         | C             | 620                    | 230/460 | 67.0                 | 3600         | 40.41                   |
| 30  | 1780            | 286TC         | <b>810015</b>     | 6386          | C             | 520                    | 230/460 | 74.0                 | 4200         | 38.98                   |
|     | 1180            | 326TC         | <b>810005</b>     | 11186         | C             | 700                    | 230/460 | 82.0                 | 3600         | 41.91                   |
| 40  | 1775            | 324TC         | <b>810019</b>     | 8077          | C             | 620                    | 230/460 | 100.0                | 3600         | 40.41                   |
|     | 1185            | 364TC         | <b>810096</b>     | 13489         | C             | 975                    | 230/460 | 104.0                | 2700         | 42.78                   |
| 50  | 1780            | 326TC         | <b>810023</b>     | 9528          | C             | 640                    | 230/460 | 120.0                | 3600         | 41.91                   |
|     | 1185            | 365TC         | <b>810097</b>     | 16171         | C             | 1029                   | 230/460 | 180.0                | 2700         | 43.78                   |
| 60  | 1780            | 364TC         | <b>810027</b>     | 12262         | C             | 975                    | 230/460 | 147.0                | 2700         | 42.78                   |
|     | 1185            | 404TC         | <b>810098</b>     | 17941         | C             | 1322                   | 230/460 | 142.0                | 2700         | 46.72                   |
| 75  | 1780            | 365TC         | <b>810031</b>     | 14703         | C             | 1050                   | 230/460 | 180.0                | 2700         | 43.78                   |
|     | 1185            | 405TC         | <b>810099</b>     | 21859         | C             | 1350                   | 230/460 | 180.0                | 2700         | 49.28                   |
| 100 | 1780            | 405TC         | <b>810087</b>     | 17914         | C             | 1400                   | 230/460 | 230.0                | 2700         | 49.28                   |
|     | 1185            | 444TC         | <b>811367+</b>    | 24852         | C             | 2050                   | 230/460 | 250.0                | 2700         | 52.72                   |
| 125 | 1780            | 444T          | <b>811369+</b>    | 22591         | C             | 2000                   | 460     | 138.0①               | 2700         | 52.72                   |
| 150 | 1780            | 445T          | <b>811371+</b>    | 25631         | C             | 2321                   | 460     | 170.0①               | 2700         | 54.72                   |
| 200 | 1785            | 445T          | <b>810503+</b>    | 30340         | C             | 2450                   | 460     | 230.0①               | 2700         | 54.72                   |
| 250 | 1780            | 449T          | <b>811516+</b>    | 40196         | C             | 3210                   | 460     | 295.0①               | 2700         | 63.21                   |
| 300 | 1785            | 449T          | <b>811529+</b>    | 50953         | C             | 3410                   | 460     | 330.0①               | 2700         | 63.21                   |
| 350 | 1785            | 449T          | <b>811530+</b>    | 62152         | C             | 3520                   | 460     | 385.0①               | 2700         | 63.21                   |

● These motors are Totally Enclosed, Non-Ventilated (TENV) — Others are Totally Enclosed Blower-Cooled (TEBC).

† Contact LEESON for applications requiring higher speeds.

+ Contact LEESON for production leadtime on these items.

① Amps at 460 volts

**ENCODER KITS\* FOR SPEEDMASTER® 2000:1 MOTORS**

| Description                                            | Enclosure | Frame    | Brand/Model    | PPR  | Catalog<br>Number | List<br>Price | Disc.<br>Sym. |
|--------------------------------------------------------|-----------|----------|----------------|------|-------------------|---------------|---------------|
| <b>Encoders</b>                                        |           |          |                |      |                   |               |               |
| Modular Mount, 5-15 VDC, with EPIC connector           | TENV      | 143-256T | Northstar SL56 | 1024 | <b>E175927</b>    | \$2610        | C             |
| Shaft Mount, 5-26 VDC, with 10 pin connector           | TENV      | 143-256T | Dynapar HS35   | 1024 | <b>E175928</b>    | 1676          | C             |
| Shaft Mount, 5-26 VDC, with 10 pin connector           | TENV      | 143-256T | BEI HS35       | 1024 | <b>E175929</b>    | 1676          | C             |
| Shaft Mount, 5-26 VDC, with 10 pin connector           | TENV      | 143-256T | Dynapar HS35   | 2048 | <b>E175930</b>    | 1676          | C             |
| Shaft Mount, 5-26 VDC, with 10 pin connector           | TENV      | 143-256T | BEI HS35       | 2048 | <b>E175931</b>    | 1676          | C             |
| Modular Mount, 5-15 VDC (Encoder Conduit Box Required) | TEBC      | 284-449T | Northstar SL56 | 1024 | <b>E175921</b>    | 2610          | C             |
| Shaft Mount, 5-26 VDC (Encoder Conduit Box Required)   | TEBC      | 284-449T | Dynapar HS35   | 1024 | <b>E175922</b>    | 1676          | C             |
| Shaft Mount, 5-26 VDC (Encoder Conduit Box Required)   | TEBC      | 284-449T | BEI HS35       | 1024 | <b>E175923</b>    | 1676          | C             |
| Shaft Mount, 5-26 VDC (Encoder Conduit Box Required)   | TEBC      | 284-449T | Dynapar HS35   | 2048 | <b>E175924</b>    | 1676          | C             |
| Shaft Mount, 5-26 VDC (Encoder Conduit Box Required)   | TEBC      | 284-449T | BEI HS35       | 2048 | <b>E175925</b>    | 1676          | C             |
| Conduit Box Required for all TEBC Units                | —         | —        | —              | —    | <b>ECB175926</b>  | 186           | C             |

\* Shipped separately for field installation.

**SHADED FRAME INDICATES CAST IRON CONSTRUCTION**





# C FACE MOTORS • SINGLE PHASE

## LESS BASE • CAPACITOR START • GENERAL PURPOSE



### DRIP-PROOF • C FACE LESS BASE • SINGLE PHASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/6 | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 1/4 | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|     | 1725            | S56C          | 100023            | \$271         | A             | 17                     | 115/208-230 | None                   | 2.7                  | 9.24                    |
|     | 1725            | S56C          | 101521            | 295           | A             | 17                     | 115/208-230 | Auto.                  | 2.7                  | 9.24                    |
| 1/3 | 3450            | S56C          | 100354            | 239           | A             | 17                     | 115/208-230 | None                   | 2.8                  | 8.99                    |
|     | 3450            | S56C          | 100355            | 251           | A             | 17                     | 115/208-230 | Auto.                  | 2.8                  | 8.99                    |
|     | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|     | 1725            | S56C          | 100024            | 316           | A             | 17                     | 115/208-230 | None                   | 3.3                  | 9.24                    |
|     | 1725            | S56C          | 100018            | 341           | A             | 18                     | 115/208-230 | Man.                   | 3.3                  | 9.24                    |
|     | 1725            | S56C          | 101522            | 334           | A             | 17                     | 115/208-230 | Auto.                  | 3.3                  | 9.24                    |
| 1/2 | 3450            | S56C          | 100356            | 251           | A             | 19                     | 115/208-230 | None                   | 3.4                  | 9.99                    |
|     | 3450            | S56C          | 100054            | 270           | A             | 18                     | 115/208-230 | Auto.                  | 3.4                  | 9.99                    |
|     | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|     | 1725            | S56C          | 100025            | 358           | A             | 19                     | 115/208-230 | None                   | 4.4                  | 9.99                    |
|     | 1725            | S56C          | 100019            | 385           | A             | 21                     | 115/208-230 | Man.                   | 4.4                  | 9.99                    |
|     | 1725            | S56C          | 100020            | 378           | A             | 20                     | 115/208-230 | Auto.                  | 4.4                  | 9.99                    |
|     | 1140            | 56C           | 110381            | 651           | A             | 32                     | 115/208-230 | None                   | 5.0                  | 11.38                   |
| 3/4 | 3450            | S56C          | 100357            | 323           | A             | 24                     | 115/208-230 | None                   | 4.9                  | 10.49                   |
|     | 3450            | S56C          | 100055            | 355           | A             | 24                     | 115/208-230 | Auto.                  | 4.9                  | 10.49                   |
|     | 1725            | S56C          | 100026            | 432           | A             | 24                     | 115/208-230 | None                   | 5.4                  | 10.99                   |
|     | 1725            | S56C          | 100021            | 466           | A             | 24                     | 115/208-230 | Man.                   | 5.4                  | 10.99                   |
|     | 1725            | S56C          | 101523            | 461           | A             | 26                     | 115/208-230 | Auto.                  | 5.4                  | 10.99                   |
|     | 1140            | 56C           | 110382            | 725           | A             | 46                     | 115/208-230 | None                   | 6.4                  | 12.88                   |
| 1   | 3450            | 56C           | 110384            | 345           | A             | 28                     | 115/208-230 | None                   | 6.0                  | 10.88                   |
|     | 3450            | 56C           | 113337            | 385           | A             | 28                     | 115/208-230 | Auto.                  | 6.0                  | 10.84                   |
|     | 1725            | 56C           | 110220            | 459           | A             | 30                     | 115/208-230 | None                   | 6.4                  | 10.88                   |
|     | 1725            | 56C           | 110036            | 484           | A             | 27                     | 115/208-230 | Man.                   | 6.4                  | 10.88                   |
|     | 1725            | 143TC         | 121002            | 497           | B             | 31                     | 115/208-230 | None                   | 6.4                  | 11.28                   |
| 1½  | 3450            | 56C           | 110387            | 476           | A             | 28                     | 115/208-230 | None                   | 8.2                  | 10.84                   |
|     | 3450            | 56C           | 113336            | 504           | A             | 28                     | 115/208-230 | Auto.                  | 8.2                  | 10.84                   |
|     | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|     | 1725            | 56C           | 110388☆           | 555           | A             | 38                     | 115/208-230 | None                   | 8.6                  | 11.84                   |
|     | 1725            | 56C           | 110037☆           | 582           | A             | 39                     | 115/208-230 | Man.                   | 8.6                  | 11.84                   |
|     | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 2   | 3450            | 56C           | 110390            | 624           | A             | 37                     | 115/208-230 | None                   | 10.0                 | 11.84                   |
|     | 3450            | 56C           | 113335            | 651           | A             | 36                     | 115/208-230 | Auto.                  | 10.0                 | 11.84                   |
|     | 3450            | 145TC         | 121184            | 635           | B             | 37                     | 115/208-230 | None                   | 10.0                 | 12.28                   |
|     | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|     | 1725            | 145TC         | 120073☆           | 630           | B             | 49                     | 115/208-230 | None                   | 10.5                 | 13.28                   |
|     | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 3   | 3450            | 56C           | 113334            | 663           | A             | 36                     | 230         | Auto.                  | 15.0                 | 11.84                   |
|     | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|     | 1740            | 184TC         | 131544            | 732           | B             | 73                     | 115/208-230 | None                   | 16.9                 | 14.19                   |
| 5   | 3450            | 184TC         | 131777☆           | 980           | B             | 70                     | 208-230     | None                   | 22.2                 | 14.69                   |
|     | 1740            | 184TC         | 131539☆           | 1020          | B             | 81                     | 230         | None                   | 21.0                 | 14.69                   |

Motors in this column have NEMA Service Factors - see page 308 for details.

☆ Capacitor start/capacitor run design for reduced amperage, others are capacitor start/induction run.

❖ These totally enclosed single phase motors have 1.15 Service Factors.

● These motors are totally enclosed, non-ventilated—Others are fan cooled.

† Class F insulated.

➤ Shaft extension has keyway and flat 180° apart for ease of mounting.

Useable shaft is 1½" long by 1/2" diameter, 1/8" keyway.

### TEFC • C FACE LESS BASE • SINGLE PHASE

| NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 48CZ➤         | 102661            | \$278         | A             | 14                     | 115/208-230 | None                   | 2.0                  | 9.19                    |
| 48CZ➤         | 101765            | 317           | A             | 18                     | 115/208-230 | None                   | 2.7                  | 9.19                    |
| S56C          | 102868❖           | 315           | A             | 22                     | 115/208-230 | None                   | 2.3                  | 9.80                    |
| S56C          | 102866            | 315           | A             | 18                     | 115/208-230 | None                   | 2.7                  | 9.44                    |
| S56C          | 102870            | 270           | A             | 20                     | 115/208-230 | None                   | 2.8                  | 9.44                    |
| S56C          | 102873●           | 270           | A             | 24                     | 115/208-230 | None                   | 1.9                  | 9.30                    |
| 48CZ➤         | 102663            | 328           | A             | 19                     | 115/208-230 | None                   | 3.3                  | 9.69                    |
| S56C          | 101766            | 341           | A             | 22                     | 115/208-230 | None                   | 3.3                  | 9.94                    |
| S56C          | 102867❖           | 339           | A             | 23                     | 115/208-230 | None                   | 2.6                  | 10.30                   |
| S56C          | 102871❖           | 357           | A             | 25                     | 115/208-230 | Man.                   | 2.6                  | 10.30                   |
| S56C          | 102864❖           | 305           | A             | 22                     | 115/208-230 | None                   | 3.5                  | 9.94                    |
| S56C          | 102872❖           | 324           | A             | 25                     | 115/208-230 | Man.                   | 3.5                  | 9.94                    |
| 48CZ➤         | 102665            | 383           | A             | 22                     | 115/208-230 | None                   | 4.0                  | 10.44                   |
| S56C          | 102862❖           | 392           | A             | 21                     | 115/208-230 | None                   | 4.0                  | 10.69                   |
| S56C          | 102865❖           | 414           | A             | 22                     | 115/208-230 | Man.                   | 4.0                  | 10.69                   |
| S56C          | 102871            | 409           | A             | 24                     | 115/208-230 | Auto.                  | 4.0                  | 10.69                   |
| 56C           | 110411            | 690           | A             | 37                     | 115/208-230 | None                   | 4.9                  | 12.81                   |
| 56C           | 110413            | 357           | A             | 26                     | 115/208-230 | None                   | 5.0                  | 11.31                   |
| 56C           | 110412            | 371           | A             | 28                     | 115/208-230 | Man.                   | 5.0                  | 11.31                   |
| 56C           | 110057❖           | 466           | A             | 25                     | 115/208-230 | None                   | 5.4                  | 11.31                   |
| 56C           | 110040❖           | 491           | A             | 26                     | 115/208-230 | Man.                   | 5.4                  | 11.31                   |
| 56C           | 110308❖           | 484           | A             | 28                     | 115/208-230 | Auto.                  | 5.4                  | 11.31                   |
| 56C           | 110414☆           | 777           | A             | 42                     | 115/208-230 | None                   | 5.3                  | 13.31                   |
| 56C           | 110416❖           | 418           | A             | 28                     | 115/208-230 | None                   | 6.0                  | 11.81                   |
| 56C           | 110415            | 458           | A             | 28                     | 115/208-230 | Man.                   | 6.0                  | 11.81                   |
| 56C           | 110058❖           | 536           | A             | 33                     | 115/208-230 | None                   | 6.4                  | 11.81                   |
| 56C           | 110041❖           | 560           | A             | 29                     | 115/208-230 | Man.                   | 6.4                  | 11.81                   |
| 143TC         | 121001            | 608           | B             | 32                     | 115/208-230 | None                   | 6.4                  | 12.25                   |
| 56C           | 110419            | 538           | A             | 31                     | 115/208-230 | None                   | 8.5                  | 12.31                   |
| 56C           | 110418            | 564           | A             | 31                     | 115/208-230 | Man.                   | 8.5                  | 12.31                   |
| 143TC         | 120101            | 608           | B             | 36                     | 115/208-230 | None                   | 8.5                  | 12.75                   |
| 56C           | 110420☆           | 604           | A             | 37                     | 115/208-230 | None                   | 8.6                  | 12.81                   |
| 56C           | 110042☆           | 630           | A             | 40                     | 115/208-230 | Man.                   | 8.6                  | 12.81                   |
| 145TC         | 120017☆           | 688           | B             | 40                     | 115/208-230 | None                   | 8.6                  | 13.75                   |
| 56C           | 110422❖           | 685           | A             | 40                     | 115/208-230 | None                   | 10.0                 | 13.31                   |
| 56C           | 110421❖†          | 709           | A             | 41                     | 115/208-230 | Man.                   | 10.0                 | 13.31                   |
| 145TC         | 120102❖†          | 710           | B             | 43                     | 115/208-230 | None                   | 10.0                 | 13.75                   |
| 56C           | 112136☆           | 809           | A             | 41                     | 115/230     | None                   | 9.2                  | 13.31                   |
| 145TC         | 120060☆           | 828           | B             | 45                     | 115/230     | Man.                   | 10.0                 | 14.25                   |
| 182TC         | 131516            | 1079          | B             | 64                     | 115/208-230 | None                   | 12.4                 | 14.47                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 145TC         | 120824☆           | 794           | B             | 56                     | 230         | Man.                   | 13.0                 | 14.25                   |
| 184TC         | 131545            | 1269          | B             | 82                     | 115/208-230 | None                   | 16.8                 | 16.47                   |
| 184TC         | 131778☆           | 1275          | B             | 81                     | 208-230     | None                   | 19.8                 | 16.97                   |
| 184TC         | 131540☆           | 1323          | B             | 104                    | 230         | None                   | 23.0                 | 17.47                   |

Motors in this column have NEMA Service Factors except as noted by ☆, which have 1.15 Service Factors.

All 180 and 210 frame Rolled Steel motors have Class F Insulation.

# C FACE MOTORS • SINGLE PHASE

## WITH BASE • CAPACITOR START • GENERAL PURPOSE



### DRIP-PROOF • C FACE WITH BASE • SINGLE PHASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/4 | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 1/3 | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|     | 1725            | S56C          | 103023            | \$324         | A             | 18                     | 115/208-230 | None                   | 3.3                  | 9.24                    |
|     | 1725            | S56C          | 103083            | 324           | A             | 18                     | 115/208-230 | Man.                   | 3.3                  | 9.24                    |
|     | ...             | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 1/2 | 3450            | S56C          | 103024            | 294           | A             | 20                     | 115/208-230 | None                   | 3.4                  | 9.99                    |
|     | 1725            | S56C          | 101651            | 392           | A             | 21                     | 115/208-230 | None                   | 4.4                  | 9.99                    |
|     | 1725            | S56C          | 103084            | 392           | A             | 21                     | 115/208-230 | Man.                   | 4.4                  | 9.99                    |
| 3/4 | 3450            | S56C          | 103025            | 345           | A             | 24                     | 115/208-230 | None                   | 4.9                  | 10.49                   |
|     | 1725            | S56C          | 101650            | 454           | A             | 27                     | 115/208-230 | None                   | 5.4                  | 10.99                   |
|     | 1725            | S56C          | 103086            | 454           | A             | 27                     | 115/208-230 | Man.                   | 5.4                  | 10.99                   |
| 1   | 3450            | 56C           | 116769            | 366           | A             | 28                     | 115/208-230 | None                   | 6.0                  | 10.84                   |
|     | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|     | 1725            | 56C           | 113930            | 518           | A             | 34                     | 115/208-230 | None                   | 6.4                  | 10.88                   |
|     | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|     | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 1½  | 3450            | 56C           | 116770            | 492           | A             | 35                     | 115/208-230 | None                   | 6.2                  | 11.34                   |
|     | 3450            | 56C           | 114214☆           | 500           | A             | 35                     | 115/208-230 | Man.                   | 6.2                  | 11.34                   |
|     | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|     | 1725            | 56HC          | 113932☆□          | 559           | A             | 39                     | 115/208-230 | None                   | 8.6                  | 11.84                   |
|     | 1725            | 56HC          | 113700☆□          | 661           | A             | 38                     | 115/208-230 | Man.                   | 7.2                  | 11.84                   |
|     | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 2   | 3450            | 56C           | 116771            | 625           | A             | 35                     | 115/208-230 | None                   | 8.6                  | 11.34                   |
|     | 3450            | 56C           | 114215☆           | 635           | A             | 35                     | 115/208-230 | Man.                   | 8.6                  | 11.34                   |
|     | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|     | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|     | 1725            | 56HC          | 113281☆□          | 685           | A             | 45                     | 115/208-230 | Man.                   | 8.6                  | 12.88                   |
|     | 1725            | 145TC         | 120992            | 599           | B             | 45                     | 115/230     | None                   | 10.5                 | 13.28                   |
|     | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 3   | 3450            | 56HC          | 116707☆           | 693           | A             | 41                     | 230         | Man.                   | 15.0                 | 12.38                   |
|     | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|     | 3450            | 182TC         | 132083☆           | 780           | B             | 74                     | 115/208-230 | None                   | 14.0                 | 14.18                   |
|     | 1740            | 184TC         | 131629            | 833           | B             | 70                     | 115/208-230 | Man.                   | 16.9                 | 14.19                   |
|     | 1740            | 184TC         | 131853☆           | 832           | B             | 87                     | 208-230     | Man.                   | 15.4                 | 15.96                   |
| 5   | 3450            | 56HC          | 116709☆           | 710           | A             | 46                     | 230         | Man.                   | 20.8                 | 13.34                   |
|     | 3450            | 184TC         | 131781☆           | 984           | B             | 70                     | 208-230     | None                   | 22.2                 | 14.19                   |
|     | 1740            | 184TC         | 131630☆           | 1023          | B             | 77                     | 208-230     | Man.                   | 21.0                 | 14.69                   |
| 7½  | 3450            | 184TC         | 132043☆           | 1021          | B             | 112                    | 208-230     | Tstat                  | 31.0                 | 16.69                   |
| 10  | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
|     | 1740            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |

Motors in this column have NEMA Service Factors - see page 308 for details.

- ☆ Capacitor start/capacitor run design for reduced amperage, others are capacitor start/induction run.
- ❖ These totally enclosed single phase motors have 1.15 Service Factors.
- These motors are totally enclosed, non-ventilated — Others are fan cooled.
- Combination 56H base motors have mounting holes for NEMA 56 and NEMA 143-145T and standard NEMA 56C face and shaft.
- † Class F insulated.

All 180 and 210 frame Rolled Steel motors have Class F Insulation.

### TEFC • C FACE WITH BASE • SINGLE PHASE

| NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| S56C          | 102916            | \$322         | A             | 22                     | 115/208-230 | None                   | 2.7                  | 9.69                    |
| S56C          | 102929            | 320           | A             | 22                     | 115/208-230 | None                   | 2.8                  | 9.69                    |
| S56C          | 102930            | 342           | A             | 24                     | 115/208-230 | None                   | 3.1                  | 10.44                   |
| S56C          | 103082            | 342           | A             | 24                     | 115/208-230 | Man.                   | 3.1                  | 10.31                   |
| S56C          | 102910❖           | 342           | A             | 25                     | 115/208-230 | None                   | 2.6                  | 10.31                   |
| S56C          | 102903            | 321           | A             | 25                     | 115/208-230 | None                   | 3.5                  | 9.94                    |
| S56C          | 102907❖           | 411           | A             | 22                     | 115/208-230 | None                   | 4.0                  | 10.69                   |
| S56C          | 103085            | 411           | A             | 22                     | 115/208-230 | Man.                   | 4.0                  | 10.69                   |
| 56C           | 112135            | 366           | A             | 26                     | 115/208-230 | None                   | 5.0                  | 11.31                   |
| 56C           | 110905❖           | 497           | A             | 26                     | 115/208-230 | None                   | 5.4                  | 11.31                   |
| 56C           | 116922            | 497           | A             | 26                     | 115/208-230 | Man.                   | 5.4                  | 11.31                   |
| 56C           | 110180            | 422           | A             | 28                     | 115/208-230 | None                   | 6.0                  | 11.81                   |
| 56C           | 115877            | 422           | A             | 28                     | 115/208-230 | Man.                   | 6.0                  | 11.81                   |
| 56C           | 110908❖           | 562           | A             | 30                     | 115/208-230 | None                   | 6.4                  | 11.81                   |
| 56C           | 115879            | 562           | A             | 32                     | 115/208-230 | Man.                   | 6.4                  | 11.81                   |
| 143TC         | 121680            | 562           | B             | 32                     | 115/208-230 | None                   | 6.4                  | 12.25                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 56C           | 110909            | 546           | A             | 34                     | 115/208-230 | None                   | 8.5                  | 12.31                   |
| 56C           | 115024☆           | 573           | A             | 35                     | 115/208-230 | Man.                   | 6.2                  | 12.31                   |
| 56HC          | 110910☆❖□         | 668           | A             | 39                     | 115/208-230 | None                   | 8.6                  | 12.81                   |
| 56HC          | 116703☆           | 672           | A             | 42                     | 115/208-230 | Man.                   | 8.6                  | 12.81                   |
| 145TC         | 121681            | 668           | B             | 40                     | 115/208-230 | None                   | 8.6                  | 13.75                   |
| 56HC          | 113931❖†          | 716           | A             | 46                     | 115/208-230 | None                   | 10.0                 | 13.31                   |
| 56HC          | 114995☆           | 682           | A             | 42                     | 115/208-230 | Man.                   | 9.2                  | 13.31                   |
| 56HC          | 115878❖†          | 716           | A             | 43                     | 115/208-230 | Man.                   | 10.0                 | 13.31                   |
| 145TC         | 121008❖†          | 716           | B             | 43                     | 115/208-230 | None                   | 10.0                 | 13.75                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 145TC         | 120274☆           | 902           | B             | 49                     | 115/230     | None                   | 9.2                  | 14.25                   |
| 145TC         | 121465☆           | 902           | A             | 44                     | 115/208-230 | Man.                   | 9.2                  | 13.75                   |
| 56HC          | 115048□☆          | 746           | A             | 53                     | 208-230     | Man.                   | 14.0                 | 13.31                   |
| 145TC         | 121060☆           | 802           | B             | 51                     | 230         | Man.                   | 13.0                 | 14.25                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 184TC         | 131631            | 1273          | B             | 84                     | 115/208-230 | Man.                   | 16.8                 | 16.47                   |
| 184TC         | 131857☆           | 1273          | B             | 104                    | 230         | Man.                   | 13.7                 | 17.61                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                    | ...                  | ...                     |
| 184TC         | 131632☆❖          | 1280          | B             | 103                    | 230         | Man.                   | 19.8                 | 16.97                   |
| 184TC         | 131633☆           | 1333          | B             | 86                     | 230         | Man.                   | 23.0                 | 16.97                   |
| 213TC         | 140694☆           | 1502          | B             | 120                    | 208-230     | None                   | 32.0                 | 19.07                   |
| 215TC         | 140695☆           | 1792          | B             | 138                    | 208-230     | None                   | 41.5                 | 20.57                   |
| 215TC         | 140678☆           | 1735          | B             | 152                    | 230         | None                   | 40.0                 | 20.71                   |

Motors in this column have NEMA Service Factors except as denoted by ❖, which have 1.15 Service Factors.



# C FACE MOTORS • THREE PHASE

## LESS BASE • GENERAL PURPOSE



### DRIP-PROOF • C FACE LESS BASE • THREE PHASE

| HP    | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number   | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | FL<br>Amps<br>230V | %<br>FL<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-------|-----------------|---------------|---------------------|---------------|---------------|------------------------|-------------|--------------------|-----------------|-------------------------|
| 1/6   | 1725            | ...           | ...                 | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
| 1/4   | 3450            | ...           | ...                 | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|       | 1725            | ...           | ...                 | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|       | 1725            | ...           | ...                 | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|       | 1725            | S56C          | 103014              | \$248         | A             | 19                     | 208-230/460 | 1.4                | 58.0            | 9.24                    |
|       | 1725            | ...           | ...                 | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
| 1/3   | 3450            | S56C          | 100375              | 250           | A             | 15                     | 208-230/460 | 1.4                | 68.0            | 9.31                    |
|       | 1725            | ...           | ...                 | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|       | 1725            | S56C          | 100048              | 273           | A             | 17                     | 208-230/460 | 1.6                | 64.3            | 9.49                    |
|       | 1725            | ...           | ...                 | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|       | 1725            | S56C          | 102695 <sup>W</sup> | 343           | A             | 22                     | 208-230/460 | 1.3                | 77.0            | 10.24                   |
|       | 1140            | ...           | ...                 | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|       | 1140            | ...           | ...                 | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
| 1/2   | 3450            | ...           | ...                 | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|       | 3450            | S56C          | 100056              | 268           | A             | 17                     | 208-230/460 | 1.8                | 69.0            | 9.31                    |
|       | 3450            | ...           | ...                 | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|       | 1725            | ...           | ...                 | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|       | 1725            | ...           | ...                 | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|       | 1725            | S56C          | 100049              | 316           | A             | 21                     | 208-230/460 | 2.0                | 68.0            | 9.99                    |
|       | 1725            | ...           | ...                 | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|       | 1725            | S56C          | 102200 <sup>W</sup> | 368           | A             | 25                     | 208-230/460 | 1.8                | 77.0            | 10.74                   |
|       | 1140            | 56C           | 110434              | 467           | A             | 26                     | 208-230/460 | 2.8                | 66.0            | 10.38                   |
| 3/4   | 3450            | S56C          | 100378              | 318           | A             | 20                     | 208-230/460 | 2.4                | 79.0            | 9.81                    |
|       | 1725            | S56C          | 100050              | 351           | A             | 24                     | 208-230/460 | 2.8                | 75.0            | 10.49                   |
|       | 1725            | 56C           | 114934 <sup>W</sup> | 394           | A             | 29                     | 208-230/460 | 2.4                | 81.5            | 10.86                   |
|       | 1140            | 56C           | 116728              | 506           | A             | 35                     | 208-230/460 | 3.4                | 75.5            | 10.88                   |
|       | 1140            | 143TC         | 120063              | 506           | B             | 36                     | 208-230/460 | 3.4                | 75.5            | 11.28                   |
| 1     | 3450            | 56C           | 110111              | 366           | A             | 22                     | 208-230/460 | 3.2                | 77.0            | 9.88                    |
|       | 3450            | ...           | ...                 | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|       | 1725            | 56C           | 110043              | 384           | A             | 22                     | 208-230/460 | 4.2                | 78.5            | 10.38                   |
|       | 1725            | 56C           | 116740 <sup>W</sup> | 572           | A             | 32                     | 208-230/460 | 3.4                | 85.5            | 11.68                   |
|       | 1725            | 143TC         | 120172              | 384           | B             | 26                     | 208-230/460 | 4.2                | 78.5            | 11.28                   |
|       | 1725            | 143TC         | 121064 <sup>W</sup> | 572           | B             | 32                     | 208-230/460 | 3.4                | 85.5            | 12.12                   |
|       | 1140            | ...           | ...                 | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|       | 1140            | ...           | ...                 | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|       | 1140            | 145TC         | 120082              | 545           | B             | 34                     | 208-230/460 | 4.0                | 77.0            | 11.78                   |
| 1 1/2 | 3450            | 56C           | 110437              | 424           | A             | 27                     | 208-230/460 | 4.2                | 81.5            | 10.84                   |
|       | 3450            | ...           | ...                 | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|       | 3450            | 143TC         | 121668              | 424           | B             | 29                     | 208-230/460 | 4.2                | 82.1            | 11.78                   |
|       | 1725            | 56C           | 110044              | 447           | A             | 27                     | 208-230/460 | 5.6                | 78.5            | 10.88                   |
|       | 1725            | 56C           | 116741              | 597           | A             | 36                     | 208-230/460 | 5.6                | 86.5            | 12.68                   |
|       | 1725            | 145TC         | 120081              | 422           | B             | 34                     | 208-230/460 | 5.6                | 78.5            | 11.78                   |
|       | 1725            | 143TC         | 121063 <sup>W</sup> | 597           | B             | 36                     | 208-230/460 | 5.6                | 86.5            | 13.12                   |
|       | 1140            | ...           | ...                 | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|       | 1140            | 145TC         | 121669              | 575           | B             | 39                     | 208-230/460 | 5.7                | 77.0            | 12.28                   |

<sup>W</sup> Premium efficiency WATTSaver® Motors. See page 15 for details.

### TEFC • C FACE LESS BASE • THREE PHASE

| NEMA<br>Frame | Catalog<br>Number   | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | FL<br>Amps<br>230V | %<br>FL<br>Eff. | "C"<br>Dim.<br>(Inches) |
|---------------|---------------------|---------------|---------------|------------------------|-------------|--------------------|-----------------|-------------------------|
| 48CZ          | 102662              | \$257         | A             | 15                     | 208-230/460 | .7                 | 71.0            | 9.44                    |
| 48CZ          | 101965 ●            | 334           | A             | 15                     | 208-230/460 | 1.0                | 67.0            | 9.03                    |
| 48CZ          | 101966 ●            | 292           | A             | 18                     | 208-230/460 | 1.0                | 78.0            | 9.31                    |
| 48CZ          | 101981              | 292           | A             | 17                     | 208-230/460 | 1.4                | 58.0            | 8.94                    |
| S56C          | 101648 ●            | 285           | A             | 17                     | 208-230/460 | 1.0                | 78.0            | 9.56                    |
| S56C          | 101767              | 285           | A             | 19                     | 208-230/460 | 1.4                | 58.0            | 9.69                    |
| 56C           | 110446 ●            | 281           | A             | 20                     | 208-230/460 | 1.2                | 77.0            | 9.90                    |
| 48CZ          | 102664              | 297           | A             | 20                     | 208-230/460 | 1.6                | 64.3            | 9.19                    |
| S56C          | 101769              | 308           | A             | 20                     | 208-230/460 | 1.6                | 64.3            | 9.69                    |
| S56C          | 102863 ●            | 315           | A             | 19                     | 208-230/460 | 1.3                | 77.0            | 9.56                    |
| S56C          | 102696 <sup>W</sup> | 430           | A             | 22                     | 208-230/460 | 1.3                | 77.0            | 10.19                   |
| 48C           | 101291 ●            | 480           | A             | 20                     | 208-230/460 | 1.8                | 73.0            | 9.56                    |
| 56C           | 113311              | 480           | A             | 22                     | 208-230/460 | 1.6                | 65.0            | 10.81                   |
| 48C           | 100449 ●            | 328           | A             | 23                     | 208-230/460 | 1.6                | 67.0            | 10.06                   |
| 56C           | 110144 ●            | 328           | A             | 25                     | 208-230/460 | 1.6                | 82.5            | 10.40                   |
| 56C           | 114176              | 328           | A             | 19                     | 208-230/460 | 2.0                | 72.0            | 10.31                   |
| 48CZ          | 100486 ●            | 374           | A             | 24                     | 208-230/460 | 1.6                | 78.0            | 10.31                   |
| 48CZ          | 102666              | 359           | A             | 24                     | 208-230/460 | 2.0                | 73.0            | 9.69                    |
| S56C          | 102861 ●            | 372           | A             | 23                     | 208-230/460 | 1.8                | 77.0            | 10.06                   |
| S56C          | 102860              | 359           | A             | 19                     | 208-230/460 | 2.0                | 73.0            | 10.19                   |
| S56C          | 101780 <sup>W</sup> | 461           | A             | 25                     | 208-230/460 | 1.8                | 77.0            | 10.69                   |
| 56C           | 110163              | 518           | A             | 25                     | 208-230/460 | 2.4                | 70.0            | 11.31                   |
| 56C           | 110448              | 343           | A             | 21                     | 208-230/460 | 2.4                | 75.5            | 10.81                   |
| 56C           | 110047              | 388           | A             | 22                     | 208-230/460 | 2.8                | 77.0            | 10.81                   |
| 56C           | 114213 <sup>W</sup> | 497           | A             | 27                     | 208-230/460 | 2.7                | 81.5            | 11.31                   |
| 56C           | 112378              | 543           | A             | 29                     | 208-230/460 | 3.0                | 75.5            | 11.81                   |
| 143TC         | 120097              | 543           | B             | 33                     | 208-230/460 | 3.0                | 75.5            | 12.25                   |
| 56C           | 110112              | 404           | A             | 21                     | 208-230/460 | 3.2                | 77.0            | 10.81                   |
| 56C           | 116748 <sup>W</sup> | 545           | A             | 29                     | 208-230/460 | 2.8                | 80.0            | 11.31                   |
| 56C           | 110048              | 414           | A             | 24                     | 208-230/460 | 3.8                | 77.0            | 11.31                   |
| 56C           | 114638 <sup>W</sup> | 691           | A             | 34                     | 208-230/460 | 3.4                | 85.5            | 12.81                   |
| 143TC         | 120024              | 414           | B             | 26                     | 208-230/460 | 3.8                | 77.0            | 11.75                   |
| 143TC         | 121067 <sup>W</sup> | 691           | B             | 36                     | 208-230/460 | 3.4                | 85.5            | 13.25                   |
| 56C           | 112379              | 532           | A             | 32                     | 208-230/460 | 4.0                | 77.0            | 12.31                   |
| 56C           | 116749 <sup>W</sup> | 726           | A             | 47                     | 208-230/460 | 3.8                | 82.5            | 13.75                   |
| 145TC         | 120098              | 532           | B             | 36                     | 208-230/460 | 4.0                | 77.0            | 12.75                   |
| 56C           | 110192              | 445           | A             | 28                     | 208-230/460 | 4.2                | 81.5            | 11.81                   |
| 56C           | 116750 <sup>W</sup> | 619           | A             | 33                     | 208-230/460 | 4.0                | 84.0            | 13.25                   |
| 143TC         | 120105              | 440           | B             | 33                     | 208-230/460 | 4.2                | 80.3            | 12.75                   |
| 56C           | 110125              | 439           | A             | 29                     | 208-230/460 | 5.0                | 78.5            | 11.81                   |
| 56C           | 116743 <sup>W</sup> | 729           | A             | 41                     | 208-230/460 | 4.8                | 86.5            | 13.31                   |
| 145TC         | 120037              | 426           | B             | 32                     | 208-230/460 | 5.0                | 80.0            | 12.75                   |
| 145TC         | 121066 <sup>W</sup> | 729           | B             | 41                     | 208-230/460 | 4.8                | 86.5            | 13.75                   |
| 56C           | 113634              | 607           | A             | 39                     | 208-230/460 | 5.7                | 77.0            | 13.31                   |
| 145TC         | 120161              | 607           | B             | 39                     | 208-230/460 | 5.7                | 77.0            | 13.75                   |

➤ Shaft extension has keyway and flat 180° apart for ease of mounting.

Useable shaft is 1 1/2" long by 1/2" diameter, 1/8" keyway.

● These motors are totally enclosed, non-ventilated—Others are fan cooled.

CONTINUED ON NEXT PAGE



# C FACE MOTORS • THREE PHASE

LESS BASE • GENERAL PURPOSE



C Face Motors



## DRIP PROOF • C FACE LESS BASE • THREE PHASE

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | FL<br>Amps<br>230V | %<br>FL<br>Eff. | "C"<br>Dim.<br>(Inches) |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|--------------------|-----------------|-------------------------|
| 2  | 3450            | 56C           | <b>113894</b>     | \$491         | A             | 31                     | 208-230/460 | 5.6                | 82.5            | 11.34                   |
|    | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|    | 3450            | 143TC         | <b>121670</b>     | 491           | B             | 33                     | 208-230/460 | 6.2                | 82.9            | 11.88                   |
|    | 1725            | 56C           | <b>115553</b>     | 478           | A             | 32                     | 208-230/460 | 6.2                | 78.5            | 11.19                   |
|    | 1725            | 56C           | <b>116742</b> [W] | 671           | A             | 41                     | 208-230/460 | 5.8                | 86.5            | 13.18                   |
|    | 1725            | 145TC         | <b>120035</b>     | 463           | B             | 33                     | 208-230/460 | 6.2                | 78.5            | 12.28                   |
|    | 1725            | 145TC         | <b>121071</b> [W] | 671           | B             | 41                     | 208-230/460 | 5.8                | 86.5            | 13.62                   |
|    | 1140            | 184TC         | <b>132059</b>     | 610           | B             | 45                     | 208-230/460 | 6.0                | 84.0            | 13.78                   |
|    | 3450            | 56C           | <b>114420</b>     | 522           | A             | 37                     | 208-230/460 | 7.6                | 84.0            | 11.84                   |
|    | 3450            | 145TC         | <b>121187</b>     | 441           | B             | 39                     | 208-230/460 | 7.6                | 84.0            | 12.28                   |
| 3  | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|    | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|    | 1725            | 145TC         | <b>121405</b>     | 551           | B             | 45                     | 208-230/460 | 8.6                | 82.5            | 13.12                   |
|    | 1740            | 182TC         | <b>131489</b>     | 513           | B             | 43                     | 208-230/460 | 8.0                | 80.0            | 11.69                   |
|    | 1760            | 182TC         | <b>131518</b> [W] | 719           | B             | 75                     | 208-230/460 | 7.8                | 89.5            | 14.20                   |
|    | 1140            | 213TC         | <b>140765</b>     | 804           | B             | 140                    | 208-230/460 | 11.6               | 86.5            | 15.76                   |
|    | 3450            | 145TC         | <b>121664</b>     | 527           | B             | 45                     | 208-230/460 | 12.4               | 85.5            | 13.75                   |
|    | 3450            | 182TC         | <b>131779</b>     | 549           | B             | 84                     | 208-230/460 | 13.2               | 82.5            | 13.19                   |
|    | 1725            | 184TC         | <b>131490</b>     | 565           | B             | 62                     | 208-230/460 | 14.2               | 84.0            | 12.69                   |
|    | 1760            | 184TC         | <b>131517</b> [W] | 845           | B             | 96                     | 208-230/460 | 12.8               | 89.5            | 15.20                   |
| 5  | 1140            | 215TC         | <b>140766</b>     | 804           | B             | 120                    | 208-230/460 | 17.6               | 87.5            | 16.75                   |
|    | 3450            | 184TC         | <b>131780</b>     | 725           | B             | 73                     | 208-230/460 | 18.4               | 84.0            | 14.19                   |
|    | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|    | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|    | 1740            | 184TC         | <b>131739</b>     | 798           | B             | 108                    | 230/460     | 20.0               | 87.0            | 14.70                   |
|    | 1740            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|    | 1750            | S213TC        | <b>131527</b>     | 798           | B             | 88                     | 230/460     | 20.0               | 87.0            | 15.69                   |
|    | 1760            | 213TC         | <b>140580</b>     | 818           | B             | 115                    | 208-230/460 | 20.0               | 88.5            | 15.25                   |
|    | 1760            | 213TC         | <b>140483</b> [W] | 936           | B             | 132                    | 208-230/460 | 20.6               | 91.0            | 16.25                   |
|    | 3450            | 213TC         | <b>140688</b>     | 983           | B             | 85                     | 208-230/460 | 25.0               | 85.5            | 16.53                   |
| 10 | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|    | 1740            | 215TC         | <b>140108</b>     | 1007          | B             | 132                    | 208-230/460 | 28.0               | 89.5            | 16.75                   |
|    | 1760            | 215TC         | <b>140485</b> [W] | 1058          | B             | 144                    | 208-230/460 | 26.8               | 91.9            | 17.25                   |
|    | 1750            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|    | 3450            | 215TC         | <b>140689</b>     | 1336          | B             | 100                    | 208-230/460 | 38.0               | 86.5            | 18.03                   |
|    | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|    | 1760            | 254TC         | <b>151682</b>     | 1474          | C             | 265                    | 208-230/460 | 37.6               | 91.0            | 20.94                   |
|    | 3500            | 254TC         | <b>151683</b>     | 1749          | C             | 258                    | 208-230/460 | 46.6               | 90.2            | 20.94                   |
|    | 1760            | 256TC         | <b>151684</b>     | 1802          | C             | 307                    | 208-230/460 | 48.0               | 92.0            | 22.60                   |
|    | 3525            | 256TC         | <b>151685</b>     | 2035          | C             | 292                    | 208-230/460 | 57.0               | 91.0            | 22.60                   |
| 25 | 1760            | 284TC         | <b>151686</b>     | 2196          | C             | 388                    | 208-230/460 | 59.6               | 91.7            | 23.54                   |
|    | 3500            | 284TSC        | <b>151687</b>     | 2338          | C             | 373                    | 208-230/460 | 70.4               | 91.0            | 22.17                   |
|    | 1760            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|    | 40              | 1770          | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|    | 50              | 1770          | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|    | 60              | 1770          | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |

## TEFC • C FACE LESS BASE • THREE PHASE

| NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | FL<br>Amps<br>230V | %<br>FL<br>Eff. | "C"<br>Dim.<br>(Inches) |
|---------------|-------------------|---------------|---------------|------------------------|-------------|--------------------|-----------------|-------------------------|
| 56C           | <b>111273</b>     | \$506         | A             | 36                     | 208-230/460 | 5.6                | 82.5            | 12.31                   |
| 56C           | <b>116751</b> [W] | 717           | A             | 44                     | 208-230/460 | 4.8                | 85.5            | 14.25                   |
| 145TC         | <b>120061</b>     | 506           | B             | 34                     | 208-230/460 | 5.6                | 82.5            | 12.75                   |
| 56C           | <b>110451</b>     | 467           | A             | 34                     | 208-230/460 | 6.2                | 81.5            | 12.81                   |
| 56C           | <b>116744</b> [W] | 765           | A             | 45                     | 208-230/460 | 5.8                | 86.5            | 13.82                   |
| 145TC         | <b>120038</b>     | 456           | B             | 35                     | 208-230/460 | 6.2                | 81.5            | 12.75                   |
| 145TC         | <b>121065</b> [W] | 765           | B             | 45                     | 208-230/460 | 5.8                | 86.5            | 14.26                   |
| 184TC         | <b>131525</b>     | 707           | B             | 59                     | 208-230/460 | 7.4                | 80.0            | 13.97                   |
| 56C           | <b>111630</b>     | 575           | A             | 37                     | 208-230/460 | 7.6                | 84.0            | 12.81                   |
| 145TC         | <b>120993</b>     | 575           | B             | 38                     | 208-230/460 | 7.6                | 84.0            | 13.25                   |
| 182TC         | <b>131513</b>     | 644           | B             | 55                     | 208-230/460 | 8.0                | 84.0            | 13.97                   |
| 56C           | <b>113890</b> ♣   | 623           | A             | 43                     | 208-230/460 | 8.6                | 82.5            | 13.81                   |
| 145TC         | <b>121035</b> ♣   | 604           | B             | 44                     | 208-230/460 | 8.6                | 82.5            | 14.25                   |
| 182TC         | <b>131491</b>     | 579           | B             | 52                     | 208-230/460 | 9.0                | 82.5            | 13.97                   |
| 182TC         | <b>131503</b> [W] | 819           | B             | 72                     | 208-230/460 | 7.8                | 89.5            | 14.96                   |
| S213TC        | <b>131642</b>     | 890           | B             | 89                     | 208-230/460 | 9.6                | 81.5            | 16.96                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
| 184TC         | <b>131514</b>     | 722           | B             | 68                     | 208-230/460 | 12.4               | 85.5            | 13.97                   |
| 184TC         | <b>131492</b>     | 663           | B             | 64                     | 208-230/460 | 13.2               | 82.5            | 14.48                   |
| 184TC         | <b>131501</b> [W] | 886           | B             | 90                     | 208-230/460 | 12.8               | 89.5            | 15.97                   |
| 215TC         | <b>140535</b>     | 1205          | B             | 120                    | 208-230/460 | 17.6               | 87.5            | 18.21                   |
| 184TC         | <b>131510</b>     | 865           | B             | 89                     | 208-230/460 | 18.4               | 86.5            | 14.97                   |
| S213TC        | <b>131912</b>     | 899           | B             | 91                     | 208-230/460 | 18.4               | 86.5            | 15.46                   |
| 213TC         | <b>151345</b>     | 956           | C             | 158                    | 208-230/460 | 18.4               | 85.5            | 18.84                   |
| 184TC         | <b>131606</b>     | 852           | B             | 66                     | 208-230/460 | 19.6               | 87.0            | 16.47                   |
| 213TC         | <b>151346</b>     | 922           | C             | 162                    | 208-230/460 | 18.4               | 87.9            | 18.84                   |
| S213TC        | <b>131528</b>     | 852           | B             | 102                    | 208-230/460 | 19.6               | 87.0            | 16.96                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
| 213TC         | <b>140486</b> [W] | 1029          | B             | 144                    | 208-230/460 | 21.4               | 91.7            | 18.70                   |
| 215TC         | <b>140690</b>     | 1066          | B             | 105                    | 208-230/460 | 24.0               | 86.5            | 20.57                   |
| 215TC         | <b>151347</b>     | 1127          | C             | 172                    | 208-230/460 | 23.8               | 86.2            | 20.34                   |
| 215TC         | <b>140109</b>     | 1021          | B             | 141                    | 208-230/460 | 26.0               | 89.5            | 18.71                   |
| 215TC         | <b>140484</b> [W] | 1242          | B             | 160                    | 208-230/460 | 26.6               | 91.7            | 19.70                   |
| 215TC         | <b>151348</b>     | 1087          | C             | 185                    | 208-230/460 | 24.6               | 88.4            | 20.34                   |
| 215TC         | <b>140691</b>     | 1503          | B             | 145                    | 208-230/460 | 37.0               | 88.5            | 20.57                   |
| 215TC         | <b>151349</b>     | 1586          | C             | 200                    | 208-230/460 | 36.0               | 89.2            | 16.61                   |
| 254TC         | <b>151350</b>     | 1543          | C             | 284                    | 208-230/460 | 37.0               | 90.0            | 23.80                   |
| 256TC         | <b>151351</b>     | 2038          | C             | 270                    | 208-230/460 | 48.0               | 89.6            | 25.50                   |
| 256TC         | <b>151352</b>     | 1946          | C             | 270                    | 208-230/460 | 48.0               | 91.2            | 25.50                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
| 284TC         | <b>151507</b>     | 2451          | C             | 390                    | 208-230/460 | 60.0               | 91.3            | 26.26                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
| 286TC         | <b>151508</b>     | 2947          | C             | 411                    | 208-230/460 | 70.0               | 91.5            | 27.83                   |
| 324TC         | <b>151509</b>     | 3770          | C             | 548                    | 208-230/460 | 92.0               | 92.1            | 29.53                   |
| 326TC         | <b>151510</b>     | 4349          | C             | 594                    | 208-230/460 | 114.2              | 92.4            | 31.02                   |
| 364TC         | <b>151519</b>     | 6536          | C             | 778                    | 208-230/460 | 140.0              | 92.7            | 32.64                   |

† Class F insulated.

♣ These totally enclosed three phase motors have 1.0 service factors.

[W] Premium efficiency WATSAVER® Motors. See page 15 for details.

All 180 and 210 frame Rolled Steel motors have Class F Insulation.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION



# C FACE MOTORS • THREE PHASE

WITH BASE • GENERAL PURPOSE



## DRIP PROOF • C FACE WITH BASE • THREE PHASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | FL<br>Amps<br>230V | %<br>FL<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|--------------------|-----------------|-------------------------|
| 1/3 | 1725            | S56C          | <b>100599</b>     | \$311         | A             | 18                     | 208-230/460 | 1.6                | 64.3            | 9.49                    |
|     | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|     | 1725            | S56C          | <b>103021</b> [W] | 361           | A             | 23                     | 208-230/460 | 1.3                | 77.0            | 10.24                   |
| 1/2 | 3450            | S56C          | <b>100600</b>     | 296           | A             | 17                     | 208-230/460 | 2.4                | 69.0            | 9.31                    |
|     | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|     | 1725            | S56C          | <b>100601</b>     | 352           | A             | 20                     | 208-230/460 | 2.0                | 68.0            | 9.99                    |
|     | 1725            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|     | 1725            | S56C          | <b>103022</b> [W] | 381           | A             | 26                     | 208-230/460 | 1.8                | 77.0            | 10.74                   |
|     | 1140            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
| 3/4 | 3450            | S56C          | <b>102971</b>     | 335           | A             | 21                     | 208-230/460 | 2.4                | 79.0            | 9.85                    |
|     | 1725            | S56C          | <b>100602</b>     | 391           | A             | 25                     | 208-230/460 | 2.8                | 75.0            | 10.49                   |
|     | 1725            | 56C           | <b>116762</b> [W] | 404           | A             | 30                     | 208-230/460 | 2.4                | 81.5            | 10.86                   |
|     | 1140            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|     | 1140            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
| 1   | 3450            | 56C           | <b>116784</b>     | 384           | A             | 23                     | 208-230/460 | 3.2                | 77.0            | 9.84                    |
|     | 1725            | 56C           | <b>110901</b>     | 458           | A             | 28                     | 208-230/460 | 4.2                | 78.5            | 10.38                   |
|     | 1725            | 56C           | <b>116763</b> [W] | 577           | A             | 33                     | 208-230/460 | 3.4                | 85.5            | 11.68                   |
|     | 1740            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|     | 1725            | 143TC         | <b>G121650</b>    | 453           | B             | 34                     | 208-230/460 | 3.1                | 82.5            | 11.28                   |
|     | 1140            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
| 1½  | 3450            | 56C           | <b>116785</b>     | 455           | A             | 28                     | 208-230/460 | 4.2                | 81.5            | 10.84                   |
|     | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|     | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|     | 1725            | 56C           | <b>110902</b>     | 482           | A             | 29                     | 208-230/460 | 5.6                | 78.5            | 10.88                   |
|     | 1725            | 56C           | <b>116764</b> [W] | 599           | A             | 37                     | 208-230/460 | 5.6                | 86.5            | 12.68                   |
|     | 1725            | 143TC         | <b>121674</b> [W] | 577           | B             | 34                     | 208-230/460 | 3.4                | 85.5            | 12.12                   |
|     | 1725            | 145TC         | <b>G121651</b>    | 474           | B             | 32                     | 208-230/460 | 4.4                | 84.0            | 12.12                   |
|     | 1725            | 145TC         | <b>121675</b> [W] | 599           | B             | 37                     | 208-230/460 | 5.6                | 86.5            | 13.12                   |
|     | 1125            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|     | 1140            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
| 2   | 3450            | 56C           | <b>114218</b>     | 563           | A             | 34                     | 208-230/460 | 5.6                | 82.5            | 11.40                   |
|     | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|     | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|     | 1725            | 56HC          | <b>116630</b> □   | 506           | A             | 32                     | 208-230/460 | 6.2                | 78.5            | 11.38                   |
|     | 1725            | 56HC          | <b>116765</b> [W] | 676           | A             | 42                     | 208-230/460 | 5.8                | 86.5            | 13.18                   |
|     | 1725            | 145TC         | <b>G120275</b>    | 508           | B             | 35                     | 208-230/460 | 5.6                | 84.0            | 12.62                   |
|     | 1725            | 145TC         | <b>121676</b> [W] | 676           | B             | 42                     | 208-230/460 | 5.8                | 86.5            | 13.62                   |
|     | 1140            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|     | 3450            | 145TC         | <b>G121072</b>    | 509           | B             | 35                     | 230/460     | 7.6                | 84.0            | 12.78                   |
|     | 3515            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
| 3   | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|     | 3510            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|     | 1740            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|     | 1740            | 56HCZ         | <b>116631</b> □   | 586           | A             | 38                     | 208-230/460 | 8.6                | 82.5            | 13.62                   |
|     | 1760            | 182TC         | <b>G130325</b>    | 582           | B             | 58                     | 208-230/460 | 8.4                | 86.5            | 12.69                   |
|     | 1760            | 182TC         | <b>132081</b> [W] | 732           | B             | 76                     | 208-230/460 | 7.8                | 89.5            | 14.20                   |
|     | 1750            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|     | 1140            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|     | 3450            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
|     | 3510            | ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |

● These motors are totally enclosed, non-ventilated — Others are fan cooled.

♣ These totally enclosed three phase motors have 1.0 service factors.

□ Combination 56H base motors have mounting holes for NEMA 56 and NEMA 143-145T and standard NEMA 56C face and shaft.

\* 56HCZ motors have mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 143-5T shaft.

[W] Premium efficiency WATTSaver® Motors. See page 15 for details.

All 180 and 210 frame Rolled Steel motors have Class F Insulation.

## TEFC • C FACE WITH BASE • THREE PHASE

| NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | FL<br>Amps<br>230V | %<br>FL<br>Eff. | "C"<br>Dim.<br>(Inches) |
|---------------|-------------------|---------------|---------------|------------------------|-------------|--------------------|-----------------|-------------------------|
| S56C          | <b>102921</b> ●   | \$343         | A             | 18                     | 208-230/460 | 1.3                | 77.0            | 9.56                    |
| S56C          | <b>102922</b>     | 342           | A             | 19                     | 208-230/460 | 1.3                | 77.0            | 10.19                   |
| S56C          | <b>102697</b> [W] | 439           | A             | 22                     | 208-230/460 | 1.3                | 77.0            | 10.19                   |
| 56C           | <b>110182</b> ●   | 340           | A             | 26                     | 208-230/460 | 1.6                | 82.5            | 10.40                   |
| 56C           | <b>114142</b>     | 340           | A             | 21                     | 208-230/460 | 2.6                | 68.0            | 10.81                   |
| S56C          | <b>102919</b> ●   | 397           | A             | 22                     | 208-230/460 | 2.0                | 77.0            | 10.06                   |
| S56C          | <b>102917</b>     | 397           | A             | 19                     | 208-230/460 | 2.0                | 73.0            | 10.19                   |
| S56C          | <b>102024</b> [W] | 472           | A             | 23                     | 208-230/460 | 1.8                | 77.0            | 10.69                   |
| 56C           | <b>110914</b>     | 533           | A             | 25                     | 208-230/460 | 2.4                | 70.0            | 11.31                   |
| 56C           | <b>110915</b>     | 368           | A             | 23                     | 208-230/460 | 2.4                | 75.5            | 10.81                   |
| 56C           | <b>110916</b>     | 427           | A             | 22                     | 208-230/460 | 2.8                | 77.0            | 10.81                   |
| 56C           | <b>114624</b> [W] | 507           | A             | 25                     | 208-230/460 | 2.7                | 81.5            | 11.31                   |
| 56C           | <b>116340</b>     | 558           | A             | 29                     | 208-230/460 | 3.0                | 75.5            | 11.81                   |
| 143TC         | <b>120485</b>     | 558           | B             | 34                     | 208-230/460 | 3.0                | 75.5            | 13.25                   |
| 56C           | <b>110181</b>     | 435           | A             | 24                     | 208-230/460 | 3.2                | 77.0            | 10.81                   |
| 56C           | <b>110912</b>     | 455           | A             | 24                     | 208-230/460 | 3.6                | 77.0            | 11.31                   |
| 56C           | <b>116745</b> [W] | 715           | A             | 34                     | 208-230/460 | 3.4                | 85.5            | 12.81                   |
| 145TC         | <b>G121286</b>    | 501           | B             | 35                     | 208-230/460 | 3.8                | 82.5            | 13.25                   |
| 143TC         | <b>121179</b> [W] | 715           | B             | 34                     | 208-230/460 | 3.4                | 85.5            | 13.25                   |
| 145TC         | <b>G120428</b>    | 608           | B             | 35                     | 208-230/460 | 3.6                | 80.0            | 13.25                   |
| 56C           | <b>110917</b>     | 488           | A             | 29                     | 208-230/460 | 4.2                | 81.5            | 11.81                   |
| 143TC         | <b>G121290</b>    | 525           | B             | 27                     | 208-230/460 | 4.0                | 82.5            | 13.25                   |
| 143TC         | <b>121672</b> [W] | 645           | B             | 33                     | 208-230/460 | 3.6                | 84.0            | 13.25                   |
| 56C           | <b>110918</b>     | 480           | A             | 30                     | 208-230/460 | 5.0                | 78.5            | 11.81                   |
| 56C           | <b>116746</b> [W] | 741           | A             | 37                     | 208-230/460 | 5.6                | 86.5            | 13.31                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                | ...             | ...                     |
| 145TC         | <b>G121287</b>    | 500           | B             | 37                     | 208-230/460 | 4.4                | 84.0            | 13.25                   |
| 145TC         | <b>121180</b> [W] | 741           | B             | 37                     | 208-230/460 | 5.6                | 86.5            | 13.75                   |
| 56HC          | <b>114198</b> □   | 643           | A             | 41                     | 208-230/460 | 5.7                | 77.0            | 13.31                   |
| 56HCZ         | <b>116592</b> *   | 643           | A             | 44                     | 208-230/460 | 5.7                | 77.0            | 13.75                   |
| 56C           | <b>113927</b>     | 553           | A             | 34                     | 208-230/460 | 5.6                | 82.5            | 12.31                   |
| 145TC         | <b>G121510</b>    | 577           | B             | 45                     | 208-230/460 | 5.2                | 84.0            | 13.25                   |
| 145TC         | <b>121673</b> [W] | 661           | B             | 44                     | 208-230/460 | 4.8                | 85.5            | 13.75                   |
| 56HC          | <b>116106</b> □   | 512           | A             | 36                     | 208-230/460 | 6.2                | 81.5            | 12.81                   |
| 56HC          | <b>116747</b> [W] | 775           | A             | 43                     | 208-230/460 | 5.8                | 86.5            | 13.82                   |
| 145TC         | <b>G120276</b>    | 524           | B             | 45                     | 208-230/460 | 5.6                | 84.0            | 13.75                   |
| 145TC         | <b>121181</b> [W] | 775           | B             | 43                     | 208-230/460 | 5.8                | 86.5            | 14.26                   |
| 184TC         | <b>G131497</b>    | 769           | B             | 76                     | 208-230/460 | 7.2                | 86.5            | 15.47                   |
| 56HC          | <b>114615</b> ♣ □ | 616           | A             | 38                     | 208-230/460 | 7.6                | 84.0            | 12.81                   |
| 145TC         | <b>G120991</b>    | 655           | B             | 35                     | 208-230/460 | 7.4                | 85.5            | 13.75                   |
| 182TC         | <b>G131899</b>    | 725           | B             | 61                     | 208-230/460 | 7.6                | 85.5            | 13.97                   |
| 182TC         | <b>132079</b> [W] | 954           | B             | 70                     | 208-230/460 | 7.6                | 86.5            | 13.96                   |
| 182TC         | <b>G151564</b>    | 772           | C             | 94                     | 208-230/460 | 8.5                | 87.5            | 16.76                   |
| 56HC          | <b>116107</b> □   | 649           | B             | 45                     | 208-230/460 | 8.6                | 82.5            | 13.81                   |
| 56HCZ         | <b>116388</b> *   | 649           | A             | 46                     | 208-230/460 | 8.6                | 82.5            | 14.25                   |
| 182TC         | <b>G130326</b>    | 650           | B             | 68                     | 208-230/460 | 8.2                | 87.5            | 13.96                   |
| 182TC         | <b>131504</b> [W] | 836           | B             | 75                     | 208-230/460 | 7.8                | 89.5            | 14.96                   |
| 182TC         | <b>G151565</b>    | 754           | C             | 94                     | 208-230/460 | 8.5                | 87.5            | 16.14                   |
| 215TC         | <b>G140602</b>    | 963           | B             | 118                    | 230/460     | 12.0               | 87.5            | 17.71                   |

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

Catalog numbers in green are EPACT motors.

# C FACE MOTORS • THREE PHASE

WITH BASE • GENERAL PURPOSE



C Face Motors

## DRIP PROOF • C FACE WITH BASE • THREE PHASE

| HP   | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number            | List<br>Price  | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|------|-----------------|---------------|------------------------------|----------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 5    | 3490            | 145TC         | <b>G121663</b>               | \$538          | B             | 45                     | 208-230/460 | 12.4                 | 85.5              | 13.75                   |
|      | 3450            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|      | 3450            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|      | 3450            | 182TC         | <b>G131249</b>               | 553            | B             | 84                     | 208-230/460 | 12.2                 | 85.5              | 13.20                   |
|      | 1760            | 184TC         | <b>G130327</b>               | 636            | B             | 80                     | 208-230/460 | 13.2                 | 87.5              | 13.69                   |
|      | 1760            | 184TC         | <b>132082</b> <sup>[W]</sup> | 858            | B             | 97                     | 208-230/460 | 12.8                 | 89.5              | 15.20                   |
|      | 1750            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|      | 1140            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 7½   | 3450            | 184TC         | <b>G131250</b>               | 904            | B             | 92                     | 208-230/460 | 17.6                 | 87.5              | 14.70                   |
|      | 3450            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|      | 3450            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|      | 3510            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|      | 1740            | 213TC         | <b>G140589</b>               | 804            | B             | 100                    | 208-230/460 | 20.0                 | 88.5              | 15.75                   |
|      | 1760            | 213TC         | <b>140767</b> <sup>[W]</sup> | 943            | B             | 132                    | 208-230/460 | 20.6                 | 91.0              | 16.25                   |
|      | 1760            | 213TC         | <b>G150170</b>               | 796            | C             | 157                    | 208-230/460 | 19.6                 | 88.5              | 16.38                   |
|      | 1170            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 10   | 3450            | 213TC         | <b>G140692</b>               | 1003           | B             | 105                    | 208-230/460 | 23.4                 | 88.5              | 18.03                   |
|      | 3510            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|      | 3510            | 213TC         | <b>G150171</b>               | 1056           | C             | 180                    | 208-230/460 | 27.6                 | 88.5              | 16.38                   |
|      | 1740            | 215TC         | <b>G140146</b>               | 988            | B             | 162                    | 208-230/460 | 28.0                 | 89.5              | 16.75                   |
|      | 1760            | 215TC         | <b>140768</b> <sup>[W]</sup> | 1070           | B             | 144                    | 208-230/460 | 26.8                 | 91.9              | 17.25                   |
|      | 1760            | 215TC         | <b>G150172</b>               | 1048           | C             | 183                    | 208-230/460 | 25.0                 | 89.5              | 18.62                   |
|      | 1170            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|      | 15              | 3450          | 215TC                        | <b>G140693</b> | 1387          | B                      | 130         | 208-230/460          | 34.0              | 90.2                    |
| 3510 |                 | 215TC         | <b>G150173</b>               | 1459           | C             | 191                    | 208-230/460 | 35.0                 | 89.5              | 18.62                   |
| 3510 |                 | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 3525 |                 | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 1770 |                 | 254TC         | <b>G150175</b>               | 1496           | C             | 266                    | 208-230/460 | 37.6                 | 91.0              | 21.32                   |
| 1770 |                 | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 1170 |                 | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 20   |                 | 3525          | 254TC                        | <b>G150070</b> | 1764          | C                      | 275         | 208-230/460          | 46.6              | 90.2                    |
|      | 3525            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|      | 1770            | 256TC         | <b>G150071</b>               | 1821           | C             | 325                    | 208-230/460 | 49.0                 | 91.0              | 23.03                   |
|      | 1770            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 25   | 3525            | 256TC         | <b>G151688</b>               | 2208           | C             | 300                    | 208-230/460 | 57.0                 | 91.0              | 22.60                   |
|      | 3550            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|      | 3550            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|      | 3550            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 30   | 1770            | 284TC         | <b>G150073</b>               | 2269           | C             | 390                    | 208-230/460 | 59.6                 | 91.7              | 23.54                   |
|      | 1770            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|      | 3550            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|      | 3550            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 40   | 3550            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|      | 1780            | 324TC         | <b>G151378</b>               | 3294           | C             | 491                    | 208-230/460 | 96.0                 | 91.0              | 26.02                   |
|      | 1780            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|      | 1780            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 50   | 3550            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|      | 1780            | 326TC         | <b>G151379</b>               | 3900           | C             | 599                    | 208-230/460 | 120.0                | 93.0              | 27.52                   |
| 1780 | ...             | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               |                         |
| 60   | 3570            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|      | 1780            | 364TC         | <b>G151689</b>               | 4895           | C             | 725                    | 208-230/460 | 141.0                | 93.6              | 28.01                   |
| 1780 | ...             | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               |                         |
| 75   | 3570            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|      | 1780            | 365TC         | <b>G151690</b>               | 5946           | C             | 771                    | 208-230/460 | 177.0                | 94.1              | 31.18                   |
| 1780 | ...             | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               |                         |
| 100  | 1780            | 404TC         | <b>G151691</b>               | 7568           | C             | 997                    | 208-230/460 | 240.0                | 94.1              | 32.76                   |
|      | 1780            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |
|      | 1780            | ...           | ...                          | ...            | ...           | ...                    | ...         | ...                  | ...               | ...                     |

## TEFC • C FACE WITH BASE • THREE PHASE

| NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 184TC         | <b>G131173</b>    | \$720         | B             | 80                     | 208-230/460 | 12.0                 | 87.5              | 14.47                   |
| 184TC         | <b>132080</b> [W] | 943           | B             | 100                    | 208-230/460 | 12.0                 | 88.5              | 16.46                   |
| 184TC         | <b>G151446</b>    | 805           | C             | 101                    | 208-230/460 | 12.0                 | 87.5              | 16.76                   |
| 184TC         | <b>G130328</b>    | 746           | B             | 81                     | 208-230/460 | 13.0                 | 87.5              | 14.97                   |
| 184TC         | <b>131502</b> [W] | 905           | B             | 99                     | 208-230/460 | 12.8                 | 89.5              | 15.97                   |
| 184TC         | <b>G151566</b>    | 827           | C             | 101                    | 208-230/460 | 13.8                 | 87.5              | 16.14                   |
| 215TC         | <b>G140482</b>    | 1237          | B             | 144                    | 208-230/460 | 17.6                 | 87.5              | 18.21                   |
| 184TC         | <b>G130990</b>    | 931           | B             | 91                     | 208-230/460 | 16.8                 | 88.5              | 15.97                   |
| S213TC        | <b>G131774</b>    | 945           | B             | 70                     | 208-230/460 | 16.8                 | 88.5              | 16.96                   |
| 213TC         | <b>140770</b> [W] | 1166          | B             | 160                    | 208-230/460 | 17.8                 | 90.2              | 19.64                   |
| 213TC         | <b>G150166</b>    | 1014          | C             | 153                    | 208-230/460 | 17.8                 | 88.5              | 18.95                   |
| 213TC         | <b>G140183</b>    | 892           | B             | 153                    | 208-230/460 | 20.4                 | 89.5              | 17.71                   |
| 213TC         | <b>140521</b> [W] | 1035          | B             | 144                    | 208-230/460 | 21.4                 | 91.7              | 18.70                   |
| 213TC         | <b>G150165</b>    | 944           | C             | 156                    | 208-230/460 | 19.2                 | 89.5              | 18.95                   |
| 254TC         | <b>G150138</b>    | 1874          | C             | 231                    | 208-230/460 | 20.0                 | 89.5              | 23.80                   |
| 213TC         | <b>G140696</b>    | 1177          | B             | 115                    | 208-230/460 | 24.0                 | 89.5              | 20.57                   |
| 215TC         | <b>140769</b> [W] | 1317          | B             | 175                    | 208-230/460 | 23.6                 | 91.7              | 21.09                   |
| 215TC         | <b>G150168</b>    | 1188          | B             | 163                    | 208-230/460 | 23.6                 | 89.5              | 20.36                   |
| 215TC         | <b>G140147</b>    | 1045          | B             | 162                    | 208-230/460 | 26.0                 | 89.5              | 18.71                   |
| 215TC         | <b>140522</b> [W] | 1250          | B             | 160                    | 208-230/460 | 26.6                 | 91.7              | 19.70                   |
| 215TC         | <b>G150167</b>    | 1111          | C             | 178                    | 208-230/460 | 25.2                 | 89.5              | 20.36                   |
| 256TC         | <b>G150139</b>    | 2088          | C             | 252                    | 208-230/460 | 26.2                 | 89.5              | 25.50                   |
| 215TC         | <b>G140697</b>    | 1557          | B             | 161                    | 208-230/460 | 36.0                 | 90.2              | 20.57                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 254TC         | <b>G150103</b>    | 1657          | C             | 245                    | 208-230/460 | 35.0                 | 90.2              | 23.80                   |
| 254TC         | <b>171586</b> [W] | 2084          | C             | 292                    | 208-230/460 | 34.6                 | 91.7              | 23.19                   |
| 254TC         | <b>G150102</b>    | 1594          | C             | 268                    | 208-230/460 | 36.6                 | 91.0              | 23.80                   |
| 254TC         | <b>171587</b> [W] | 2184          | C             | 290                    | 208-230/460 | 36.0                 | 92.4              | 23.19                   |
| 284TC         | <b>G150104</b>    | 3110          | C             | 369                    | 208-230/460 | 40.4                 | 90.2              | 26.26                   |
| 256TC         | <b>G150079</b>    | 2092          | C             | 257                    | 208-230/460 | 46.2                 | 90.2              | 25.50                   |
| 256TC         | <b>171588</b> [W] | 2560          | C             | 326                    | 208-230/460 | 46.0                 | 92.4              | 24.92                   |
| 256TC         | <b>G150080</b>    | 1946          | C             | 321                    | 208-230/460 | 48.2                 | 91.0              | 25.50                   |
| 256TC         | <b>171589</b> [W] | 2608          | C             | 332                    | 208-230/460 | 49.0                 | 93.0              | 24.92                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 284TSC        | <b>G150106</b>    | 2471          | C             | 362                    | 208-230/460 | 58.2                 | 91.0              | 24.88                   |
| 284TSC        | <b>171590</b> [W] | 3217          | C             | 393                    | 208-230/460 | 56.8                 | 93.0              | 24.88                   |
| 284TC         | <b>G151383</b>    | 2471          | C             | 362                    | 208-230/460 | 58.2                 | 91.0              | 26.26                   |
| 284TC         | <b>G150081</b>    | 2509          | C             | 387                    | 208-230/460 | 58.8                 | 92.4              | 26.26                   |
| 284TC         | <b>171591</b> [W] | 3328          | C             | 395                    | 208-230/460 | 59.0                 | 94.0              | 26.26                   |
| 286TSC        | <b>G150108</b>    | 2915          | C             | 375                    | 208-230/460 | 69.2                 | 91.0              | 26.46                   |
| 286TC         | <b>G151396</b>    | 2915          | C             | 375                    | 208-230/460 | 69.2                 | 91.0              | 27.83                   |
| 286TC         | <b>G150082</b>    | 2966          | C             | 433                    | 208-230/460 | 69.8                 | 92.4              | 27.83                   |
| 286TC         | <b>171592</b> [W] | 4010          | C             | 442                    | 208-230/460 | 70.0                 | 93.6              | 27.83                   |
| 324TSC        | <b>G150110</b>    | 4298          | C             | 574                    | 208-230/460 | 93.0                 | 91.7              | 28.00                   |
| 324TC         | <b>G150083</b>    | 3786          | C             | 572                    | 208-230/460 | 95.2                 | 93.0              | 29.53                   |
| 324TC         | <b>171593</b> [W] | 5184          | C             | 538                    | 208-230/460 | 92.0                 | 94.1              | 29.53                   |
| 326TSC        | <b>G150112</b>    | 4424          | C             | 604                    | 208-230/460 | 112.0                | 92.4              | 29.53                   |
| 326TC         | <b>G150084</b>    | 4388          | C             | 631                    | 208-230/460 | 117.8                | 93.0              | 31.02                   |
| 326TC         | <b>171594</b> [W] | 5695          | C             | 597                    | 208-230/460 | 117.0                | 94.5              | 31.02                   |
| 364TSC        | <b>G150114</b>    | 7232          | C             | 860                    | 208-230/460 | 139.0                | 93.0              | 30.51                   |
| 364TC         | <b>G150085</b>    | 6619          | C             | 699                    | 208-230/460 | 138.0                | 93.6              | 32.64                   |
| 364TC         | <b>171595</b> [W] | 9032          | C             | 676                    | 208-230/460 | 137.0                | 95.4              | 32.64                   |
| 365TSC        | <b>G150115</b>    | 8683          | C             | 773                    | 208-230/460 | 172.0                | 93.0              | 31.49                   |
| 365TC         | <b>G150086</b>    | 8396          | C             | 757                    | 208-230/460 | 173.0                | 94.1              | 33.62                   |
| 365TC         | <b>171596</b> [W] | 10392         | C             | 743                    | 208-230/460 | 170.0                | 95.8              | 33.62                   |
| ...           | ...               | ...           | ...           | ...                    | ...         | ...                  | ...               | ...                     |
| 405TC         | <b>G151680</b>    | 10501         | C             | 1100                   | 208-230/460 | 229.0                | 94.5              | 37.91                   |
| 405TC         | <b>171597</b> [W] | 12725         | C             | 1002                   | 208-230/460 | 225.0                | 95.4              | 37.91                   |

Motors in this column have NEMA Service Factors — see page 308 for details.

[W] Premium efficiency WATTSaver® Motors. See page 15 for details.

All 180 and 210 frame Rolled Steel motors have Class F Insulation.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

Catalog numbers in green are EPACT motors.

Motors in this column have 1.15 Service Factors, except noted by ♣ which have a 1.00 Service Factor.



## WASHGUARD MOTORS NOW AVAILABLE IN FIVE STYLES



**PREMIUM WASHGUARD  
ALL-STAINLESS**



### *Maximum service in critically clean or corrosive environments*

- All exterior components of stainless steel
- Endshields o-ring sealed to frame
- IEEE 841 severe-duty features standard
- Meets demanding pharmaceutical requirements, also excellent for chemical-processing applications
- Meets IP56 enclosure protection
- Incorporates all WASHGUARD mechanical and electrical features, plus IRIS™ insulation system
- IRIS™ insulation system
- BISSC certified for baking industry

AC motor catalog listings on page 37  
DC motor catalog listings on page 89



**FHP**  
**WASHGUARD SST  
ALL-STAINLESS**



### *Stainless Steel Tough for demanding washdown applications*

- All exterior components of 300 series stainless steel, including motor frame, endshield and conduit box castings
- Moisture resistant sealant between frame and endbells
- Full-fact nameplate is laser-etched on the motor frame
- Built to withstand the demanding washdown environments found in the food processing, chemical processing and beverage industries
- No paint or coatings of any type are used on the exterior of the motor
- Four locations for T-drains provided on each endshield
- IRIS™ insulation system
- Meets IP55 enclosure protection
- Three phase motors are suitable for use on VFDs
- 10:1 ratio for constant or variable torque at 1.0 SF

Catalog listings on page 35



**WASHGUARD II  
STAINLESS FRAME**



### *Superior, extended life in severe environments*

- Paint-free exterior—stainless frame and conduit box lid, specially processed endshields and conduit box housing
- Etched stainless steel nameplate
- Proven WASHGUARD mechanical and electrical features
- IRIS™ insulation system
- BISSC certified for baking industry
- Meets IP55 enclosure protection
- Three phase motors are suitable for use on VFDs
- 10:1 ratio for constant or variable torque at 1.0 SF

Catalog listings on page 33



**WASHGUARD  
WHITE EPOXY**



### *Enhanced performance in wet, humid areas*

- Our original moisture-shedding "duck" motor
- Durable RUST-OLEUM® white epoxy coating
- Stainless steel shaft, conduit box cover, nameplate, fan guard
- Special gaskets, slingers and seals
- Four endshield drains
- Moisture-resistant interior components

- IRIS™ insulation system
- Single-phase, three-phase and DC SCR models
- Meets IP55 enclosure protection
- Three phase motors are suitable for use on VFDs
- 10:1 ratio for constant or variable torque at 1.0 SF



Catalog listings on pages 30-32



**EXTREME  
DUCK**



### *Revolutionary Designed Stainless Steel Motors are built to be the last Stainless Steel Washdown motors you will ever need!*

- Meet EPACT for non-exempt when tested without shaft seals
- Total winding encapsulation using an Epoxy Resin
- LEESON's exclusive IRIS™ Inverter-Rated Insulation System
- Motors are UL component recognized
- CSA Energy Efficiency Verification
- Construction is CSA Certified for safety
- All exterior components are 300-Series stainless steel
- Protech Bearing isolator used for the output shaft seal

- Double Lip Viton shaft seal used on non-drive output shaft on TEFC motors
- Minimal exterior fasteners, no through-bolt design and screw on conduit box covers
- Pre-lubricated double-sealed bearings
- Rotor/Cartridge, "Q-CAR," for quick access to bearings
- Rigid Cast Base for rugged applications
- Full fact nameplate is laser etched
- BISSC certified for baking industry

Catalog listings on page 39



# WASHGUARD MOTORS ARE BUILT TO HANDLE HIGH-PRESSURE WASHDOWNS!\*

**Stainless-steel fan guard**  
on all WASHGUARD frames.

**Composite fan** is chemically-inert and static-free. Fan is positively positioned on shaft. On TEFC designs only.

**Stainless-steel, "full-fact"**  
**nameplate** includes information  
on motor efficiency and  
connections. Readable even  
after repeated washdowns.

**USDA-approved, white  
epoxy finish** for superior  
protection and resistance to  
caustic cleaning solutions.

**Encapsulated starting switch**  
(single-phase WASHGUARD motors)  
uses a patented, field-proven design  
that is immune to moisture, shock and  
vibration. No moving parts or exposed  
contacts to become corroded or  
inoperable.

**Moisture-resistant shaft system** includes  
303 stainless-steel shaft and lubricated,  
spring-loaded contact seals in each endshield.  
Patented V-ring Forsheda seal on shaft end to  
deflect water (see inset). Double-sealed,  
oversized bearings lubricated with Exxon  
POLYREX® EM high temperature, moisture-  
resistant lubricant. Bearing cavities packed to  
further retard entrance of moisture.

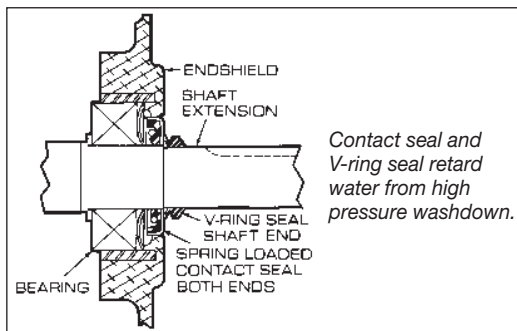
WASHGUARD White Epoxy Model Shown

**Cast, oversized conduit box** with tough,  
high-temperature nitrile gaskets and  
stainless-steel cover and hardware.  
Oversized design with threaded entrance.  
All machined fits are sealed and nylon  
gaskets are used under bolt heads.

**Interior coatings** protect against  
moisture and corrosion. Frame,  
base, endshields, rotor, and interior  
components are protected by  
enamel and polyester compounds  
of outstanding adhesion and  
resistance to moisture, acids,  
alkalies, and oils. Efficiencies meet  
EPACT mandates for covered  
motors when tested without shaft  
seals. High temperature, moisture  
resistant IRIS insulation system  
assures long life on inverter service.  
Windings are immersed and cured  
in polyester insulating compound.



**Four condensate drains in  
each endshield** (at three, six,  
nine, and twelve o'clock) purge  
condensate and water which  
may enter the motor.



\* Also excellent for applications requiring a motor that is "tropicalized"!



# WASHGUARD MOTORS

WHITE EPOXY • SINGLE PHASE & DC



White Duck



## SINGLE PHASE • TEFC • RIGID BASE

Featuring Electronic Solid State Encapsulated Switch

| HP    | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/2   | 1725            | 56            | 112431            | \$514         | A             | 24                     | 115/208-230 | None                   | 4.4                  | 10.81                   |
| 3/4   | 1725            | 56            | 112432            | 604           | A             | 31                     | 115/208-230 | None                   | 5.4                  | 11.31                   |
| 1     | 1725            | 56            | 112626            | 692           | A             | 33                     | 115/208-230 | None                   | 6.4                  | 11.81                   |
|       | 1740            | 143T          | 120589            | 692           | B             | 34                     | 115/208-230 | None                   | 6.4                  | 12.25                   |
| 1 1/2 | 1740            | 145T          | 120590            | 882           | B             | 47                     | 115/208-230 | None                   | 9.5                  | 13.75                   |
| 2     | 1740            | 182T          | 131571            | 1279          | B             | 60                     | 115/208-230 | None                   | 12.6                 | 13.46                   |

## SINGLE PHASE • TEFC • C FACE LESS BASE

Featuring Electronic Solid State Encapsulated Switch

| HP    | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/3   | 3450            | 56C           | 114310            | \$504         | A             | 25                     | 115/208-230 | None                   | 2.6                  | 10.69                   |
|       | 1725            | 56C           | 114311            | 511           | A             | 27                     | 115/208-230 | None                   | 3.2                  | 10.69                   |
| 1/2   | 3450            | 56C           | 114312            | 511           | A             | 25                     | 115/208-230 | None                   | 3.6                  | 10.69                   |
|       | 1725            | 56C           | 114313            | 525           | A             | 29                     | 115/208-230 | None                   | 4.4                  | 11.19                   |
| 3/4   | 3450            | 56C           | 114314            | 514           | A             | 31                     | 115/208-230 | None                   | 5.0                  | 11.69                   |
|       | 1725            | 56C           | 114315            | 606           | A             | 31                     | 115/208-230 | None                   | 5.4                  | 11.69                   |
| 1     | 3450            | 56C           | 114316            | 517           | A             | 29                     | 115/208-230 | None                   | 6.0                  | 12.19                   |
|       | 1725            | 56C           | 114317            | 688           | A             | 34                     | 115/208-230 | None                   | 6.4                  | 12.19                   |
| 1 1/2 | 3450            | 56C           | 114318            | 764           | A             | 36                     | 115/208-230 | None                   | 8.5                  | 12.69                   |
|       | 1725            | 56C           | 114319            | 882           | A             | 43                     | 115/208-230 | None                   | 9.5                  | 13.69                   |

## SINGLE PHASE • TEFC • C FACE WITH BASE

Featuring Electronic Solid State Encapsulated Switch

| HP    | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/3   | 3450            | 56C           | 113580            | \$507         | A             | 27                     | 115/208-230 | None                   | 2.6                  | 10.69                   |
|       | 1725            | 56C           | 112526            | 514           | A             | 28                     | 115/208-230 | None                   | 3.2                  | 10.69                   |
| 1/2   | 3450            | 56C           | 113581            | 514           | A             | 25                     | 115/208-230 | None                   | 3.6                  | 10.69                   |
|       | 1725            | 56C           | 112527            | 532           | A             | 28                     | 115/208-230 | None                   | 4.4                  | 11.19                   |
| 3/4   | 3450            | 56C           | 113582            | 521           | A             | 31                     | 115/208-230 | None                   | 5.0                  | 11.69                   |
|       | 1725            | 56C           | 112528            | 603           | A             | 30                     | 115/208-230 | None                   | 5.4                  | 11.69                   |
| 1     | 3450            | 56C           | 113583            | 523           | A             | 31                     | 115/208-230 | None                   | 6.0                  | 12.19                   |
|       | 1725            | 56C           | 112529            | 694           | A             | 33                     | 115/208-230 | None                   | 6.4                  | 12.19                   |
| 1 1/2 | 3450            | 56C           | 113584            | 765           | A             | 36                     | 115/208-230 | None                   | 8.5                  | 12.69                   |
|       | 1725            | 56HC          | 113300            | 886           | A             | 45                     | 115/208-230 | None                   | 9.5                  | 13.69                   |
| 2     | 3450            | 56HC          | 114637            | 882           | A             | 43                     | 115/208-230 | None                   | 10.0                 | 13.69                   |

WASHGUARD MOTORS SHED  
WATER LIKE A DUCK!



PROTECTED  
WITH  
RUST-OLEUM®  
COATINGS

## DC • SCR RATED 90 & 180 VOLTS

TENV • C FACE WITH REMOVABLE BASE

| HP    | Full<br>Load<br>RPM | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Arm.<br>Volts<br>DC | Control<br>Volts<br>AC | F.L.<br>Amps<br>DC | "C"<br>Dim.<br>(Inches) |
|-------|---------------------|---------------|-------------------|---------------|---------------|------------------------|---------------------|------------------------|--------------------|-------------------------|
| 1/4   | 1750                | S56C          | 108423            | \$636         | A             | 23                     | 90                  | 115                    | 2.7                | 10.69                   |
|       | 1750                | S56C          | 098375            | 636           | A             | 21                     | 180                 | 230                    | 1.4                | 10.22                   |
| 1/3   | 1750                | S56C          | 108424            | 673           | A             | 26                     | 90                  | 115                    | 3.5                | 11.69                   |
|       | 1750                | S56C          | 098376            | 673           | A             | 22                     | 180                 | 230                    | 1.7                | 10.22                   |
| 1/2   | 1750                | S56C          | 108226            | 754           | A             | 38                     | 90                  | 115                    | 4.9                | 13.69                   |
|       | 1750                | S56C          | 108227            | 754           | A             | 43                     | 180                 | 230                    | 2.4                | 13.69                   |
| 3/4   | 1750                | S56C          | 108228            | 915           | A             | 53                     | 90                  | 115                    | 7.0                | 15.69                   |
|       | 1750                | S56C          | 108229            | 915           | A             | 50                     | 180                 | 230                    | 3.5                | 15.69                   |
| 1     | 1750                | S56C          | 108230**          | 1116          | A             | 45                     | 90                  | 115                    | 10.0               | 15.81                   |
|       | 1750                | S56C          | 108231**          | 1116          | A             | 42                     | 180                 | 230                    | 5.0                | 14.81                   |
| 1 1/2 | 1750                | S56C          | 108232**          | 1425          | A             | 50                     | 180                 | 230                    | 7.6                | 15.81                   |

\*\* These motors are totally enclosed fan cooled.

All Washdown Duty motors have Class F Insulation.





**THREE PHASE • TENV and TEFC C FACE LESS BASE**

| HP    | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | FL<br>Amps<br>230V | %<br>FL<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|--------------------|-----------------|-------------------------|
| 1/4   | 1725            | 56C           | 113649●           | \$492         | A             | 19                     | 208-230/460 | 1.1                | 68.0            | 9.56                    |
| 1/3   | 3450            | 56C           | 116640●           | 508           | A             | 19                     | 208-230/460 | 1.1                | 77.0            | 10.08                   |
|       | 1725            | 56C           | 113954●           | 523           | A             | 19                     | 208-230/460 | 1.3                | 72.0            | 9.56                    |
|       | 1725            | 56C           | 116642            | 523           | A             | 19                     | 208-230/460 | 1.7                | 68.0            | 10.69                   |
| 1/2   | 3450            | 56C           | 116643●           | 524           | A             | 22                     | 208-230/460 | 1.6                | 82.5            | 10.06                   |
|       | 1725            | 56C           | 113473●           | 539           | A             | 22                     | 208-230/460 | 1.8                | 78.5            | 10.06                   |
|       | 1725            | 56C           | 116644            | 539           | A             | 22                     | 208-230/460 | 2.0                | 74.0            | 11.19                   |
| 3/4   | 3450            | 56C           | 113022●           | 545           | A             | 23                     | 208-230/460 | 2.4                | 84.0            | 11.06                   |
|       | 1725            | 56C           | 113019●           | 624           | A             | 28                     | 208-230/460 | 2.5                | 80.0            | 10.56                   |
|       | 1725            | 56C           | 116645            | 624           | A             | 28                     | 208-230/460 | 2.8                | 77.0            | 11.69                   |
| 1     | 3450            | 56C           | 113023●           | 636           | A             | 35                     | 208-230/460 | 2.6                | 85.5            | 11.56                   |
|       | 1725            | 56C           | 113020●           | 650           | A             | 32                     | 208-230/460 | 3.2                | 80.0            | 11.56                   |
|       | 1725            | 56C           | 116646            | 650           | B             | 32                     | 208-230/460 | 3.8                | 77.0            | 11.69                   |
|       | 1725            | 143TC         | 120760●           | 650           | B             | 35                     | 208-230/460 | 3.2                | 80.0            | 11.75                   |
|       | 1725            | 143TC         | 121652            | 650           | A             | 35                     | 208-230/460 | 3.8                | 77.0            | 11.75                   |
| 1 1/2 | 3450            | 56C           | 113024●           | 674           | A             | 42                     | 208-230/460 | 3.8                | 84.0            | 12.56                   |
|       | 1725            | 56C           | 113021●           | 678           | A             | 44                     | 208-230/460 | 4.2                | 84.0            | 13.06                   |
|       | 1725            | 56C           | 116647            | 678           | A             | 44                     | 208-230/460 | 5.0                | 78.5            | 12.69                   |
|       | 1725            | 145TC         | 120761●           | 678           | B             | 47                     | 208-230/460 | 4.2                | 84.0            | 13.25                   |
|       | 1725            | 145TC         | 121655            | 678           | A             | 47                     | 208-230/460 | 5.0                | 78.5            | 12.75                   |
| 2     | 3450            | 56C           | 113593●           | 771           | A             | 47                     | 208-230/460 | 5.0                | 84.0            | 13.06                   |
|       | 3450            | 145TC         | 121040●           | 771           | B             | 45                     | 208-230/460 | 5.0                | 84.0            | 13.12                   |
|       | 1725            | 56C           | 114616            | 791           | A             | 48                     | 208-230/460 | 6.2                | 81.5            | 12.69                   |
|       | 1725            | 145TC         | 120762            | 791           | B             | 39                     | 208-230/460 | 6.2                | 81.5            | 12.75                   |
| 3     | 3450            | 56C           | 115976            | 941           | A             | 39                     | 208-230/460 | 7.6                | 84.0            | 13.19                   |
|       | 3450            | 145TC         | 120987            | 941           | B             | 39                     | 208-230/460 | 7.6                | 84.0            | 13.25                   |
|       | 1740            | 182TC         | 131596            | 1035          | B             | 61                     | 208-230/460 | 9.0                | 82.5            | 14.47                   |
| 5     | 3450            | 184TC         | 131595            | 1312          | B             | 72                     | 208-230/460 | 12.4               | 85.5            | 14.47                   |
|       | 1740            | 184TC         | 131597            | 1173          | B             | 72                     | 208-230/460 | 13.2               | 82.5            | 14.47                   |
| 7 1/2 | 3450            | S213TC        | 131594            | 1626          | B             | 85                     | 208-230/460 | 18.4               | 86.5            | 15.47                   |
|       | 1750            | 213TC         | 140467            | 1489          | B             | 139                    | 208-230/460 | 20.4               | 89.5            | 17.71                   |
| 10    | 3450            | 215TC         | 140737            | 1983          | B             | 124                    | 208-230/460 | 24.0               | 89.5            | 20.57                   |
|       | 1750            | 215TC         | 140465            | 1691          | B             | 180                    | 208-230/460 | 26.0               | 89.5            | 18.71                   |
| 15    | 3450            | 215TC         | 140738            | 2468          | B             | 139                    | 208-230/460 | 36.0               | 90.2            | 20.57                   |

**THREE PHASE • TEFC • RIGID BASE**

| HP    | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | FL<br>Amps<br>230V | %<br>FL<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|--------------------|-----------------|-------------------------|
| 1/2   | 1725            | 56            | 112427            | \$529         | A             | 24                     | 208-230/460 | 2.0                | 74.0            | 10.81                   |
| 3/4   | 1725            | 56            | 112428            | 552           | A             | 27                     | 208-230/460 | 2.8                | 77.0            | 10.81                   |
| 1     | 1725            | 56            | 112627            | 580           | A             | 26                     | 208-230/460 | 3.8                | 77.0            | 11.31                   |
|       | 1725            | 143T          | G120585           | 634           | B             | 35                     | 208-230/460 | 3.1                | 82.5            | 12.75                   |
| 1 1/2 | 1725            | 145T          | G120858           | 636           | B             | 51                     | 208-230/460 | 4.4                | 84.0            | 12.75                   |
| 2     | 1725            | 145T          | G120586           | 791           | B             | 46                     | 208-230/460 | 5.6                | 84.0            | 13.75                   |
| 3     | 1740            | 56HZ          | 115751■           | 810           | A             | 45                     | 208-230/460 | 8.6                | 82.5            | 14.25                   |
|       | 1760            | 182T          | G130662           | 1044          | B             | 69                     | 208-230/460 | 8.2                | 87.5            | 13.96                   |
| 5     | 3450            | 184T          | G131775           | 1195          | B             | 75                     | 208-230/460 | 12.0               | 87.5            | 14.46                   |
|       | 1760            | 184T          | G130663           | 1195          | B             | 85                     | 208-230/460 | 13.0               | 87.5            | 14.96                   |
| 7 1/2 | 3450            | 184T          | G131776           | 1490          | B             | 87                     | 208-230/460 | 16.8               | 88.5            | 15.96                   |
|       | 3450            | S213T         | G131911           | 1490          | B             | 87                     | 208-230/460 | 16.8               | 88.5            | 16.59                   |
|       | 1740            | 213T          | G140280           | 1490          | B             | 131                    | 208-230/460 | 20.4               | 89.5            | 17.71                   |
| 10    | 1740            | 215T          | G140281           | 1784          | B             | 165                    | 208-230/460 | 26.0               | 89.5            | 18.71                   |

**THREE PHASE • TENV and TEFC C FACE WITH BASE**

| HP    | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | FL<br>Amps<br>230V | %<br>FL<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|--------------------|-----------------|-------------------------|
| 1/4   | 1725            | 56C           | 112523            | \$495         | A             | 21                     | 208-230/460 | 1.1                | 67.0            | 10.69                   |
| 1/3   | 3450            | 56C           | 116641●           | 524           | A             | 22                     | 208-230/460 | 1.1                | 77.0            | 10.08                   |
|       | 1725            | 56C           | 112547            | 544           | A             | 22                     | 208-230/460 | 1.7                | 68.0            | 10.69                   |
| 1/2   | 3450            | 56C           | 113588●           | 493           | A             | 26                     | 208-230/460 | 1.5                | 82.5            | 10.58                   |
|       | 1725            | 56C           | 113586●           | 552           | A             | 23                     | 208-230/460 | 1.8                | 78.5            | 10.06                   |
|       | 1725            | 56C           | 112429†           | 552           | A             | 22                     | 208-230/460 | 2.0                | 74.0            | 11.19                   |
|       | 1140            | 56C           | 115743●           | 691           | A             | 24                     | 208-230/460 | 2.3                | 77.0            | 11.56                   |
| 3/4   | 3450            | 56C           | 113589●           | 542           | A             | 24                     | 208-230/460 | 2.4                | 84.0            | 11.08                   |
|       | 1725            | 56C           | 113587●           | 640           | A             | 30                     | 208-230/460 | 2.5                | 80.0            | 10.56                   |
|       | 1725            | 56C           | 112430            | 640           | A             | 26                     | 208-230/460 | 2.8                | 77.0            | 11.19                   |
|       | 1140            | 56HC          | 115744●□          | 751           | A             | 25                     | 208-230/460 | 3.0                | 78.5            | 13.06                   |
| 1     | 3450            | 56C           | 113590●           | 634           | A             | 34                     | 208-230/460 | 2.6                | 85.5            | 11.58                   |
|       | 1725            | 56C           | 112524            | 667           | A             | 27                     | 208-230/460 | 3.8                | 77.0            | 11.69                   |
|       | 1725            | 143TC         | G120587           | 667           | B             | 35                     | 208-230/460 | 3.1                | 82.5            | 13.25                   |
|       | 1140            | 56HC          | 115745□           | 804           | A             | 35                     | 208-230/460 | 4.0                | 77.0            | 13.08                   |
| 1 1/2 | 3450            | 56C           | 113591●           | 700           | A             | 44                     | 208-230/460 | 3.8                | 84.0            | 12.56                   |
|       | 1725            | 145TC         | G121540           | 696           | B             | 51                     | 208-230/460 | 4.4                | 84.0            | 13.25                   |
|       | 1725            | 56C           | 112643            | 696           | A             | 32                     | 208-230/460 | 5.0                | 78.5            | 12.19                   |
|       | 1140            | 56HC          | 115746□           | 849           | A             | 31                     | 208-230/460 | 5.7                | 77.0            | 14.18                   |
| 2     | 3450            | 56HC          | 113592●♣          | 777           | A             | 48                     | 208-230/460 | 5.0                | 84.0            | 13.06                   |
|       | 3450            | 145TC         | 121039●           | 777           | B             | 41                     | 208-230/460 | 5.0                | 84.0            | 13.12                   |
|       | 1725            | 56C           | 112644            | 798           | A             | 36                     | 208-230/460 | 6.2                | 81.5            | 12.69                   |
|       | 1725            | 145TC         | G120588           | 861           | B             | 47                     | 208-230/460 | 5.6                | 84.0            | 13.75                   |
| 3     | 3450            | 145TC         | G120911           | 1016          | B             | 43                     | 208-230/460 | 7.6                | 85.5            | 13.75                   |
|       | 1760            | 182TC         | G130664           | 1133          | B             | 77                     | 208-230/460 | 8.2                | 87.5            | 14.47                   |
| 5     | 3450            | 184TC         | G131167           | 1418          | B             | 76                     | 208-230/460 | 12.0               | 87.5            | 14.47                   |
|       | 1760            | 184TC         | G131171           | 1279          | B             | 79                     | 208-230/460 | 13.0               | 87.5            | 14.97                   |
| 7 1/2 | 3450            | 184TC         | G132016           | 1759          | B             | 90                     | 208-230/460 | 16.8               | 88.5            | 15.97                   |
|       | 3450            | S213TC        | G131165           | 1759          | B             | 108                    | 208-230/460 | 16.8               | 88.5            | 17.47                   |
|       | 1740            | 213TC         | G140466           | 1621          | B             | 131                    | 208-230/460 | 20.4               | 89.5            | 17.71                   |
| 10    | 3450            | 215TC         | G140700           | 2089          | B             | 125                    | 208-230/460 | 24.0               | 89.5            | 20.57                   |
|       | 1740            | 215TC         | G140464           | 1843          | B             | 140                    | 208-230/460 | 26.0               | 89.5            | 18.71                   |
| 15    | 3450            | 215TC         | G140701           | 2572          | B             | 140                    | 208-230/460 | 36.0               | 90.2            | 20.57                   |

**THREE PHASE • 575 VOLTS  
TEFC • C FACE WITH BASE**

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | FL<br>Amps<br>230V | %<br>FL<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|--------------------|-----------------|-------------------------|
| 1/4 | 1725            | 56C           | 112520            | \$495         | A             | 24                     | 575     | 0.44               | 68.0            | 10.69                   |
| 1/3 | 1725            | 56C           | 112521            | 512           | A             | 22                     | 575     | 0.68               | 68.0            | 10.69                   |
| 1/2 | 1725            | 56C           | 112483            | 552           | A             | 28                     | 575     | 0.8                | 74.0            | 10.69                   |
| 3/4 | 1725            | 56C           | 112484            | 640           | A             | 24                     | 575     | 1.12               | 77.0            | 11.19                   |
| 1   | 1725            | 56C           | 112522            | 667           | A             | 30                     | 575     | 1.5                | 77.0            | 11.69                   |

- Combination 56HZ base has mounting holes for NEMA 56 and 143-5T and a standard NEMA 145T frame shaft of 7/8" diameter.
- ♣ These motors are totally enclosed, non ventilated — Others are fan cooled.
- These totally enclosed three phase motors have 1.0 service factors.
- Combination 56H base motors have mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 56 shaft.





# WASHGUARD MOTORS

WHITE EPOXY • THREE PHASE & BRAKEKITS™



## THREE PHASE • TEFC • JM PUMP

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1  | 1725            | 143JM         | 121579            | \$891         | B             | 37                     | 208-230/460 | 3.1                  | 82.5              | 15.75                   |
| 1½ | 3450            | 143JM         | 121580            | 962           | B             | 46                     | 208-230/460 | 4.0                  | 82.5              | 15.75                   |
|    | 1725            | 145JM         | 121581            | 987           | B             | 53                     | 208-230/460 | 4.4                  | 84.0              | 15.75                   |
| 2  | 3450            | 145JM         | 121582            | 1086          | B             | 47                     | 208-230/460 | 5.2                  | 84.0              | 15.75                   |
|    | 1725            | 145JM         | 121583            | 1018          | B             | 49                     | 208-230/460 | 5.6                  | 84.0              | 16.25                   |
| 3  | 3450            | 145JM         | 121584            | 1166          | B             | 45                     | 208-230/460 | 7.6                  | 85.5              | 16.25                   |
|    | 1760            | 182JM         | 131967            | 1295          | B             | 79                     | 208-230/460 | 8.2                  | 87.5              | 16.13                   |
| 5  | 3450            | 184JM         | 131968            | 1545          | B             | 78                     | 208-230/460 | 12.0                 | 87.5              | 16.13                   |
|    | 1760            | 184JM         | 131969            | 1402          | B             | 81                     | 208-230/460 | 13.0                 | 87.5              | 16.63                   |
| 7½ | 3450            | 184JM         | 131970            | 1694          | B             | 110                    | 208-230/460 | 16.8                 | 88.5              | 17.63                   |
|    | 1740            | 213JM         | 140733            | 1890          | B             | 133                    | 208-230/460 | 20.4                 | 89.5              | 19.00                   |
| 10 | 3450            | 215JM         | 140734            | 2328          | B             | 135                    | 208-230/460 | 24.0                 | 89.5              | 21.70                   |
|    | 1740            | 215JM         | 140735            | 2200          | B             | 142                    | 208-230/460 | 26.0                 | 89.5              | 20.00                   |
| 15 | 3450            | 215JM         | 140736            | 2662          | B             | 150                    | 208-230/460 | 36.0                 | 90.2              | 21.70                   |



## JET PUMP • THREADED SHAFT THREE PHASE • TEFC • C-FACE LESS BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 3/4 | 3450            | 56J           | 116774            | \$547         | A             | 23                     | 208-230/460 | 2.4                  | 75.5              | 10.81                   |
| 1   | 3450            | 56J           | 116775            | 636           | A             | 35                     | 208-230/460 | 3.2                  | 77.0              | 10.81                   |
| 1½  | 3450            | 56J           | 116776            | 676           | A             | 42                     | 208-230/460 | 4.2                  | 81.5              | 11.81                   |
| 2   | 3450            | 56J           | 116777            | 774           | A             | 47                     | 208-230/460 | 5.6                  | 82.5              | 12.31                   |
| 3   | 3450            | 56J           | 116778            | 812           | A             | 49                     | 208-230/460 | 7.6                  | 84.0              | 13.25                   |

## JET PUMP • THREADED SHAFT THREE PHASE • TEFC • C-FACE WITH BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 3/4 | 3450            | 56J           | 116779            | \$561         | A             | 24                     | 208-230/460 | 2.4                  | 75.5              | 10.81                   |
| 1   | 3450            | 56J           | 116780            | 652           | A             | 36                     | 208-230/460 | 3.2                  | 77.0              | 10.81                   |
| 1½  | 3450            | 56J           | 116781            | 707           | A             | 43                     | 208-230/460 | 4.2                  | 81.5              | 11.81                   |
| 2   | 3450            | 56J           | 116782            | 787           | A             | 48                     | 208-230/460 | 5.6                  | 82.5              | 12.31                   |
| 3   | 3450            | 56J           | 116783            | 838           | A             | 50                     | 208-230/460 | 7.6                  | 84.0              | 13.25                   |



## WASHGUARD • TENV/TEFC • C FACE WITH BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Brake<br>Rating<br>(ft-lbs) | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-----------------------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1/3 | 1725            | 56C           | 3                           | 116466            | \$1087        | A             | 40                     | 208-230/460 | 1.3                  | 72.0              | 14.00                   |
| 1/2 | 1725            | 56C           | 3                           | 116467            | 1108          | A             | 42                     | 208-230/460 | 1.8                  | 78.5              | 14.50                   |
| 3/4 | 1725            | 56C           | 6                           | 116468            | 1315          | A             | 44                     | 208-230/460 | 2.5                  | 80.0              | 15.00                   |
| 1   | 1725            | 56C           | 6                           | 116469            | 1358          | A             | 48                     | 208-230/460 | 3.2                  | 80.0              | 15.50                   |
|     | 1725            | 143TC         | 6                           | 121616            | 1358          | A             | 49                     | 208-230/460 | 3.2                  | 80.0              | 16.06                   |
| 1½  | 1725            | 145TC         | 10                          | G121617           | 1883          | A             | 50                     | 208-230/460 | 4.4                  | 84.0              | 19.01                   |
| 2   | 1725            | 145TC         | 10                          | G121618           | 1952          | A             | 62                     | 208-230/460 | 5.6                  | 84.0              | 19.01                   |

## WASHGUARD • TENV/TEFC • C FACE LESS BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Brake<br>Rating<br>(ft-lbs) | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-----------------------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1/3 | 1725            | 56C           | 3                           | 116462            | \$1049        | A             | 39                     | 208-230/460 | 1.3                  | 72.0              | 14.00                   |
| 1/2 | 1725            | 56C           | 3                           | 116463            | 1075          | A             | 41                     | 208-230/460 | 1.8                  | 78.5              | 14.50                   |
| 3/4 | 1725            | 56C           | 6                           | 116464            | 1279          | A             | 43                     | 208-230/460 | 2.5                  | 80.0              | 15.00                   |
| 1   | 1725            | 56C           | 6                           | 116465            | 1325          | A             | 45                     | 208-230/460 | 3.2                  | 80.0              | 15.50                   |
|     | 1725            | 143TC         | 6                           | 121613            | 1325          | A             | 46                     | 208-230/460 | 3.2                  | 80.0              | 15.56                   |
| 1½  | 1725            | 145TC         | 10                          | 121614            | 1835          | A             | 49                     | 208-230/460 | 5.0                  | 78.5              | 18.01                   |
| 2   | 1725            | 145TC         | 10                          | 121615            | 1888          | A             | 61                     | 208-230/460 | 6.2                  | 81.5              | 18.51                   |

All Washdown Duty motors have Class F Insulation.

## WASHGUARD COUPLER BRAKES

Solid die-cast aluminum Stearns NEMA 4X coupler brake converts any TEFC or TENV 56C thru 145TC motor to a fail-safe brakemotor by mounting between the C-face motor and driven equipment. Food safe white epoxy finish. BISSC Certified. Adds 5" to the overall length of 56C thru 145TC WASHGUARD TEFC or TENV motors. Includes all mounting components.



### For Both Single and Three Phase Motors

| Cat. No.<br>115/208-230V<br>Single Phase | Cat. No.<br>208-230/460V<br>Three Phase | Cat. No.<br>575V<br>Three Phase | Brake<br>Rating<br>(ft-lbs) | Max.<br>HP @<br>1725 rpm | Mounts<br>to NEMA<br>Frame | Coupler Brake<br>Output Shaft<br>and Face | List<br>Price | Disc.<br>Sym. | App.<br>Wt.<br>(lbs.) |
|------------------------------------------|-----------------------------------------|---------------------------------|-----------------------------|--------------------------|----------------------------|-------------------------------------------|---------------|---------------|-----------------------|
| 175566                                   | 175567                                  | 175568                          | 3                           | 1                        | 56C                        | 5/8", 56C                                 | \$960         | A             | 13                    |
| 175572                                   | 175573                                  | 175574                          | 6                           | 2                        | 56C/143-5TC                | 5/8", 56C                                 | 1033          | A             | 14                    |

Larger coupler brakes on page 43.

## WASHGUARD BRAKEKITS™

Kit of components including a Stearns NEMA 4X brake to convert 56 thru 145T frame stock TEFC only motors to fail-safe brakemotors. Food safe white epoxy finish. BISSC Certified. Adds 5 1/8" to the overall length of 56 thru 145T WASHGUARD TEFC motors.



WASHGUARD Brakekits™ have the same convenient assembly method as general purpose models.

### For Both Three Phase and 230V Single Phase Motors

| Brake<br>Rating<br>(ft-lbs) | Mounts<br>to NEMA<br>Frame | Max.<br>HP @<br>1725rpm | Cat. No.<br>208-230/460 V<br>Brake Coil Voltage | List<br>Price | Disc.<br>Sym. | App.<br>Wt.<br>(lbs.) |
|-----------------------------|----------------------------|-------------------------|-------------------------------------------------|---------------|---------------|-----------------------|
| 3                           | 56/143-5T                  | 1                       | 175616                                          | \$1066        | A             | 24                    |
| 6                           | 56/143-5T                  | 2                       | 175617                                          | 1125          | A             | 36                    |
| 10                          | 56/143-5T                  | 3                       | 175618                                          | 1185          | A             | 43                    |

# Super Duck



**LEESON Severe Duty, stainless frame, WASHGUARD II** motors are designed for superior extended service in severe environments. Typical applications include food processing areas requiring frequent sanitation procedures using high pressure cleaning with concentrated caustic solutions, areas of high humidity and in chemical environments.

**Mechanical Protection Features**  
These motors have an entirely paint free exterior with 300 series stainless steel motor body, conduit box lid, shaft extension, hardware, fasteners and an etched motor data plate.

To enhance chemical and corrosion resistance, all surfaces of the endbells and conduit box are processed using a U.S.

Department of Agriculture approved technique. This proprietary process has been tested and qualified for more than 2,500 hours of salt spray endurance for external surfaces, and

1,000 hours for internal surfaces. This process has proven successful in food washdown applications and has shown excellent corrosion resistance.

Shaft seals, slingers and one-way stainless steel drains retard entrance of contaminants and water into the motor. Multiple, repositional drains provided for all angle mounting, release any water that does enter the motor from hose downs or condensation. Chemically resistant, tough nitrile gaskets and a threaded entrance for power connection also restrict entrance to the motor's interior. Nylon gaskets are used to seal bolt heads.

Bearings used are double sealed and prelubricated with moisture resistant Exxon POLYREX® EM high temperature lubricant.

#### Electrical Performance and Protection Features

Efficiencies meet EPACT mandates for covered motors when tested without shaft seals. High temperature, moisture resistant IRIS insulation system assures long life on inverter service. Windings are immersed and cured in polyester insulating compound. All Washdown Duty motors have Class F Insulation.

#### Standards and Approvals

UL component recognized, file number E57948, guide number PRGY2. Energy efficiency ratings are verified by an independent testing laboratory.

CSA Energy Efficiency Verification Program, report number EEV 78720-1.

Construction is CSA Certified for safety report number LR33543.

**WASHGUARD II** motors are certified to the Baking Industry Sanitation Standard #29 and listed under BISSC authorization number 769.



## WASHGUARD II MOTORS

### STAINLESS FRAME • THREE PHASE



WASHGUARD



#### STAINLESS FRAME • TENV • C FACE LESS BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1/2 | 1725            | 56C           | 114394            | \$641         | A             | 30                     | 208-230/460 | 1.6                  | 78.5              | 11.06                   |
| 3/4 | 1725            | 56C           | 114395            | 742           | A             | 34                     | 208-230/460 | 2.3                  | 80.0              | 11.56                   |
| 1   | 1725            | 56C           | 114437            | 769           | A             | 44                     | 208-230/460 | 3.0                  | 81.5              | 12.06                   |
|     | 1725            | 143TC         | 121109            | 769           | B             | 40                     | 208-230/460 | 3.0                  | 81.5              | 12.13                   |
| 1½  | 1725            | 56C           | 114581>           | 806           | A             | 45                     | 208-230/460 | 4.4                  | 84.0              | 12.69                   |
|     | 1725            | 145TC         | 121350>           | 806           | B             | 40                     | 208-230/460 | 4.4                  | 84.0              | 12.75                   |
| 2   | 1725            | 56C           | 114582>           | 916           | A             | 51                     | 208-230/460 | 5.6                  | 84.0              | 13.69                   |
|     | 1725            | 145TC         | 121351>           | 916           | B             | 51                     | 208-230/460 | 5.6                  | 84.0              | 13.75                   |

> All ratings TENV except 1½ & 2 HP, which is TEFC with stainless steel fan cover and chemically inert fan.



#### STAINLESS FRAME • TENV • C FACE WITH BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1/2 | 1725            | 56HC          | 114560□           | \$647         | A             | 34                     | 208-230/460 | 1.6                  | 78.5              | 11.56                   |
| 3/4 | 1725            | 56HC          | 114561□           | 748           | A             | 38                     | 208-230/460 | 2.3                  | 80.0              | 12.06                   |
| 1   | 1725            | 56HC          | 114562□           | 777           | A             | 45                     | 208-230/460 | 2.3                  | 81.5              | 12.06                   |
|     | 1725            | 143TC         | 121165            | 777           | B             | 45                     | 208-230/460 | 2.3                  | 81.5              | 12.13                   |
| 1½  | 1725            | 145TC         | G121166>          | 812           | B             | 42                     | 208-230/460 | 4.4                  | 84.0              | 13.25                   |
| 2   | 1725            | 145TC         | G121167>          | 950           | B             | 51                     | 208-230/460 | 5.6                  | 84.0              | 13.75                   |

> All ratings TENV except 1½ & 2 HP, which is TEFC with stainless steel fan cover and chemically inert fan.

□ Combination 56H base motors have mounting holes for NEMA 56 and NEMA 143-145T and standard NEMA 56C face and shaft.

#### CHEMICAL RESISTANCE RATING CHART

| CHEMICAL                          | CONCENTRATION         | COMPONENT-RESISTANCE     |                           |
|-----------------------------------|-----------------------|--------------------------|---------------------------|
|                                   |                       | STAINLESS<br>STEEL PARTS | ENDBELLS &<br>CONDUIT BOX |
| WATER:                            |                       |                          |                           |
| De-Ionized Boiling                | 100%                  | Excellent                | Excellent                 |
| Salt (Immersed)                   | 30%                   | Excellent                | Excellent                 |
| Salt (Spray)                      | 5%                    | Excellent                | Excellent                 |
| Tap - 250°F/120°C @<br>10,000 PSI | 100%                  | Excellent                | Excellent                 |
| ACIDS:                            |                       |                          |                           |
| Hydrochloric                      | 35%                   | Poor                     | Very Good                 |
| Sulfuric                          | 25%                   | Poor                     | Excellent                 |
| Nitric                            | 35%                   | Excellent                | Good                      |
| Picric                            | Saturated<br>Solution | Excellent                | Very Good                 |
| BASE:                             |                       |                          |                           |
| Caustic                           | 100%                  | Excellent                | Excellent                 |
| Caustic                           | 12.5 pH               | Excellent                | Excellent                 |
| Caustic - 125°F/50°C              | 9.5 pH                | Excellent                | Excellent                 |
| SOLVENTS:                         |                       |                          |                           |
|                                   | --                    | Excellent                | Excellent                 |

Catalog numbers in green are EPACT motors.

Phone: 800.894.0412 - Fax: 888.723.4773 - Web: www.clrwtr.com - Email: info@clrwtr.com



## WASHGUARD ALL-STAINLESS MOTORS

ALL-STAINLESS • THREE PHASE

# WASHGUARD SST

*This member of LEESON's family of tough ducks is designed for long life in demanding washdown applications. LEESON's FHP WASHGUARD SST All-Stainless motors are Stainless Steel Tough!*

Built with all stainless steel external components to prevent corrosion and well sealed against moisture and condensation to protect internal components, the Washguard SST all-stainless motors are able to withstand the severe washdown environments found in the food processing, chemical processing, and beverage industries.



### CHEMICAL RESISTANCE RATING CHART

| CHEMICAL                       | CONCENTRATION      | ALL STAINLESS COMPONENTS |
|--------------------------------|--------------------|--------------------------|
| <b>WATER:</b>                  |                    |                          |
| De-Ionized Boiling             | 100%               | Excellent                |
| Salt (Immersed)                | 30%                | Excellent                |
| Salt (Spray)                   | 5%                 | Excellent                |
| Tap - 250°F/120°C @ 10,000 PSI | 100%               | Excellent                |
| <b>ACIDS:</b>                  |                    |                          |
| Hydrochloric                   | 35%                | Poor                     |
| Sulfuric                       | 25%                | Poor                     |
| Nitric                         | 35%                | Excellent                |
| Picric                         | Saturated Solution | Excellent                |
| <b>BASE:</b>                   |                    |                          |
| Caustic                        | 100%               | Excellent                |
| Caustic                        | 12.5 pH            | Excellent                |
| Caustic - 125°F/50°C           | 9.5 pH             | Excellent                |
| <b>SOLVENTS:</b>               | —                  | Excellent                |

**300-Series stainless steel** exterior components – frame, base, endshields, shaft extension, fan guard, hardware, conduit box and cover – for maximum corrosion resistance.

**Laser-etched** full-fact nameplate on motor frame.

**Anti-corrosion coating** applied to rotor and heavy polyester varnish on stator and to prevent corrosion.

**Double-sealed bearings** with moisture-resistant high-temperature grease.

**Rubber-covered seals** on both shaft extensions of TEFC motors.

**Split conduit box design** with flanged cover and rubber gasket for better sealing.

**Heavy-duty 12 ga. stamped base** used on all ratings.

**Moisture resistant sealant** between frame and endshields excludes water.

**Four condensate drains** in each endshield (at three, six, nine and twelve o'clock) provide locations to purge condensate and water, which may enter the motor.

**T-drains provided for effective drainage** without allowing water to splash inside the motor. T-drain for opposite shaft end is installed at six o'clock position (and can be relocated easily). T-drain for shaft end is shipped loose for customer installation at low point of motor.



CONFORMITE  
EUROPEENE





# WASHGUARD ALL-STAINLESS MOTORS

ALL-STAINLESS • SINGLE-PHASE & THREE-PHASE



WASHGUARD

## WASHGUARD SST

### Mechanical Protection Features:

All exterior components – frame, base, endshields, fan guard, shaft, hardware, conduit box and cover – are made from 300 series stainless steel for maximum corrosion resistance. Nameplate data is permanently laser-etched into the motor frame – no Mylar nameplate that can wash off or riveted metal nameplate to trap dirt. No paint or any type of coating is used on the exterior of the motor.

Sealant is applied to endshield and frame fits before assembly to prevent water entry. Shaft seals on both ends of TEFC motors – shaft end only on TENV. Double-sealed bearings have high performance Exxon Polyrex EM grease. Conduit box is fully gasketed half-split design with flanged cover and body gasket with lead separator. Anti-corrosion coating on rotor prevents corrosion. Four quadrant drain locations on each endbell allow drainage of condensation in any mounting position. Stainless steel T-drains are provided to prevent liquids from splashing into the drain locations. Motors are shipped with a T-drain assembled in the six o'clock position on the opposite endshield. Another T-drain is shipped loose in the conduit box for installation at the lowest point of the shaft-end endshield. For a totally sealed motor, a spare pipe plug is included to replace the pre-installed T-drain.

Mechanical performance is further enhanced by over-sized bearings, heavy 12 gauge base, shaft-end bearing is locked internally to limit axial endplay, and specially designed shaft extension resists breakage at bearing journal.

### Electrical Performance and Protection Features:

FHP Washguard SST full load efficiencies meet EPACT standards for non-exempt motors when tested without shaft seals. For extra moisture resistance, windings are immersed and cured in polyester insulating varnish. LEESON's exclusive IRIS™ Inverter-Rated Insulation System provides extra protection and long life, especially in inverter driven applications.

20:1 Constant Torque Operation

### Standards and Approvals:

UL component recognized, file number E57948, guide number PRGY2. Energy efficiency ratings are verified by an independent testing laboratory.

CSA Energy Efficiency Verification Program, report number EEV 78720-1.

Construction is CSA Certified for safety report number LR33543.

Motor is CE marked for European acceptance.



### SINGLE-PHASE • TENV/TEFC • C FACE W/BASE

| HP  | RPM  | NEMA Frame | Catalog Number | List Price | Disc. Sym. | App. Wgt. (lbs.) | Voltage     | F.L. Amps 230V | "C" Dim. (Inches) |
|-----|------|------------|----------------|------------|------------|------------------|-------------|----------------|-------------------|
| 1/2 | 3600 | 56C        | 191474         | \$548      | A          | 29.5             | 115/208-230 | 3.1            | 11.1              |
|     | 1800 | 56C        | 191475         | 617        | A          | 31.5             | 115/208-230 | 4.1            | 11.1              |
| 3/4 | 3600 | 56C        | 191476         | 602        | A          | 31.5             | 115/208-230 | 4.5            | 11.8              |
|     | 1800 | 56C        | 191477         | 713        | A          | 39.0             | 115/208-230 | 4.9            | 11.8              |
| 1   | 3600 | 56C        | 191478         | 708        | A          | 39.0             | 115/208-230 | 6.2            | 12.3              |
|     | 1800 | 56C        | 191479         | 743        | A          | 42.5             | 115/208-230 | 6.8            | 12.3              |
| 1½  | 3600 | 56C        | 191480         | 779        | A          | 42.5             | 115/208-230 | 8.8            | 13.2              |
|     | 1800 | 56C        | 191481         | 776        | A          | 52.5             | 115/208-230 | 9.5            | 13.2              |
| 2   | 3600 | 145TC      | 191482         | 1005       | A          | 64.5             | 115/208-230 | 10.8           | 14.2              |
|     | 1800 | 145TC      | 191483         | 985        | A          | 64.5             | 115/208-230 | 9.0            | 14.2              |

Numbers in green are EPACT motors.

Numbers in blue are available 4th Quarter 2008.



### THREE-PHASE • TENV/TEFC • C FACE WITH BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1/3 | 3450            | 56C           | 191200●           | \$525         | A             | 29                     | 208-230/460 | 1.0                  | 74.0              | 9.78                    |
|     | 1750            | 56C           | 191201●           | 587           | A             | 30                     | 208-230/460 | 1.3                  | 78.5              | 9.78                    |
| 1/2 | 3450            | 56C           | 191203●           | 537           | A             | 32                     | 208-230/460 | 1.5                  | 77.0              | 9.78                    |
|     | 1750            | 56C           | 191204●           | 605           | A             | 33                     | 208-230/460 | 1.6                  | 81.5              | 9.78                    |
|     | 1140            | 56C           | 191414●           | 659           | A             | 36                     | 208-230/460 | 2.0                  | 78.5              | 9.76                    |
| 3/4 | 3450            | 56C           | 191206●           | 590           | A             | 33                     | 208-230/460 | 2.0                  | 78.5              | 9.78                    |
|     | 1750            | 56C           | 191207●           | 697           | A             | 38                     | 208-230/460 | 2.3                  | 82.5              | 9.78                    |
|     | 1140            | 56C           | 191415●           | 758           | A             | 49                     | 208-230/460 | 3.0                  | 80.0              | 11.30                   |
| 1   | 3450            | 56HC          | 191209□           | 692           | A             | 41                     | 208-230/460 | 2.6                  | 80.0              | 13.77                   |
|     | 3450            | 143TC         | G191210           | 744           | B             | 42                     | 208-230/460 | 2.6                  | 80.0              | 13.62                   |
|     | 1750            | 56C           | 191291●①          | 727           | A             | 46                     | 208-230/460 | 3.0                  | 81.5              | 11.00                   |
|     | 1750            | 56HC          | 191211□           | 727           | A             | 47                     | 208-230/460 | 3.0                  | 82.5              | 13.77                   |
|     | 1750            | 143TC         | G191212           | 781           | B             | 48                     | 208-230/460 | 3.0                  | 82.5              | 13.62                   |
|     | 1140            | 56HC          | 191417            | 792           | A             | 49                     | 208-230/460 | 3.8                  | 82.5              | 13.10                   |
|     | 1140            | 145TC         | 191418            | 851           | B             | 49                     | 208-230/460 | 3.8                  | 82.5              | 13.20                   |
| 1½  | 3450            | 56HC          | 191215□           | 763           | A             | 48                     | 208-230/460 | 3.8                  | 82.5              | 13.77                   |
|     | 3450            | 143TC         | G191216           | 821           | B             | 49                     | 208-230/460 | 3.8                  | 82.5              | 13.62                   |
|     | 1750            | 56HC          | 191217□           | 758           | A             | 48                     | 208-230/460 | 4.8                  | 84.0              | 13.77                   |
|     | 1750            | 145TC         | G191218           | 814           | B             | 49                     | 208-230/460 | 4.8                  | 84.0              | 13.62                   |
| 2   | 3450            | 56HC          | 191221□           | 846           | A             | 49                     | 208-230/460 | 5.0                  | 84.0              | 13.77                   |
|     | 3450            | 145TC         | G191222           | 983           | B             | 50                     | 208-230/460 | 5.0                  | 84.0              | 13.62                   |
|     | 1750            | 56HC          | 191223□           | 865           | A             | 52                     | 208-230/460 | 5.8                  | 84.0              | 13.77                   |
|     | 1750            | 145TC         | G191224           | 966           | B             | 53                     | 208-230/460 | 5.8                  | 84.0              | 13.62                   |
| 3   | 3450            | 145TC         | G191293           | 1055          | B             | 62                     | 208-230/460 | 7.4                  | 85.5              | 14.12                   |

● These motors are totally enclosed, non-ventilated—Others are fan cooled.

□ Combination 56H base motors have mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 56 shaft.

① 10:1 Constant Torque Operation



### THREE-PHASE • TENV/TEFC • C FACE LESS BASE

| HP  | RPM  | NEMA Frame | Catalog Number | List Price | Disc. Sym. | App. Wgt. (lbs.) | Voltage     | F.L. Amps 230V | % F.L. Eff. | "C" Dim. (Inches) |
|-----|------|------------|----------------|------------|------------|------------------|-------------|----------------|-------------|-------------------|
| 1/3 | 1750 | 56C        | 191202         | \$583      | A          | 30               | 208-230/460 | 1.3            | 78.5        | 9.78              |
|     | 1750 | 56C        | 191205         | 597        | A          | 33               | 208-230/460 | 1.6            | 81.5        | 9.78              |
| 1/2 | 1750 | 56C        | 191419         | 650        | A          | 35               | 208-230/460 | 2.0            | 78.5        | 9.76              |
|     | 1140 | 56C        | 191208         | 695        | A          | 38               | 208-230/460 | 2.3            | 82.5        | 9.78              |
| 3/4 | 1750 | 56C        | 191420         | 756        | A          | 47               | 208-230/460 | 3.0            | 80.0        | 11.30             |
|     | 1140 | 56C        | 191290         | 725        | A          | 45               | 208-230/460 | 3.0            | 81.5        | 11.00             |
| 1   | 1750 | 56C        | 191213         | 725        | A          | 47               | 208-230/460 | 3.0            | 82.5        | 13.77             |
|     | 1750 | 143TC      | 191214         | 746        | B          | 47               | 208-230/460 | 3.0            | 82.5        | 13.62             |
|     | 1140 | 56C        | 191421         | 790        | A          | 47               | 208-230/460 | 3.8            | 82.5        | 13.10             |
| 1½  | 1750 | 56C        | 191219         | 756        | A          | 48               | 208-230/460 | 4.8            | 84.0        | 13.77             |
|     | 1750 | 145TC      | 191220         | 778        | B          | 48               | 208-230/460 | 4.8            | 84.0        | 13.62             |
| 2   | 1750 | 56C        | 191225         | 862        | A          | 52               | 208-230/460 | 5.8            | 84.0        | 13.77             |
|     | 1750 | 145TC      | 191226         | 888        | B          | 52               | 208-230/460 | 5.8            | 84.0        | 13.62             |

● These motors are totally enclosed, non-ventilated—Others are fan cooled.



# WASHGUARD ALL-STAINLESS MOTORS

ALL-STAINLESS • SINGLE PHASE • THREE PHASE

## PREMIUM STAINLESS STEEL DUCK



### General Specifications:

Designed specifically to meet the demanding sanitation requirements of the pharmaceutical, food processing and beverage industries. These motors are also ideal in clean room and severe chemical-processing applications involving frequent washdown with nitric acid and caustic lye. In fact, WASHGUARD All-Stainless Motors include IEEE 841 severe-duty features right out of the box! Motors have been tested to and passed the IEC IP-56 test requirements.

### Mechanical Protection Features:

- All exterior components are 300-series stainless steel.
- Nothing on the motor's exterior is painted or coated in any way.
- All sealing components are Viton® for superior chemical resistance.
- Full fact nameplate is laser etched on the motor frame – no separately attached nameplate to trap dirt or contaminants.
- Endshields are O-ring sealed to the frame.
- Double lip shaft seals on both ends of TEFC motors (shaft end only on TENV motors).
- Removable hydrophobic breathers in opposite shaft endbell and conduit box equalize pressure without allowing moisture to enter.
- Exterior fastener use minimized reducing the number of entry points for moisture. There are no holes in the frame for attaching a nameplate. Bearing lock screws are located inside the motor and the conduit box mounted screws have been eliminated.
- Double-sealed bearings are pre-lubricated with moisture-resistant high-temperature grease for long life.
- Interior coatings applied to rotor and stator protect against corrosion.
- New conduit box mounting system provides optimum sealing.
- Ease to clean construction is BISSC Certified for bakery applications..

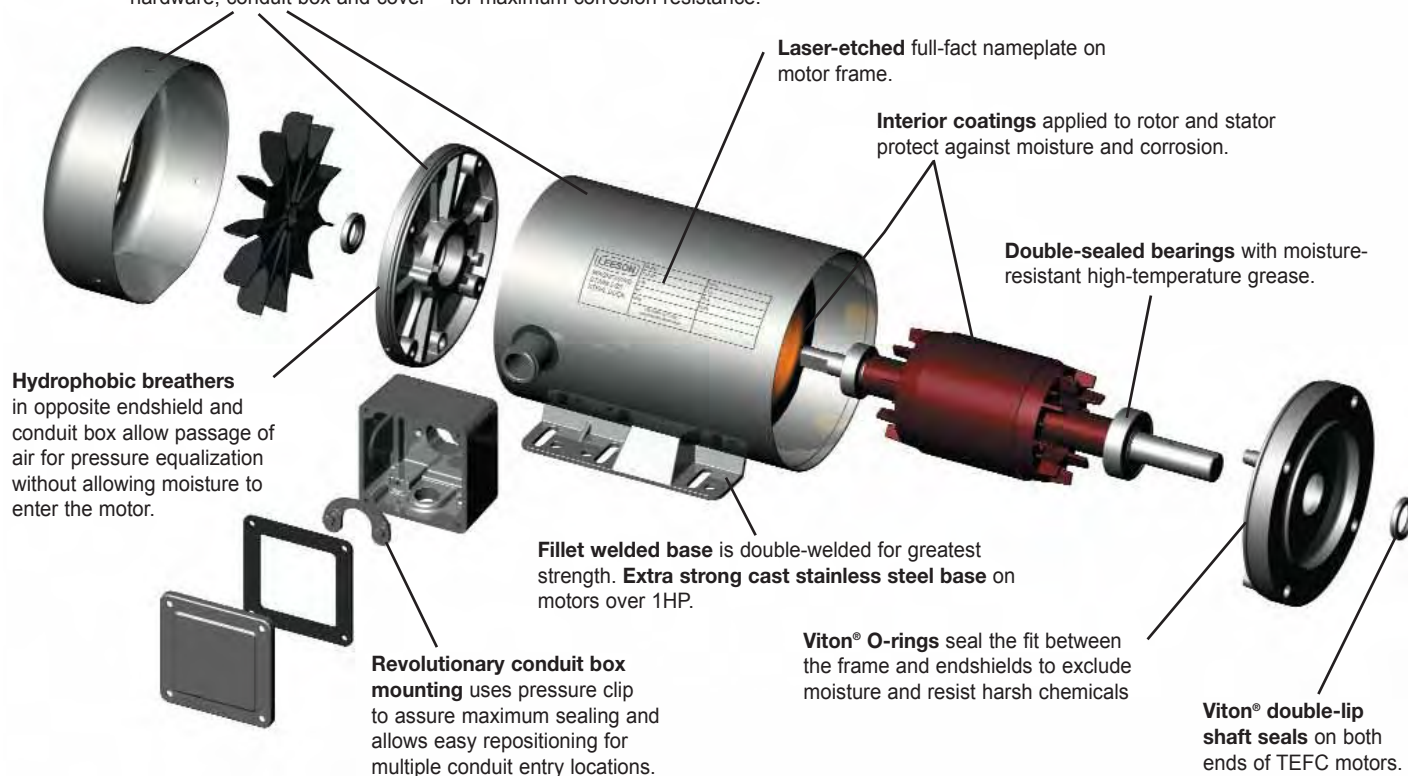
### Electrical Performance and Protection Features

- WASHGUARD efficiencies meet EPACT mandates for non-exempt motors when tested without shaft seals.
- Windings are immersed and cured in polyester insulating varnish for extra moisture-resistance.
- LEESON's exclusive IRIS™ Inverter-Rated Insulation System provides extra protection and long life, especially in inverter-driven applications.
- Single-phase motors use Solid State Sinpac® switch – no mechanical switch contacts to corrode and fail.
- All Washdown Duty motors have Class F Insulation.

### Standards and Approvals

- Single and three phase motors are UL component recognized – file number E57948, guide number PRGY2.
- CSA Energy Efficiency Verification Program, report number EEV 78720-1.
- Construction is CSA Certified for safety report number LR33543 and listed under BISSC authorization number 769.

**300-Series stainless steel** exterior components – frame, base, endshields, shaft extension, fan guard, hardware, conduit box and cover – for maximum corrosion resistance.



### CHEMICAL RESISTANCE RATING CHART

| CHEMICAL                       | CONCENTRATION      | ALL STAINLESS COMPONENTS |
|--------------------------------|--------------------|--------------------------|
| <b>WATER:</b>                  |                    |                          |
| De-Ionized Boiling             | 100%               | Excellent                |
| Salt (Immersed)                | 30%                | Excellent                |
| Salt (Spray)                   | 5%                 | Excellent                |
| Tap - 250°F/120°C @ 10,000 PSI | 100%               | Excellent                |
| <b>ACIDS:</b>                  |                    |                          |
| Hydrochloric                   | 35%                | Poor                     |
| Sulfuric                       | 25%                | Poor                     |
| Nitric                         | 35%                | Excellent                |
| Picric                         | Saturated Solution | Excellent                |
| <b>BASE:</b>                   |                    |                          |
| Caustic                        | 100%               | Excellent                |
| Caustic                        | 12.5 pH            | Excellent                |
| Caustic - 125°F/50°C           | 9.5 pH             | Excellent                |
| <b>SOLVENTS:</b>               |                    |                          |
|                                | –                  | Excellent                |





# WASHGUARD ALL-STAINLESS MOTORS



ALL-STAINLESS • THREE PHASE

WASHGUARD



**PREMIUM  
STAINLESS  
STEEL DUCK**

## THREE PHASE • TENV/TEFC • C FACE WITH BASE

| HP    | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1/2   | 3450            | 56HC          | <b>116165</b> □   | \$1045        | A             | 35                     | 208-230/460 | 1.6                  | 82.5              | 12.04                   |
|       | 1750            | 56HC          | <b>115633</b> □   | 1121          | A             | 35                     | 208-230/460 | 1.6                  | 78.5              | 12.54                   |
|       | 1140            | 56HC          | <b>116297</b> □   | 1397          | A             | 35                     | 208-230/460 | 2.3                  | 77.0              | 12.54                   |
| 3/4   | 3450            | 56HC          | <b>116167</b> □   | 1082          | A             | 40                     | 208-230/460 | 2.4                  | 84.0              | 12.54                   |
|       | 1750            | 56HC          | <b>115634</b> □   | 1163          | A             | 41                     | 208-230/460 | 2.3                  | 80.0              | 13.04                   |
|       | 1140            | 56HC          | <b>116298</b> □   | 1443          | A             | 46                     | 208-230/460 | 3.0                  | 78.5              | 14.04                   |
| 1     | 3450            | 56HC          | <b>116169</b> □   | 1184          | A             | 43                     | 208-230/460 | 2.6                  | 85.5              | 13.04                   |
|       | 1750            | 56HC          | <b>115635</b> □   | 1190          | A             | 44                     | 208-230/460 | 3.0                  | 81.5              | 13.54                   |
|       | 1750            | 56HC          | <b>116674</b>     | 1223          | A             | 39                     | 208-230/460 | 3.1                  | 82.5              | 13.13                   |
|       | 1750            | 143TC         | <b>121419</b> □   | 1190          | B             | 44                     | 208-230/460 | 3.0                  | 81.5              | 13.61                   |
|       | 1750            | 143TC         | <b>G121658</b>    | 1223          | B             | 50                     | 208-230/460 | 3.1                  | 82.5              | 13.19                   |
|       | 1140            | 56HC          | <b>116299</b> □   | 1479          | B             | 48                     | 208-230/460 | 4.0                  | 77.0              | 13.13                   |
| 1 1/2 | 3450            | 143TC         | <b>G121524</b>    | 1232          | B             | 45                     | 208-230/460 | 4.0                  | 82.5              | 13.69                   |
|       | 1750            | 56HC          | <b>116450</b> □   | 1251          | B             | 49                     | 208-230/460 | 4.4                  | 84.0              | 13.63                   |
|       | 1750            | 145TC         | <b>G121420</b>    | 1251          | B             | 49                     | 208-230/460 | 4.4                  | 84.0              | 13.69                   |
|       | 1140            | 56HC          | <b>116300</b> □   | 1538          | B             | 51                     | 208-230/460 | 5.4                  | 80.0              | 14.13                   |
| 2     | 3450            | 145TC         | <b>G121526</b>    | 1463          | B             | 49                     | 208-230/460 | 5.2                  | 84.0              | 13.69                   |
|       | 1750            | 56HC          | <b>116451</b> □   | 1479          | B             | 50                     | 208-230/460 | 5.6                  | 84.0              | 13.63                   |
|       | 1750            | 145TC         | <b>G121421</b>    | 1479          | B             | 50                     | 208-230/460 | 5.6                  | 84.0              | 13.69                   |
| 3     | 3450            | 145TC         | <b>G121528</b>    | 1761          | B             | 53                     | 208-230/460 | 7.6                  | 85.5              | 13.69                   |
|       | 1750            | 182TC         | <b>G131900</b>    | 1826          | B             | 85                     | 208-230/460 | 8.2                  | 87.5              | 14.77                   |
| 5     | 3450            | 184TC         | <b>G131901</b>    | 2069          | B             | 90                     | 208-230/460 | 12.0                 | 87.5              | 14.77                   |
|       | 1750            | 184TC         | <b>G131902</b>    | 2025          | B             | 96                     | 208-230/460 | 13.0                 | 87.5              | 15.27                   |
| 7 1/2 | 3450            | 213TC         | <b>G140698</b>    | 2833          | B             | 160                    | 208-230/460 | 18.4                 | 88.5              | 18.69                   |
|       | 1750            | 213TC         | <b>G140675</b>    | 3197          | B             | 160                    | 208-230/460 | 20.4                 | 89.5              | 18.69                   |
| 10    | 3450            | 215TC         | <b>G140699</b>    | 2912          | B             | 165                    | 208-230/460 | 24.0                 | 89.5              | 18.69                   |
|       | 1750            | 215TC         | <b>G140676</b>    | 3293          | B             | 173                    | 208-230/460 | 26.0                 | 89.5              | 18.69                   |

- These motors are totally enclosed, non-ventilated—Others are fan cooled.
- Combination 56H base motors have mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 56 shaft.

## THREE PHASE • TENV/TEFC • C FACE LESS BASE

| HP    | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1/2   | 3450            | 56C           | <b>116316</b> ●   | \$1027        | A             | 35                     | 208-230/460 | 1.6                  | 82.5              | 12.04                   |
|       | 1750            | 56C           | <b>116166</b> ●   | 1098          | A             | 34                     | 208-230/460 | 1.6                  | 78.5              | 12.54                   |
| 3/4   | 3450            | 56C           | <b>116317</b> ●   | 1062          | A             | 40                     | 208-230/460 | 2.4                  | 84.0              | 12.54                   |
|       | 1750            | 56C           | <b>116168</b> ●   | 1133          | A             | 40                     | 208-230/460 | 2.3                  | 80.0              | 13.04                   |
| 1     | 3450            | 56C           | <b>116318</b> ●   | 1164          | A             | 43                     | 208-230/460 | 2.6                  | 85.5              | 13.04                   |
|       | 1750            | 56C           | <b>116170</b> ●   | 1170          | A             | 44                     | 208-230/460 | 3.0                  | 81.5              | 13.54                   |
|       | 1750            | 56HC          | <b>116675</b>     | 1170          | A             | 45                     | 208-230/460 | 3.1                  | 82.5              | 13.13                   |
|       | 1750            | 143TC         | <b>121523</b> ●   | 1170          | B             | 44                     | 208-230/460 | 3.0                  | 81.5              | 13.61                   |
|       | 1750            | 143TC         | <b>121659</b>     | 1170          | B             | 46                     | 208-230/460 | 3.1                  | 82.5              | 13.19                   |
| 1 1/2 | 3450            | 143TC         | <b>121560</b>     | 1171          | B             | 45                     | 208-230/460 | 4.0                  | 82.5              | 12.69                   |
|       | 1750            | 56C           | <b>116448</b>     | 1193          | B             | 49                     | 208-230/460 | 4.4                  | 84.0              | 13.63                   |
|       | 1750            | 145TC         | <b>121525</b>     | 1193          | B             | 49                     | 208-230/460 | 4.4                  | 84.0              | 13.69                   |
| 2     | 3450            | 145TC         | <b>121561</b>     | 1437          | B             | 48                     | 208-230/460 | 5.2                  | 84.0              | 13.19                   |
|       | 1750            | 56C           | <b>116449</b>     | 1447          | B             | 49                     | 208-230/460 | 5.6                  | 84.0              | 13.63                   |
|       | 1750            | 145TC         | <b>121527</b>     | 1447          | B             | 54                     | 208-230/460 | 5.6                  | 84.0              | 13.69                   |
| 3     | 3450            | 145TC         | <b>121562</b>     | 1728          | B             | 49                     | 208-230/460 | 7.6                  | 85.5              | 13.69                   |
|       | 1750            | 182TC         | <b>131923</b>     | 1741          | B             | 82                     | 208-230/460 | 8.2                  | 87.5              | 14.77                   |
| 5     | 3450            | 184TC         | <b>131949</b>     | 1974          | B             | 90                     | 208-230/460 | 12.0                 | 87.5              | 14.77                   |
|       | 1750            | 184TC         | <b>131924</b>     | 1987          | B             | 94                     | 208-230/460 | 13.0                 | 87.5              | 15.27                   |

- These motors are totally enclosed, non-ventilated—Others are fan cooled.



## SINGLE PHASE • TENV/TEFC • C FACE WITH BASE

| HP    | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/3   | 1750            | 56HC          | <b>116343</b> □   | \$1173        | A             | 35                     | 115/208-230 | None                   | 2.7                  | 12.20                   |
| 1/2   | 3450            | 56HC          | <b>116344</b> □   | 1160          | A             | 38                     | 115/208-230 | None                   | 3.8                  | 12.20                   |
|       | 1750            | 56HC          | <b>116345</b> □   | 1190          | A             | 38                     | 115/208-230 | None                   | 3.3                  | 12.70                   |
| 3/4   | 1750            | 56HC          | <b>116346</b> □   | 1256          | A             | 42                     | 115/208-230 | None                   | 3.8                  | 12.70                   |
| 1     | 3450            | 56HC          | <b>116347</b> □   | 1316          | A             | 49                     | 115/208-230 | None                   | 6.0                  | 13.70                   |
|       | 1750            | 56HC          | <b>116348</b> □   | 1307          | A             | 49                     | 115/208-230 | None                   | 4.5                  | 13.70                   |
| 1 1/2 | 3450            | 56HC          | <b>116482</b> □   | 1379          | A             | 49                     | 115/208-230 | None                   | 6.8                  | 13.81                   |
|       | 1750            | 145TC         | <b>121622</b>     | 1358          | B             | 53                     | 115/208-230 | None                   | 7.4                  | 14.81                   |
| 2     | 3450            | 145TC         | <b>121623</b>     | 1506          | B             | 57                     | 115/208-230 | None                   | 8.8                  | 14.81                   |
|       | 1750            | 145TC         | <b>121632</b>     | 1567          | B             | 57                     | 115/208-230 | None                   | 10.0                 | 14.81                   |

- These motors are totally enclosed, non-ventilated—Others are fan cooled.
- Combination 56H base motors have mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 56 shaft.

## SINGLE PHASE • TENV/TEFC • C FACE LESS BASE

| HP    | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/3   | 1750            | 56C           | <b>116349</b> ●   | \$1148        | A             | 35                     | 115/208-230 | None                   | 2.7                  | 11.70                   |
| 1/2   | 1750            | 56C           | <b>116350</b> ●   | 1169          | A             | 38                     | 115/208-230 | None                   | 3.3                  | 12.70                   |
| 3/4   | 1750            | 56C           | <b>116351</b> ●   | 1231          | A             | 42                     | 115/208-230 | None                   | 3.8                  | 12.70                   |
| 1     | 1750            | 56C           | <b>116352</b> ●   | 1275          | A             | 49                     | 115/208-230 | None                   | 4.5                  | 13.70                   |
| 1 1/2 | 1750            | 145TC         | <b>121624</b>     | 1295          | B             | 53                     | 115/208-230 | None                   | 7.4                  | 14.87                   |
| 2     | 1750            | 145TC         | <b>121633</b>     | 1490          | B             | 57                     | 115/208-230 | None                   | 10.0                 | 14.87                   |

- These motors are totally enclosed, non-ventilated—Others are fan cooled.



## BRAKE MOTOR

## THREE PHASE • TENV • C FACE WITH BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Brake<br>Rating<br>(ft-lbs) | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-----------------------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1/2 | 1725            | 56C           | 3                           | <b>116483</b> ●   | \$4098        | A             | 59                     | 208-230/460 | 1.6                  | 78.5              | 15.85                   |
| 1   | 1725            | 56C           | 6                           | <b>116484</b> ●   | 4319          | A             | 69                     | 208-230/460 | 3.0                  | 81.5              | 15.85                   |

- These motors are totally enclosed, non-ventilated.

## THREE PHASE • TEFC • JM PUMP

| HP    | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1     | 1750            | 143JM         | <b>121626</b>     | \$1217        | B             | 53                     | 208-230/460 | 3.1                  | 82.5              | 16.00                   |
| 1 1/2 | 3450            | 143JM         | <b>121627</b>     | 1218          | B             | 46                     | 208-230/460 | 4.0                  | 82.5              | 16.00                   |
|       | 1750            | 145JM         | <b>121628</b>     | 1242          | B             | 49                     | 208-230/460 | 4.4                  | 84.0              | 16.00                   |
| 2     | 3450            | 145JM         | <b>121629</b>     | 1447          | B             | 52                     | 208-230/460 | 5.2                  | 84.0              | 16.00                   |
|       | 1750            | 145JM         | <b>121630</b>     | 1463          | B             | 50                     | 208-230/460 | 5.6                  | 84.0              | 16.50                   |
| 3     | 3450            | 145JM         | <b>121631</b>     | 1740          | B             | 53                     | 208-230/460 | 7.6                  | 85.5              | 16.50                   |
|       | 1750            | 182JM         | <b>131996</b>     | 1841          | B             | 85                     | 208-230/460 | 8.2                  | 87.5              | 16.20                   |
| 5     | 3450            | 184JM         | <b>131997</b>     | 2030          | B             | 89                     | 208-230/460 | 12.0                 | 87.5              | 16.20                   |
|       | 1750            | 184JM         | <b>131998</b>     | 2041          | B             | 96                     | 208-230/460 | 13.0                 | 87.5              | 16.77                   |
| 7 1/2 | 3450            | 213JM         | <b>140740</b>     | 3093          | B             | 153                    | 208-230/460 | 18.4                 | 88.5              | 16.81                   |
|       | 1750            | 213JM         | <b>140741</b>     | 3160          | B             | 156                    | 208-230/460 | 20.4                 | 89.5              | 19.81                   |
| 10    | 3450            | 215JM         | <b>140742</b>     | 3200          | B             | 155                    | 208-230/460 | 24.0                 | 89.5              | 19.81                   |
|       | 1750            | 215JM         | <b>140743</b>     | 3259          | B             | 173                    | 208-230/460 | 26.0                 | 89.5              | 19.81                   |

Catalog numbers in green are EPACT motors.





## WASHGUARD ALL-STAINLESS MOTORS

ALL-STAINLESS • THREE PHASE



# EXTREME DUCK

**NEW!**



### General Specifications:

These Revolutionary Designed Stainless Steel Motors are built using our "Voice of the customer" design criteria to withstand extreme washdown and sanitation requirements of the food processing, pharmaceutical, packaging and beverage industries. Our Innovative Hydro Sealed System "HS" protects from the "outside-in" by reducing entrance points of contaminants and eliminates the need for drain plugs and breathers. This proven process also minimizes exterior hardware, which may trap application elements. Our unique Rotor/Cartridge Seal System, "Q-CAR" gives quick access to the interior of the motor should the need arise. 300-Series Stainless Steel used on all exterior surfaces gives ideal protection against severe chemical-processing applications and frequent washdown processes using Salt water, Nitric Acids and Solvents. These motors meet IEC IP-67 test requirements, though they are not designed to run immersed in water.

### Mechanical Protection Features:

- All exterior components are 300-Series stainless steel
- Protech Bearing isolator used for the output shaft seal
- Double Lip Viton shaft seal used on non-drive output shaft on TEFC motors
- Minimal exterior fasteners due to no through-bolt design and screw on conduit box covers reduces surface areas that may trap contaminants
- Double-sealed bearings are pre-lubricated with moisture resistant, high temperature grease for long life
- Rotor/Cartridge, "Q-CAR," design for quick access to motor interior (patent pending).
- O-ring sealed openings on conduit box covers and Rotor/Cartridge cover
- Rigid Cast Base for rugged applications
- Conduit box lead hole location rotatable on TEFC designs
- Full fact nameplate is laser etched to the motor frame making frame surface smooth, which eliminates areas that trap contaminants
- Ease of clean construction is BISSC certified for bakery applications and motors meet Pharmaceutical Duty specifications

### Electrical Performance and Protection Features

- Motors meet EPACT mandates for non-exempt motors when tested without shaft seals
- Total winding encapsulation using an Epoxy Resin.
- LEESON's exclusive IRIS™ Inverter-Rated Insulation System provides extra protection and long life, especially when used in applications driven by an Inverter.
- 3 year warranty
- 10:1 constant torque operation

### Standards and Approvals

- Motors are UL component recognized – file number E57948, guide number PRGY2
- CSA Energy Efficiency Verification Program, report number EEV 78720-1
- Construction is CSA Certified for safety, report number LR33543 and listed under BISSC authorization number 769
- 3 year warranty



### CHEMICAL RESISTANCE RATING CHART

| CHEMICAL                       | CONCENTRATION      | ALL STAINLESS COMPONENTS |
|--------------------------------|--------------------|--------------------------|
| <b>WATER:</b>                  |                    |                          |
| De-Ionized Boiling             | 100%               | Excellent                |
| Salt (Immersed)                | 30%                | Excellent                |
| Salt (Spray)                   | 5%                 | Excellent                |
| Tap - 250°F/120°C @ 10,000 PSI | 100%               | Excellent                |
| <b>ACIDS:</b>                  |                    |                          |
| Hydrochloric                   | 35%                | Poor                     |
| Sulfuric                       | 25%                | Poor                     |
| Nitric                         | 35%                | Excellent                |
| Picric                         | Saturated Solution | Excellent                |
| <b>BASE:</b>                   |                    |                          |
| Caustic                        | 100%               | Excellent                |
| Caustic                        | 12.5 pH            | Excellent                |
| Caustic - 125°F/50°C           | 9.5 pH             | Excellent                |
| <b>SOLVENTS:</b>               |                    |                          |
|                                | –                  | Excellent                |

# WASHGUARD ALL-STAINLESS MOTORS

ALL-STAINLESS • THREE PHASE



WASHGUARD



## THREE PHASE • TENV/TEFC • C FACE WITH BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|------------------------|-------------|----------------------|-------------------------|
| 1/2 | 3450            | 56C           | 117118●           | \$1171        | 39                     | 208-230/460 | 1.6                  | 10.47                   |
|     | 1750            | 56C           | 117119●           | 1231          | 40                     | 208-230/460 | 1.6                  | 10.72                   |
| 3/4 | 3450            | 56C           | 117120●           | 1211          | 46                     | 208-230/460 | 2.4                  | 10.47                   |
|     | 1750            | 56C           | 117121●           | 1279          | 47                     | 208-230/460 | 2.3                  | 11.22                   |
| 1   | 3450            | 56C           | 117122●           | 1301          | 48                     | 208-230/460 | 2.6                  | 10.97                   |
|     | 1750            | 56C           | 117123●           | 1309          | 50                     | 208-230/460 | 3.0                  | 11.97                   |
| 1½  | 3450            | 143TC         | G121748           | 1381          | 54                     | 208-230/460 | 4.0                  | 11.00                   |
|     | 1750            | 145TC         | G121749           | 1376          | 56                     | 208-230/460 | 4.4                  | 11.25                   |
| 2   | 3450            | 145TC         | G121739           | 1595          | 56                     | 208-230/460 | 5.2                  | 12.50                   |
|     | 1750            | 145TC         | G121740           | 1613          | 57                     | 208-230/460 | 5.6                  | 12.50                   |

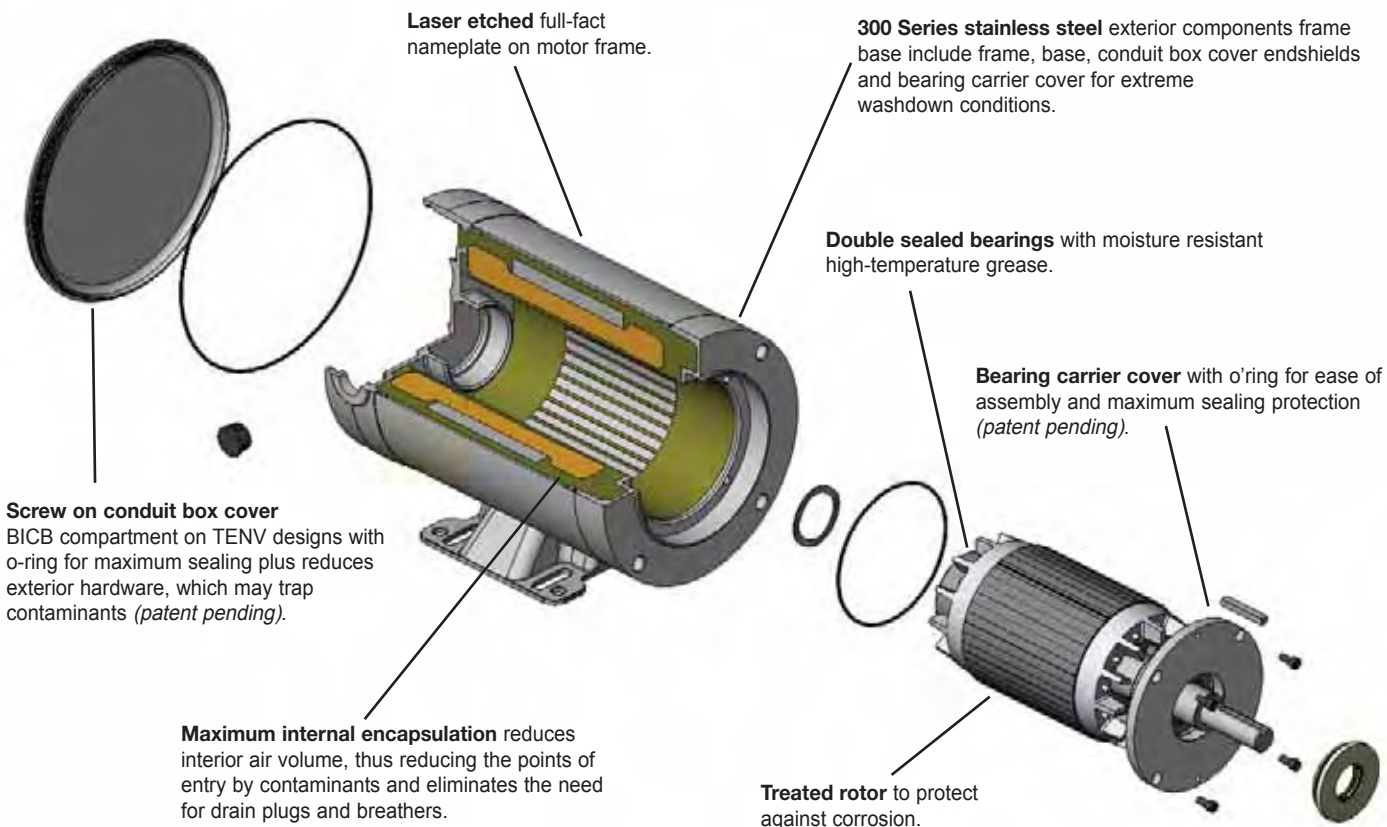
● These motors are totally enclosed, non-ventilated—Others are fan cooled.

Catalog numbers in green are EPACT motors.

## THREE PHASE • TENV/TEFC • C FACE LESS BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|------------------------|-------------|----------------------|-------------------------|
| 1/2 | 3450            | 56C           | 117126●           | \$1148        | 38                     | 208-230/460 | 1.6                  | 10.47                   |
|     | 1750            | 56C           | 117127●           | 1209          | 39                     | 208-230/460 | 1.6                  | 10.72                   |
| 3/4 | 3450            | 56C           | 117128●           | 1188          | 45                     | 208-230/460 | 2.4                  | 10.47                   |
|     | 1750            | 56C           | 117129●           | 1256          | 46                     | 208-230/460 | 2.3                  | 11.22                   |
| 1   | 3450            | 56C           | 117130●           | 1278          | 47                     | 208-230/460 | 2.6                  | 10.97                   |
|     | 1750            | 56C           | 117131●           | 1287          | 50                     | 208-230/460 | 3.0                  | 11.97                   |
| 1½  | 3450            | 143TC         | 121750            | 1358          | 53                     | 208-230/460 | 4.0                  | 11.00                   |
|     | 1750            | 145TC         | 121751            | 1354          | 55                     | 208-230/460 | 4.4                  | 11.25                   |
| 2   | 3450            | 145TC         | 121742            | 1573          | 55                     | 208-230/460 | 5.2                  | 12.50                   |
|     | 1750            | 145TC         | 121743            | 1590          | 56                     | 208-230/460 | 5.6                  | 12.50                   |

● These motors are totally enclosed, non-ventilated—Others are fan cooled.



# LEESON<sup>®</sup> EXPLOSION-PROOF MOTORS

## SINGLE PHASE

### EXPLOSION-PROOF FOR HAZARDOUS LOCATIONS

Underwriters Laboratories  
and Canadian Standards  
Association Listed

#### General Specifications:

These explosion-proof motors are designed and approved for application in hazardous environments having certain explosive gases or materials present.

#### Features:

Rugged mechanical construction meeting all requirements for safety. UL and CSA listed.

Double shielded, pre-lubricated ball bearings are standard. All motors have inherent automatic overload protection. NEMA 1.0

Service Factor except as noted.

Explosion-proof conduit box included at no extra cost.

Capacitors on single phase designs are mounted inside the motor frame.

Division I areas are environments where a hazard is present continuously or would be subject to fire or explosion if the hazard was present as a result of an accident or uncommon occurrence.

Division II areas are environments where the threat of fire or explosion is not normally present and not likely to result in the event of an abnormal occurrence.

#### Application Notes:

These motors must be applied in accordance with the National Electrical Code, Article #500. A partial listing of explosive agents is noted below. Consult NFPA Publication 497M for a complete listing. Please note subheads above each column for qualifications of LEESON motors.

**NOTE:** No LEESON motors are listed for Class I, Group A or B.

#### Class I

**Group A:** Acetylene

**Group B:** Butadiene, ethylene oxide, hydrogen, propylene oxide, manufactured gases containing more than 30% hydrogen by volume.

**Group C:** Acetaldehyde, cyclopropane, diethyl ether, ethylene.

**Group D:** Acetone, acrylonitrile, ammonia, benzene, butane, ethanol, ethylene dichloride, gasoline, hexane, isoprene, methane (natural gas), methanol, naphtha, propane, propylene, styrene, toluene, vinyl acetate, vinyl chloride, xylene.

#### Class II

**Group E:** Aluminum, magnesium and other metal dusts with similar characteristics.

**Group F:** Carbon black, coke or coal dust.

**Group G:** Flour, starch or grain dust.



### SINGLE PHASE • RIGID BASE

DIVISION I, DIVISION II, CLASS I, GROUPS C & D—  
CLASS II, GROUPS F & G • W/CONDUIT BOX

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------|-------------------------|
| 1/3 | 1725            | 56            | 111074●           | \$610         | A             | 35                     | 115/208-230 | Auto.                  | 2.9                  | 63.0              | 12.38                   |
| 1/2 | 1725            | 56H           | 111084□           | 673           | A             | 41                     | 115/208-230 | Auto.                  | 4.4                  | 65.0              | 13.94                   |
| 3/4 | 1725            | 56H           | 110934□           | 793           | A             | 46                     | 115/208-230 | Auto.                  | 5.5                  | 70.0              | 14.44                   |
| 1   | 1725            | 56H           | 110961□           | 902           | A             | 47                     | 115/208-230 | Auto.                  | 6.7                  | 75.0              | 14.44                   |

### SINGLE PHASE • C FACE LESS BASE

DIVISION I, DIVISION II, CLASS I, GROUPS C & D—  
CLASS II, GROUPS F & G • W/CONDUIT BOX

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------|-------------------------|
| 1/3 | 3450            | 56C           | 111095            | \$642         | A             | 38                     | 115/208-230 | Auto.                  | 2.2                  | 65.0              | 12.88                   |
|     | 1725            | 56C           | 111075●           | 673           | A             | 41                     | 115/208-230 | Auto.                  | 2.9                  | 70.0              | 12.37                   |
| 1/2 | 3450            | 56C           | 111098            | 648           | A             | 35                     | 115/208-230 | Auto.                  | 4.2                  | 63.0              | 13.44                   |
|     | 3450            | 56J           | 116188            | 612           | A             | 35                     | 115/208-230 | Auto.                  | 3.8                  | 63.0              | 13.96                   |
|     | 1725            | 56C           | 111085            | 746           | A             | 45                     | 115/208-230 | Auto.                  | 4.4                  | 65.0              | 13.94                   |
| 3/4 | 3450            | 56C           | 111097            | 695           | A             | 40                     | 115/208-230 | Auto.                  | 5.0                  | 64.0              | 13.96                   |
|     | 3450            | 56J           | 116186            | 689           | A             | 40                     | 115/208-230 | Auto.                  | 5.0                  | 64.0              | 14.46                   |
|     | 1725            | 56C           | 111086            | 828           | A             | 50                     | 115/208-230 | Auto.                  | 5.5                  | 70.0              | 14.44                   |
| 1   | 3450            | 56C           | 111096            | 746           | A             | 49                     | 115/208-230 | Auto.                  | 6.2                  | 70.0              | 14.44                   |
|     | 3450            | 56J           | 116185            | 740           | A             | 49                     | 115/208-230 | Auto.                  | 6.0                  | 70.0              | 14.96                   |
|     | 1725            | 56C           | 110852            | 944           | A             | 53                     | 115/208-230 | Auto.                  | 6.7                  | 75.0              | 14.44                   |
| 1½  | 3450            | 56C           | 114424            | 1070          | A             | 44                     | 115/208-230 | Auto.                  | 8.5                  | 72.0              | 14.96                   |
|     | 3450            | 56J           | 116183            | 948           | A             | 54                     | 115/208-230 | Auto.                  | 8.5                  | 72.0              | 15.46                   |
| 2   | 3450            | 56C           | 114425            | 1316          | A             | 54                     | 115/208-230 | Auto.                  | 10.5                 | 74.0              | 15.96                   |
|     | 3450            | 56J           | 116181            | 1031          | A             | 54                     | 115/208-230 | Auto.                  | 10.5                 | 74.0              | 16.46                   |

### SINGLE PHASE • C FACE WITH BASE

DIVISION I, DIVISION II, CLASS I, GROUPS C & D—  
CLASS II, GROUPS F & G • W/CONDUIT BOX

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------|-------------------------|
| 1/3 | 3450            | 56C           | 116605            | \$663         | A             | 39                     | 115/208-230 | Auto.                  | 2.6                  | 65.0              | 13.46                   |
|     | 1725            | 56C           | 116606            | 693           | A             | 42                     | 115/208-230 | Auto.                  | 3.3                  | 62.0              | 13.44                   |
|     | 1140            | 56C           | 116607□           | 793           | A             | 45                     | 115/208-230 | Auto.                  | 3.9                  | 58.0              | 14.96                   |
| 1/2 | 3450            | 56C           | 116608□           | 669           | A             | 36                     | 115/208-230 | Auto.                  | 3.8                  | 63.0              | 13.46                   |
|     | 1725            | 56C           | 116609□           | 768           | A             | 46                     | 115/208-230 | Auto.                  | 4.4                  | 66.0              | 13.94                   |
|     | 1140            | 56HC          | 116610□           | 861           | A             | 56                     | 115/208-230 | Auto.                  | 4.7                  | 64.0              | 15.46                   |
| 3/4 | 3450            | 56C           | 116611□           | 716           | A             | 41                     | 115/208-230 | Auto.                  | 5.3                  | 65.0              | 13.94                   |
|     | 1725            | 56C           | 116612□           | 850           | A             | 51                     | 115/208-230 | Auto.                  | 5.5                  | 70.0              | 14.44                   |
| 1   | 3450            | 56C           | 116613□           | 768           | A             | 50                     | 115/208-230 | Auto.                  | 6.3                  | 70.0              | 14.44                   |
|     | 1725            | 56C           | 116614□           | 936           | A             | 54                     | 115/208-230 | Auto.                  | 6.7                  | 75.0              | 14.44                   |
| 1½  | 3450            | 56C           | 116615□           | 1091          | A             | 45                     | 115/208-230 | Auto.                  | 8.5                  | 72.0              | 14.96                   |
| 2   | 3450            | 56C           | 116616□           | 1335          | A             | 58                     | 115/208-230 | Auto.                  | 10.5                 | 74.0              | 15.96                   |

● These motors are totally enclosed, non-ventilated—others are fan cooled.  
□ 56H & 56HC motors have bases with mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 56C face and 5/8" shaft.



**EXPLOSION-PROOF  
FOR HAZARDOUS LOCATIONS**

Underwriters Laboratories  
and Canadian Standards  
Association Listed

**General Specifications:**

These explosion-proof motors are designed and approved for application in hazardous environments having certain explosive gases or materials present.

**Features:**

Rugged mechanical construction meeting all requirements for safety. UL and CSA listed.

Double shielded, pre-lubricated ball bearings are standard. All motors have inherent automatic overload protection. NEMA 1.0 Service Factor except as noted.

Explosion-proof conduit box included at no extra cost.

Normally-closed thermostats are standard on cast iron motors.

Division I areas are environments where a hazard is present continuously or would be subject to fire or explosion if the hazard was present as a result of an accident or uncommon occurrence.

Division II areas are environments where the threat of fire or explosion is not normally present and not likely to result in the event of an abnormal occurrence.

**Application Notes:**

These motors must be applied in accordance with the National Electrical Code, Article #500. A partial listing of explosive agents is noted below. Consult NFPA Publication 497M for a complete listing. Please note subheads above each column for qualifications of LEESON motors.

**NOTE: No LEESON motors are listed for Class I, Group A or B.**

**Class I**

**Group A:** Acetylene

**Group B:** Butadiene, ethylene oxide, hydrogen, propylene oxide, manufactured gases containing more than 30% hydrogen by volume.

**Group C:** Acetaldehyde, cyclopropane, diethyl ether, ethylene.

**Group D:** Acetone, acrylonitrile, ammonia, benzene, butane, ethanol, ethylene dichloride, gasoline, hexane, isoprene, methane (natural gas), methanol, naphtha, propane, propylene, styrene, toluene, vinyl acetate, vinyl chloride, xylene.

**Class II**

**Group E:** Aluminum, magnesium and other metal dusts with similar characteristics.

**Group F:** Carbon black, coke or coal dust.

**Group G:** Flour, starch or grain dust.

**EXCEPT AS NOTED, STEEL FRAME  
EXPLOSION-PROOF MOTORS ARE NOT  
INVERTER-RATED AND MUST NOT  
BE USED WITH AN INVERTER**

**THREE PHASE • RIGID BASE**

**DIVISION I, DIVISION II, CLASS I, GROUPS C & D—  
CLASS II, GROUPS F & G • W/CONDUIT BOX**

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | FL<br>Amps<br>230V | %<br>FL<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|--------------------|-----------------|-------------------------|
| 1/3 | 1725            | 56            | 111932●           | \$623         | A             | 33                     | 208-230/460 | Auto.                  | 1.3                | 76.0            | 10.88                   |
|     | 1140            | 56H           | 111940●           | 893           | A             | 39                     | 208-230/460 | Auto.                  | 1.5                | 70.0            | 12.38                   |
| 1/2 | 3450            | 56            | 111934●           | 712           | A             | 39                     | 208-230/460 | Auto.                  | 1.6                | 82.5            | 12.38                   |
|     | 1725            | 56            | 111929▲●          | 647           | A             | 32                     | 208-230/460 | Auto.                  | 1.7                | 75.0            | 11.38                   |
|     | 1140            | 56H           | 111938□           | 947           | A             | 44                     | 208-230/460 | Auto.                  | 2.0                | 71.0            | 13.97                   |
| 3/4 | 3450            | 56            | 111937            | 744           | A             | 37                     | 208-230/460 | Auto.                  | 3.2                | 75.5            | 13.94                   |
|     | 1725            | 56            | 111923            | 751           | A             | 38                     | 208-230/460 | Auto.                  | 3.0                | 75.0            | 13.94                   |
| 1   | 3450            | 56            | 111942            | 786           | A             | 34                     | 208-230/460 | Auto.                  | 3.6                | 77.0            | 13.94                   |
|     | 1725            | 56H           | 111922□           | 817           | A             | 45                     | 208-230/460 | Auto.                  | 3.6                | 78.0            | 13.94                   |
| 1½  | 3450            | 143T          | G120489           | 800           | B             | 46                     | 208-230/460 | Auto.                  | 4.0                | 82.5            | 14.41                   |
|     | 1725            | 145T          | G120490           | 891           | B             | 56                     | 208-230/460 | Auto.                  | 4.4                | 84.0            | 14.41                   |
| 2   | 3450            | 145T          | G120491           | 824           | B             | 51                     | 208-230/460 | Auto.                  | 5.2                | 84.0            | 15.41                   |
|     | 1725            | 145T          | G120391           | 988           | B             | 56                     | 208-230/460 | Auto.                  | 5.6                | 84.0            | 15.41                   |
| 3   | 3450            | 145T          | G120387           | 974           | B             | 51                     | 208-230/460 | Auto.                  | 7.4                | 85.5            | 15.91                   |

▲ These motors are satisfactory for operation on 50 Hz power supply at full rated horsepower.

● These motors are totally enclosed, non-ventilated—Others are fan cooled.

□ Combination 56H base motors have mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 56 shaft.

**THREE PHASE • C FACE LESS BASE**

**DIVISION I, DIVISION II, CLASS I, GROUPS C & D—  
CLASS II, GROUPS F & G • W/CONDUIT BOX**

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | FL<br>Amps<br>230V | %<br>FL<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|--------------------|-----------------|-------------------------|
| 1/3 | 3450            | 56C           | 111944●+          | \$743         | A             | 36                     | 208-230/460 | Auto.                  | 1.2                | 77.0            | 11.88                   |
|     | 1725            | 56C           | 111931▲●          | 799           | A             | 29                     | 208-230/460 | Auto.                  | 1.2                | 76.0            | 11.97                   |
| 1/2 | 3450            | 56C           | 111933+●+         | 775           | A             | 33                     | 208-230/460 | Auto.                  | 1.6                | 82.5            | 12.38                   |
|     | 3450            | 56J           | 116187●+          | 756           | A             | 33                     | 208-230/460 | Auto.                  | 1.6                | 82.5            | 12.87                   |
|     | 1725            | 56C           | 111930▲●          | 846           | A             | 34                     | 208-230/460 | Auto.                  | 1.7                | 75.0            | 11.37                   |
| 3/4 | 3450            | 56C           | 111936+           | 799           | A             | 27                     | 208-230/460 | Auto.                  | 2.4                | 75.5            | 12.96                   |
|     | 1725            | 56C           | 111935            | 860           | A             | 36                     | 208-230/460 | Auto.                  | 3.0                | 75.0            | 13.94                   |
| 1   | 3450            | 56C           | 111943+           | 836           | A             | 30                     | 208-230/460 | Auto.                  | 3.2                | 77.0            | 12.96                   |
|     | 3450            | 56J           | 116184+           | 814           | A             | 33                     | 208-230/460 | Auto.                  | 3.2                | 77.0            | 13.46                   |
|     | 1725            | 56C           | 111926            | 902           | A             | 46                     | 208-230/460 | Auto.                  | 3.6                | 78.0            | 13.94                   |
| 1½  | 3450            | 56C           | 111939+           | 951           | A             | 48                     | 208-230/460 | Auto.                  | 4.2                | 81.5            | 13.96                   |
|     | 3450            | 56J           | 116182+           | 834           | A             | 48                     | 208-230/460 | Auto.                  | 4.2                | 81.5            | 14.46                   |
|     | 1725            | 56C           | 111941            | 970           | A             | 46                     | 208-230/460 | Auto.                  | 4.4                | 80.0            | 13.96                   |
| 2   | 3450            | 56C           | 113971+           | 1064          | A             | 50                     | 208-230/460 | Auto.                  | 5.6                | 82.5            | 14.46                   |
|     | 3450            | 56J           | 116180+           | 872           | A             | 50                     | 208-230/460 | Auto.                  | 5.6                | 82.5            | 14.96                   |
|     | 1725            | 145TC         | 121178            | 1051          | B             | 50                     | 208-230/460 | Auto.                  | 5.6                | 84.0            | 15.02                   |
| 3   | 3450            | 56C           | 114419③           | 1183          | A             | 54                     | 208-230/460 | Auto.                  | 7.6                | 84.0            | 14.96                   |
|     | 1740            | 182TC         | 158003⑤           | 1222          | C             | 91                     | 230/460     | T-Stat                 | 8.8                | 80.0            | 15.62                   |
| 5   | 1740            | 184TC         | 158005⑤           | 1399          | C             | 110                    | 230/460     | T-Stat                 | 13.4               | 82.5            | 16.12                   |

③ Catalog #114419 is approved for Class I, Group C & D – Class II, Group F service only.

⑤ Explosion-proof motors are Class I, Group D—Class II, Groups F & G.

▲ These motors are satisfactory for operation on 50 Hz power supply at full rated horsepower.

● These motors are totally enclosed, non-ventilated—Others are fan cooled.

+

These motors have 1.15 Service Factors.

+ Consult factory for 50 Hz derate.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

# LEESON<sup>®</sup> EXPLOSION-PROOF MOTORS

## THREE PHASE • C FACE

### EXPLOSION-PROOF FOR HAZARDOUS LOCATIONS

Underwriters Laboratories  
and Canadian Standards  
Association Listed

#### General Specifications:

These explosion-proof motors are designed and approved for application in hazardous environments having certain explosive gases or materials present.

#### Features:

Rugged mechanical construction meeting all requirements for safety. UL and CSA listed.

Double shielded, pre-lubricated ball bearings are standard. All motors have inherent automatic overload protection. NEMA 1.0 Service Factor except as noted.

Explosion-proof conduit box included at no extra cost.

Division I areas are environments where a hazard is present continuously or would be subject to fire or explosion if the hazard was present as a result of an accident or uncommon occurrence.

Division II areas are environments where the threat of fire or explosion is not normally present and not likely to result in the event of an abnormal occurrence.

#### Application Notes:

These motors must be applied in accordance with the National Electrical Code, Article #500. A partial listing of explosive agents is noted below. Consult NFPA Publication 497M for a complete listing. Please note subheads above each column for qualifications of LEESON motors.

**NOTE: No LEESON motors are listed for Class I, Group A or B.**

#### Class I

**Group A:** Acetylene

**Group B:** Butadiene, ethylene oxide, hydrogen, propylene oxide, manufactured gases containing more than 30% hydrogen by volume.

**Group C:** Acetaldehyde, cyclopropane, diethyl ether, ethylene.

**Group D:** Acetone, acrylonitrile, ammonia, benzene, butane, ethanol, ethylene dichloride, gasoline, hexane, isoprene, methane (natural gas), methanol, naphtha, propane, propylene, styrene, toluene, vinyl acetate, vinyl chloride, xylene.

#### Class II

**Group E:** Aluminum, magnesium and other metal dusts with similar characteristics.

**Group F:** Carbon black, coke or coal dust.

**Group G:** Flour, starch or grain dust.



**EXCEPT AS NOTED, STEEL FRAME  
EXPLOSION-PROOF MOTORS ARE NOT  
INVERTER-RATED AND MUST NOT  
BE USED WITH AN INVERTER**

### THREE PHASE • C FACE WITH BASE

DIVISION I, DIVISION II, CLASS I, GROUPS C & D—  
CLASS II, GROUPS F & G • W/CONDUIT BOX

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------|-------------------------|
| 1/3 | 3450            | 56C           | 114625▲           | \$751         | A             | 33                     | 208-230/460 | Auto.                  | 1.2                  | 77.0              | 11.88                   |
|     | 1725            | 56C           | 114626▲           | 812           | A             | 38                     | 208-230/460 | Auto.                  | 1.3                  | 76.0              | 10.87                   |
| 1/2 | 3450            | 56C           | 114627●★          | 783           | A             | 35                     | 208-230/460 | Auto.                  | 1.6                  | 82.5              | 12.38                   |
|     | 1725            | 56C           | 114628▲           | 849           | A             | 35                     | 208-230/460 | Auto.                  | 1.7                  | 75.0              | 11.37                   |
|     | 1725            | 56C           | 116190◆           | 1066          | A             | 34                     | 208-230/460 | T-Stat                 | 2.4                  | 68.0              | 13.44                   |
| 3/4 | 3450            | 56C           | 114629            | 809           | A             | 33                     | 208-230/460 | Auto.                  | 2.4                  | 75.5              | 12.96                   |
|     | 1725            | 56C           | 114630            | 865           | A             | 42                     | 208-230/460 | Auto.                  | 2.6                  | 75.0              | 12.46                   |
|     | 1725            | 56C           | 116191◆           | 1089          | A             | 38                     | 208-230/460 | T-Stat                 | 3.0                  | 75.5              | 13.44                   |
| 1   | 3450            | 56C           | 114631            | 846           | A             | 34                     | 208-230/460 | Auto.                  | 3.2                  | 77.0              | 12.96                   |
|     | 1725            | 56C           | 114632            | 918           | A             | 47                     | 208-230/460 | Auto.                  | 3.4                  | 78.0              | 13.96                   |
|     | 1725            | 143TC         | G121541◆          | 1213          | B             | 44                     | 208-230/460 | T-Stat                 | 3.0                  | 82.5              | 14.50                   |
| 1½  | 3450            | 56C           | 114633            | 960           | A             | 42                     | 208-230/460 | Auto.                  | 4.2                  | 81.5              | 13.96                   |
|     | 1725            | 56C           | 114634            | 982           | A             | 45                     | 208-230/460 | Auto.                  | 4.4                  | 80.0              | 13.96                   |
|     | 1725            | 145TC         | G121542◆          | 1258          | B             | 54                     | 208-230/460 | T-Stat                 | 4.4                  | 84.0              | 16.00                   |
| 2   | 3450            | 56C           | 114635            | 950           | A             | 51                     | 208-230/460 | Auto.                  | 5.6                  | 78.8              | 14.46                   |
|     | 1740            | 145TC         | G121182           | 1059          | B             | 58                     | 208-230/460 | Auto.                  | 5.6                  | 84.0              | 15.02                   |
|     | 1725            | 145TC         | G121543◆          | 1376          | B             | 65                     | 208-230/460 | T-Stat                 | 5.6                  | 84.0              | 16.50                   |
| 3   | 3450            | 56C           | 114636③           | 1191          | A             | 62                     | 208-230/460 | Auto.                  | 7.6                  | 84.0              | 14.96                   |

③ Catalog #114636 is approved for Class I, Group C & D – Class II, Group F service only.

▲ These motors are satisfactory for operation on 50 Hz power supply at full rated horsepower.

● These motors are totally enclosed, non-ventilated—Others are fan cooled.

★ These motors have 1.15 Service Factors.

◆ These motors are inverter-rated and suitable for use with an inverter. Others are not!

### C FACE WITH RIGID BASE • THREE PHASE CAST IRON FRAME

DIVISION I, DIVISION II, CLASS I, GROUP D—CLASS II, GROUPS F & G  
WITH CONDUIT BOX AND NORMALLY-CLOSED THERMOSTATS

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | F.L.<br>Amps<br>460 V. | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|-------------------|-------------------------|
| 3  | 3450            | 182TC         | G850587★          | \$1214        | C             | 90                     | 230/460 | 3.8                    | 85.5              | 17.12                   |
|    | 1750            | 182TC         | G850617★          | 1214          | C             | 91                     | 230/460 | 4.0                    | 87.5              | 17.12                   |
| 5  | 3450            | 184TC         | G850588★          | 1296          | C             | 125                    | 230/460 | 6.2                    | 87.5              | 17.12                   |
|    | 1750            | 184TC         | G850618★          | 1296          | C             | 125                    | 230/460 | 6.3                    | 87.5              | 17.12                   |
| 7½ | 3450            | 213TC         | G850589★          | 1945          | C             | 138                    | 230/460 | 9.5                    | 88.5              | 20.18                   |
|    | 1750            | 213TC         | G850619★          | 1926          | C             | 138                    | 230/460 | 10.0                   | 89.5              | 20.18                   |
| 10 | 3450            | 215TC         | G850590★          | 2043          | C             | 155                    | 230/460 | 12.0                   | 89.5              | 20.18                   |
|    | 1750            | 215TC         | G850620★          | 2027          | C             | 155                    | 230/460 | 13.0                   | 91.0              | 20.18                   |
| 15 | 3450            | 254TC         | G850591★          | 2676          | C             | 238                    | 230/460 | 18.0                   | 90.2              | 23.52                   |
|    | 1750            | 254TC         | G850621★H         | 3137          | C             | 238                    | 230/460 | 19.5                   | 91.0              | 23.52                   |
| 20 | 3450            | 256TC         | G850592★H         | 3596          | C             | 263                    | 230/460 | 23.0                   | 90.2              | 25.27                   |
|    | 1750            | 256TC         | G850622★H         | 3576          | C             | 263                    | 230/460 | 25.0                   | 91.0              | 25.27                   |
| 25 | 3450            | 284TSC        | G850593★H         | 3723          | C             | 365                    | 230/460 | 29.0                   | 91.0              | 24.94                   |
|    | 1750            | 284TC         | G850623★H         | 3682          | C             | 366                    | 230/460 | 31.5                   | 92.4              | 26.30                   |
| 30 | 1750            | 286TC         | G850624★H         | 4183          | C             | 385                    | 230/460 | 37.0                   | 92.4              | 27.80                   |
| 40 | 1750            | 324TC         | G850625★H         | 5437          | C             | 550                    | 230/460 | 51.5                   | 93.0              | 28.87                   |
| 50 | 1750            | 326TC         | G850626 H         | 6691          | C             | 570                    | 230/460 | 61.5                   | 93.0              | 30.37                   |

★ These motors have 1.15 Service Factors.

H Explosion-proof motors are Class I, Groups C & D—Class II, Groups F & G.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

Catalog numbers in green are EPACT motors.

**EXPLOSION-PROOF  
FOR HAZARDOUS LOCATIONS**

Underwriters Laboratories  
and Canadian Standards  
Association Listed

**General Specifications:**

These explosion-proof motors are designed and approved for application in hazardous environments having certain explosive gases or materials present.

**Features:**

Rugged mechanical construction meeting all requirements for safety. UL and CSA listed.

Double shielded, pre-lubricated ball bearings are standard. All motors have inherent automatic overload protection. NEMA 1.15 service factor except as noted.

Explosion-proof conduit box included at no extra cost.

Normally-closed thermostats are standard on cast iron motors.

Division I areas are environments where a hazard is present continuously or would be subject to fire or explosion if the hazard was present as a result of an accident or uncommon occurrence.

Division II areas are environments where the threat of fire or explosion is not normally present and not likely to result in the event of an abnormal occurrence.

**Application Notes:**

These motors must be applied in accordance with the National Electrical Code, Article #500. A partial listing of explosive agents is noted below. Consult NFPA Publication 497M for a complete listing. Please note headings and footnotes for qualifications of specific LEESON motors.

**NOTE: No LEESON motors are listed for Class I, Group A or B.**

**Class I**

**Group A:** Acetylene

**Group B:** Butadiene, ethylene oxide, hydrogen, propylene oxide, manufactured gases containing more than 30% hydrogen by volume.

**Group C:** Acetaldehyde, cyclopropane, diethyl ether, ethylene.

**Group D:** Acetone, acrylonitrile, ammonia, benzene, butane, ethanol, ethylene dichloride, gasoline, hexane, isoprene, methane (natural gas), methanol, naphtha, propane, propylene, styrene, toluene, vinyl acetate, vinyl chloride, xylene.

**Class II**

**Group E:** Aluminum, magnesium and other metal dusts with similar characteristics.

**Group F:** Carbon black, coke or coal dust.

**Group G:** Flour, starch or grain dust.

**THREE PHASE • CAST IRON FRAME • RIGID BASE**

**DIVISION I, DIVISION II, WITH CONDUIT BOX AND NORMALLY CLOSED THERMOSTATS**

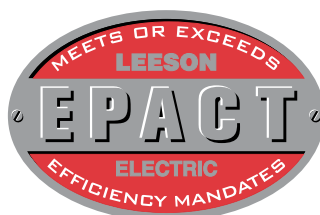
**EXPLOSION-PROOF MOTORS ARE CLASS I, GROUPS C & D—  
CLASS II, GROUPS F & G • ALL RATINGS ARE INVERTER RATED**

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | F.L.<br>Amps<br>460V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|----------------------|-------------------|-------------------------|
| 3   | 1760            | 182T          | G158362           | \$1152        | C             | 100                    | 230/460 | 4.2                  | 87.5              | 17.12                   |
| 5   | 3475            | 184T          | G158319           | 1214          | C             | 110                    | 230/460 | 6.2                  | 87.5              | 17.12                   |
|     | 1745            | 184T          | G158366           | 1193          | C             | 120                    | 230/460 | 6.5                  | 87.5              | 17.12                   |
| 7½  | 3530            | 213T          | G158158           | 1862          | C             | 175                    | 230/460 | 9.5                  | 88.5              | 20.91                   |
|     | 1760            | 213T          | G158157           | 1841          | C             | 138                    | 230/460 | 10.0                 | 89.5              | 19.66                   |
| 10  | 3535            | 215T          | G158159           | 1954          | C             | 190                    | 230/460 | 12.0                 | 89.5              | 20.91                   |
|     | 1765            | 215T          | G158140           | 1945          | C             | 155                    | 230/460 | 12.5                 | 89.5              | 20.91                   |
| 15  | 3520            | 254T          | G158000           | 2634          | C             | 325                    | 230/460 | 18.0                 | 90.2              | 23.52                   |
|     | 1765            | 254T          | G158001           | 2623          | C             | 375                    | 230/460 | 19.5                 | 91.0              | 23.52                   |
| 20  | 3525            | 256T          | G825039           | 2761          | C             | 375                    | 230/460 | 23.5                 | 90.2              | 25.27                   |
|     | 1765            | 256T          | G158010           | 2740          | C             | 263                    | 230/460 | 25.0                 | 91.0              | 25.27                   |
| 25  | 3525            | 284TS         | G825046           | 3562          | C             | 400                    | 230/460 | 29.0                 | 91.0              | 24.94                   |
|     | 1770            | 284T          | G825047           | 3199          | C             | 366                    | 230/460 | 31.5                 | 92.4              | 26.30                   |
| 30  | 3515            | 286TS         | G825040           | 3839          | C             | 450                    | 230/460 | 35.0                 | 91.0              | 26.44                   |
|     | 1760            | 286T          | G825041           | 3707          | C             | 450                    | 230/460 | 37.0                 | 92.4              | 27.80                   |
| 40  | 3550            | 324TS         | G825042           | 5169          | C             | 500                    | 230/460 | 45.5                 | 91.7              | 27.37                   |
|     | 1770            | 324T          | G825043♣          | 4935          | C             | 525                    | 230/460 | 51.5                 | 93.0              | 28.87                   |
| 50  | 3550            | 326TS         | G825044           | 6680          | C             | 570                    | 230/460 | 57.0                 | 92.4              | 28.87                   |
|     | 1765            | 326T          | G825045♣          | 6011          | C             | 570                    | 230/460 | 61.5                 | 93.0              | 30.37                   |
| 60  | 3560            | 364TS         | G825001♣          | 9544          | C             | 875                    | 230/460 | 70.5                 | 93.0              | 29.38                   |
|     | 1775            | 364T          | G825002♣          | 8733          | C             | 975                    | 230/460 | 72.0                 | 93.6              | 31.50                   |
| 75  | 3555            | 365TS         | G825004           | 11029         | C             | 1000                   | 230/460 | 84.0                 | 93.6              | 30.38                   |
|     | 1780            | 365T          | G825005           | 10742         | C             | 1025                   | 230/460 | 86.0                 | 94.1              | 32.50                   |
| 100 | 3565            | 405TS         | G825007           | 14920         | C             | 1150                   | 230/460 | 112.0                | 94.1              | 34.12                   |
|     | 1780            | 405T          | G825008           | 13208         | C             | 1300                   | 230/460 | 114.0                | 94.5              | 37.12                   |
| 125 | 3565            | 444TS         | G825010           | 20596         | C             | 1750                   | 230/460 | 136.0                | 94.5              | 37.50                   |
|     | 1780            | 444T          | G825011           | 17062         | C             | 1800                   | 460     | 143.0                | 94.5              | 41.25                   |
| 150 | 3570            | 445TS         | G825013           | 24106         | C             | 2050                   | 460     | 167.0                | 95.0              | 37.50                   |
|     | 1785            | 445T          | G825014           | 20169         | C             | 2050                   | 460     | 172.0                | 95.0              | 43.19                   |
| 200 | 3570            | 445TS         | G825016♣          | 29416         | C             | 2300                   | 460     | 222.0                | 95.0              | 37.50                   |
|     | 1785            | 445T          | G825017           | 23838         | C             | 2250                   | 460     | 225.0                | 95.0              | 43.19                   |
| 250 | 3570            | 449TS         | G825019.99Ⓜ♣32466 |               | C             | 2450                   | 460     | 280.0                | 95.0              | 47.97                   |
|     | 1785            | 449T          | G825020.99Ⓜ♣26828 |               | C             | 2600                   | 460     | 290.0                | 95.0              | 51.69                   |

These explosion-proof motors are not designed for vertical mounting.

Ⓜ Explosion-proof motors are Class I, Group D—Class II, Groups F & G.

♣ 1.0 Service Factor



SHADED FRAME INDICATES CAST IRON CONSTRUCTION

Catalog numbers in green are EPACT motors.



# LEESON<sup>®</sup> BRAKEMOTORS

## SINGLE & THREE PHASE

### BRAKEMOTORS

Fail-safe positive, stop and hold brakemotors. Brakes are spring set. Load is stopped automatically when power is turned off. LEESON brakemotors feature a power off manual release for convenience, and for use in case of a power failure. The manual release resets automatically. The standard brake is manufactured by Stearns. The brake

coil leads are brought into the conduit box of the motor for easy connection and may be connected to operate when power to the motor is shut off, or to be actuated independent of power to the motor. Three phase motors have brake coils rated 230/460 VAC, 60 Hz. Single phase brake coils are 115/230 VAC, 60 Hz.

### SINGLE PHASE • TENV/TEFC • C FACE WITH BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Brake<br>Rating<br>(ft-lbs) | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-----------------------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/3 | 1725            | 56C           | 3                           | 114165●           | \$792         | A             | 28                     | 115/208-230 | None                   | 2.9                  | 14.06                   |
| 1/2 | 1725            | 56C           | 3                           | 111950            | 857           | A             | 32                     | 115/208-230 | None                   | 4.4                  | 15.06                   |
| 3/4 | 1725            | 56C           | 6                           | 114167            | 1126          | A             | 38                     | 115/208-230 | None                   | 5.4                  | 15.56                   |
| 1   | 1725            | 56C           | 6                           | 111951☆           | 1193          | A             | 38                     | 115/208-230 | None                   | 5.3                  | 16.07                   |
| 1½  | 1725            | 145TC         | 10                          | 121816☆           | 1293          | A             | 40                     | 115/208-230 | None                   | 9.2                  | 19.23                   |

● These motors are totally enclosed, non-ventilated – Others are fan cooled.

☆ Capacitor start/capacitor run design for reduced amperage, others are capacitor start/induction run.

### THREE PHASE • DRIP-PROOF • RIGID BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Brake<br>Rating<br>(ft-lbs) | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-----------------------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1/2 | 1725            | 56            | 3                           | 114162            | \$772         | A             | 28                     | 208-230/460 | 2.0                  | 74.0              | 13.56                   |
| 3/4 | 1725            | 56            | 6                           | 114163            | 901           | A             | 29                     | 208-230/460 | 2.8                  | 77.0              | 14.06                   |
| 1   | 1725            | 56            | 6                           | 114164            | 980           | A             | 32                     | 208-230/460 | 4.2                  | 78.5              | 14.06                   |
| 1½  | 1725            | 145T          | 10                          | G120370           | 1125          | B             | 44                     | 208-230/460 | 4.4                  | 84.0              | 16.00                   |
| 2   | 1725            | 145T          | 10                          | G120371           | 1277          | B             | 45                     | 208-230/460 | 6.0                  | 84.0              | 16.00                   |
| 3   | 1740            | 182T          | 15                          | G131626           | 1576          | B             | 65                     | 208-230/460 | 8.4                  | 86.5              | 16.89                   |
| 5   | 1740            | 184T          | 25                          | G131627           | 1981          | B             | 95                     | 208-230/460 | 13.2                 | 87.5              | 17.89                   |
| 7½  | 1760            | 213T          | 35                          | G140611           | 2422          | B             | 130                    | 208-230/460 | 20.0                 | 88.5              | 23.01                   |
| 10  | 1760            | 215T          | 50                          | G140635           | 3066          | B             | 138                    | 208-230/460 | 28.0                 | 89.5              | 25.01                   |

All 180 and 210 frame Rolled Steel motors have Class F Insulation.

### THREE PHASE • DRIP-PROOF • C FACE LESS BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Brake<br>Rating<br>(ft-lbs) | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-----------------------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1/2 | 1725            | 56C           | 3                           | 114156            | \$792         | A             | 28                     | 208-230/460 | 2.0                  | 74.0              | 13.56                   |
| 3/4 | 1725            | 56C           | 6                           | 114157            | 924           | A             | 38                     | 208-230/460 | 2.8                  | 77.0              | 14.06                   |
| 1   | 1725            | 56C           | 6                           | 114166            | 999           | A             | 40                     | 208-230/460 | 3.4                  | 78.5              | 14.06                   |
|     | 1725            | 143TC         | 6                           | 121678            | 999           | B             | 42                     | 208-230/460 | 3.4                  | 78.5              | 14.50                   |
| 1½  | 1725            | 145TC         | 10                          | 120372            | 1162          | B             | 43                     | 208-230/460 | 5.6                  | 78.5              | 15.50                   |
|     | 1725            | 56C           | 10                          | 116766            | 1162          | A             | 43                     | 208-230/460 | 5.6                  | 78.5              | 15.50                   |
| 2   | 1725            | 145TC         | 10                          | 120373            | 1309          | B             | 47                     | 208-230/460 | 6.2                  | 78.5              | 16.00                   |
| 3   | 1740            | 182TC         | 15                          | 131624            | 1647          | B             | 56                     | 208-230/460 | 10.0                 | 80.0              | 16.40                   |
| 5   | 1740            | 184TC         | 25                          | 131625            | 2045          | B             | 76                     | 208-230/460 | 14.2                 | 84.0              | 17.35                   |

### THREE PHASE • DRIP-PROOF • C FACE WITH BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Brake<br>Rating<br>(ft-lbs) | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-----------------------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1/2 | 1725            | 56C           | 3                           | 111326            | \$801         | A             | 31                     | 208-230/460 | 2.0                  | 74.0              | 13.56                   |
| 3/4 | 1725            | 56C           | 6                           | 111327            | 937           | A             | 34                     | 208-230/460 | 2.8                  | 77.0              | 14.06                   |
| 1   | 1725            | 56C           | 6                           | 111328            | 1012          | A             | 42                     | 208-230/460 | 4.2                  | 78.5              | 14.06                   |
| 1½  | 1725            | 145TC         | 10                          | G121053           | 1165          | B             | 42                     | 208-230/460 | 4.4                  | 84.0              | 16.00                   |
| 2   | 1725            | 145TC         | 10                          | G121054           | 1309          | B             | 51                     | 208-230/460 | 6.0                  | 84.0              | 16.50                   |
| 3   | 1740            | 182TC         | 15                          | G131558           | 1813          | B             | 84                     | 208-230/460 | 8.4                  | 86.5              | 16.90                   |
| 5   | 1740            | 184TC         | 25                          | G131559           | 2209          | B             | 97                     | 208-230/460 | 13.2                 | 87.5              | 18.35                   |
| 7½  | 1760            | 213TC         | 35                          | G140610           | 2574          | B             | 115                    | 208-230/460 | 20.0                 | 88.5              | 23.51                   |
| 10  | 1760            | 215TC         | 50                          | G140638           | 4343          | B             | 125                    | 208-230/460 | 28.0                 | 89.5              | 25.01                   |

Catalog numbers in green are EPACT motors.  
Catalog numbers in blue are NEW motors.

# BRAKEMOTORS

## THREE PHASE



### THREE PHASE • TEFC • RIGID BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Brake<br>Rating<br>(ft-lbs) | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | FL.<br>Amps<br>230V | %<br>FL.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-----------------------------|-------------------|---------------|---------------|------------------------|-------------|---------------------|------------------|-------------------------|
| 1/3 | 1725            | 56            | 3                           | 114151●           | \$753         | A             | 28                     | 208-230/460 | 1.3                 | 72.0             | 13.56                   |
| 1/2 | 1725            | 56            | 3                           | 114150●           | 820           | A             | 33                     | 208-230/460 | 1.8                 | 78.5             | 14.06                   |
|     | 1140            | 56            | 6                           | 114149            | 1131          | A             | 33                     | 208-230/460 | 2.4                 | 70.0             | 15.56                   |
| 3/4 | 1725            | 56            | 6                           | 114147            | 961           | A             | 34                     | 208-230/460 | 2.8                 | 77.0             | 15.56                   |
|     | 1140            | 56            | 6                           | 114148            | 1188          | A             | 43                     | 208-230/460 | 3.0                 | 75.5             | 16.06                   |
| 1   | 1725            | 56            | 6                           | 114146            | 1113          | A             | 37                     | 208-230/460 | 3.8                 | 77.0             | 16.06                   |
|     | 1725            | 143T          | 6                           | G121679           | 1099          | B             | 40                     | 208-230/460 | 3.1                 | 82.5             | 17.50                   |
|     | 1140            | 145T          | 10                          | G121050           | 1567          | B             | 45                     | 208-230/460 | 3.6                 | 80.0             | 17.52                   |
| 1½  | 1725            | 56            | 10                          | 116767            | 1250          | A             | 44                     | 208-230/460 | 4.4                 | 84.0             | 17.08                   |
|     | 1725            | 145T          | 10                          | G120329           | 1232          | B             | 44                     | 208-230/460 | 4.4                 | 84.0             | 17.52                   |
| 2   | 1725            | 145T          | 10                          | G120330           | 1262          | B             | 53                     | 208-230/460 | 5.6                 | 84.0             | 18.00                   |
|     | 1140            | 184T          | 15                          | G131620           | 2106          | B             | 80                     | 208-230/460 | 7.2                 | 86.5             | 20.33                   |
| 3   | 1740            | 182T          | 15                          | G131613           | 1722          | B             | 78                     | 230/460     | 8.2                 | 87.5             | 18.83                   |
|     | 1170            | 213T          | 35                          | G140601           | 3124          | B             | 147                    | 208-230/460 | 12.0                | 87.5             | 26.49                   |
| 5   | 1740            | 184T          | 25                          | G131614           | 2137          | B             | 102                    | 230/460     | 13.0                | 87.5             | 20.78                   |
| 7½  | 1760            | 213T          | 35                          | G140603           | 2749          | B             | 162                    | 208-230/460 | 20.4                | 89.5             | 26.49                   |
| 10  | 1760            | 215T          | 50                          | G140636           | 3153          | B             | 174                    | 208-230/460 | 26.0                | 89.5             | 27.99                   |



### THREE PHASE • TEFC • C FACE LESS BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Brake<br>Rating<br>(ft-lbs) | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | FL.<br>Amps<br>230V | %<br>FL.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-----------------------------|-------------------|---------------|---------------|------------------------|-------------|---------------------|------------------|-------------------------|
| 1/3 | 1725            | 56C           | 3                           | 114158●           | \$768         | A             | 26                     | 208-230/460 | 1.3                 | 72.0             | 13.56                   |
| 1/2 | 1725            | 56C           | 3                           | 114159            | 837           | A             | 26                     | 208-230/460 | 2.0                 | 74.0             | 15.06                   |
| 3/4 | 1725            | 56C           | 6                           | 114160            | 981           | A             | 34                     | 208-230/460 | 2.8                 | 77.0             | 15.06                   |
| 1   | 1725            | 56C           | 6                           | 114161            | 1133          | A             | 31                     | 208-230/460 | 3.6                 | 77.0             | 15.56                   |
|     | 1725            | 143TC         | 6                           | 121556            | 1133          | B             | 37                     | 208-230/460 | 3.8                 | 77.0             | 17.00                   |
| 1½  | 1725            | 56C           | 10                          | 116768            | 1270          | A             | 40                     | 208-230/460 | 5.0                 | 78.5             | 16.56                   |
|     | 1725            | 145TC         | 10                          | 120331            | 1270          | B             | 40                     | 208-230/460 | 5.0                 | 78.5             | 17.00                   |
| 2   | 1725            | 145TC         | 10                          | 120332            | 1304          | B             | 51                     | 208-230/460 | 6.0                 | 84.0             | 18.00                   |
| 3   | 1740            | 182TC         | 15                          | 131610            | 1806          | B             | 69                     | 230/460     | 9.0                 | 84.0             | 18.73                   |
| 5   | 1740            | 184TC         | 25                          | 131611            | 2234          | B             | 92                     | 230/460     | 13.2                | 86.0             | 19.18                   |
| 7½  | 1740            | S213TC        | 35                          | 131612            | 2858          | B             | 149                    | 230/460     | 19.6                | 87.0             | 25.29                   |
| 10  | 1760            | 215TC         | 50                          | 140637            | 3630          | B             | 136                    | 208-230/460 | 26.0                | 89.5             | 27.99                   |

● These motors are totally enclosed, non-ventilated.  
† Class F insulated.

All 180 and 210 frame Rolled Steel motors have Class F Insulation.



### THREE PHASE • TEFC • C FACE WITH BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Brake<br>Rating<br>(ft-lbs) | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | FL.<br>Amps<br>230V | %<br>FL.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-----------------------------|-------------------|---------------|---------------|------------------------|-------------|---------------------|------------------|-------------------------|
| 1/3 | 1725            | 56C           | 3                           | 110669●           | \$756         | A             | 30                     | 208-230/460 | 1.3                 | 72.0             | 13.56                   |
| 1/2 | 1725            | 56C           | 3                           | 110670●†          | 850           | A             | 34                     | 208-230/460 | 1.8                 | 78.5             | 14.06                   |
|     | 1725            | 56C           | 3                           | 114154            | 850           | A             | 34                     | 208-230/460 | 2.4                 | 74.0             | 15.06                   |
|     | 1140            | 56C           | 3                           | 114152            | 1223          | A             | 34                     | 208-230/460 | 2.4                 | 70.0             | 15.56                   |
| 3/4 | 1725            | 56C           | 6                           | 110671●†          | 994           | A             | 34                     | 208-230/460 | 2.5                 | 80.0             | 14.56                   |
|     | 1725            | 56C           | 6                           | 114155            | 994           | A             | 46                     | 208-230/460 | 2.8                 | 77.0             | 15.56                   |
| 1   | 1725            | 56C           | 6                           | 110679            | 1170          | A             | 32                     | 208-230/460 | 3.6                 | 77.0             | 15.56                   |
|     | 1725            | 143TC         | 6                           | G121557           | 1153          | B             | 43                     | 208-230/460 | 3.1                 | 82.5             | 17.50                   |
| 1½  | 1725            | 145TC         | 10                          | G121051           | 1291          | B             | 45                     | 230/460     | 4.4                 | 84.0             | 17.50                   |
| 2   | 1725            | 145TC         | 10                          | G121052           | 1329          | B             | 59                     | 208-230/460 | 5.6                 | 84.0             | 18.00                   |
| 3   | 1740            | 182TC         | 15                          | G131617           | 1805          | B             | 79                     | 230/460     | 8.2                 | 87.5             | 18.83                   |
| 5   | 1740            | 184TC         | 25                          | G131618           | 2255          | B             | 117                    | 230/460     | 13.0                | 87.5             | 20.78                   |
| 7½  | 1760            | 213TC         | 35                          | G140605           | 2879          | B             | 163                    | 208-230/460 | 20.4                | 89.5             | 26.49                   |
| 10  | 1760            | 215TC         | 50                          | G140639           | 3697          | B             | 175                    | 208-230/460 | 26.0                | 89.5             | 27.99                   |



### WASHGUARD • TENV/TEFC • C FACE WITH BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Brake<br>Rating<br>(ft-lbs) | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | FL.<br>Amps<br>230V | %<br>FL.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-----------------------------|-------------------|---------------|---------------|------------------------|-------------|---------------------|------------------|-------------------------|
| 1/3 | 1725            | 56C           | 3                           | 116466●           | \$1087        | A             | 40                     | 208-230/460 | 1.3                 | 72.0             | 14.00                   |
| 1/2 | 1725            | 56C           | 3                           | 116467●           | 1108          | A             | 42                     | 208-230/460 | 1.8                 | 78.5             | 14.50                   |
| 3/4 | 1725            | 56C           | 6                           | 116468●           | 1315          | A             | 44                     | 208-230/460 | 2.5                 | 80.0             | 15.00                   |
| 1   | 1725            | 56C           | 6                           | 116469●           | 1358          | A             | 48                     | 208-230/460 | 3.2                 | 80.0             | 15.50                   |
|     | 1725            | 143TC         | 6                           | 121616●           | 1358          | A             | 49                     | 208-230/460 | 3.2                 | 80.0             | 16.06                   |
| 1½  | 1725            | 145TC         | 10                          | G121617           | 1883          | A             | 50                     | 208-230/460 | 4.4                 | 84.0             | 19.01                   |
| 2   | 1725            | 145TC         | 10                          | G121618           | 1952          | A             | 62                     | 208-230/460 | 5.6                 | 84.0             | 19.01                   |

### WASHGUARD • TENV/TEFC • C FACE LESS BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Brake<br>Rating<br>(ft-lbs) | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | FL.<br>Amps<br>230V | %<br>FL.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-----------------------------|-------------------|---------------|---------------|------------------------|-------------|---------------------|------------------|-------------------------|
| 1/3 | 1725            | 56C           | 3                           | 116462●           | \$1049        | A             | 39                     | 208-230/460 | 1.3                 | 72.0             | 14.00                   |
| 1/2 | 1725            | 56C           | 3                           | 116463●           | 1075          | A             | 41                     | 208-230/460 | 1.8                 | 78.5             | 14.50                   |
| 3/4 | 1725            | 56C           | 6                           | 116464●           | 1279          | A             | 43                     | 208-230/460 | 2.5                 | 80.0             | 15.00                   |
| 1   | 1725            | 56C           | 6                           | 116465●           | 1325          | A             | 45                     | 208-230/460 | 3.2                 | 80.0             | 15.50                   |
|     | 1725            | 143TC         | 6                           | 121613●           | 1325          | A             | 46                     | 208-230/460 | 3.2                 | 80.0             | 15.56                   |
| 1½  | 1725            | 145TC         | 10                          | 121614            | 1835          | A             | 49                     | 208-230/460 | 5.0                 | 78.5             | 18.01                   |
| 2   | 1725            | 145TC         | 10                          | 121615            | 1888          | A             | 61                     | 208-230/460 | 6.2                 | 81.5             | 18.51                   |

### ALL-STAINLESS • TENV • C FACE WITH BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Brake<br>Rating<br>(ft-lbs) | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | FL.<br>Amps<br>230V | %<br>FL.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-----------------------------|-------------------|---------------|---------------|------------------------|-------------|---------------------|------------------|-------------------------|
| 1/2 | 1725            | 56C           | 3                           | 116483●           | \$4098        | A             | 59                     | 208-230/460 | 1.6                 | 78.5             | 15.85                   |
| 1   | 1725            | 56C           | 6                           | 116484●           | 4319          | A             | 69                     | 208-230/460 | 3.0                 | 81.5             | 15.85                   |

● These motors are totally enclosed, non-ventilated.

Catalog numbers in green are EPACT motors.

# LEESON BRAKEKITS



## LEESON BRAKEKITS

Kit of components to convert 56 through 256T frame stock TEFC motors to fail-safe brakemotors.

Kit mounts on fan end of motor. Kits for 56-184T steel frame motors include totally enclosed Stearns AC brake, replacement cast fan cover, shaft extension, fan and hardware. Kits for 213T-256T cast iron frame motors **do not include brake**, but are designed for Stearns 87,000 series brake.

Two 1/2" NPT holes with 18" leads are provided for connections. The BRAKEKIT adds 5 1/8" to the overall length of 56 and 143-5T frame, and 5 7/8" to the overall length of 182-184T frame.

## BRAKEKITS

| Brake Rating (ft.-lbs.) | Mounts to NEMA Frame | Max. HP @ 1725rpm | Cat. No.<br>115-208/230 V<br>Brake Coil Voltage | Cat. No.<br>208-230/460 V<br>Brake Coil Voltage | Cat. No.<br>575 V<br>Brake Coil Voltage | List Price | Disc. Sym. | App. Wt. (lbs.) |
|-------------------------|----------------------|-------------------|-------------------------------------------------|-------------------------------------------------|-----------------------------------------|------------|------------|-----------------|
| 3                       | 48/S56               | 1                 | —                                               | <b>175615</b> ①                                 | —                                       | \$552      | A          | 10              |
| 3                       | 56/143-5T            | 1                 | <b>175659</b><br><b>175762</b> ②                | <b>175139</b><br><b>175765</b> ②                | <b>175177</b><br><b>175768</b> ②        | 552        | A          | 10              |
| 6                       | 56/143-5T            | 2                 | <b>175660</b><br><b>175763</b> ②                | <b>175140</b><br><b>175766</b> ②                | <b>175178</b><br><b>175769</b> ②        | 635        | A          | 10              |
| 10                      | 56/143-5T            | 3                 | <b>175662</b><br><b>175764</b> ②                | <b>175141</b><br><b>175767</b> ②                | <b>175179</b><br><b>175770</b> ②        | 727        | A          | 10              |
| 15                      | 182-4T               | 3                 | —                                               | <b>175696</b>                                   | <b>175698</b>                           | 1356       | B          | 12              |
| 25                      | 182-4T               | 5                 | —                                               | <b>175697</b>                                   | <b>175699</b>                           | 1538       | B          | 12              |

- 56/143-5T frame Brakekits cannot be used on S56 frame motors.
- Use the 182-4T frame Brakekits on motors having catalog numbers with a "G" prefix or that are 131454 or higher.
- 182-4T frame Brakekits can also be used on single-phase 4-pole (1725RPM) motors, but can only be connected for 208-230V. All brake coils are single phase.

① For motors having a "P" for the suffix letter on the date code and having a face mount fan guard.

② For 56/145 frame motors having a "B" for the suffix letter for the date code and having a face mount fan guard.

## BRAKE ADAPTER KITS

| Brake Rating (ft.-lbs.) | Mounts to NEMA Frame | Max. HP @ 1725rpm | Catalog Number | List Price | Disc. Sym. | App. Wt. (lbs.) |
|-------------------------|----------------------|-------------------|----------------|------------|------------|-----------------|
| 6-105                   | 213-5T               | 10                | <b>175710</b>  | \$251      | C          | 30              |
| 6-105                   | 254-6T               | 20                | <b>175711</b>  | 356        | C          | 40              |

- Brake Adapter Kits include adapter casting/fan guard, brake fan, adapter shaft and hardware needed to mount a Stearns® 87,000 series brake (sold separately by Stearns®).
- Shaded frame sizes are for use with cast iron motors.

WASHGUARD Brakekits have the same convenient assembly method as general purpose models.



## BRAKEKITS FOR WASHGUARD MOTORS

Kit of components including a Stearns NEMA 4X brake to convert 56 thru 145T frame stock TEFC only motors to fail-safe brakemotors. Food safe white epoxy finish. BISSC Certified. Adds 5 1/8" to the overall length of 56 thru 145T WASHGUARD TEFC motors.

## WASHGUARD BRAKEKITS

For 230/460V Three Phase and 230V Single Phase Motors

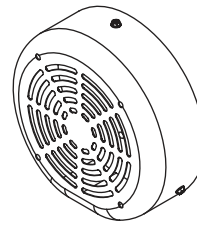
| Brake Rating (ft.-lbs.) | Mounts to NEMA Frame | Max. HP @ 1725rpm | Cat. No.<br>208-230/460 V<br>Brake Coil Voltage | List Price | Disc. Sym. | App. Wt. (lbs.) |
|-------------------------|----------------------|-------------------|-------------------------------------------------|------------|------------|-----------------|
| 3                       | 56/143-5T            | 1                 | <b>175616</b><br><b>175771</b> ②                | \$1066     | A          | 24              |
| 6                       | 56/143-5T            | 2                 | <b>175617</b><br><b>175772</b> ②                | 1125       | A          | 36              |
| 10                      | 56/143-5T            | 3                 | <b>175618</b><br><b>175773</b> ②                | 1185       | A          | 43              |

② For 56/145 frame motors having a "B" for the suffix letter for the date code and having a face mount fan guard.

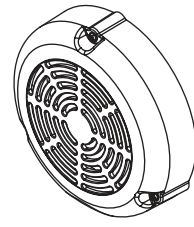
## BRAKE SELECTION

In this table, brake torque ratings are no less than 140% of the motor full load torque. Match HP & frame size of motor with appropriately rated BRAKEKIT.

| Motor HP | Brakemotor RPM<br>Torque Rating of Brake (Lb.-Ft) |      |      |
|----------|---------------------------------------------------|------|------|
|          | 3450                                              | 1725 | 1140 |
| 1/3      | 3                                                 | 3    | 3    |
| 1/2      | 3                                                 | 3    | 3    |
| 3/4      | 3                                                 | 6    | 6    |
| 1        | 3                                                 | 6    | 6    |
| 1 1/2    | 6                                                 | 10   | 10   |
| 2        | 6                                                 | 10   | 15   |
| 3        | 10                                                | 15   | 25   |
| 5        | 15                                                | 25   | 35   |
| 7.5      | 25                                                | 35   | 50   |
| 10       | 25                                                | 50   | 75   |
| 15       | 35                                                | 75   | 105  |
| 20       | 50                                                | 105  | —    |



Old Design



New Design -  
Face Mount



Numbers in blue are available 3rd Quarter 2008.



## DOUBLE C-FACE COUPLER BRAKES

A new and expanded line of Coupler Brakes designed for applications where mounting the brake between the motor and driven load is the preferred, or most convenient, location. They are an excellent problem solver for applications where a brake needs to be added to existing equipment – without replacing the motor.

Rugged cast aluminum or cast iron construction Stearns brakes are well suited to most industrial applications. Coupler brakes are designed to be C-face connected on both ends – these brakes are not suited for overhung loads to be applied to the output shaft.

A wide range of voltages and brake torque ratings in both NEMA 2 and NEMA 4X enclosures are available from stock. NEMA 2 brakes are best suited for use with standard ODP and TEFC motors. NEMA 4X brakes are designed for use with LEESON WASHGUARD motors.

## GENERAL PURPOSE COUPLER BRAKES

Mounts directly to the face and shaft of NEMA 56 through 215T-frame C-face motors to create a fail-safe brakemotor.

The 6 ft.lb. brake mounts to NEMA 56C or 143-5TC motors using an optional adaptor sleeve, which is included with the brake. Output shaft can be either 56C or 143-5TC depending on the location of the provided adaptor sleeve. A 1/2 NPT threaded lead exit hole is provided for power connections.



**Stearns**

## GENERAL PURPOSE (NEMA 2) COUPLER BRAKES

For Both Single and Three Phase Motors

| Cat. No.<br>115/208-230V<br>Single Phase | Cat. No.<br>208-230/460V<br>Three Phase | Cat. No.<br>575V<br>Three Phase | Brake<br>Rating<br>(ft-lbs) | Max.<br>HP @<br>1725 rpm | Mounts<br>to NEMA<br>Frame | Coupler Brake<br>Output Shaft<br>and Face | Add to<br>Motor<br>"C" Dim. | List<br>Price | Disc.<br>Sym. | App.<br>Wt.<br>(lbs.) |
|------------------------------------------|-----------------------------------------|---------------------------------|-----------------------------|--------------------------|----------------------------|-------------------------------------------|-----------------------------|---------------|---------------|-----------------------|
| 175563                                   | 175564                                  | 175565                          | 3                           | 1                        | 56C                        | 5/8", 56C                                 | 4.91                        | \$545         | A             | 13                    |
| 175569                                   | 175570                                  | 175571                          | 6                           | 2                        | 56C/143-5TC                | 5/8" or 7/8", 56C                         | 4.91                        | 625           | A             | 14                    |
| 175575                                   | 175576                                  | 175577                          | 10                          | 3                        | 143-5TC                    | 7/8", 143-5TC                             | 4.91                        | 655           | A             | 15                    |
| —                                        | 175581                                  | —                               | 15                          | 3                        | 143-5TC                    | 7/8", 143-5TC                             | 4.91                        | 748           | A             | 16                    |
| —                                        | 175583                                  | —                               | 15                          | 3                        | 182-4TC                    | 1 1/8", 182-4TC                           | 8.38                        | 2663          | A             | 58                    |
| —                                        | 175585                                  | —                               | 25                          | 5                        | 182-4TC                    | 1 1/8", 182-4TC                           | 8.38                        | 2785          | A             | 58                    |
| —                                        | 175587                                  | —                               | 35                          | 7 1/2                    | 213-5TC                    | 1 3/8", 213-5TC                           | 8.88                        | 3057          | A             | 60                    |
| —                                        | 175589                                  | —                               | 50                          | 10                       | 213-5TC                    | 1 3/8", 213-5TC                           | 8.88                        | 3384          | A             | 62                    |

## WASHGUARD COUPLER BRAKES

Solid die-cast aluminum Stearns NEMA 4X coupler brake converts any TEFC or TENV 56C thru 215TC motor to a fail-safe brakemotor by mounting between the C-face motor and driven equipment. Food safe white epoxy finish. BISSC Certified. Adds 5" to the overall length of 56C thru 145TC WASHGUARD TEFC or TENV motors. Includes all mounting components.



## WASHGUARD (NEMA 4X) COUPLER BRAKES

For Both Single and Three Phase Motors

| Cat. No.<br>115/208-230V<br>Single Phase | Cat. No.<br>208-230/460V<br>Three Phase | Cat. No.<br>575V<br>Three Phase | Brake<br>Rating<br>(ft-lbs) | Max.<br>HP @<br>1725 rpm | Mounts<br>to NEMA<br>Frame | Coupler Brake<br>Output Shaft<br>and Face | Add to<br>Motor<br>"C" Dim. | List<br>Price | Disc.<br>Sym. | App.<br>Wt.<br>(lbs.) |
|------------------------------------------|-----------------------------------------|---------------------------------|-----------------------------|--------------------------|----------------------------|-------------------------------------------|-----------------------------|---------------|---------------|-----------------------|
| 175566                                   | 175567                                  | 175568                          | 3                           | 1                        | 56C                        | 5/8", 56C                                 | 4.94                        | \$960         | A             | 13                    |
| 175572                                   | 175573                                  | 175574                          | 6                           | 2                        | 56C/143-5TC                | 5/8" or 7/8", 56C                         | 4.94                        | 1033          | A             | 14                    |
| 175578                                   | 175579                                  | 175580                          | 10                          | 3                        | 143-5TC                    | 7/8", 143-5TC                             | 4.94                        | 1093          | A             | 15                    |
| —                                        | 175582                                  | —                               | 15                          | 3                        | 143-5TC                    | 7/8", 143-5TC                             | 4.94                        | 1271          | A             | 16                    |
| —                                        | 175584                                  | —                               | 15                          | 3                        | 182-4TC                    | 1 1/8", 182-4TC                           | 8.38                        | 3443          | A             | 58                    |
| —                                        | 175586                                  | —                               | 25                          | 5                        | 182-4TC                    | 1 1/8", 182-4TC                           | 8.38                        | 3511          | A             | 58                    |
| —                                        | 175588                                  | —                               | 35                          | 7 1/2                    | 213-5TC                    | 1 3/8", 213-5TC                           | 8.88                        | 3640          | A             | 60                    |
| —                                        | 175590                                  | —                               | 50                          | 10                       | 213-5TC                    | 1 3/8", 213-5TC                           | 8.88                        | 4066          | A             | 62                    |



# LEESON JET PUMP MOTORS

## SINGLE PHASE

### JET PUMP MOTORS

#### General Specifications:

Stator impregnated with extra heavy varnish system. High temperature copper magnet wire provides extended motor life. "Super Hush" flow-through ventilation system (exhaust shaft-end) standard. Vertical or horizontal mounting (drip-cover available). Ground provision. Die cast aluminum NEMA 56 C face mounting flange, with cast iron bearing seat insert. Mechanical bearing lock—shaft-end, for longer life. Reliable, field proven, corrosion resistant rotating switch. High overload capacities provided by service factor. Neoprene shaft flinger on J frame motors protects bearings by repelling moisture and other contaminants.



#### Shaft Material:

Keyed shafts are made of carbon steel. Threaded shafts are 416 stainless steel. Shafts are CW rotation, facing lead end.

#### Bearings:

203 Double-sealed ball bearing, shaft-end; 203 Double-shielded ball bearing, switch-end. Shaft-end bearing is locked to limit axial movement of the shaft.

#### Terminal Board:

1/4" Quick connects (keyed shaft motors are reversible).

#### U.L. and C.S.A. Recognized:

Motor components (UL File No. E57948).

Class "B" insulation system (UL File No. E55555).

Thermal protector/winding combination (UL No. E57955) through 1HP C.S.A. listed through 1HP (Report No. LR33543).

#### SERVICE FACTORS FOR LEESON SINGLE PHASE JET PUMP MOTORS\*

| HP  | Drip-Proof Service Factor | TEFC Service Factor |
|-----|---------------------------|---------------------|
| 1/2 | 1.60                      | 1.60                |
| 3/4 | 1.50                      | 1.50                |
| 1   | 1.40                      | 1.25                |
| 1½  | 1.30                      | 1.00                |
| 2   | 1.25                      | 1.00                |
| 3   | 1.15                      | —                   |

\* Applies to general purpose motors only, not explosion-proof.

#### DRIP-COVER KITS

Each kit includes one drip-cover. Designed to protect motors from rain, snow and ice when mounted outdoors in a vertical position.



#### FOR DRIP-PROOF MOTORS

| Frame        | Catalog Number | List Price | Disc. Sym. | App. Wgt. (lbs.) |
|--------------|----------------|------------|------------|------------------|
| 48-S56       | 175003         | \$43       | A          | 2                |
| 48-S56       | 175298◆        | 43         | A          | 2                |
| 56 143T-145T | 175004         | 48         | A          | 2                |

◆ For use with motors having "P" suffix on date code.

#### KEYED SHAFT • DRIP-PROOF SINGLE PHASE • LESS BASE

| HP  | RPM 60 Hz | NEMA Frame | Catalog Number | List Price | Disc. Sym. | App. Wgt. (lbs.) | Voltage     | Over-load Prot. | F.L. Amps 230V | "C" Dim. (Inches) |
|-----|-----------|------------|----------------|------------|------------|------------------|-------------|-----------------|----------------|-------------------|
| 1/2 | 3450      | S56C       | 100204         | \$265      | A          | 19               | 115/208-230 | Auto.           | 3.4            | 9.49              |
| 3/4 | 3450      | S56C       | 100205+        | 349        | A          | 21               | 115/208-230 | Auto.           | 5.1            | 9.99              |
| 1   | 3450      | S56C       | 100722+        | 377        | A          | 24               | 115/208-230 | Auto.           | 5.7            | 10.49             |
| 1½  | 3450      | 56C        | 110288         | 495        | A          | 31               | 115/208-230 | Auto.           | 9.0            | 11.34             |
| 2   | 3450      | 56C        | 110289         | 638        | A          | 37               | 115/208-230 | Auto.           | 10.5           | 12.34             |
| 3   | 3450      | 56C        | 110280☆        | 652        | A          | 49               | 230         | Auto.           | 12.8           | 13.55             |

#### THREADED SHAFT • DRIP-PROOF SINGLE PHASE • LESS BASE

| HP  | RPM 60 Hz | NEMA Frame | Catalog Number | List Price | Disc. Sym. | App. Wgt. (lbs.) | Voltage     | Over-load Prot. | F.L. Amps 230V | "C" Dim. (Inches) |
|-----|-----------|------------|----------------|------------|------------|------------------|-------------|-----------------|----------------|-------------------|
| 1/2 | 3450      | S56J       | 100207+        | \$255      | A          | 19               | 115/208-230 | Auto.           | 3.4            | 10.00             |
| 3/4 | 3450      | S56J       | 100208+        | 332        | A          | 21               | 115/208-230 | Auto.           | 5.1            | 10.50             |
| 1   | 3450      | S56J       | 100723+        | 348        | A          | 23               | 115/208-230 | Auto.           | 5.7            | 11.00             |
| 1½  | 3450      | 56J        | 110292+        | 484        | A          | 31               | 115/208-230 | Auto.           | 9.0            | 11.34             |
| 2   | 3450      | 56J        | 110293+        | 598        | A          | 37               | 115/208-230 | Auto.           | 10.5           | 12.34             |
| 3   | 3450      | 56J        | 110286☆+       | 616        | A          | 51               | 230         | Auto.           | 12.8           | 14.15             |

#### THREADED SHAFT • TEFC SINGLE PHASE • LESS BASE

| HP  | RPM 60 Hz | NEMA Frame | Catalog Number | List Price | Disc. Sym. | App. Wgt. (lbs.) | Voltage     | Over-load Prot. | F.L. Amps 230V | "C" Dim. (Inches) |
|-----|-----------|------------|----------------|------------|------------|------------------|-------------|-----------------|----------------|-------------------|
| 1/2 | 3450      | 56J        | 113955+        | \$299      | A          | 22               | 115/208-230 | Auto.           | 3.8            | 11.31             |
| 3/4 | 3450      | 56J        | 113956+        | 356        | A          | 26               | 115/208-230 | Auto.           | 5.0            | 11.81             |
| 1   | 3450      | 56J        | 113639+        | 434        | A          | 30               | 115/208-230 | Auto.           | 6.0            | 12.31             |
| 1½  | 3450      | 56J        | 113640+        | 516        | A          | 34               | 115/208-230 | Auto.           | 8.5            | 12.81             |
| 2   | 3450      | 56J        | 113641+        | 611        | A          | 41               | 115/208-230 | Auto.           | 10.0           | 13.81             |

#### THREADED SHAFT • TEFC SINGLE PHASE • WITH BASE

| HP  | RPM 60 Hz | NEMA Frame | Catalog Number | List Price | Disc. Sym. | App. Wgt. (lbs.) | Voltage     | Over-load Prot. | F.L. Amps 230V | "C" Dim. (Inches) |
|-----|-----------|------------|----------------|------------|------------|------------------|-------------|-----------------|----------------|-------------------|
| 1/2 | 3450      | 56J        | 113637+        | \$344      | A          | 23               | 115/208-230 | Auto.           | 3.8            | 11.31             |
| 3/4 | 3450      | 56J        | 113638+        | 368        | A          | 26               | 115/208-230 | Auto.           | 5.0            | 11.81             |
| 1   | 3450      | 56J        | 113957+        | 445        | A          | 28               | 115/208-230 | Auto.           | 6.0            | 12.31             |
| 1½  | 3450      | 56J        | 113958+        | 529        | A          | 34               | 115/208-230 | Auto.           | 8.5            | 12.81             |
| 2   | 3450      | 56J        | 113959+        | 624        | A          | 43               | 115/208-230 | Auto.           | 10.0           | 13.81             |

#### THREADED SHAFT • EXPLOSION PROOF • TEFC SINGLE PHASE • C-FACE LESS BASE

| HP  | RPM 60 Hz | NEMA Frame | Catalog Number | List Price | Disc. Sym. | App. Wgt. (lbs.) | Voltage     | Over-load Prot. | F.L. Amps 230V | "C" Dim. (Inches) |
|-----|-----------|------------|----------------|------------|------------|------------------|-------------|-----------------|----------------|-------------------|
| 1/2 | 3450      | 56J        | 116188         | \$612      | A          | 35               | 115/208-230 | Auto.           | 3.8            | 13.96             |
| 3/4 | 3450      | 56J        | 116186         | 689        | A          | 40               | 115/208-230 | Auto.           | 5.0            | 14.46             |
| 1   | 3450      | 56J        | 116185         | 740        | A          | 49               | 115/208-230 | Auto.           | 6.0            | 14.96             |
| 1½  | 3450      | 56J        | 116183         | 948        | A          | 52               | 115/208-230 | Auto.           | 8.5            | 15.46             |
| 2   | 3450      | 56J        | 116181         | 1031       | A          | 54               | 115/208-230 | Auto.           | 10.5           | 16.46             |

+ These motors are fixed rotation—CW from lead end.

☆ Capacitor start/capacitor run designed for reduced amperage, others are capacitor start/induction run.

SEE FHP SINGLE PHASE JET PUMP MOTORS ON PAGE 51

## JET PUMP MOTORS

### General Specifications:

Rugged, three phase jet pump motors for industrial service. NEMA 56 C face. Stator impregnated with heavy varnish system. High temperature copper magnet wire for high overload capacity. Grounding provision inside oversized gasketed conduit box. 380 alloy aluminum endplate with cast bearing seat insert. Neoprene shaft flinger to repel moisture and other contaminants. Mechanical bearing lock, shaft end, controls axial movement. UL and CSA recognized design (UL file No. E57948).

### Shaft Material:

303 stainless steel, threaded.

### Bearings:

203 Double-sealed ball bearing, shaft-end; 203 Double-shielded ball bearing, switch-end. Shaft-end bearing is locked to limit axial movement of the shaft.

### Electrical Specifications:

Explosion-proof motors have automatic overload protection. Others have no thermal overload protection.



## WASHGUARD JET PUMP MOTORS

Washdown duty three phase jet pump motors for industrial service. These motors include all of the features of LEESON's White Duck WASHGUARD motors with the addition of a 56J threaded shaft for use on jet pumps. For demanding pump applications in wet, humid, or washdown environments.



### WASHGUARD • JET PUMP • THREADED SHAFT THREE PHASE • TEFC • C-FACE LESS BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 3/4 | 3450            | 56J           | 116774            | \$547         | A             | 23                     | 208-230/460 | 2.4                  | 75.5              | 10.81                   |
| 1   | 3450            | 56J           | 116775            | 636           | A             | 35                     | 208-230/460 | 3.2                  | 77.0              | 10.81                   |
| 1½  | 3450            | 56J           | 116776            | 676           | A             | 42                     | 208-230/460 | 4.2                  | 81.5              | 11.81                   |
| 2   | 3450            | 56J           | 116777            | 774           | A             | 47                     | 208-230/460 | 5.6                  | 82.5              | 12.31                   |
| 3   | 3450            | 56J           | 116778            | 812           | A             | 49                     | 208-230/460 | 7.6                  | 84.0              | 13.25                   |

### WASHGUARD • JET PUMP • THREADED SHAFT THREE PHASE • TEFC • C-FACE WITH BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 3/4 | 3450            | 56J           | 116779            | \$561         | A             | 24                     | 208-230/460 | 2.4                  | 75.5              | 10.81                   |
| 1   | 3450            | 56J           | 116780            | 652           | A             | 36                     | 208-230/460 | 3.2                  | 77.0              | 10.81                   |
| 1½  | 3450            | 56J           | 116781            | 707           | A             | 43                     | 208-230/460 | 4.2                  | 81.5              | 11.81                   |
| 2   | 3450            | 56J           | 116782            | 787           | A             | 48                     | 208-230/460 | 5.6                  | 82.5              | 12.31                   |
| 3   | 3450            | 56J           | 116783            | 838           | A             | 50                     | 208-230/460 | 7.6                  | 84.0              | 13.25                   |

## THREADED SHAFT • DRIP-PROOF THREE PHASE • LESS BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1/3 | 3450            | S56J          | 102197            | \$266         | A             | 15                     | 208-230/460 | 1.4                  | 68.0              | 9.94                    |
| 1/2 | 3450            | S56J          | 102198            | 280           | A             | 17                     | 208-230/460 | 1.8                  | 69.0              | 9.94                    |
| 3/4 | 3450            | S56J          | 101637            | 336           | A             | 18                     | 208-230/460 | 2.4                  | 79.0              | 10.44                   |
| 1   | 3450            | S56J          | 101638            | 373           | A             | 25                     | 208-230/460 | 3.0                  | 78.0              | 11.44                   |
| 1½  | 3450            | 56J           | 113891            | 447           | A             | 28                     | 208-230/460 | 4.2                  | 81.5              | 11.34                   |
| 2   | 3450            | 56J           | 113892            | 530           | A             | 33                     | 208-230/460 | 5.6                  | 82.5              | 11.84                   |
| 3   | 3450            | 56J           | 113893            | 627           | A             | 36                     | 208-230/460 | 7.6                  | 84.0              | 12.34                   |
| 5   | 3490            | 56J           | 116698            | 688           | A             | 45                     | 208-230/460 | 12.4                 | 85.5              | 13.88                   |

## THREADED SHAFT • DRIP-PROOF THREE PHASE • WITH BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1/2 | 3450            | S56J          | 102199            | \$293         | A             | 17                     | 208-230/460 | 1.8                  | 69.0              | 9.94                    |
| 3/4 | 3450            | S56J          | 101776            | 336           | A             | 18                     | 208-230/460 | 2.4                  | 79.0              | 10.44                   |
| 1   | 3450            | S56J          | 101775            | 376           | A             | 26                     | 208-230/460 | 3.0                  | 78.0              | 11.44                   |
| 1½  | 3450            | 56J           | 114203            | 457           | A             | 33                     | 208-230/460 | 4.2                  | 81.5              | 11.34                   |
| 2   | 3450            | 56J           | 114202            | 546           | A             | 35                     | 208-230/460 | 5.6                  | 82.5              | 11.84                   |
| 3   | 3450            | 56HJ          | 114201            | 644           | A             | 35                     | 208-230/460 | 8.0                  | 84.0              | 11.84                   |
| 5   | 3490            | 56HJ          | 116699            | 706           | A             | 47                     | 208-230/460 | 12.4                 | 85.5              | 13.88                   |

## THREADED SHAFT • TEFC THREE PHASE • LESS BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1/2 | 3450            | 56J           | 114931            | \$316         | A             | 21                     | 208-230/460 | 2.0                  | 67.0              | 10.81                   |
| 3/4 | 3450            | 56J           | 114208            | 349           | A             | 22                     | 208-230/460 | 2.4                  | 75.5              | 11.31                   |
| 1   | 3450            | 56J           | 114207            | 415           | A             | 25                     | 208-230/460 | 3.2                  | 77.0              | 11.31                   |
| 1½  | 3450            | 56J           | 114206            | 431           | A             | 31                     | 208-230/460 | 4.2                  | 81.5              | 12.31                   |
| 2   | 3450            | 56J           | 114205            | 547           | A             | 40                     | 208-230/460 | 5.6                  | 82.5              | 12.81                   |
| 3   | 3450            | 56J           | 114204            | 592           | A             | 52                     | 208-230/460 | 7.6                  | 84.0              | 13.31                   |

## THREADED SHAFT • TEFC THREE PHASE • WITH BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 3/4 | 3450            | 56J           | 113028            | \$419         | A             | 23                     | 208-230/460 | 2.4                  | 75.5              | 11.31                   |
| 1   | 3450            | 56J           | 113029            | 428           | A             | 24                     | 208-230/460 | 3.2                  | 77.0              | 11.31                   |
| 1½  | 3450            | 56J           | 113030            | 442           | A             | 31                     | 208-230/460 | 4.2                  | 81.5              | 12.31                   |
| 2   | 3450            | 56J           | 113031            | 553           | A             | 36                     | 208-230/460 | 5.6                  | 82.5              | 12.81                   |
| 3   | 3450            | 56HJ          | 113032            | 603           | A             | 39                     | 208-230/460 | 7.6                  | 84.0              | 13.31                   |

## THREADED SHAFT • EXPLOSION PROOF • TEFC/TENV THREE PHASE • C-FACE LESS BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1/2 | 3450            | 56J           | 116187▲           | \$756         | A             | 33                     | 208-230/460 | 1.6                  | 82.5              | 12.87                   |
| 1   | 3450            | 56J           | 116184▲           | 814           | A             | 33                     | 208-230/460 | 3.2                  | 77.0              | 13.46                   |
| 1½  | 3450            | 56J           | 116182▲           | 834           | A             | 48                     | 208-230/460 | 4.2                  | 81.5              | 14.46                   |
| 2   | 3450            | 56J           | 116180▲           | 872           | A             | 50                     | 208-230/460 | 5.6                  | 82.5              | 14.96                   |

▲ These motors are satisfactory for operation on 50 Hz power supply at full rated horsepower.  
● These motors are totally enclosed, non-ventilated—Others are fan cooled.





# SWIMMING POOL PUMP MOTORS

## SINGLE PHASE

### COMMERCIAL DUTY SWIMMING POOL MOTORS



#### General Specifications:

Cast iron NEMA 56 C face mounting face or aluminum as noted. Mechanical bearing lock—shaft-end. Fully enclosed endbell at switch-end. Protected “double contact” starting switch with dual contact switch circuit providing maximum starting dependability. Reliable, field proven, corrosion resistant rotating switch. Stator impregnated with extra heavy varnish system. High temperature copper magnet wire providing extended motor life. “Low voltage” run capabilities. “Super Hush” flow-through ventilation system (exhaust shaft-end). Gaskets supplied under conduit cover and capacitor case giving added environmental protection. 1/2" NPT pipe tap supplied in “built-in” conduit box. Grounding provisions inside terminal panel plus external provision. High overload capacities provided by service factor.

#### Shaft Material:

Keyed shafts are made of carbon steel. Threaded shafts are 303 stainless steel. Shafts are CW rotation, facing lead end.

#### Bearings:

304 Double-sealed ball bearing, shaft-end; 203 Double-shielded ball bearing, switch-end.

#### Terminal Boards:

¼" quick connects (keyed shaft motors are reversible).

#### U.L. and C.S.A. Recognized:

Motor components (UL File No. #57948).

Class “B” insulation system (UL File No. E55555).

Thermal protector/winding combination (UL No. E56955)

through 1HP. C.S.A. listed through 1HP (Report No. LR33543).

#### SERVICE FACTORS FOR SWIMMING POOL MOTORS

| HP  | Service Factor |
|-----|----------------|
| 1/2 | 1.60           |
| 3/4 | 1.50           |
| 1   | 1.40           |
| 1½  | 1.30           |
| 2   | 1.25           |
| 3   | 1.15           |

### KEYED SHAFT • ALUMINUM C FACE LESS BASE SINGLE PHASE • DRIP-PROOF

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | “C”<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/2 | 3450            | S56C          | 101524            | \$274         | A             | 19                     | 115/208-230 | Auto.                  | 3.4                  | 10.05                   |
| 3/4 | 3450            | S56C          | 101525            | 316           | A             | 22                     | 115/208-230 | Auto.                  | 5.1                  | 10.55                   |
| 1   | 3450            | S56C          | 101526            | 353           | A             | 25                     | 115/208-230 | Auto.                  | 5.7                  | 11.05                   |
| 1½  | 3450            | 56C           | 113686            | 453           | A             | 30                     | 115/208-230 | Auto.                  | 9.0                  | 11.88                   |

### KEYED SHAFT • CAST IRON C FACE LESS BASE SINGLE PHASE • DRIP-PROOF

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | “C”<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/2 | 3450            | 56C           | 110278            | \$321         | A             | 24                     | 115/208-230 | Auto.                  | 4.2                  | 10.56                   |
| 3/4 | 3450            | 56C           | 110241            | 401           | A             | 29                     | 115/208-230 | Auto.                  | 5.2                  | 11.15                   |
| 1   | 3450            | 56C           | 110242            | 432           | A             | 31                     | 115/208-230 | Auto.                  | 6.8                  | 11.15                   |
| 1½  | 3450            | 56C           | 110243            | 559           | A             | 36                     | 115/208-230 | Auto.                  | 9.0                  | 11.55                   |
| 2   | 3450            | 56C           | 110279            | 627           | A             | 40                     | 115/208-230 | Auto.                  | 10.5                 | 12.55                   |
| 3   | 3450            | 56C           | 110280☆           | 652           | A             | 49                     | 230         | Auto.                  | 12.8                 | 13.55                   |

### THREADED SHAFT • ALUMINUM C FACE LESS BASE SINGLE PHASE • DRIP-PROOF

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | “C”<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/2 | 3450            | S56J          | 101527+           | \$284         | A             | 20                     | 115/208-230 | Auto.                  | 3.4                  | 10.56                   |
| 3/4 | 3450            | S56J          | 101528+           | 328           | A             | 23                     | 115/208-230 | Auto.                  | 5.1                  | 11.06                   |
| 1   | 3450            | S56J          | 101529+           | 360           | A             | 24                     | 115/208-230 | Auto.                  | 5.7                  | 11.56                   |
| 1½  | 3450            | 56J           | 113687+           | 465           | A             | 30                     | 115/208-230 | Auto.                  | 9.0                  | 12.40                   |

### THREADED SHAFT • CAST IRON C FACE LESS BASE SINGLE PHASE • DRIP-PROOF

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | “C”<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/2 | 3450            | 56J           | 110281+           | \$335         | A             | 25                     | 115/208-230 | Auto.                  | 4.2                  | 10.55                   |
| 3/4 | 3450            | 56J           | 110282+           | 361           | A             | 30                     | 115/208-230 | Auto.                  | 5.2                  | 11.65                   |
| 1   | 3450            | 56J           | 110283+           | 408           | A             | 31                     | 115/208-230 | Auto.                  | 6.8                  | 11.65                   |
| 1½  | 3450            | 56J           | 110284+           | 521           | A             | 36                     | 115/208-230 | Auto.                  | 9.0                  | 12.15                   |
| 2   | 3450            | 56J           | 110285+           | 629           | A             | 41                     | 115/208-230 | Auto.                  | 10.5                 | 13.15                   |
| 3   | 3450            | 56J           | 110286☆+          | 616           | A             | 51                     | 230         | Auto.                  | 12.8                 | 14.15                   |

+ Threaded shaft are fixed rotation—CW from lead end.

☆ Capacitor start/capacitor run design for reduced amperage, others are capacitor start/induction run.

# POOL AND JET PUMP MOTORS C-FACE, JET PUMP AND SQUARE FLANGE



## PERFORMA + FHP POOL AND JET PUMP MOTORS

### General Specifications:

Energy-saving single-phase Permanent Split Capacitor *PERFORMA*+ Pool and Jet Pump motors have separate compartment design required for many pool and spa applications. PSC design gives energy-efficient operation with no switches to wear or seize. Special balancing of FHP motors gives super quiet operation. Motors are connected for CW rotation, viewed from the lead end of the motor, and are not reversible. All designs – keyed and threaded – have 304 stainless steel shafts. Double-sealed bearings on both ends of the motor have high temperature grease for long life. Motors have external grounding lug and Class F insulation with Class B rise.

### Standards and Approvals:

UL component recognized, UL file number E57948

CSA certified for safety, CSA report number LR33543

Design complies with requirements for motor/pump/cord assemblies that must pass the UL 1081 water spray test.



### KEYED SHAFT • C FACE LESS BASE SINGLE PHASE • PSC • DRIP-PROOF

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | Service<br>Factor | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|-------------------|----------------------|-------------------------|
| 1/2 | 3450            | 56C           | MK1052            | \$253         | A             | 26                     | 115/230 | Auto.                  | 1.95              | 4.9                  | 11.75                   |
| 3/4 | 3450            | 56C           | MK1072            | 301           | A             | 27                     | 115/230 | Auto.                  | 1.65              | 5.2                  | 11.75                   |
| 1   | 3450            | 56C           | MK1102            | 335           | A             | 29                     | 115/230 | Auto.                  | 1.5               | 5.1                  | 12.73                   |
| 1½  | 3450            | 56C           | MK1152            | 397           | A             | 37                     | 230     | Auto.                  | 1.4               | 6.7                  | 13.71                   |
| 2   | 3450            | 56C           | MK1202            | 475           | A             | 37                     | 230     | Auto.                  | 1.15              | 8.5                  | 13.71                   |



### THREADED SHAFT • C FACE LESS BASE SINGLE PHASE • PSC • DRIP-PROOF

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | Service<br>Factor | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|-------------------|----------------------|-------------------------|
| 1/2 | 3450            | 56J           | MT1052            | \$253         | A             | 26                     | 115/230 | Auto.                  | 1.95              | 4.9                  | 12.09                   |
| 3/4 | 3450            | 56J           | MT1072            | 301           | A             | 27                     | 115/230 | Auto.                  | 1.65              | 5.2                  | 12.09                   |
| 1   | 3450            | 56J           | MT1102            | 335           | A             | 29                     | 115/230 | Auto.                  | 1.5               | 5.1                  | 13.07                   |
| 1½  | 3450            | 56J           | MT1152            | 397           | A             | 37                     | 230     | Auto.                  | 1.4               | 6.7                  | 14.05                   |
| 2   | 3450            | 56J           | MT1202            | 475           | A             | 37                     | 230     | Auto.                  | 1.15              | 8.5                  | 14.05                   |



### THREADED SHAFT • SQUARE FLANGE LESS BASE SINGLE PHASE • PSC • DRIP-PROOF

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | Service<br>Factor | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|-------------------|----------------------|-------------------------|
| 1/2 | 3450            | 56Y           | MST1052           | \$253         | A             | 26                     | 115/230 | Auto.                  | 1.95              | 4.9                  | 11.92                   |
| 3/4 | 3450            | 56Y           | MST1072           | 301           | A             | 27                     | 115/230 | Auto.                  | 1.65              | 5.2                  | 11.92                   |
| 1   | 3450            | 56Y           | MST1102           | 335           | A             | 29                     | 115/230 | Auto.                  | 1.5               | 5.1                  | 12.90                   |
| 1½  | 3450            | 56Y           | MST1152           | 397           | A             | 37                     | 230     | Auto.                  | 1.4               | 6.7                  | 13.89                   |
| 2   | 3450            | 56Y           | MST1202           | 475           | A             | 37                     | 230     | Auto.                  | 1.15              | 8.5                  | 13.89                   |

### Separate Compartment Design

Locates the motor run capacitor, protector and terminal board in a separate compartment on the end of the motor. Protective cover protects these items from water spray as defined by the UL1081 specification and provides for convenient servicing. Complies with requirements of UL1081 standard for motor/pump/cord assemblies used on swimming pool pumps; pump filter combinations, and chlorinators. Stub shaft with flats in accessible for wrenching when attaching pump impeller.



## JP PUMP MOTORS



### General Specifications:

For use with close-coupled pumps having NEMA JP mounting and shaft dimensions. In such applications, the pump impeller is mounted directly on the motor shaft. Designed for continuous duty service. All motors listed are 1.15 Service Factor.

### Mechanical Features:

Open drip-proof construction with rigid base mounting. Locked bearing on shaft end limits axial shaft movement. For use where the environment is relatively clean and dry. For outdoor use, an enclosure or drip cover may be preferred. See the Drip Cover Kit table. Some 182-4JP frame motors have enclosed endshields as standard with frame meeting the 12" drip-proof requirement. No drip cover is needed, or shown in the table, for these motors.

### Electrical Features:

UL Recognized and CSA Certified. Single phase designs are capacitor start, induction run.

**All 180 and 210 frame Rolled Steel motors have Class F Insulation.**

## SINGLE PHASE • DRIP-PROOF • RIGID BASE

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) | Drip<br>Cover<br>Kit Ref. |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|-----------------------|----------------------|-------------------------|---------------------------|
| 5  | 3450            | 184JP         | <b>131881</b>     | \$1131        | B             | 92                     | 230     | None                  | 22.0                 | 19.38                   | ...                       |
| 7½ | 3450            | 213JP         | <b>140646</b>     | 1343          | B             | 140                    | 230     | None                  | 37.0                 | 14.17                   | C                         |
| 10 | 3450            | 215JP         | <b>140647</b>     | 1813          | B             | 157                    | 230     | None                  | 47.0                 | 15.67                   | C                         |

## THREE PHASE • DRIP-PROOF • RIGID BASE

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | %<br>F.L.<br>Eff. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) | Drip<br>Cover<br>Kit Ref. |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|-------------------|----------------------|-------------------------|---------------------------|
| 1½ | 1725            | 145JP         | <b>121846</b>     | \$375         | B             | 35                     | 208-230/460 | 80.0              | 4.8                  | 16.18                   | A                         |
| 2  | 1725            | 145JP         | <b>121847</b>     | 391           | B             | 39                     | 208-230/460 | 81.5              | 6.2                  | 17.18                   | A                         |
| 3  | 3450            | 145JP         | <b>121849</b>     | 492           | B             | 37                     | 208-230/460 | 84.0              | 8.9                  | 16.68                   | A                         |
|    | 1725            | 182JP         | <b>131882*</b>    | 512           | B             | 52                     | 208-230/460 | 80.0              | 10.0                 | 16.88                   | E                         |
| 5  | 3450            | 182JP         | <b>131884</b>     | 591           | B             | 55                     | 208-230/460 | 82.5              | 13.2                 | 17.88                   | E                         |
|    | 1725            | 182JP         | <b>131883</b>     | 587           | B             | 64                     | 208-230/460 | 84.0              | 14.2                 | 17.38                   | E                         |
| 7½ | 3450            | 184JP         | <b>131885</b>     | 708           | B             | 78                     | 208-230/460 | 84.0              | 18.4                 | 18.88                   | E                         |
|    | 1760            | 213JP         | <b>140667</b>     | 966           | B             | 96                     | 208-230/460 | 88.5              | 20.0                 | 20.76                   | D                         |
| 10 | 3450            | 213JP         | <b>140655</b>     | 910           | B             | 136                    | 208-230/460 | 85.5              | 27.6                 | 22.18                   | C                         |
|    | 1760            | 215JP         | <b>140668</b>     | 1104          | B             | 125                    | 208-230/460 | 89.5              | 28.0                 | 21.76                   | D                         |
| 15 | 3450            | 215JP         | <b>140656</b>     | 1125          | B             | 117                    | 208-230/460 | 86.5              | 42.0                 | 23.68                   | C                         |
|    | 1760            | 254JP         | <b>801051</b>     | 1365          | B             | 155                    | 208-230/460 | 87.5              | 43.0                 | 25.29                   | ...                       |
| 20 | 3500            | 254JP         | <b>801056</b>     | 1418          | B             | 159                    | 208-230/460 | 88.5              | 52.6                 | 25.29                   | ...                       |
|    | 1760            | 256JP         | <b>801052</b>     | 1649          | B             | 210                    | 208-230/460 | 88.5              | 56.4                 | 27.04                   | ...                       |
| 25 | 3525            | 256JP         | <b>801057</b>     | 1671          | B             | 166                    | 208-230/460 | 89.5              | 66.0                 | 27.04                   | ...                       |
|    | 1760            | 284JP         | <b>801053</b>     | 2218          | C             | 306                    | 230/460     | 87.5              | 66.0                 | 27.18                   | ...                       |
| 30 | 3525            | 284JP         | <b>801058</b>     | 2226          | C             | 315                    | 230/460     | 88.5              | 73.0                 | 27.18                   | ...                       |
|    | 1760            | 286JP         | <b>801054</b>     | 2302          | C             | 320                    | 230/460     | 89.5              | 79.0                 | 28.68                   | ...                       |
| 40 | 3550            | 286JP         | <b>801059</b>     | 2548          | C             | 360                    | 230/460     | 88.5              | 100.0                | 28.68                   | ...                       |
|    | 1760            | 324JP         | <b>801055</b>     | 2929          | C             | 491                    | 230/460     | 93.0              | 97.0                 | 29.12                   | ...                       |
| 50 | 3550            | 324JP         | <b>801060</b>     | 3259          | C             | 450                    | 230/460     | 89.5              | 124.0                | 29.12                   | ...                       |

\* F1 mounting only.

## DRIP COVER KITS FOR JP PUMP MOTORS

| Kit Ref. | Frame       | Catalog Number | Enclosure   | List Price |
|----------|-------------|----------------|-------------|------------|
| A        | 56-145JP    | <b>175932</b>  | ODP or TEFC | \$26       |
| B        | 182JP-184JP | <b>175933</b>  | ODP         | 30         |
| C        | 213JP-215JP | <b>175305</b>  | ODP         | 86         |
| D        | 213JP-215JP | <b>175846</b>  | ODP         | 86         |
| E        | 182JP-184JP | <b>175614</b>  | ODP         | 61         |

SHADED FRAME INDICATES CAST IRON CONSTRUCTION



## JM PUMP MOTORS

### General Specifications:

Designed for continuous duty service on close-coupled pumps using NEMA JM mounting provisions. All motors have a rigid mounting base and NEMA JM pump shaft.



### Mechanical Features:

Open drip-proof construction, cooling air exhausts at the shaft end for maximum cooling. Oversized locked bearing on shaft end limits axial shaft movement. Drip covers are available as accessory kits for 143-5JM and 182-4JM motors—see letter designations in the table on page 48 for the correct kit.

Some 182-4JM frame motors have enclosed endshields as standard with frame vents meeting the 12° drip-proof requirement. No drip cover is needed, or shown in the table, for these motors.



### Electrical Features:

High efficiency copper windings with NEMA 1.15 service factors. UL and CSA recognized designs.

Single phase designs are capacitor start/induction run unless indicated otherwise. **All 180 and 210 frame Rolled Steel motors have Class F Insulation.**

## SINGLE PHASE • DRIP-PROOF • RIGID BASE

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) | Drip<br>Cover<br>Kit Ref. |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|---------------------------|
| 1  | 1740            | 143JM         | 120996☆           | \$652         | B             | 42                     | 115/208-230 | None                   | 6.4                  | 13.91                   | A                         |
| 1½ | 1740            | 145JM         | 120994☆           | 657           | B             | 45                     | 115/208-230 | None                   | 8.6                  | 14.91                   | A                         |
| 2  | 3450            | 145JM         | 121190☆           | 673           | B             | 47                     | 115/208-230 | None                   | 10.5                 | 14.91                   | A                         |
|    | 1740            | 145JM         | 120995☆           | 659           | B             | 45                     | 115/208-230 | None                   | 10.5                 | 15.41                   | A                         |
|    | 1760            | 182JM         | 132073            | 688           | B             | 70                     | 115/208-230 | None                   | 12.4                 | 13.19                   | C                         |
| 3  | 3450            | 182JM         | 131640☆           | 796           | B             | 80                     | 115/208-230 | None                   | 15.2                 | 16.32                   | C                         |
|    | 1760            | 182JM         | 131604            | 915           | B             | 73                     | 230         | None                   | 16.8                 | 15.82                   | C                         |
| 5  | 3450            | 184JM         | 131641☆           | 1131          | B             | 95                     | 115/208-230 | None                   | 24.0                 | 17.32                   | C                         |
|    | 1760            | 184JM         | 131605☆           | 1300          | B             | 82                     | 230         | None                   | 21.0                 | 16.32                   | C                         |
| 7½ | 3450            | 213JM         | 140642☆           | 1609          | B             | 140                    | 230         | None                   | 37.0                 | 14.17                   | E                         |
|    | 1760            | 215JM         | 140665☆           | 1715          | B             | 141                    | 230         | None                   | 40.5                 | 18.38                   | E                         |
| 10 | 3450            | 215JM         | 140644☆           | 1813          | B             | 144                    | 230         | None                   | 47.0                 | 18.38                   | E                         |
|    | 1760            | 215JM         | 140666☆           | 2122          | B             | 144                    | 230         | None                   | 43.0                 | 19.88                   | E                         |

☆ Capacitor start/capacitor run design for reduced amperage, others are capacitor start/induction run.

## THREE PHASE • DRIP-PROOF • RIGID BASE

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) | Drip<br>Cover<br>Kit Ref. |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|---------------------------|
| 1  | 1740            | 143JM         | 121850            | \$383         | B             | 29                     | 208-230/460 | 3.6                  | 77.0              | 13.12                   | B                         |
| 1½ | 1740            | 145JM         | 121851            | 414           | B             | 32                     | 208-230/460 | 4.8                  | 80.0              | 13.12                   | B                         |
| 2  | 3450            | 145JM         | 121853            | 479           | B             | 30                     | 208-230/460 | 6.2                  | 80.0              | 13.12                   | B                         |
|    | 1740            | 145JM         | 121852            | 430           | B             | 37                     | 208-230/460 | 6.2                  | 81.5              | 14.12                   | B                         |
| 3  | 3450            | 145JM         | 121854            | 530           | B             | 35                     | 208-230/460 | 8.4                  | 84.0              | 13.62                   | B                         |
|    | 1760            | 182JM         | 131562            | 568           | B             | 55                     | 208-230/460 | 8.8                  | 84.0              | 13.82                   | J                         |
| 5  | 3450            | 182JM         | 131574            | 699           | B             | 62                     | 208-230/460 | 12.6                 | 85.5              | 14.82                   | J                         |
|    | 1760            | 184JM         | 131563            | 655           | B             | 65                     | 208-230/460 | 13.4                 | 86.0              | 14.82                   | J                         |
| 7½ | 3450            | 184JM         | 131576            | 790           | B             | 83                     | 208-230/460 | 18.0                 | 86.5              | 15.82                   | J                         |
|    | 1760            | 213JM         | 140618            | 966           | B             | 140                    | 208-230/460 | 20.0                 | 88.5              | 16.88                   | F                         |
| 10 | 3450            | S213JM        | 131577            | 1018          | B             | 96                     | 208-230/460 | 25.0                 | 82.5              | 16.82                   | C                         |
|    | 1760            | 215JM         | 140619            | 1104          | B             | 181                    | 208-230/460 | 28.0                 | 89.5              | 17.88                   | F                         |
| 15 | 3450            | 215JM         | 151380            | 1302          | C             | 178                    | 208-230/460 | 36.0                 | 86.8              | 19.84                   | H                         |
|    | 1740            | 254JM         | 151361            | 1488          | C             | 254                    | 208-230/460 | 39.0                 | 90.0              | 22.87                   | I                         |
| 20 | 3450            | 254JM         | 151381            | 1503          | C             | 276                    | 208-230/460 | 48.0                 | 90.0              | 22.87                   | I                         |
|    | 1740            | 256JM         | 151362            | 1748          | C             | 312                    | 208-230/460 | 50.0                 | 91.0              | 24.53                   | I                         |
| 25 | 3450            | 256JM         | 151382            | 1771          | C             | 318                    | 208-230/460 | 62.0                 | 89.3              | 24.53                   | I                         |
|    | 1740            | 284JM         | 801028            | 2195          | C             | 303                    | 230/460     | 66.0                 | 87.5              | 24.31                   | ...                       |
| 30 | 3450            | 284JM         | 801040            | 2220          | C             | 325                    | 230/460     | 73.0                 | 88.5              | 24.31                   | ...                       |
|    | 1740            | 286JM         | 801029            | 2302          | C             | 350                    | 230/460     | 79.0                 | 89.5              | 25.81                   | ...                       |
| 40 | 3450            | 286JM         | 801041            | 2548          | C             | 337                    | 230/460     | 100.0                | 88.5              | 25.81                   | ...                       |
|    | 1740            | 324JM         | 801030            | 3007          | C             | 386                    | 230/460     | 106.0                | 89.5              | 26.25                   | ...                       |
| 50 | 3450            | 324JM         | 801042            | 3463          | C             | 433                    | 230/460     | 124.0                | 89.5              | 29.12                   | ...                       |

## DRIP COVER KITS FOR JM PUMP MOTORS

| Kit Ref. | Frame     | Catalog Number | Enclosure   | List Price |
|----------|-----------|----------------|-------------|------------|
| A        | 143-145JM | 175004         | ODP         | \$ 48      |
| B        | 143-145JM | 175932         | ODP or TEFC | 26         |
| C        | 182-184JM | 175933         | ODP         | 30         |
| D        | 182-184JM | 175695         | TEFC        | 145        |
| E        | 213-215JM | 175305         | ODP         | 86         |
| F        | 213-215JM | 175846         | ODP         | 86         |
| G        | 213-215JM | 175849         | TEFC        | 86         |
| H        | 213-215JM | 175962         | ODP         | 86         |
| I        | 254-256JM | 175963         | ODP         | 109        |
| J        | 182-184JM | 175614         | ODP         | 61         |

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

# LEESON<sup>®</sup> JM PUMP MOTORS

## THREE PHASE

### JM PUMP MOTORS

#### General Specifications:

Designed for continuous duty service on close-coupled pumps using NEMA JM mounting provisions. All motors have a rigid mounting base and NEMA JM pump shaft.



#### Mechanical Features:

Totally enclosed fan cooled construction for maximum life in dirty or severe environments. Oversized locked bearing on shaft end limits axial shaft movement. Drip covers are available as accessory kits for 143-5JM and 182-4JM motors—see letter designations in the table for the correct kit. Some 182-4JM frame motors have enclosed endshields as standard with frame vents meeting the 12° drip-proof requirement. No drip cover is needed, or shown in the table, for these motors.

#### Electrical Features:

High efficiency copper windings with NEMA 1.15 service factors. UL and CSA recognized designs. **All 180 and 210 frame Rolled Steel motors have Class F Insulation.**

See pages 48 & 122 for Drip Cover Kits.

### THREE PHASE • TEFC • RIGID BASE

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) | Drip<br>Cover<br>Kit Ref. |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|---------------------------|
| 1  | 1740            | 143JM         | 121855            | \$426         | B             | 30                     | 208-230/460 | 3.6                  | 77.0              | 14.50                   | B                         |
| 1½ | 3450            | 143JM         | 121858            | 429           | B             | 31                     | 208-230/460 | 4.6                  | 80.0              | 14.50                   | B                         |
|    | 1740            | 145JM         | 121856            | 465           | B             | 35                     | 208-230/460 | 4.8                  | 80.0              | 14.50                   | B                         |
| 2  | 3450            | 145JM         | 121859            | 527           | B             | 33                     | 208-230/460 | 6.0                  | 80.0              | 14.50                   | B                         |
|    | 1740            | 145JM         | 121857            | 463           | B             | 43                     | 208-230/460 | 5.8                  | 82.5              | 16.00                   | B                         |
| 3  | 3450            | 145JM         | 121860            | 558           | B             | 42                     | 208-230/460 | 7.6                  | 84.0              | 16.00                   | B                         |
|    | 1760            | 182JM         | 131579            | 567           | B             | 67                     | 230/460     | 8.8                  | 84.0              | 15.59                   | D                         |
| 5  | 3450            | 184JM         | 131580            | 758           | B             | 72                     | 208-230/460 | 12.4                 | 85.5              | 15.59                   | D                         |
|    | 1760            | 184JM         | 131581            | 737           | B             | 89                     | 230/460     | 13.4                 | 86.0              | 15.59                   | D                         |
| 7½ | 3450            | 184JM         | 131582            | 840           | B             | 96                     | 208-230/460 | 18.4                 | 86.5              | 16.59                   | D                         |
|    | 3450            | S213JM        | 132027            | 928           | B             | 112                    | 208-230/460 | 16.8                 | 88.5              | 21.96                   | D                         |
|    | 1760            | 215JM         | 140622            | 979           | B             | 117                    | 208-230/460 | 20.4                 | 89.5              | 18.84                   | G                         |
| 10 | 3450            | S213JM        | 131583            | 1123          | B             | 100                    | 208-230/460 | 26.2                 | 82.5              | 18.59                   | D                         |
|    | 1760            | 215JM         | 140623            | 1209          | B             | 136                    | 208-230/460 | 26.0                 | 89.5              | 19.84                   | G                         |
| 15 | 3450            | 215JM         | 140764            | 1591          | B             | 130                    | 208-230/460 | 34.0                 | 90.2              | 24.41                   | ...                       |
|    | 3450            | 254JM         | 151567            | 1857          | C             | 245                    | 208-230/460 | 35.0                 | 90.2              | 23.80                   | ...                       |
|    | 1760            | 254JM         | 151568            | 1806          | C             | 277                    | 208-230/460 | 36.6                 | 91.0              | 23.80                   | ...                       |
| 20 | 3450            | 254JM         | 151569            | 2026          | C             | 285                    | 208-230/460 | 46.2                 | 90.2              | 23.80                   | ...                       |
|    | 1760            | 254JM         | 151570            | 2191          | C             | 321                    | 208-230/460 | 48.2                 | 91.0              | 25.50                   | ...                       |
| 25 | 3450            | 256JM         | 151417            | 2509          | C             | 307                    | 208-230/460 | 56.4                 | 91.0              | 27.00                   | I                         |
|    | 1740            | 284JM         | 151418            | 2466          | C             | 370                    | 208-230/460 | 58.8                 | 92.4              | 27.17                   | ...                       |
| 30 | 3450            | 284JM         | 151420            | 2976          | C             | 375                    | 208-230/460 | 69.2                 | 91.0              | 27.17                   | ...                       |
|    | 1740            | 286JM         | 151422            | 2928          | C             | 428                    | 208-230/460 | 69.8                 | 92.4              | 28.74                   | ...                       |
| 40 | 3450            | 286JM         | 151424            | 3710          | C             | 400                    | 208-230/460 | 93.0                 | 91.7              | 28.74                   | ...                       |
|    | 1740            | 324JM         | 151426            | 3592          | C             | 258                    | 208-230/460 | 95.2                 | 93.0              | 31.33                   | ...                       |

### WASHGUARD JM PUMP MOTORS

#### General Specifications:

Standard NEMA JM pump motor design with the addition of LEESON's trusted WASHGUARD, design. Designed for service in washdown-duty environments where moisture exclusion and corrosion resistance is required for long service life.



#### Mechanical Specifications:

Refer to the detail of mechanical features as shown in the WASHGUARD, section of this catalog.

#### Electrical Features:

All ratings are TEFC design with class F insulation, and 1.15 Service Factor. UL and CSA recognized designs with IRIS™ insulation on all ratings. **All 180 and 210 frame Rolled Steel motors have Class F Insulation.**

### WASHGUARD THREE PHASE • TEFC • JM PUMP

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1  | 1725            | 143JM         | 121579            | \$891         | B             | 37                     | 208-230/460 | 3.1                  | 82.5              | 15.75                   |
| 1½ | 3450            | 143JM         | 121580            | 962           | B             | 46                     | 208-230/460 | 4.0                  | 82.5              | 15.75                   |
|    | 1725            | 145JM         | 121581            | 987           | B             | 53                     | 208-230/460 | 4.4                  | 84.0              | 15.75                   |
| 2  | 3450            | 145JM         | 121582            | 1086          | B             | 47                     | 208-230/460 | 5.2                  | 84.0              | 15.75                   |
|    | 1725            | 145JM         | 121583            | 1018          | B             | 49                     | 208-230/460 | 5.6                  | 84.0              | 16.25                   |
| 3  | 3450            | 145JM         | 121584            | 1166          | B             | 45                     | 208-230/460 | 7.6                  | 85.5              | 16.25                   |
|    | 1760            | 182JM         | 131967            | 1295          | B             | 79                     | 208-230/460 | 8.2                  | 87.5              | 16.13                   |
| 5  | 3450            | 184JM         | 131968            | 1545          | B             | 78                     | 208-230/460 | 12.0                 | 87.5              | 16.13                   |
|    | 1760            | 184JM         | 131969            | 1402          | B             | 81                     | 208-230/460 | 13.0                 | 87.5              | 16.63                   |
| 7½ | 3450            | 184JM         | 131970            | 1694          | B             | 110                    | 208-230/460 | 16.8                 | 88.5              | 17.63                   |
|    | 1740            | 213JM         | 140733            | 1890          | B             | 133                    | 208-230/460 | 20.4                 | 89.5              | 19.00                   |
| 10 | 3450            | 215JM         | 140734            | 2328          | B             | 135                    | 208-230/460 | 24.0                 | 89.5              | 21.70                   |
|    | 1740            | 215JM         | 140735            | 2200          | B             | 142                    | 208-230/460 | 26.0                 | 89.5              | 20.00                   |
| 15 | 3450            | 215JM         | 140736            | 2662          | B             | 150                    | 208-230/460 | 36.0                 | 90.2              | 21.70                   |

# RESILIENT BASE MOTORS • SINGLE PHASE

GENERAL PURPOSE OR FAN & BLOWER SERVICE • MODERATE STARTING TORQUE



Resilient Base

## General Specifications:

Industrial quality, resilient (cradle) mounted, capacitor start-type, ball bearing motors for fan and blower service. Moderate starting torque electrical design to reduce stress on fan blades during start-up. Capacitor-type design has higher energy efficiency rating than split phase, single phase fan and blower motors. Suitable for belt-driven fans or fan-on-shaft applications. Self-ventilated design, may be mounted outside of the fan's airflow.

## DRIP-PROOF • SINGLE PHASE RESILIENT BASE

Drip-proof design and resilient mount. Moderate starting torque. Suitable for general purpose applications.



| HP    | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/4   | 3450            | 48            | 101434#           | \$245         | A             | 16                     | 115/208-230 | Auto.                  | 2.0                  | 9.39                    |
|       | 1725            | 48            | 100109            | 287           | A             | 17                     | 115/208-230 | Auto.                  | 2.7                  | 9.89                    |
|       | 1725            | 48            | 100111#           | 248           | A             | 17                     | 115/208-230 | Auto.                  | 2.7                  | 9.89                    |
|       | 1725            | 48            | 102963            | 287           | A             | 17                     | 277         | Auto.                  | 2.2*                 | 9.89                    |
| 1/3   | 3450            | 48            | 101431#           | 252           | A             | 17                     | 115/208-230 | Auto.                  | 2.3                  | 9.39                    |
|       | 1725            | 48            | 100110            | 352           | A             | 18                     | 115/208-230 | Auto.                  | 3.3                  | 9.89                    |
|       | 1725            | 48            | 101015#           | 287           | A             | 18                     | 115/208-230 | Auto.                  | 3.3                  | 9.89                    |
|       | 1725            | S56           | 100014            | 331           | A             | 19                     | 115/208-230 | None                   | 3.3                  | 10.31                   |
|       | 1725            | S56           | 100010            | 352           | A             | 18                     | 115/208-230 | Auto.                  | 3.3                  | 10.31                   |
|       | 1725            | S56           | 100063#           | 287           | A             | 19                     | 115/208-230 | Auto.                  | 3.3                  | 10.31                   |
|       | 1725            | S56           | 102964            | 352           | A             | 18                     | 277         | Auto.                  | 2.8*                 | 10.31                   |
|       | 1725            | S56           |                   |               |               |                        |             |                        |                      |                         |
| 1/2   | 3450            | 48            | 101432#           | 278           | A             | 20                     | 115/208-230 | Auto.                  | 3.4                  | 9.89                    |
|       | 1725            | S56           | 100015            | 357           | A             | 21                     | 115/208-230 | None                   | 4.4                  | 10.81                   |
|       | 1725            | S56           | 100045#           | 342           | A             | 20                     | 115/208-230 | Man.                   | 4.4                  | 10.81                   |
|       | 1725            | S56           | 101611]           | 379           | A             | 22                     | 115/208-230 | Auto.                  | 4.4                  | 10.81                   |
|       | 1725            | S56           | 100011            | 379           | A             | 22                     | 115/208-230 | Auto.                  | 4.4                  | 10.81                   |
|       | 1725            | S56           | 100064#           | 343           | A             | 20                     | 115/208-230 | Auto.                  | 4.4                  | 10.81                   |
|       | 1725            | S56           | 102965            | 379           | A             | 22                     | 277         | Auto.                  | 3.7*                 | 10.81                   |
|       | 1725            | S56           |                   |               |               |                        |             |                        |                      |                         |
| 3/4   | 3450            | 48            | 101433#           | 327           | A             | 22                     | 115/208-230 | Auto.                  | 4.8                  | 10.39                   |
|       | 3450            | S56H          | 100603            | 348           | A             | 26                     | 115/208-230 | Auto.                  | 4.9                  | 11.31                   |
|       | 1725            | S56H          | 100016            | 448           | A             | 26                     | 115/208-230 | None                   | 5.4                  | 11.81                   |
|       | 1725            | S56H          | 100046            | 468           | A             | 26                     | 115/208-230 | Man.                   | 5.4                  | 11.81                   |
|       | 1725            | S56H          | 100047#           | 392           | A             | 25                     | 115/208-230 | Man.                   | 5.5                  | 11.81                   |
|       | 1725            | S56H          | 101839]           | 468           | A             | 28                     | 115/208-230 | Auto.                  | 5.4                  | 11.81                   |
|       | 1725            | S56H          | 100012            | 468           | A             | 26                     | 115/208-230 | Auto.                  | 5.4                  | 11.81                   |
|       | 1725            | S56H          | 100065#           | 387           | A             | 25                     | 115/208-230 | Auto.                  | 5.5                  | 11.81                   |
| 1     | 3450            | 56H           | 110478            | 402           | A             | 28                     | 115/208-230 | Auto.                  | 6.0                  | 11.85                   |
|       | 1725            | 56H           | 113027            | 487           | A             | 30                     | 115/208-230 | None                   | 6.4                  | 11.81                   |
|       | 1725            | 56H           | 110007            | 507           | A             | 29                     | 115/208-230 | Auto.                  | 6.4                  | 11.81                   |
|       | 1725            | 56H           | 110054#           | 496           | A             | 32                     | 115/208-230 | Auto.                  | 6.4                  | 11.81                   |
|       | 1725            | 56H           | 116599            | 507           | A             | 29                     | 277         | Auto.                  | 5.4*                 | 11.82                   |
| 1 1/2 | 3450            | 56H           | 110479            | 517           | A             | 30                     | 115/230     | Auto.                  | 8.2                  | 11.82                   |
|       | 1725            | 56H           | 110579☆□          | 614           | A             | 38                     | 115/208-230 | Auto                   | 7.2                  | 12.82                   |
|       | 1725            | 56H           | 116600            | 614           | A             | 38                     | 277         | Auto                   | 6.0*                 | 12.82                   |
| 2     | 3450            | 56H           | 113633            | 647           | A             | 38                     | 115/208-230 | Auto.                  | 10.0                 | 13.82                   |
|       | 1725            | 56H           | 113608☆           | 654           | A             | 45                     | 115/208-230 | Auto.                  | 10.0                 | 13.81                   |
|       | 1725            | 56H           | 116601            | 654           | A             | 45                     | 277         | Auto.                  | 8.7*                 | 13.82                   |

\* F.L. Amps at 277V

These motors have NEMA Service Factors except as noted by # which have a 1.0 Service Factor and TEFC motors, which have a 1.15 Service Factor.

## TEFC • SINGLE PHASE RESILIENT BASE

Totally enclosed, fan cooled design makes these motors ideal for replacement in tough agricultural and industrial applications where contaminants cause failure of open drip-proof motors.



| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/2 | 1725            | 56            | 110025            | \$429         | A             | 26                     | 115/208-230 | Auto.                  | 4.4                  | 11.96                   |
| 3/4 | 1725            | 56            | 110026□           | 514           | A             | 28                     | 115/208-230 | Auto.                  | 5.4                  | 12.46                   |
| 1   | 1725            | 56H           | 111915□           | 584           | A             | 31                     | 115/208-230 | Auto.                  | 6.4                  | 12.96                   |

## WATTSaver® PREMIUM EFFICIENCY FAN MOTORS DRIP-PROOF • SINGLE PHASE RESILIENT BASE

Premium efficiency motors for residential, agricultural and industrial belted-fan applications, when continuous or near-continuous operation is common.

Features include quiet bearings, resilient cradle base, and quiet flow-through ventilation. Class F insulated, with spade connectors on terminal board for quick and easy installation.



| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>115V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------|-------------------------|
| 1/4 | 1725            | 48            | 101602            | \$319         | A             | 19                     | 115     | Auto.                  | 2.5                  | 71.0              | 10.39                   |
| 1/3 | 1725            | 48            | 101405            | 378           | A             | 19                     | 115     | Auto.                  | 3.2                  | 75.0              | 10.39                   |
|     | 1725/1140       | 56HZ          | 113771②           | 505           | A             | 30                     | 115     | Auto.                  | 3.0                  | 73.0              | 11.44                   |
|     | 1725/1140       | 56HZ          | 113970②           | 464           | A             | 30                     | 115     | Auto.                  | 3.2                  | 73.0              | 11.94                   |
|     | 1725/850        | 56HZ          | 113674②           | 505           | A             | 30                     | 115     | Auto.                  | 3.1                  | 70.0              | 11.44                   |
| 1/2 | 1725/850        | 56HZ          | 113969②           | 464           | A             | 30                     | 115     | Auto.                  | 3.2                  | 73.0              | 11.94                   |
|     | 1725            | 48            | 101585            | 431           | A             | 25                     | 115     | Auto.                  | 4.6                  | 76.0              | 11.39                   |

FOR ADDITIONAL WATTSaver® MOTORS, SEE PAGES 16-19.

- ② These combination 56H base motors have mounting holes for 56 and 143-5T, and a 1/2" diameter shaft with flat 1 1/2" long.
- # These motors have a NEMA 1.00 Service Factor, suitable for blower and fan duty.
- ☆ Capacitor start/capacitor run design for reduced amperage, others are capacitor start/induction run.
- Combination 56 H base motors have mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 56 shaft.
- ] With terminal board.





## RESILIENT BASE MOTORS • THREE PHASE

GENERAL PURPOSE OR FAN & BLOWER SERVICE • MODERATE STARTING TORQUE

### General Specifications:

Industrial quality, resilient (cradle) mounted, three phase, ball bearing motors for fan and blower service. Moderate starting torque electrical design to reduce stress on fan blades during start-up. Suitable for belt-driven fans or fan-on-shaft applications. Self-ventilated design, may be mounted outside of the fan's airflow.

### TEFC • THREE PHASE RESILIENT BASE

Totally enclosed, fan cooled design makes these motors ideal for replacement in tough industrial applications where contaminants cause failure of open drip-proof designs.



| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>Load<br>Prot. | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------|-------------------------|
| 1/2 | 1725            | 56            | 111917●□          | \$408         | A             | 25                     | 208-230/460 | None                   | 1.8                  | 78.5              | 11.31                   |
| 1   | 1725            | 56            | 111918□           | 459           | A             | 29                     | 208-230/460 | None                   | 3.8                  | 77.0              | 12.46                   |

### DRIP-PROOF • THREE PHASE RESILIENT BASE

Drip-proof design and resilient mount. Moderate starting torque. Suitable for general purpose applications.



| HP    | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>Load<br>Prot. | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------|-------------------------|
| 1/3   | 3450            | S56           | 101639♦           | \$293         | A             | 17                     | 208-230/460 | Auto.                  | 1.7                  | 61.0              | 10.31                   |
|       | 1725            | S56           | 100210            | 319           | A             | 18                     | 208-230/460 | None                   | 1.6                  | 64.3              | 10.31                   |
|       | 1725            | S56           | 101520♦           | 387           | A             | 19                     | 208-230/460 | Auto.                  | 1.6                  | 64.3              | 10.81                   |
| 1/2   | 3450            | S56           | 101640♦           | 352           | A             | 18                     | 208-230/460 | Auto.                  | 2.4                  | 69.0              | 10.31                   |
|       | 1725            | S56           | 100145            | 366           | A             | 22                     | 208-230/460 | None                   | 2.0                  | 68.0              | 10.81                   |
|       | 1725            | S56           | 100796♦           | 426           | A             | 22                     | 208-230/460 | Auto.                  | 2.0                  | 68.0              | 11.31                   |
| 3/4   | 3450            | S56           | 101773            | 368           | A             | 20                     | 208-230/460 | None                   | 2.4                  | 79.0              | 10.81                   |
|       | 3450            | S56           | 101641♦           | 429           | A             | 20                     | 208-230/460 | Auto.                  | 2.4                  | 79.0              | 11.31                   |
|       | 1725            | S56           | 100146            | 406           | A             | 25                     | 208-230/460 | None                   | 2.8                  | 75.0              | 11.31                   |
|       | 1725            | S56           | 100908♦           | 461           | A             | 26                     | 208-230/460 | Auto.                  | 2.8                  | 75.0              | 11.81                   |
| 1     | 3450            | 56            | 114192            | 392           | A             | 24                     | 208-230/460 | None                   | 3.2                  | 77.0              | 10.82                   |
|       | 3450            | 56            | 113895♦           | 453           | A             | 25                     | 208-230/460 | Auto.                  | 3.2                  | 77.0              | 10.82                   |
|       | 1725            | 56            | 110052            | 427           | A             | 23                     | 208-230/460 | None                   | 4.2                  | 78.5              | 11.31                   |
|       | 1725            | 56H           | 111311♦           | 480           | A             | 27                     | 208-230/460 | Auto.                  | 4.2                  | 78.5              | 11.31                   |
| 1 1/2 | 3450            | 56H           | 114194            | 477           | A             | 31                     | 208-230/460 | None                   | 4.2                  | 81.5              | 11.82                   |
|       | 3450            | 56H           | 113896♦           | 513           | A             | 29                     | 208-230/460 | Auto.                  | 4.2                  | 81.5              | 11.82                   |
|       | 1725            | 56H           | 110433            | 491           | A             | 32                     | 208-230/460 | None                   | 5.6                  | 78.5              | 11.81                   |
|       | 1725            | 56H           | 113846♦           | 509           | A             | 29                     | 208-230/460 | Auto.                  | 5.6                  | 78.5              | 11.81                   |
| 2     | 3450            | 56H           | 114196            | 552           | A             | 36                     | 208-230/460 | None                   | 5.6                  | 82.9              | 12.32                   |
|       | 3450            | 56H           | 113897♦           | 595           | A             | 39                     | 208-230/460 | Auto.                  | 5.6                  | 82.9              | 12.32                   |
|       | 1725            | 56H           | 114197            | 533           | A             | 37                     | 208-230/460 | None                   | 6.2                  | 78.5              | 12.31                   |
|       | 1725            | 56H           | 113847♦           | 584           | A             | 34                     | 208-230/460 | Auto.                  | 6.2                  | 78.5              | 12.31                   |
| 3     | 3450            | 56HZ          | 113926♦           | 587           | A             | 40                     | 208-230/460 | Auto.                  | 7.6                  | 84.0              | 13.19                   |
|       | 1725            | 56HZ          | 116593♦           | 640           | A             | 47                     | 230/460     | Auto.                  | 8.6                  | 82.5              | 14.19                   |
| 5     | 3490            | 145T          | 121665            | 660           | B             | 49                     | 208-230/460 | Auto.                  | 12.4                 | 85.5              | 13.82                   |

- These motors are totally enclosed, non-ventilated.
- Combination 56 H base motors have mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 56 shaft.
- ♦ Automatic reset overload protection. Do not use with variable frequency drives.

# FAN & BLOWER MOTORS

## MULTI-SPEED • SINGLE & THREE PHASE



### TWO-WINDING VARIABLE TORQUE PSC TYPE FOR SHAFT MOUNTED FAN APPLICATIONS

#### These fan and blower duty

**motors** are designed for dependable, *energy saving* performance in applications where the fan is mounted on the shaft of the motor. The permanent split capacitor design does not require a centrifugal switch, resulting in higher reliability than on other types of single phase motors. This design is also more energy efficient and less expensive to operate.

These motors may be operated at listed speed or two speed operation may be achieved by using the proper auxiliary switch. They are suitable for variable speed by adjusting the voltage to the motor using a variable voltage control.<sup>④</sup>

Overload protected with a UL and CSA recognized automatic reset protector. Grounding provisions. Totally enclosed, dust tight design, with resilient mounting for quiet operation. Lubricated with Exxon POLYREX<sup>®</sup> EM high temperature lubricant. Exterior coating on 56-frame motors is two-stage epoxy and on 48-frame motors a baked-on powder coat is applied for extra corrosion resistance in tough applications. Because of the inherently low starting torques of this design, these motors are not suitable for belt driven fan applications. They must be mounted within the air stream of the driven fan.



### TWO-SPEED, TWO-WINDING VARIABLE TORQUE FOR BELT DRIVEN OR SHAFT MOUNTED FAN APPLICATIONS

**Variable torque, two-speed motors** are suited for belted or fan on shaft applications. They are self ventilated, and may be mounted within or outside of the driven fan's air stream.

Resilient mounted for quiet operation, and lubricated with high temperature Exxon POLYREX<sup>®</sup> EM lubricant.

3/4 HP and larger single phase are capacitor start motors; smaller single phase are split phase start.



- Suitable for single speed operation only.
- ① Has provisions for Bellyband and pedestal fan mounting – no rigid base.
- ② In addition to resilient base, this motor has provisions for Bellyband and pedestal mounting.
- Combination 56H base motors have mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 56 shaft.
- ④ These 825 and 1075 RPM motors suitable for single speed operation only.
- \* The shaft of this motor is 3/4" longer to accommodate fan on shaft mountings. 48Z is 1/2" diameter by 2 1/4". 56Z is 5/8" diameter, 2 5/8" long. All have 1" extended through bolts, except Catalog Numbers 100805 and 100806 which are extended 1/4".
- ☆ Capacitor start/capacitor run design for reduced amperage, others are capacitor start/induction run.
- ✓ This split phase start, capacitor run motor is suitable for belt drive within the airflow of the fan.

### SINGLE PHASE • PSC TYPE • RESILIENT BASE TOTALLY ENCLOSED AIR OVER (TEAO)

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------------|
| 1/4 | 1625            | 48Z*          | <b>100803</b>     | \$349         | A             | 19                     | 115/230 | Auto.                  | 1.4                  | 10.66                   |
|     | 1075            | 48Z*          | <b>100824</b>     | 411           | A             | 20                     | 115/230 | Auto.                  | 1.4                  | 10.66                   |
|     | 1075            | S56Z*         | <b>100805</b>     | 441           | A             | 22                     | 115/230 | Auto.                  | 1.4                  | 11.06                   |
| 1/3 | 1625            | 48Z*          | <b>100804</b>     | 376           | A             | 21                     | 115/230 | Auto.                  | 1.6                  | 10.66                   |
|     | 1625            | S56H          | <b>100767</b>     | 406           | A             | 22                     | 115/230 | Auto.                  | 1.6                  | 10.31                   |
|     | 1625            | 56HY          | <b>111348</b> ②   | 406           | A             | 29                     | 115/230 | Auto.                  | 1.7                  | 12.94                   |
| 1/2 | 1075            | 48Z*          | <b>100825</b>     | 476           | A             | 25                     | 115/230 | Auto.                  | 1.8                  | 11.16                   |
|     | 1075            | S56HZ*        | <b>100806</b>     | 505           | A             | 27                     | 115/230 | Auto.                  | 1.8                  | 11.56                   |
|     | 1625            | 56HZ*         | <b>111323</b>     | 424           | A             | 30                     | 115/230 | Auto.                  | 2.6                  | 12.56                   |
| 1   | 1625            | S56H          | <b>100768</b>     | 432           | A             | 36                     | 115/230 | Auto.                  | 2.2                  | 10.81                   |
|     | 1075            | 48Z*          | <b>101645</b>     | 557           | A             | 27                     | 115/230 | Auto.                  | 2.8                  | 11.16                   |
|     | 1075            | 56HZ*         | <b>111321</b> □   | 547           | A             | 37                     | 115/230 | Auto.                  | 3.0                  | 13.56                   |
| 3/4 | 825             | 56HZ*         | <b>111919</b> □④  | 677           | A             | 45                     | 115/230 | Auto.                  | 3.2                  | 13.56                   |
|     | 1625            | 56HZ*         | <b>111324</b>     | 627           | A             | 34                     | 115/230 | Auto.                  | 3.5                  | 13.06                   |
|     | 1625            | 56H           | <b>111266</b>     | 627           | A             | 36                     | 115/230 | Auto.                  | 3.5                  | 12.31                   |
| 1   | 1075            | 56HZ*         | <b>111322</b> □④  | 646           | A             | 44                     | 115/230 | Auto.                  | 4.0                  | 13.56                   |
|     | 1625            | 56HZ*         | <b>111267</b>     | 658           | A             | 39                     | 115/230 | Auto.                  | 4.4                  | 12.81                   |

These motors have a 1.0 Service Factor.

### SINGLE PHASE • PSC TYPE • RIGID BASE TOTALLY ENCLOSED AIR OVER (TEAO)

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/4 | 1625            | 48Y           | <b>100699</b>     | \$341         | A             | 19                     | 115/230     | Auto.                  | 1.4                  | 10.65                   |
|     | 1750            | 48Y           | <b>101252</b> •   | 344           | A             | 19                     | 115/208-230 | Auto.                  | 1.5                  | 10.40                   |
| 1/3 | 1625            | 48Y           | <b>100700</b>     | 395           | A             | 21                     | 115/230     | Auto.                  | 1.6                  | 10.65                   |
|     | 1625            | 56Y           | <b>111202</b> ①   | 395           | A             | 27                     | 115/230     | Auto.                  | 1.7                  | 12.00                   |
|     | 1750            | 48Y           | <b>101253</b> •   | 398           | A             | 22                     | 115/208-230 | Auto.                  | 1.9                  | 10.65                   |
| 1/2 | 1140            | S56Z          | <b>100604</b>     | 496           | A             | 23                     | 115/230     | Auto.                  | 1.8                  | 11.40                   |
|     | 1625            | 48Y           | <b>100701</b>     | 418           | A             | 25                     | 115/230     | Auto.                  | 2.5                  | 12.15                   |
|     | 1750            | S56Y          | <b>101176</b> •✓  | 421           | A             | 24                     | 115/230     | Auto.                  | 3.5                  | 10.40                   |

### SINGLE PHASE • DRIP-PROOF • RESILIENT BASE

| HP       | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>High/Low | "C"<br>Dim.<br>(Inches) |
|----------|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|--------------------------|-------------------------|
| 1/4-1/12 | 1725/1140       | 48Z*          | <b>101020</b>     | \$305         | A             | 20                     | 115     | None                   | 4.2-3.2                  | 11.64                   |
| 1/3-0.15 | 1725/1140       | S56H          | <b>101021</b>     | 386           | A             | 26                     | 115     | None                   | 5.0-4.6                  | 12.27                   |
| 1/2-1/4  | 1725/1140       | 56H           | <b>111953</b>     | 483           | A             | 33                     | 115     | None                   | 7.8-4.6                  | 12.31                   |
|          | 1725/1140       | 56H           | <b>113643</b>     | 483           | A             | 33                     | 230     | None                   | 3.9-2.3                  | 12.31                   |
| 3/4-1/3  | 1725/1140       | 56H           | <b>111954</b> □   | 701           | A             | 38                     | 115     | None                   | 11.6-7.4                 | 12.81                   |
|          | 1725/1140       | 56H           | <b>113672</b> □   | 701           | A             | 39                     | 230     | None                   | 5.8-3.7                  | 12.81                   |
| 1-0.44   | 1725/1140       | 56H           | <b>111955</b> □☆  | 826           | A             | 41                     | 115     | None                   | 13.2-9.5                 | 12.81                   |
|          | 1725/1140       | 56H           | <b>113373</b> □☆  | 826           | A             | 39                     | 230     | None                   | 6.5-4.6                  | 12.81                   |

### THREE PHASE • DRIP-PROOF • RESILIENT BASE

| HP        | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>High/Low | "C"<br>Dim.<br>(Inches) |
|-----------|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|--------------------------|-------------------------|
| 1/2-.22   | 1725/1140       | 56H           | <b>111956</b>     | \$729         | A             | 32                     | 208-230 | None                   | 1.8-1.1                  | 12.31                   |
|           | 1725/1140       | 56H           | <b>111957</b>     | 729           | A             | 32                     | 460     | None                   | 0.9-0.5                  | 12.31                   |
| 3/4-1/3   | 1725/1140       | 56H           | <b>111958</b> □   | 768           | A             | 36                     | 208-230 | None                   | 2.8-1.6                  | 12.81                   |
|           | 1725/1140       | 56H           | <b>111959</b> □   | 768           | A             | 36                     | 460     | None                   | 1.4-0.8                  | 12.81                   |
| 1-0.44    | 1725/1140       | 56H           | <b>111960</b> □   | 826           | A             | 40                     | 208-230 | None                   | 4.0-2.4                  | 12.81                   |
|           | 1725/1140       | 56H           | <b>111961</b> □   | 826           | A             | 40                     | 460     | None                   | 1.8-1.0                  | 12.81                   |
| 1 1/2-.67 | 1725/1140       | 56H           | <b>111962</b> □   | 1002          | A             | 40                     | 208-230 | None                   | 5.0-2.6                  | 12.81                   |
|           | 1725/1140       | 56H           | <b>111963</b> □   | 1002          | A             | 40                     | 460     | None                   | 2.5-1.3                  | 12.81                   |

These motors have a 1.0 Service Factor.

# LEESON® FAN & BLOWER MOTORS

## SINGLE & THREE PHASE

### AERATION FAN MOTORS

**Totally Enclosed Air Over Motors**, dust tight, suitable for shaft mounted fans or belt driven fans. Capacitor start designs.

Designed to be used within the airflow of the driven fan, these motors offer protection from the environment and are finished in epoxy enamel to resist corrosion in tough atmospheres.

Lubricated with high temperature Exxon POLYREX® EM lubricant. Grounding provisions. Fully gasketed.



### SINGLE PHASE • CAPACITOR START • RIGID BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------------|
| 3/4 | 3450            | 56Z           | 111332⑦           | \$353         | A             | 27                     | 115/230 | None                   | 5.0                  | 10.90                   |
| 1   | 3450            | 56Z           | 111333⑦           | 418           | A             | 29                     | 115/230 | None                   | 6.0                  | 10.90                   |
| 1½  | 3450            | 56Z           | 111949⑦           | 541           | A             | 32                     | 115/230 | None                   | 8.5                  | 11.40                   |
|     | 3450            | 143TZ         | 120374⑧           | 581           | B             | 32                     | 115/230 | None                   | 8.5                  | 11.84                   |
| 2   | 3450            | 145TZ         | 120375⑧           | 708           | B             | 41                     | 230     | None                   | 10.0                 | 13.34                   |
| 3   | 3450            | 145T          | 120376☆           | 745           | B             | 45                     | 230     | None                   | 12.8                 | 13.84                   |

These TEAO motors have a 1.0 Service Factor.  
Built-in terminal panel for quick easy connections.

### THREE PHASE • RIGID BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 3/4 | 3450            | 56Z           | 111334⑦           | \$360         | A             | 21                     | 208-230/460 | 2.4                  | 75.5              | 9.88                    |
| 1   | 3450            | 56Z           | 111335⑦           | 392           | A             | 22                     | 208-230/460 | 3.2                  | 77.0              | 9.90                    |
| 1½  | 3450            | 143TZ         | 120377⑧           | 450           | B             | 31                     | 208-230/460 | 4.2                  | 82.5              | 11.34                   |
| 2   | 3450            | 145TZ         | 120378⑧           | 532           | B             | 34                     | 208-230/460 | 5.6                  | 82.5              | 11.84                   |
| 3   | 3450            | 145T          | 120379⑧           | 598           | B             | 38                     | 208-230/460 | 7.6                  | 84.0              | 12.34                   |

These TEAO motors have a 1.0 Service Factor.

### CONDENSER FAN MOTORS

**For Shaft Mounted Fan Applications**

**Belly Band Mount Fan Motors** designed for operating vertical shaft-up on condenser fan, air over applications.

Enclosed endshield on shaft-end prevents contaminants from entering motor when mounted vertical shaft-up. Designed for belly band mount with three support screws located at 120° increments in motor frame. Shaft flingers located both internally and externally.

Double sealed ball bearings with Exxon POLYREX® EM grease having operating temperature range of -20°F to +350°F and special formulation to provide extra long life and moisture resistance. Phosphatized shaft for corrosion resistance. Gasketed conduit box. Ground screw accommodations.

1.15 Service Factor. Automatic overload protector also guards against primary single phasing—UL component recognized (File E57955).



### THREE PHASE • DRIP-PROOF ★ AUTOMATIC OVERLOAD • BELLY BAND & RIGID MOUNT

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1/2 | 1140            | 56Y           | 116772Δ           | \$516         | A             | 25                     | 208-230/460 | 2.8                  | 66.0              | 12.56                   |
| 3/4 | 1140            | 56Y           | 116773Δ           | 559           | A             | 31                     | 208-230/460 | 3.4                  | 75.5              | 13.06                   |
| 1   | 1140            | 56Y           | 111147Δ           | 635           | A             | 37                     | 208-230/460 | 3.6                  | 77.0              | 14.06                   |
|     | 1140            | 56Y           | 115778+           | 589           | A             | 37                     | 208-230/460 | 4.0                  | 77.0              | 14.05                   |
| 1½  | 1140            | 56Y           | 111148Δ           | 693           | A             | 42                     | 208-230/460 | 5.2                  | 78.0              | 15.06                   |
|     | 1140            | 56HY          | 115779+           | 641           | A             | 39                     | 208-230/460 | 5.6                  | 79.0              | 15.55                   |

⑦ Standard 5/8" diameter shaft with keyway plus 3/4" deep hole drilled and tapped to 1/4-20 UNC in end of shaft to facilitate mounting of some fan blades.

⑧ Standard 7/8" diameter shaft with keyway plus 3/4" deep hole drilled and tapped to 1/4-20 UNC in end of shaft to facilitate mounting of some fan blades.

☆ Capacitor start/capacitor run design for reduced amperage, others are capacitor start/induction run.

+ Rigid base.

Δ Belly band mount.

★ Do Not use with AC Inverters.



# FAN & BLOWER MOTORS

## SINGLE PHASE • COMMERCIAL DUTY



### INDUSTRIAL SPLIT PHASE MOTORS

**LEESON FHP Commercial Duty**, split phase motors with moderate starting torque, designed for continuous duty on ventilation fans, blowers and other belt driven or fan on shaft applications.

Resilient base for quiet operation. Prelubricated ball bearings for long life in commercial and industrial environments. Has automatic thermal overload and built-in terminal panel style connection provisions.



### DRIP-PROOF • RESILIENT BASE • AUTOMATIC OVERLOAD

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>115V | Service<br>Factor | "L"<br>Dim.<br>(Inches) | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------|-------------------------|-------------------------|
| 1/4 | 1725            | 48            | 191868①           | \$207         | A             | 15                     | 115/230 | Auto.                  | 4.6                  | 1.35              | 4.00                    | 9.37                    |
| 1/3 | 1725            | 48            | 191869①           | 222           | A             | 17                     | 115/230 | Auto.                  | 5.8                  | 1.35              | 4.51                    | 9.88                    |
| 1/2 | 1725            | 48            | 191870①           | 257           | A             | 19                     | 115/230 | Auto.                  | 8.4                  | 1.25              | 5.02                    | 10.39                   |

Dimensions on Page 316

① Motors built after December 01, 2005 will have terminal boards.

### RESIDENTIAL/INDUSTRIAL BELTED FAN MOTORS SPLIT PHASE

Designed for use in residential and commercial fans and blowers where low starting torque is required. (Air conditioners, roof ventilators and exhaust fans.)

Sleeve or ball bearings. NEMA Service factors. Resilient "cradle" style base.



### OPEN DRIP-PROOF • RESILIENT BASE • AUTOMATIC OVERLOAD

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Bearing<br>Type | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>115V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-----------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------------|
| 1/4 | 1725            | 48YZ☆         | Ball            | M900195           | \$189         | A             | 13                     | 115     | Auto.                  | 5.0                  | 9.72                    |
| 1/3 | 1725/1140       | 56            | Ball            | M900277           | 363           | A             | 20                     | 115     | Auto.                  | 5.3/2.9              | 10.78                   |
|     | 1725            | 48YZ☆         | Ball            | M900196           | 221           | A             | 15                     | 115     | Auto.                  | 6.1                  | 9.72                    |
| 1/2 | 1725/1140       | 56            | Ball            | M900599           | 455           | A             | 30                     | 115     | Auto.                  | 8.4/4.5              | 11.85                   |
|     | 1725            | 48YZ☆         | Ball            | M900197           | 290           | A             | 20                     | 115     | Auto.                  | 7.2                  | 10.72                   |

☆ 48YZ motors have std. 48-frame base with 1/2" dia. x 1 7/8" long shaft ext. with flat. Also includes sleeve to convert shaft to 5/8" dia. with 3/16" square key.

### PREMIUM EFFICIENCY INDUSTRIAL/RESIDENTIAL BELTED FAN MOTORS

High-efficiency motors for residential or industrial belted fan application.

Features include quiet ball bearings, resilient cradle base and "Super-Hush" flow-through ventilation.

Rotors are specially balanced for smooth and quiet operation.

Spade connectors on terminal board in standard wiring format along with industry standard mounting allow for quick and easy interchange with other makes.



### OPEN DRIP-PROOF • 115V • SINGLE PHASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>115V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------|-------------------------|
| 1/4 | 1725            | 48            | M090602*          | \$245         | A             | 15                     | 115     | Auto.                  | 2.5                  | 71.0              | 9.88                    |
| 1/3 | 1725            | 48            | M090405*          | 257           | A             | 19                     | 115     | Auto.                  | 3.2                  | 75.0              | 9.88                    |
| 1/2 | 1725            | 48            | M090585**         | 316           | A             | 22                     | 115     | Auto.                  | 4.6                  | 76.0              | 10.50                   |

\* Split-phase start, capacitor run

\*\* Capacitor start, capacitor run



#### Features:

- Drop-in replacement for most standard belted-fan motors
- Extremely quiet running compared to standard fan motors
- Consumes approximately half of the power of a standard fan motor

### PEDESTAL FAN MOTORS

**LEESON FHP Commercial Duty** totally enclosed, air over fan motors for air circulators where motor is mounted directly to fan column.

Energy efficient, permanent split capacitor type design eliminates the centrifugal switch for "three phase" reliability. Totally enclosed ball bearing design for commercial and industrial environments. Automatic thermal overload protection, reversible.

Heavy-gauge steel yoke is welded to the motor frame. Four 10-32 mounting studs are extended 1.0" on 5.14" bolt circle for mounting of fan shroud.

Motors are UL and CSA Recognized for both the U.S. and Canadian markets.



### SINGLE PHASE • PSC TYPE • TEAO • YOKE MOUNTED AUTOMATIC OVERLOAD • 1.0 S.F.

| HP  | RPM<br>60<br>Hz* | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>115V | "U"<br>Dim.<br>(Inches) | "C"<br>Dim.<br>(Inches) |
|-----|------------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------------|-------------------------|
| 1/4 | 1625             | 48Y           | 191872            | \$207         | A             | 14                     | 115/230 | Auto.                  | 2.6                  | 0.500                   | 10.95                   |
|     | 1625             | 48Y           | 191908            | 207           | A             | 14                     | 115/230 | Auto.                  | 2.6                  | 0.625                   | 10.95                   |
|     | 1075             | 48Y           | 191891            | 229           | A             | 22                     | 115/230 | Auto.                  | 2.4                  | 0.500                   | 10.95                   |
|     | 1075             | 48Y           | 191909            | 229           | A             | 25                     | 115/230 | Auto.                  | 2.4                  | 0.625                   | 10.95                   |
| 1/3 | 1625             | 48Y           | 191871            | 226           | A             | 15                     | 115/230 | Auto.                  | 3.4                  | 0.500                   | 10.95                   |
|     | 1625             | 48Y           | 191910            | 226           | A             | 15                     | 115/230 | Auto.                  | 3.4                  | 0.625                   | 10.95                   |
|     | 1075             | 48Y           | 191892            | 256           | A             | 23                     | 115/230 | Auto.                  | 3.0                  | 0.500                   | 11.46                   |
|     | 1075             | 48Y           | 191911            | 256           | A             | 26                     | 115/230 | Auto.                  | 3.0                  | 0.625                   | 11.46                   |
| 1/2 | 1625             | 48Y           | 191873            | 261           | A             | 24                     | 115/230 | Auto.                  | 4.6                  | 0.500                   | 10.95                   |
|     | 1625             | 48Y           | 191875            | 261           | A             | 24                     | 115/230 | Auto.                  | 4.6                  | 0.625                   | 10.95                   |
|     | 1075             | 48Y           | 191893            | 297           | A             | 26                     | 115/230 | Auto.                  | 5.0                  | 0.500                   | 11.93                   |
|     | 1075             | 48Y           | 191912            | 297           | A             | 26                     | 115/230 | Auto.                  | 5.0                  | 0.625                   | 11.93                   |

\*Two speed operation possible by connecting 115V power to 230V connections. Actual speed (approx. 67% of rated speed) will depend on fan blade design.



# INSTANT REVERSING MOTORS

## INSTANT REVERSING MOTORS

### PARKING GATES, DOOR OPERATORS & SLIDE GATES

#### General Specifications:

Specially designed motors for use on "instant-reversing" parking gates, doors, slide gates, or other moderate starting torque instant reversing applications. Capable of frequent reversing service.



#### Features (Resilient Base and C Face):

Instant "plug-reversing" with simple three-wire connection. Permanent split capacitor design offering low inrush and full load amps. Manual reset overload protector. Starting torque approximately 150% of full load, not suitable for hard to start loads.



#### Features (Rigid Base):

Capacitor start, induction run motors with solid state, instant reversing switch. Manual reset overload protector.



## RESILIENT BASE • SINGLE PHASE • DRIP-PROOF

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>115V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------------|
| 1/3 | 1625            | S56           | 191742            | \$399         | A             | 18                     | 115     | Man.                   | 4.0                  | 10.31                   |
| 1/2 | 1625            | S56           | 100802            | 442           | A             | 24                     | 115     | Man.                   | 6.1                  | 11.31                   |
|     | 1625            | S56           | 191743            | 449           | A             | 24                     | 115     | Man.                   | 4.6                  | 10.31                   |
| 3/4 | 1625            | 56H           | 113642            | 527           | A             | 33                     | 115     | Man.                   | 8.2                  | 11.31                   |

## C FACE LESS BASE • SINGLE PHASE • DRIP-PROOF

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>115V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------------|
| 1/3 | 1625            | S56C          | 102017            | \$393         | A             | 18                     | 115     | Man.                   | 4.2                  | 9.99                    |
| 1/2 | 1625            | S56C          | 102021            | 442           | A             | 22                     | 115     | Man.                   | 6.1                  | 10.49                   |
|     | 1625            | S56C          | 100704*           | 442           | A             | 16                     | 115     | Man.                   | 5.1                  | 10.24                   |

\* Motor has same electrical design as 102017, but is rated for intermittent duty.

## RIGID BASE • SINGLE PHASE • TEFC

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 3/4 | 1725            | 56            | 114932            | \$566         | A             | 30                     | 115/208-230 | Man.                   | 5.4                  | 11.31                   |
| 1   | 1725            | 56            | 114933            | 618           | A             | 30                     | 115/208-230 | Man.                   | 6.4                  | 11.81                   |

## PRESSURE WASHER PUMP MOTORS LOW AMPERAGE DESIGN

Motors specially suited for hot or cold pressure washer applications and other single phase installations requiring minimum starting and running amperages. Capacitor start, capacitor run construction for reduced amperage.

### Mechanical Features:

Double shield ball bearings prelubricated with Exxon POLYREX® EM lubricant, having operating temperature range of -20°F to +350°F and special formulation to provide extra long life and moisture resistance. Dynamically balanced rotor and shaft assembly.

### Electrical Features:

High efficiency reduced amperage energy saving designs. Stator impregnated with extra heavy varnish system. High temperature copper magnet wire for high overload capacity. Capacitor start/ capacitor run design for reduced amperage. Grounding provision in conduit box. Manual reset overload protector protects against automatic resets. High overload capacities provided by service factor. **All 180 and 210 frame Rolled Steel motors have Class F Insulation.**



## C FACE WITH BASE • SINGLE PHASE • TEFC

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage         | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-----------------|------------------------|----------------------|-------------------------|
| 1/3 | 1725            | 56C           | 116485§           | \$501         | A             | 29                     | 115/<br>208-230 | Man.                   | 3.2                  | 10.81                   |
| 1/2 | 1725            | 56C           | 116486§           | 574           | A             | 23                     | 115/<br>208-230 | Man.                   | 4.4                  | 10.81                   |
| 3/4 | 1725            | 56C           | 116487§           | 669           | A             | 30                     | 115/<br>208-230 | Man.                   | 5.4                  | 11.31                   |
| 1   | 3450            | 56C           | 115877            | 422           | A             | 28                     | 115/<br>208-230 | Man.                   | 6.0                  | 11.81                   |
|     | 1725            | 56C           | 115879            | 562           | A             | 32                     | 115/<br>208-230 | Man.                   | 6.4                  | 11.81                   |
| 1½  | 3450            | 56C           | 115024☆           | 573           | A             | 35                     | 115/<br>208-230 | Man.                   | 6.2                  | 12.31                   |
|     | 1725            | 56HC          | 116703♣           | 672           | A             | 39                     | 115/<br>208-230 | Man.                   | 8.6                  | 12.81                   |
| 2   | 3450            | 56HC          | 114995☆           | 682           | A             | 42                     | 115/<br>208-230 | Man.                   | 9.2                  | 13.31                   |
|     | 1725            | 145TC         | 121465♣           | 902           | B             | 44                     | 115/<br>208-230 | Man.                   | 9.2                  | 13.75                   |
| 3   | 3450            | 56HC          | 115048☆♣†         | 746           | A             | 53                     | 208-230         | Man.                   | 14.0                 | 13.81                   |
|     | 1740            | 184TC         | 131857☆           | 1273          | B             | 104                    | 230             | Man.                   | 13.7                 | 17.61                   |
| 5   | 3450            | 184TC         | 131632†           | 1280          | B             | 103                    | 230             | Man.                   | 19.8                 | 16.97                   |
|     | 1740            | 184TC         | 131633♣†          | 1333          | B             | 989                    | 230             | Man.                   | 23.0                 | 16.97                   |

## RIGID BASE • SINGLE PHASE • DRIP-PROOF

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 3/4 | 3450            | S56           | 100053            | \$342         | A             | 24                     | 115/208-230 | Man.                   | 4.9                  | 10.49                   |
|     | 1725            | S56           | 101544☆           | 495           | A             | 28                     | 115/208-230 | Man.                   | 4.0                  | 11.24                   |
| 1   | 3450            | 56            | 110097            | 355           | A             | 27                     | 115/208-230 | Man.                   | 6.0                  | 10.84                   |
|     | 1725            | 56            | 113630☆           | 537           | A             | 31                     | 115/208-230 | Man.                   | 5.3                  | 10.84                   |
| 1½  | 3450            | 56            | 113631☆           | 470           | A             | 36                     | 115/208-230 | Man.                   | 6.2                  | 11.34                   |
|     | 1725            | 56H           | 113266☆□          | 626           | A             | 42                     | 115/208-230 | Man.                   | 6.7                  | 12.38                   |
|     | 1725            | 145T          | 120004☆           | 669           | B             | 40                     | 115/208-230 | Man.                   | 8.6                  | 12.28                   |
| 2   | 3450            | 56            | 113632☆           | 634           | A             | 36                     | 115/208-230 | Man.                   | 8.6                  | 11.34                   |
|     | 1725            | 56H           | 116704□           | 669           | A             | 45                     | 115/208-230 | Man.                   | 8.6                  | 12.88                   |
|     | 1725            | 145T          | 120879            | 703           | B             | 53                     | 115/208-230 | Man.                   | 8.6                  | 13.31                   |
| 3   | 3450            | 56H           | 116706□☆†         | 674           | A             | 39                     | 230         | Man.                   | 15.0                 | 12.38                   |
|     | 1740            | 184T          | 131851☆           | 832           | B             | 72                     | 208-230     | Man.                   | 13.7                 | 15.22                   |
| 5   | 3450            | 56H           | 116708□♣†         | 689           | A             | 45                     | 230         | Man.                   | 20.8                 | 13.34                   |
|     | 1740            | 184T          | 131622            | 1010          | B             | 82                     | 208-230     | Man.                   | 21.0                 | 14.69                   |

## RIGID BASE • SINGLE PHASE • TEFC

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 3/4 | 3450            | 56            | 110108            | \$360         | A             | 26                     | 115/208-230 | Man.                   | 5.0                  | 11.31                   |
|     | 1725            | 56            | 110022            | 490           | A             | 29                     | 115/208-230 | Man.                   | 5.4                  | 11.31                   |
| 1   | 3450            | 56            | 110142            | 442           | A             | 28                     | 115/208-230 | Man.                   | 6.0                  | 11.81                   |
|     | 1725            | 56            | 110023            | 555           | A             | 29                     | 115/208-230 | Man.                   | 6.4                  | 11.81                   |
|     | 1725            | 143T          | 120008            | 555           | B             | 31                     | 115/208-230 | Man.                   | 6.4                  | 12.75                   |
| 1½  | 3450            | 56            | 110109♣           | 607           | A             | 31                     | 115/208-230 | Man.                   | 8.5                  | 12.31                   |
|     | 1725            | 56H           | 113333♣□          | 628           | A             | 38                     | 115/208-230 | Man.                   | 8.6                  | 12.81                   |
|     | 1725            | 145T          | 120009♣           | 628           | B             | 42                     | 115/208-230 | Man.                   | 8.6                  | 13.25                   |
| 2   | 3450            | 56H           | 110402□♣†         | 709           | A             | 41                     | 115/208-230 | Man.                   | 10.0                 | 13.31                   |
|     | 3450            | 145T          | 120395♣†          | 717           | B             | 44                     | 115/208-230 | Man.                   | 10.0                 | 13.75                   |
|     | 1725            | 145T          | 120867♣           | 902           | B             | 48                     | 115/208-230 | Man.                   | 9.2                  | 13.75                   |
| 3   | 3450            | 56H           | 116705□♣†         | 739           | A             | 53                     | 230         | Man.                   | 14.0                 | 13.81                   |
|     | 1740            | 184T          | 131855☆           | 999           | B             | 88                     | 230         | Man.                   | 13.7                 | 16.86                   |
| 5   | 3450            | 184T          | 132042            | 1248          | B             | 103                    | 230         | Man.                   | 19.8                 | 16.97                   |
|     | 1740            | 184T          | 131856☆           | 1161          | B             | 95                     | 230         | Man.                   | 21.0                 | 17.86                   |

## C FACE WITH BASE • SINGLE PHASE • DRIP-PROOF

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1½ | 3450            | 56C           | 114214            | \$500         | A             | 35                     | 115/208-230 | Man.                   | 6.2                  | 11.34                   |
|    | 1725            | 56HC          | 113700☆□          | 661           | A             | 38                     | 115/208-230 | Man.                   | 7.2                  | 11.84                   |
| 2  | 3450            | 56C           | 114215            | 635           | A             | 45                     | 115/208-230 | Man.                   | 8.6                  | 11.34                   |
|    | 1725            | 56HC          | 113281☆□          | 685           | A             | 45                     | 115/208-230 | Man.                   | 8.6                  | 12.88                   |
| 3  | 3450            | 56HC          | 116707☆□†         | 693           | A             | 41                     | 230         | Man.                   | 15.0                 | 12.38                   |
|    | 1740            | 184TC         | 131853☆           | 832           | B             | 87                     | 208-230     | Man.                   | 15.4                 | 15.96                   |
| 5  | 3450            | 56HC          | 116709□†♣         | 710           | A             | 46                     | 230         | Man.                   | 20.8                 | 13.54                   |
|    | 1740            | 184TC         | 131630☆           | 1023          | B             | 77                     | 208-230     | Man.                   | 21.0                 | 14.69                   |

- ☆ Capacitor start/capacitor run design for reduced amperage, others are capacitor start/induction run.
- Combination 56H base motors have mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 56 face and 5/8" shaft.
- ♣ 1.0 Service Factor
- † Class F insulation
- § Farm Duty motor





# COMPRESSOR DUTY MOTORS

## COMPRESSOR, PUMP AND FAN & BLOWER DUTY

### COMPRESSOR DUTY



#### General Specifications:

Motors designed for air compressor, pump, and fan and blower duty applications which require high breakdown torque and rugged mechanical construction.

#### Mechanical Features:

Prelubricated double shielded, amply sized, ball bearing construction to accommodate varying belt loads and tension.

#### Electrical Features:

High efficiency energy saving designs. Class "F" copper windings. Class "F" varnish. High starting and breakdown torque. Single phase motors are wired for CW rotation facing lead end. They may be reconnected for CCW rotation. The compressor motors shown here are the ratings most common to this application. For additional motors of different HP, RPM, etc., see pages 8-13. All 180 and 210 frame Rolled Steel motors have Class F Insulation.

### SINGLE PHASE • DRIP-PROOF • RIGID BASE

| HP   | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1    | 3450            | 56            | 110160            | \$350         | A             | 27                     | 115/230     | Man.                   | 6.7                  | 11.38                   |
|      | 1725            | 143T          | 120044            | 477           | B             | 38                     | 115/208-230 | None                   | 6.4                  | 11.28                   |
|      | 1725            | 143T          | 120003            | 501           | B             | 33                     | 115/208-230 | Man.                   | 6.4                  | 11.13                   |
| 1½   | 3450            | 56            | 110161            | 384           | A             | 33                     | 115/230     | Man.                   | 10.0                 | 11.88                   |
|      | 1725            | 145T          | 120042☆           | 527           | B             | 38                     | 115/208-230 | None                   | 8.6                  | 12.28                   |
|      | 1725            | 145T          | 120004☆           | 669           | B             | 40                     | 115/208-230 | Man.                   | 8.6                  | 12.28                   |
| 2    | 3450            | 56            | 110232            | 400           | A             | 33                     | 115/230     | Man.                   | 11.0                 | 11.88                   |
|      | 1725            | 182T          | 131515            | 650           | B             | 56                     | 115/208-230 | None                   | 12.4                 | 13.19                   |
|      | 1725            | 182T          | 131536            | 696           | B             | 63                     | 115/208-230 | Man.                   | 8.8                  | 10.66                   |
| 3    | 3450            | 56Y           | 110222⊗†          | 449           | A             | 38                     | 230         | Man.                   | 15.0                 | 12.38                   |
|      | 1725            | 184T          | 131534            | 704           | B             | 69                     | 115/230     | None                   | 16.9                 | 14.19                   |
| 5SPL | 3450            | 56            | 116523☆           | 542           | A             | 35                     | 208-230     | Man.                   | 15.0                 | 11.44                   |
| 5    | 3450            | 56Y           | 111275☆⊗†         | 558           | A             | 44                     | 230         | Man.                   | 20.8                 | 13.34                   |
|      | 3450            | 56Y           | 116789☆†          | 574           | A             | 45                     | 230         | Man.                   | 20.8                 | 12.38                   |
|      | 3450            | 145T          | 120554☆†          | 565           | B             | 46                     | 230         | Man.                   | 20.8                 | 13.12                   |
|      | 1725            | 184T          | 131537☆           | 845           | B             | 83                     | 230         | None                   | 21.0                 | 14.69                   |
|      | 1725            | 184T          | 131622☆           | 1010          | B             | 82                     | 230         | Man.                   | 21.0                 | 14.69                   |
| 7½   | 3450            | 184T          | 132044☆           | 814           | B             | 110                    | 208-230     | Tstat                  | 31.0                 | 16.69                   |
|      | 3450            | 213T          | 140680☆           | 1375          | B             | 112                    | 208-230     | None                   | 29.5                 | 16.55                   |
|      | 1740            | 215T          | 140155☆           | 1200          | B             | 113                    | 230         | None                   | 36.0                 | 17.26                   |
| 10   | 3450            | 215T          | 140681☆           | 1738          | B             | 135                    | 208-230     | None                   | 37.0                 | 18.05                   |
|      | 1725            | 215TZ         | 140311☆✓          | 1754          | B             | 140                    | 230         | None                   | 43.0                 | 19.76                   |

### THREE PHASE • DRIP-PROOF • RIGID BASE

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1  | 1725            | 143T          | G120010           | \$380         | B             | 30                     | 208-230/460 | 3.1                  | 82.5              | 11.28                   |
| 1½ | 1725            | 145T          | G120011           | 404           | B             | 37                     | 208-230/460 | 4.4                  | 84.0              | 12.13                   |
| 2  | 1725            | 145T          | G120012           | 433           | B             | 45                     | 208-230/460 | 6.0                  | 84.0              | 12.12                   |
| 3  | 1740            | 182T          | G130000           | 477           | B             | 57                     | 208-230/460 | 8.4                  | 86.5              | 12.69                   |
| 5  | 1740            | 184T          | G130004           | 529           | B             | 69                     | 208-230/460 | 13.2                 | 87.5              | 13.69                   |
| 7½ | 1740            | 213T          | G140471           | 768           | B             | 144                    | 208-230/460 | 20.0                 | 88.5              | 15.25                   |
| 10 | 1740            | 215T          | G140490           | 917           | B             | 132                    | 208-230/460 | 28.0                 | 89.5              | 16.75                   |
| 20 | 1750            | 256T          | G150006†          | 1711          | C             | 307                    | 208-230/460 | 48.0                 | 91.7              | 22.60                   |

### THREE PHASE • TEFC • RIGID BASE

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 3  | 1740            | 182T          | G130008           | \$540         | B             | 68                     | 230/460     | 8.2                  | 87.5              | 13.96                   |
| 5  | 1740            | 182T          | G130027           | 622           | B             | 80                     | 230/460     | 13.0                 | 87.5              | 14.96                   |
| 7½ | 1740            | 213T          | G140578           | 833           | B             | 144                    | 208-230/460 | 20.4                 | 89.5              | 17.71                   |
| 10 | 1740            | 215T          | G140489           | 965           | B             | 167                    | 208-230/460 | 26.0                 | 89.5              | 18.71                   |
| 15 | 1750            | 254T          | G150066†          | 1522          | C             | 277                    | 208-230/460 | 36.6                 | 91.0              | 23.19                   |
| 20 | 1750            | 256T          | G150007†          | 1873          | C             | 321                    | 208-230/460 | 48.2                 | 91.0              | 24.92                   |

☆ Capacitor start/capacitor run design for reduced amperage, others are capacitor start/induction run.

† Class F insulated.

✓ Motor with standard diameter shaft, 1.0" longer than standard.

⊗ Special BA dimension 2.31" for belt guard clearance.

✦ Motor has mounting base with 182-4T mounting holes, shaft height is 4.5". Shaft is std. NEMA 56 - 5/8" dia. x 1 7/8" long.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

Catalog numbers in green are EPACKT motors.

## WOODWORKING MOTORS

## General Specifications:

Motors designed for woodworking equipment such as table saws, planers, etc.

Totally enclosed designs prevent motor problems caused by wood dust and shavings.



## SINGLE PHASE • TEFC • RIGID BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 3/4 | 3450            | 56            | 110108            | \$368         | A             | 26                     | 115/208-230 | Man.                   | 5.0                  | 11.31                   |
| 1   | 3450            | 56            | 110142            | 452           | A             | 28                     | 115/208-230 | Man.                   | 6.0                  | 11.81                   |
| 1½  | 3450            | 56            | 110109            | 621           | A             | 34                     | 115/208-230 | Man.                   | 8.5                  | 12.31                   |
| 2   | 3450            | 56H           | 110402✦†          | 725           | A             | 41                     | 115/208-230 | Man.                   | 10.0                 | 13.31                   |
|     | 3450            | 145T          | 120395✦†          | 732           | B             | 44                     | 115/208-230 | Man.                   | 10.0                 | 13.75                   |
| 3   | 3450            | 145T          | 120341☆†          | 751           | B             | 46                     | 230         | None                   | 13.0                 | 14.25                   |

## SINGLE PHASE • TEFC • C FACE LESS BASE

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------------|
| 3  | 3450            | 145TC         | 120824☆           | \$811         | B             | 56                     | 230     | Man.                   | 13.0                 | 14.25                   |

## TABLE SAW MOTOR

## General Specifications:

Totally enclosed fan cooled motor produces extra high breakdown torques for maximum cutting power.

Supplied with 8-foot cord and 115V plug, on/off toggle switch. CW rotation, facing lead end. Replaces Delta motor number 62-042.



## SINGLE PHASE • TEFC • RIGID BASE

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------------|
| 1½ | 3450            | 56            | 113627            | \$729         | A             | 39                     | 115/230 | Man.                   | 7.5                  | 12.31                   |

## CONTRACTORS' SAW MOTORS

## Special Mounting:

Motor pivots on rod for belt tensioning. Totally enclosed fan cooled motor produces extra high breakdown torques for maximum cutting power. Has 1¾" long shaft, ¾" diameter with keyway. Added 54" cord to all motors 1½-4 HP. Catalog numbers 120925 and 120997 replace Delta UNISAW® motor 83-621 (1½ HP); 120728 and 120998 replace Delta UNISAW® motor 83-651 (3 HP).



## SINGLE PHASE • TEFC • DELTA UNISAW® MOUNTING

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------------|
| 1½ | 3450            | 143Y          | 120925            | \$652         | B             | 44                     | 115/230 | None                   | 10.0                 | 12.68                   |
| 2  | 3450            | 143Y          | 120997            | 716           | B             | 44                     | 115/230 | None                   | 11.0                 | 12.68                   |
| 3  | 3450            | 145Y          | 120728☆           | 913           | B             | 52                     | 230     | None                   | 13.0                 | 13.68                   |
| 4  | 3450            | 145Y          | 120998☆           | 953           | B             | 48                     | 230     | None                   | 17.6                 | 13.68                   |

UNISAW® is a registered trademark of Delta International.

## CONTRACTORS' POWER TOOL MOTORS

## General Specifications:

Open, drip-proof double shaft motors for woodworking applications. With encapsulated, electronic starting switch and double shielded ball bearings to prevent failures caused by sawdust accumulation.

Capacitor start design for high torques and reduced amperage, improved efficiency.

Shaft extension each end, with keyway and flat 90° apart for ease of mounting.

Useable shaft, each end is 1½" long by ½" diameter on 48 frames and 1⅞" long by ⅝" diameter on 56 frame motors.

DOUBLE-SHAFT • SINGLE PHASE  
DRIP-PROOF • RIGID BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/2 | 1725            | S56Z          | 101781            | \$433         | A             | 17                     | 115/208-230 | None                   | 4.4                  | 12.43                   |
| 3/4 | 3450            | 48Z           | 101782            | 445           | A             | 24                     | 115/208-230 | None                   | 4.9                  | 12.18                   |
| 1   | 3450            | 56Z           | 114216            | 466           | A             | 27                     | 115/208-230 | None                   | 6.0                  | 12.81                   |

☆ Capacitor start/capacitor run design for reduced amperage, others are capacitor start/induction run.

† Class F insulated.

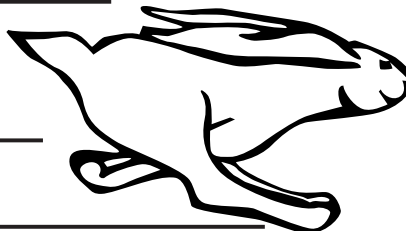
□ Combination 56 H base motors have mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 56 shaft.

✦ These totally enclosed single phase motors have 1.15 Service Factors.



**CUSTOM MULTI-SPEED  
LOW-SPEED AND MODIFIED MOTORS**

# Custom **PDQ**



## PDQ MODULAR PRODUCTION PROGRAM

**CUSTOM MULTI-SPEED, LOW SPEED AND MODIFIED MOTORS,  
ONE OR SEVERAL AT A TIME, ON A QUICK TURNAROUND BASIS.**

LEESON's "Modular Production" utilizes specially designed and standard components to make almost any imaginable NEMA frame multi-speed or low-speed motor available when you need it.

**Quick Turnaround**-LEESON's Custom PDQ can provide quick answers to inquiries and fast turnaround for orders of highly customized motors.

**Comprehensive Catalog** - Features the Industry's most extensive two-speed and low speed motor selection as well as a listing of commonly requested modifications. **Call for your copy of LEESON Catalog 1057 - Multi-Speed, Low-Speed and Modified Motors.**

**Full Fact Acknowledgement** - With Custom PDQ all custom motors are promptly and fully acknowledged upon receipt of order. The acknowledgement includes the complete motor specification pricing and shipping date.

Motors of 254T frame and larger are of cast iron construction with all the rugged features of LEESON's stock single-speed motors described on pages 14 & 15 of this catalog. All two-speed designs are class F insulated and have a 1.15 S.F.



**Whether for the everyday or not-so-everyday needs,  
Custom PDQ gives you the ability to say "Yes" to  
requests for customized motors.**

### Multi-speed

Two, three and four-speed motors

### Low Speed

900, 720, 600, 450 and 300 rpm

### Modified as per Catalog 1057 - Some examples are:

- Anti-condensation heaters
- Brakemotors, custom
- Cooling tower specifications
- Downsized frames
- Epoxy and fungus proofing
- 50 Hz
- Premium-efficiency, North American manufacture
- Insulation, special
- Marine duty (below deck)
- Part winding (low and high voltages)
- Shafts, modified
- Thermostats
- Thermistors
- Washdown service
- IEEE841 conversion of WATTSaver® motors
- Voltages (non-standard)

...and many more

**For quotations, availability, and application  
assistance phone toll-free to our Canadian  
manufacturing facility.**



## TWO-SPEED MOTORS

### THREE PHASE • VARIABLE AND CONSTANT TORQUE



Multi-Speed

## TWO-SPEED • VARIABLE AND CONSTANT TORQUE

Two-speed, single winding design motors. Typical applications and characteristic speed torque curves are noted below.

These totally enclosed fan cooled designs are priced competitive to other manufacturers' drip-proof two-speed, single winding motors.



### VARIABLE TORQUE • 460 V

1725/850 RPM • ONE WINDING • RIGID BASE • TEFC

| HP      | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | F.L.<br>Amps<br>** | "C"<br>Dim.<br>(Inches) |
|---------|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|--------------------|-------------------------|
| 1/2.5   | 1725/850        | 143T          | 120945            | \$748         | B             | 36                     | 460     | 1.6–0.7            | 12.75                   |
| 1.5/3.7 | 1725/850        | 145T          | 120941†           | 779           | B             | 36                     | 460     | 2.4–1.0            | 12.75                   |
| 2/5     | 1725/850        | 145T          | 120940            | 908           | B             | 36                     | 460     | 3.2–1.3            | 12.75                   |
| 3/7.5   | 1725/850        | 184T          | 131474            | 973           | B             | 77                     | 460     | 4.0–1.8            | 14.46                   |
| 5/1.2   | 1740/860        | 184T          | 131475            | 1241          | B             | 107                    | 460     | 6.5–2.5            | 15.96                   |
| 7.5/1.9 | 1740/860        | 215T          | 140447            | 1749          | B             | 155                    | 460     | 9.7–3.3            | 17.71                   |
| 10/2.5  | 1740/860        | 215T          | 140448            | 2061          | B             | 168                    | 460     | 12.7–4.2           | 18.71                   |

These TEFC motors have a 1.0 Service Factor.

### VARIABLE TORQUE • 208-230 V

1725/850 RPM • ONE WINDING • RIGID BASE • TEFC

| HP      | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | F.L.<br>Amps<br>** | "C"<br>Dim.<br>(Inches) |
|---------|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|--------------------|-------------------------|
| 1/2.5   | 1725/850        | 143T          | 120944            | \$748         | B             | 36                     | 208-230 | 3.2–1.4            | 12.75                   |
| 1.5/3.7 | 1725/850        | 145T          | 120947†           | 780           | B             | 36                     | 208-230 | 4.8–2.0            | 12.75                   |
| 2/5     | 1725/850        | 145T          | 120946            | 908           | B             | 35                     | 208-230 | 6.3–2.6            | 12.75                   |
| 3/7.5   | 1725/850        | 184T          | 131468            | 973           | B             | 78                     | 208-230 | 8.0–3.6            | 14.46                   |
| 5/1.2   | 1740/860        | 184T          | 131469            | 1241          | B             | 94                     | 208-230 | 13.0–5.0           | 15.96                   |
| 7.5/1.9 | 1740/860        | 215T          | 140443            | 1766          | B             | 154                    | 208-230 | 19.4–6.6           | 17.71                   |
| 10/2.5  | 1740/860        | 215T          | 140444            | 2061          | B             | 166                    | 208-230 | 25.4–8.4           | 18.71                   |

These TEFC motors have a 1.0 Service Factor.

### CONSTANT TORQUE • 460 V

1725/850 RPM • ONE WINDING • RIGID BASE • TEFC

| HP    | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | F.L.<br>Amps<br>** | "C"<br>Dim.<br>(Inches) |
|-------|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|--------------------|-------------------------|
| 1/5   | 1725/850        | 143T          | 120943†           | \$1066        | B             | 36                     | 460     | 1.4–1.6            | 13.25                   |
| 2/1   | 1740/860        | 184T          | 131471            | 1365          | B             | 68                     | 460     | 2.9–2.9            | 13.96                   |
| 3/1.5 | 1725/850        | 184T          | 131470            | 1548          | B             | 80                     | 460     | 3.8–3.5            | 14.96                   |
| 5/2.5 | 1725/850        | 215T          | 140445            | 2024          | B             | 145                    | 460     | 6.7–7.0            | 17.71                   |

These TEFC motors have a 1.0 Service Factor.

### CONSTANT TORQUE • 208-230 V

1725/850 RPM • ONE WINDING • RIGID BASE • TEFC

| HP    | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | F.L.<br>Amps<br>** | "C"<br>Dim.<br>(Inches) |
|-------|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|--------------------|-------------------------|
| 1/5   | 1725/850        | 143T          | 120942            | \$1066        | B             | 37                     | 208-230 | 3.2–4.2            | 12.75                   |
| 2/1   | 1740/860        | 184T          | 131473            | 1365          | B             | 69                     | 208-230 | 5.8–5.7            | 13.96                   |
| 3/1.5 | 1725/850        | 184T          | 131472            | 1548          | B             | 80                     | 208-230 | 7.6–6.9            | 14.96                   |
| 5/2.5 | 1725/850        | 215T          | 140446            | 2024          | B             | 137                    | 208-230 | 13.4–14.0          | 17.71                   |

These TEFC motors have a 1.0 Service Factor.

\*\* F.L. Amps listed are for high and low speeds, respectively.  
† Class F insulated.

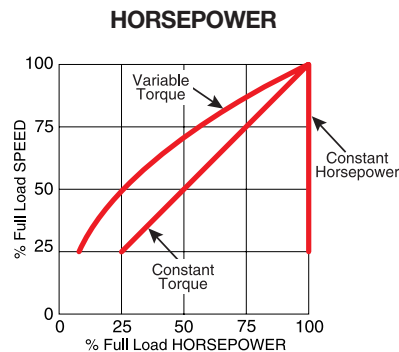
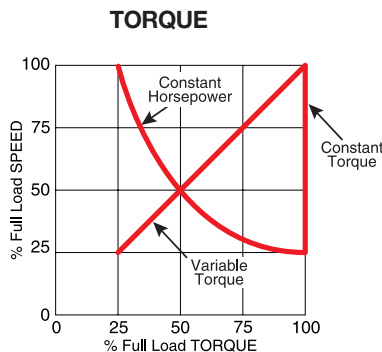
All 180 and 210 frame Rolled Steel motors have Class F Insulation.

## MULTI-SPEED MOTORS • APPLICATION DATA

**Variable torque** motors have horsepower ratings that vary as the square of the speed, while torque varies directly with the speed. These motors are typically used on applications such as fans, blowers and centrifugal pumps.

**Constant torque** motors are capable of developing the same torque for all speeds. Their horsepower ratings vary directly with the speed. Constant torque motors are used on mixers, compressors, conveyors, printing presses, extractors, feeders and laundry machinery.

**Constant horsepower** motors develop the same horsepower at all operating speeds, and the torque varies inversely with the speed. These motors are often used on machine tools, such as drills, lathes, punch presses and milling machines. **Please contact LEESON with details for constant HP applications.**





# 575 & 200-208 VOLT MOTORS THREE PHASE



## 575 VOLT • THREE PHASE • TEFC • RIGID BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | F.L.<br>Amps<br>575 V. | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|-------------------|-------------------------|
| 1/2 | 3450            | 56            | 110714●           | \$318         | A             | 25                     | 575     | 0.6                    | 82.5              | 10.40                   |
|     | 1725            | 56            | 110199●†          | 347           | A             | 25                     | 575     | 0.8                    | 78.5              | 9.88                    |
|     | 1725            | S56           | 101051            | 347           | A             | 24                     | 575     | 0.8                    | 68.0              | 9.94                    |
| 3/4 | 3450            | 56            | 110354            | 351           | A             | 22                     | 575     | 0.9                    | 75.5              | 10.81                   |
|     | 1725            | 56            | 110178            | 369           | A             | 22                     | 575     | 1.1                    | 77.0              | 10.81                   |
|     | 1140            | 56            | 111394            | 526           | A             | 30                     | 575     | 1.2                    | 75.5              | 11.81                   |
| 1   | 3450            | 56            | 110715            | 410           | A             | 24                     | 575     | 1.3                    | 77.0              | 10.81                   |
|     | 1725            | 56            | 110206            | 387           | A             | 24                     | 575     | 1.5                    | 77.0              | 11.31                   |
|     | 1740            | 143T          | 120122            | 432           | B             | 31                     | 575     | 1.2                    | 82.5              | 12.75                   |
|     | 1140            | 145T          | 120167            | 576           | B             | 32                     | 575     | 1.4                    | 80.0              | 13.25                   |
| 1½  | 3450            | 145T          | 120170            | 468           | B             | 36                     | 575     | 1.6                    | 82.5              | 12.75                   |
|     | 1725            | 56            | 110893            | 436           | A             | 30                     | 575     | 2.0                    | 78.5              | 11.81                   |
|     | 1740            | 145T          | 120021            | 413           | B             | 36                     | 575     | 1.8                    | 84.0              | 12.75                   |
|     | 1140            | 182T          | 131548            | 635           | B             | 76                     | 575     | 2.5                    | 85.5              | 14.96                   |
| 2   | 3450            | 145T          | 120171            | 549           | B             | 44                     | 575     | 2.1                    | 84.0              | 13.25                   |
|     | 1740            | 145T          | 120019            | 438           | B             | 45                     | 575     | 2.25                   | 84.0              | 13.75                   |
|     | 1140            | 184T          | 131529            | 709           | B             | 89                     | 575     | 2.9                    | 86.5              | 15.46                   |
| 3   | 3450            | 145T          | 120423            | 629           | B             | 50                     | 575     | 3.0                    | 85.5              | 13.75                   |
|     | 1740            | 182T          | 131460            | 540           | B             | 74                     | 575     | 3.3                    | 87.5              | 13.96                   |
| 5   | 3450            | 184T          | 131552            | 764           | B             | 75                     | 575     | 4.8                    | 87.5              | 14.46                   |
|     | 1740            | 184T          | 131461            | 622           | B             | 85                     | 575     | 5.2                    | 87.5              | 14.96                   |
| 7½  | 3500            | 213T          | 150196            | 906           | C             | 158                    | 575     | 7.4                    | 85.5              | 18.19                   |
|     | 1750            | 213T          | 140593            | 813           | B             | 144                    | 575     | 8.2                    | 89.5              | 17.71                   |
| 10  | 3500            | 215T          | 150197            | 1056          | C             | 172                    | 575     | 9.5                    | 85.5              | 19.61                   |
|     | 1750            | 215T          | 150212            | 1048          | C             | 186                    | 575     | 9.8                    | 86.5              | 19.61                   |
| 15  | 3500            | 254T          | 150198            | 1477          | C             | 270                    | 575     | 14.4                   | 86.5              | 23.19                   |
|     | 1750            | 254T          | 150116            | 1517          | C             | 284                    | 575     | 14.8                   | 90.2              | 23.19                   |
| 20  | 3500            | 256T          | 150199            | 1975          | C             | 328                    | 575     | 19.2                   | 89.5              | 24.92                   |
|     | 1750            | 256T          | 150117            | 1914          | C             | 367                    | 575     | 19.2                   | 91.7              | 24.92                   |
| 25  | 3500            | 284TS         | 150224            | 2369          | C             | 402                    | 575     | 24.0                   | 90.2              | 24.88                   |
|     | 1750            | 284T          | 150118            | 2336          | C             | 390                    | 575     | 24.0                   | 91.0              | 26.26                   |
| 30  | 3500            | 286TS         | 150228            | 2964          | C             | 442                    | 575     | 28.0                   | 89.5              | 26.46                   |
|     | 1750            | 286T          | 150119            | 2692          | C             | 411                    | 575     | 28.0                   | 91.0              | 27.83                   |
| 40  | 3500            | 324TS         | 150232            | 3726          | C             | 554                    | 575     | 36.8                   | 91.0              | 28.03                   |
|     | 1750            | 324T          | 150120            | 3563          | C             | 548                    | 575     | 36.8                   | 91.7              | 29.53                   |
| 50  | 1750            | 326T          | 150121            | 4394          | C             | 594                    | 575     | 45.8                   | 91.7              | 31.02                   |
| 60  | 1750            | 364T          | 150239            | 6688          | C             | 778                    | 575     | 56.0                   | 91.7              | 32.64                   |
| 75  | 1750            | 365T          | 150244            | 2369          | C             | 850                    | 575     | 68.8                   | 92.4              | 33.62                   |
| 100 | 1750            | 405T          | 150253            | 10051         | C             | 1175                   | 575     | 92.0                   | 93.0              | 37.91                   |

Other stock 575V motors are available from LEESON through our Canadian facility. Contact LEESON for availability.

- These motors are totally enclosed, non-ventilated, all others totally enclosed fan cooled.
- † Class F insulated.
- ♣ 1.0 Service Factor, Class F insulation.
- ~ Open fan cooled design.

All 180 and 210 frame Rolled Steel motors have Class F Insulation.

## 575 VOLT • TEFC • C FACE LESS BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | F.L.<br>Amps<br>575 V. | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|-------------------|-------------------------|
| 1/2 | 1725            | 56C           | 110176●†          | \$369         | A             | 20                     | 575     | 0.8                    | 79.0              | 9.94                    |
| 3/4 | 1725            | 56C           | 110177            | 396           | A             | 21                     | 575     | 1.1                    | 77.0              | 10.81                   |
| 1   | 1725            | 56C           | 110204            | 423           | A             | 30                     | 575     | 1.5                    | 77.0              | 11.31                   |
|     | 1740            | 143TC         | 120176            | 435           | B             | 32                     | 575     | 1.2                    | 82.5              | 12.25                   |
| 1½  | 1725            | 56C           | 111444            | 448           | A             | 33                     | 575     | 2.0                    | 78.5              | 11.81                   |
|     | 1740            | 145TC         | 120177            | 472           | B             | 31                     | 575     | 1.8                    | 84.0              | 12.75                   |
| 2   | 3450            | 56C           | 111611            | 495           | A             | 34                     | 575     | 2.2                    | 82.5              | 12.31                   |
|     | 1740            | 145TC         | 120178            | 503           | B             | 45                     | 575     | 2.25                   | 84.0              | 13.75                   |
| 3   | 1740            | 182TC         | 131498            | 579           | B             | 68                     | 575     | 3.3                    | 87.5              | 13.97                   |
| 5   | 1740            | 184TC         | 131499            | 699           | B             | 76                     | 575     | 5.2                    | 87.5              | 14.97                   |



## 200-208 VOLT/400-416 VOLT • THREE PHASE DRIP-PROOF • RIGID BASE

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage         | F.L.<br>Amps<br>575 V. | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-----------------|------------------------|-------------------|-------------------------|
| 5  | 1740            | 184T          | 131500            | \$497         | B             | 62                     | 200-208/400-416 | 15.4                   | 86.0              | 13.19                   |
| 7½ | 1740            | S213T         | 131547~           | 707           | B             | 105                    | 200-208/400-416 | 22.0                   | 84.0              | 17.09                   |
| 10 | 1740            | 215T          | 140004            | 865           | B             | 122                    | 200-208/400-416 | 32.0                   | 86.5              | 15.76                   |

## 200-208 VOLT/400-416 VOLT • THREE PHASE TEFC • RIGID BASE

| HP | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage         | F.L.<br>Amps<br>200 V. | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|----|---------------|-------------------|---------------|---------------|------------------------|-----------------|------------------------|-------------------|-------------------------|
| 1  | 56            | 110255            | \$406         | A             | 30                     | 200-208         | 4.4                    | 77.0              | 11.31                   |
|    | 143T          | 120047            | 406           | B             | 32                     | 200-208         | 4.4                    | 77.0              | 12.75                   |
| 1½ | 145T          | 120032            | 412           | B             | 35                     | 200-208         | 5.6                    | 80.0              | 12.75                   |
| 2  | 145T          | 120034†           | 435           | B             | 38                     | 200-208         | 7.2                    | 81.5              | 12.75                   |
| 3  | 182T          | 131465            | 508           | B             | 82                     | 200-208/400-416 | 10.0                   | 84.0              | 12.96                   |
| 5  | 184T          | 131466            | 586           | B             | 63                     | 200-208/400-416 | 15.4                   | 86.0              | 13.96                   |
| 7½ | S213T         | 131467♣           | 749           | B             | 106                    | 200-208/400-416 | 23.0                   | 87.0              | 17.58                   |
| 10 | 215T          | 140013            | 910           | B             | 168                    | 200-208/400-416 | 29.6                   | 87.5              | 18.21                   |

All 200-208 motors have a 1.15 Service Factor, Class F insulation

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

# SEVERE DUTY WATTSaver PLUS & IEEE PREMIUM EFFICIENT MOTORS



## General Specifications:

Designed specifically to meet severe duty environments that you may find in applications such as chemical plants, foundries, pulp and paper mills, waste management facilities, refineries, above ground mines or other applications that demand corrosion protection for long motor life and dependability.



## Mechanical Protection Features:

- Full cast iron construction
- Two-part Epoxy paint
- Inpro Shaft Seal on output shaft and Forsheda seal on non-drive end
- Internal corrosion protection
- Regreasable bearings 250 Frame and above
- Three Year warranty
- Stainless Steel nameplate
- Corrosion Resistant hardware

## Electrical Performance and Protection Features:

- 1.15 Service Factor
- Meets IP 55 enclosure protection
- Dual voltage design
- Normally Closed Thermostats

## Standards and Approvals:

- UL and CSA recognized
- Construction is CSA Certified for safety report number LR62104
- UL recognized construction, file number E57948

## General Specifications:

Designed for harsh environments that you may find in refineries, above-ground mines, foundries, paper and pulp mills, cement plants or other severe duty applications requiring a premium efficient motor.



## Mechanical Protection Features:

- Inpro Shaft Seals installed
- Re-greasable bearings by using extended grease tubes.
- Five-year warranty
- Two part epoxy painted
- Brass breather and drain plug

## Electrical Performance and Protection Features:

- Tested to IEEE-841 Standards
- Actual test and vibration Data supplied with each motor
- Meets NEMA MG1 – 1.26.6 Waterproof Specification
- Nameplate stamped to Division 2 CSA certification for hazardous locations, Class 1 Groups A, B, C, D, Temperature code T2B
- Meets NEMA Premium Efficient standards
- 1.15 Service Factor
- Class F Insulation System

## Standards and Approvals:

- UL Recognized and CSA Certified
- Tested to IEEE45 USCG Marine Duty, API RP14F for offshore platforms
- Meets IP56

## SEVERE DUTY • WATTSaver PLUS

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 3  | 1760            | 182T          | <b>171623</b>     | \$910         | C             | 112                    | 208-230/460 | 7.8                    | 90.2                 | 16.64                   |
|    | 1180            | 213T          | <b>171634</b>     | 1284          | C             | 180                    | 208-230/460 | 9.4                    | 89.5                 | 18.69                   |
| 5  | 1760            | 184T          | <b>171630</b>     | 942           | C             | 120                    | 208-230/460 | 12.8                   | 89.5                 | 17.30                   |
|    | 1180            | 215T          | <b>171635</b>     | 1437          | C             | 186                    | 208-230/460 | 14.4                   | 89.5                 | 20.11                   |
| 7½ | 3510            | 213T          | <b>171616</b>     | 1309          | C             | 155                    | 208-230/460 | 18                     | 91.0                 | 18.69                   |
|    | 1760            | 213T          | <b>171622</b>     | 1264          | C             | 165                    | 208-230/460 | 18.6                   | 91.7                 | 18.69                   |
|    | 1170            | 254T          | <b>171636</b>     | 1868          | C             | 263                    | 208-230/460 | 22.2                   | 91.7                 | 23.69                   |
| 10 | 3510            | 215T          | <b>171617</b>     | 1553          | C             | 190                    | 208-230/460 | 23                     | 91.7                 | 20.11                   |
|    | 1760            | 215T          | <b>171631</b>     | 1506          | C             | 187                    | 208-230/460 | 25                     | 91.7                 | 20.11                   |
|    | 1170            | 256T          | <b>171637</b>     | 2672          | C             | 312                    | 208-230/460 | 29                     | 91.7                 | 25.42                   |
| 15 | 3525            | 254T          | <b>171620</b>     | 2111          | C             | 294                    | 208-230/460 | 34.6                   | 92.4                 | 23.69                   |
|    | 1770            | 254T          | <b>171632</b>     | 2041          | C             | 294                    | 208-230/460 | 36                     | 92.4                 | 23.69                   |
|    | 1170            | 284T          | <b>171638</b>     | 3616          | C             | 346                    | 208-230/460 | 40.6                   | 92.4                 | 26.76                   |
| 20 | 3525            | 256T          | <b>171621</b>     | 2579          | C             | 330                    | 208-230/460 | 46                     | 92.4                 | 25.42                   |
|    | 1770            | 256T          | <b>171633</b>     | 2550          | C             | 335                    | 208-230/460 | 49                     | 93.0                 | 25.42                   |
|    | 1170            | 286T          | <b>171639</b>     | 4520          | C             | 405                    | 208-230/460 | 54                     | 92.4                 | 28.33                   |

## IEEE 841 PREMIUM EFFICIENT MOTORS

| HP | RPM  | NEMA<br>Frame | IEEE 841<br>Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | F.L.<br>Amps<br>230V | % F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|----|------|---------------|-------------------------------|---------------|---------------|------------------------|---------|----------------------|----------------|-------------------------|
| 1  | 1725 | 143T          | <b>811541</b>                 | \$723         | C             | 55                     | 460     | 1.5                  | 85.5           | 10.43                   |
| 1½ | 3460 | 143T          | <b>811542</b>                 | 896           | C             | 58                     | 460     | 2.0                  | 86.5           | 10.43                   |
|    | 1730 | 145T          | <b>811543</b>                 | 830           | C             | 65                     | 460     | 2.2                  | 84.0           | 11.43                   |
| 2  | 3500 | 145T          | <b>811544</b>                 | 941           | C             | 68                     | 460     | 2.5                  | 85.5           | 11.43                   |
|    | 1735 | 145T          | <b>811545</b>                 | 869           | C             | 68                     | 460     | 3.0                  | 85.5           | 11.43                   |
| 3  | 3525 | 182T          | <b>811546</b>                 | 1363          | C             | 105                    | 460     | 3.8                  | 87.5           | 12.71                   |
|    | 1760 | 182T          | <b>811547</b>                 | 1154          | C             | 100                    | 460     | 4.0                  | 90.2           | 12.71                   |
| 5  | 3505 | 184T          | <b>811548</b>                 | 1464          | C             | 142                    | 460     | 5.9                  | 89.5           | 16.19                   |
|    | 1755 | 184T          | <b>811549</b>                 | 1349          | C             | 130                    | 460     | 6.2                  | 90.2           | 16.19                   |
| 7½ | 3540 | 213T          | <b>811550</b>                 | 1728          | C             | 200                    | 460     | 8.9                  | 91.7           | 17.18                   |
|    | 1770 | 213T          | <b>811551</b>                 | 1636          | C             | 200                    | 460     | 9.6                  | 91.7           | 19.73                   |
| 10 | 3535 | 215T          | <b>811552</b>                 | 2021          | C             | 218                    | 460     | 11.2                 | 91.7           | 20.97                   |
|    | 1765 | 215T          | <b>811553</b>                 | 1981          | C             | 225                    | 460     | 12.5                 | 91.7           | 19.73                   |
| 15 | 3550 | 254T          | <b>811554</b>                 | 2503          | C             | 345                    | 460     | 17.5                 | 91.7           | 23.52                   |
|    | 1775 | 254T          | <b>811555</b>                 | 2380          | C             | 350                    | 460     | 18.8                 | 92.4           | 23.52                   |
| 20 | 3537 | 256T          | <b>811556</b>                 | 3094          | C             | 375                    | 460     | 23.4                 | 92.4           | 25.27                   |
|    | 1775 | 256T          | <b>811557</b>                 | 2960          | C             | 425                    | 460     | 24.1                 | 93.0           | 25.27                   |
| 25 | 3560 | 284TS         | <b>811558</b>                 | 3840          | C             | 481                    | 460     | 28.1                 | 93.6           | 24.97                   |
|    | 1775 | 284T          | <b>811559</b>                 | 3508          | C             | 478                    | 460     | 31.0                 | 93.6           | 26.34                   |

SHADED FRAME INDICATES CAST IRON CONSTRUCTION





# AGRICULTURAL MOTORS

## GENERAL PURPOSE • SINGLE PHASE

### FARM DUTY • GENERAL PURPOSE

Heavy duty single phase Hi-Torque Motors designed specifically for severe "farm duty" applications.

#### Mechanical Features:

Gasketed capacitor housing and conduit boxes provide protection in all environments.  
Double sealed ball bearings prelubricated with Exxon POLYREX® EM grease having operating temperature range of -20°F to +350°F and special formulation to provide extra bearing protection.  
Rubber boot over manual protector reset button provides weather protection.

#### Electrical Features:

Low temperature manual overload protector protects against extreme overload.  
Class "F" copper windings and varnish.  
Capacitor start provides high starting torque with normal starting current.

All 180 and 210 frame Rolled Steel motors have Class F Insulation.



### HIGH TORQUE • RIGID BASE SINGLE PHASE • TEFC

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/3 | 1725            | 56            | 113256            | \$366         | A             | 20                     | 115/208-230 | Man.                   | 3.2                  | 10.81                   |
| 1/2 | 1725            | 56            | 110086            | 426           | A             | 22                     | 115/208-230 | Man.                   | 4.4                  | 10.81                   |
| 3/4 | 1725            | 56            | 110087            | 503           | A             | 26                     | 115/208-230 | Man.                   | 5.4                  | 11.31                   |
| 1   | 1725            | 56            | 110088            | 578           | A             | 30                     | 115/208-230 | Man.                   | 7.0                  | 11.81                   |
|     | 1725            | 143T          | 121569            | 582           | A             | 30                     | 115/208-230 | Man.                   | 7.0                  | 12.75                   |
| 1½  | 1725            | 56H           | 110089☆□          | 645           | A             | 41                     | 115/208-230 | Man.                   | 8.6                  | 12.61                   |
|     | 1725            | 56HZ/<br>145T | 113938■           | 656           | A             | 39                     | 115/208-230 | Man.                   | 8.6                  | 13.25                   |
| 2   | 1725            | 56HZ/<br>145T | 110090☆■          | 925           | A             | 43                     | 230         | Man.                   | 9.2                  | 13.75                   |
|     | 1740            | 182T          | 131541            | 986           | B             | 50                     | 115/208-230 | Man.                   | 12.4                 | 14.46                   |
| 3   | 1740            | 184T          | 131542            | 1033          | B             | 83                     | 230         | Man.                   | 19.0                 | 16.46                   |
| 5   | 1740            | 184T          | 131543☆           | 1294          | B             | 96                     | 230         | Man.                   | 20.5                 | 17.46                   |
| 7½  | 1740            | 215T          | 140707☆           | 1546          | B             | 144                    | 230         | Man.                   | 32.0                 | 20.21                   |
| 10  | 1740            | 215T          | 140706☆           | 1811          | B             | 152                    | 230         | Man.                   | 40.0                 | 20.71                   |

### HIGH TORQUE C FACE LESS BASE SINGLE PHASE • TEFC

NEMA C Face Motor designed with overspeed protection on mechanical centrifugal starting switch.



| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/3 | 1725            | 56C           | 113290            | \$484         | A             | 28                     | 115/208-230 | Man.                   | 3.2                  | 10.81                   |
| 1/2 | 1725            | 56C           | 110492            | 554           | A             | 22                     | 115/208-230 | Man.                   | 4.4                  | 10.81                   |
| 3/4 | 1725            | 56C           | 110493            | 648           | A             | 29                     | 115/208-230 | Man.                   | 5.4                  | 11.31                   |
| 1   | 1725            | 56C           | 110494            | 735           | A             | 33                     | 115/208-230 | Man.                   | 7.0                  | 11.81                   |
| 1½  | 1725            | 56C           | 110495☆           | 835           | A             | 43                     | 115/208-230 | Man.                   | 8.6                  | 12.31                   |
| 2   | 1725            | 145TC         | 120855†☆          | 1084          | B             | 45                     | 230         | Man.                   | 9.2                  | 13.75                   |
| 3   | 1740            | 184TC         | 131603            | 1471          | B             | 104                    | 230         | Man.                   | 19.0                 | 16.47                   |
| 5   | 1740            | 184TC         | 131602☆           | 1804          | B             | 104                    | 230         | Man.                   | 20.5                 | 17.47                   |

### EXTRA HI-TORQUE RIGID BASE SINGLE PHASE • TEFC

Extra Hi-Torque rated 5, 7½ and 10 HP Motors deliver starting torque as high as 300-400% of motor's full load torque with all mechanical and electrical features listed above.



| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 2  | 1740            | 182T          | 131541            | \$986         | B             | 50                     | 115/208-230 | Man.                   | 12.4                 | 14.46                   |
| 3  | 1740            | 184T          | 131542            | 1033          | B             | 83                     | 230         | Man.                   | 19.0                 | 16.46                   |
| 5  | 1740            | 215T          | 140203☆           | 1548          | B             | 119                    | 230         | Man.                   | 24.0                 | 18.71                   |
|    | 1740            | 215TZ         | 140223☆♦          | 1577          | B             | 150                    | 230         | Man.                   | 24.0                 | 18.71                   |
| 7½ | 1740            | 215T          | 140130☆           | 1686          | B             | 144                    | 230         | Man.                   | 33.6                 | 20.21                   |
|    | 1740            | 215TZ         | 140209☆♦          | 1817          | B             | 141                    | 230         | Man.                   | 33.6                 | 20.21                   |
| 10 | 1740            | 215T          | 140414☆           | 1976          | B             | 156                    | 230         | Man.                   | 40.0                 | 20.71                   |

### HIGH TORQUE C FACE WITH BASE SINGLE PHASE • TEFC

NEMA C Face Motor designed with overspeed protection on mechanical centrifugal starting switch.



| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/3 | 1725            | 56C           | 116485            | \$501         | A             | 29                     | 115/208-230 | Man.                   | 3.2                  | 10.81                   |
| 1/2 | 1725            | 56C           | 116486            | 574           | A             | 23                     | 115/208-230 | Man.                   | 4.4                  | 10.81                   |
| 3/4 | 1725            | 56C           | 116487            | 669           | A             | 30                     | 115/208-230 | Man.                   | 5.4                  | 11.31                   |
| 1   | 1725            | 56C           | 116488            | 760           | A             | 34                     | 115/208-230 | Man.                   | 7.0                  | 11.81                   |
| 1½  | 1725            | 56HC          | 116489☆           | 855           | A             | 44                     | 115/208-230 | Man.                   | 8.6                  | 12.81                   |
| 2   | 1725            | 145TC         | 121625†☆          | 1091          | B             | 46                     | 230         | Man.                   | 9.2                  | 13.75                   |
| 3   | 1740            | 184TC         | 131994            | 1499          | B             | 105                    | 230         | Man.                   | 19.0                 | 16.47                   |
| 5   | 1740            | 184TC         | 131995☆           | 1813          | B             | 105                    | 230         | Man.                   | 20.5                 | 17.47                   |

■ Combination 56 HZ base has mounting holes for NEMA 56 and 143-5T and a standard NEMA 145T frame shaft of 7/8" diameter.

□ Combination 56H base has mounting holes for NEMA 56 and 143-5T and a standard NEMA 56 frame shaft.

☆ Capacitor start/capacitor run design for reduced amperage, others are capacitor start/induction run.

† Class F insulated.

♦ These motors have a NEMA 215T base mounting pattern and shaft height of 5.25", with usable length of 3 3/8" and diameter of 1 1/8" with standard key.

### TWO-WINDING VARIABLE TORQUE PSC TYPE FOR SHAFT MOUNTED FAN APPLICATIONS

These fan and blower duty motors are designed for dependable, *energy saving* performance in applications where the fan is mounted on the shaft of the motor. The permanent split capacitor design does not require a centrifugal switch, resulting in higher reliability than on other types of single phase motors. This design is also more energy efficient and less expensive to operate.



These motors may be operated at listed speed or two speed operation may be achieved by using the proper auxiliary switch. They are suitable for variable speed by adjusting the voltage to the motor using a variable voltage control, except as noted by ∇.

Overload protected with an automatic reset protector. Grounding provisions. Totally enclosed, dust tight design, with resilient mounting for quiet operation. Lubricated with quiet running high temperature lubricant. Corrosion resistant finish for tough applications. Because of the inherently low starting torques of this design, these motors are not suitable for belt driven fan applications. They must be mounted within the air stream of the driven fan.



- \* The useable shaft of this motor is 3/4" longer than NEMA standard to accommodate fan on shaft mountings. 48Z is 1/2" diameter by 2 1/4". 56Z is 5/8" diameter, 2 5/8" long. All have 1" extended through bolts. Except Catalog Numbers 100805 and 100806 which are extended 1/4".
- ∇ Suitable for single speed operation only.
- Combination 56H base motors have mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 56 shaft.
- ① Has provisions for belly band and pedestal fan mount—no rigid base.
- ② In addition to resilient base, this motor has provisions for belly band and pedestal fan mount.
- ✓ This split phase start, capacitor run motor is suitable for belt drive within the airflow of the fan.
- ⊗ Shaft is 5/8" by 2.0"
- \*\* Shaft is 5/8" by 2 5/8"
- \* Shaft is 3/4" by 3 1/2"

### VENTILATION FAN MOTOR SHAFT-MOUNTED • DUST-TIGHT

Totally enclosed, high efficiency, permanent split capacitor motor for direct drive exhaust ventilation fans in poultry and livestock houses. Fully gasketed, dust-tight construction with sealed bearings and shaft slinger. Automatic thermal overload protector. Extended through-bolts for mounting, no base. Built-in terminal panel for quick, easy connection. Grounding provision.

Because of the inherently low starting torque of this design, this motor is not suitable for belt-driven fan applications. It must be mounted in the air stream of the fan for cooling.



### SINGLE PHASE • PSC • TEAO • RESILIENT BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------------|
| 1/4 | 1625            | 48Z*          | 100803            | \$349         | A             | 19                     | 115/230 | Auto.                  | 1.4                  | 10.66                   |
|     | 1075            | 48Z*          | 100824            | 411           | A             | 20                     | 115/230 | Auto.                  | 1.4                  | 10.66                   |
|     | 1075            | S56Z*         | 100805            | 441           | A             | 22                     | 115/230 | Auto.                  | 1.4                  | 11.06                   |
| 1/3 | 1625            | 48Z*          | 100804            | 376           | A             | 21                     | 115/230 | Auto.                  | 1.6                  | 10.66                   |
|     | 1625            | S56H          | 100767            | 406           | A             | 22                     | 115/230 | Auto.                  | 1.6                  | 10.31                   |
|     | 1625            | 56HY          | 111348②           | 406           | A             | 24                     | 115/230 | Auto.                  | 1.7                  | 13.44                   |
|     | 1075            | 48Z*          | 100825            | 476           | A             | 25                     | 115/230 | Auto.                  | 1.8                  | 11.16                   |
|     | 1075            | S56HZ*        | 100806            | 505           | A             | 27                     | 115/230 | Auto.                  | 1.8                  | 11.56                   |
| 1/2 | 1625            | 56HZ*         | 111323            | 424           | A             | 30                     | 115/230 | Auto.                  | 2.6                  | 12.56                   |
|     | 1625            | S56H          | 100768            | 432           | A             | 36                     | 115/230 | Auto.                  | 2.2                  | 10.81                   |
|     | 1075            | 48Z*          | 101645            | 557           | A             | 33                     | 115/230 | Auto.                  | 2.8                  | 11.16                   |
|     | 1075            | 56HZ*         | 111321□           | 547           | A             | 37                     | 115/230 | Auto.                  | 3.0                  | 13.56                   |
|     | 850             | 48YZ⊗         | M099836∇          | 380           | A             | 24                     | 115/230 | Auto.                  | 3.0                  | 11.55                   |
|     | 825             | 56HZ*         | 111919□∇          | 677           | A             | 40                     | 115/230 | Auto.                  | 3.2                  | 13.56                   |
| 3/4 | 1625            | 56HZ*         | 111324            | 627           | A             | 34                     | 115/230 | Auto.                  | 3.5                  | 13.06                   |
|     | 1625            | 56H           | 111266            | 627           | A             | 36                     | 115/230 | Auto.                  | 3.5                  | 12.31                   |
|     | 1075            | 56HZ*         | 111322□∇          | 646           | A             | 44                     | 115/230 | Auto.                  | 4.0                  | 13.56                   |
| 1   | 1625            | 56HZ          | 111267            | 658           | A             | 39                     | 115/230 | Auto.                  | 4.4                  | 12.81                   |

These motors have a 1.0 Service Factor

### SINGLE PHASE • PSC TYPE • RIGID BASE TOTALLY ENCLOSED AIR OVER (TEAO)

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/4 | 1750            | 48Y           | 101252∇           | \$344         | A             | 19                     | 115/208-230 | Auto.                  | 1.5                  | 10.90                   |
|     | 1625            | 48Y           | 100699            | 341           | A             | 19                     | 115/230     | Auto.                  | 1.4                  | 10.65                   |
|     | 1625            | 48Y           | M099799           | 270           | A             | 19                     | 115/230     | Auto.                  | 1.5                  | 10.79                   |
|     | 1075            | 48Y           | M099260           | 282           | A             | 21                     | 115/230     | Auto.                  | 1.2                  | 10.83                   |
| 1/3 | 1725            | 48Y           | M090253∇          | 279           | A             | 22                     | 115/230     | Auto.                  | 1.8                  | 10.47                   |
|     | 1750            | 48Y           | 101253∇           | 398           | A             | 22                     | 115/208-230 | Auto.                  | 1.9                  | 10.65                   |
|     | 1625            | 48Y           | 100700            | 395           | A             | 22                     | 115/230     | Auto.                  | 1.6                  | 10.65                   |
|     | 1625            | 56Y           | 111202①           | 395           | A             | 24                     | 115/230     | Auto.                  | 1.7                  | 12.00                   |
|     | 1625            | 48Y           | M099800           | 306           | A             | 22                     | 115/230     | Auto.                  | 1.8                  | 10.79                   |
|     | 1075            | 48Y           | M099261           | 333           | A             | 21                     | 115/230     | Auto.                  | 1.5                  | 11.34                   |
| 1/2 | 1140            | S56Y          | 100604            | 496           | A             | 23                     | 115/230     | Auto.                  | 1.8                  | 11.40                   |
|     | 1750            | S56Y          | 101176/∇          | 421           | A             | 26                     | 115/230     | Auto.                  | 3.5                  | 10.40                   |
|     | 1625            | 48Y           | 100701            | 418           | A             | 29                     | 115/230     | Auto.                  | 2.5                  | 12.15                   |
|     | 1625            | 48Y           | M099801           | 330           | A             | 29                     | 115/230     | Auto.                  | 2.5                  | 10.79                   |
| 3/4 | 1075            | 48Y           | M099946           | 344           | A             | 26                     | 115/230     | Auto.                  | 2.5                  | 11.81                   |
|     | 1075            | 56HZ          | M099847           | 532           | A             | 36                     | 115/230     | Auto.                  | 3.6                  | 13.56                   |

### SINGLE PHASE • TEAO • THRU BOLT MOUNT

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------------|
| 1/3 | 1625            | 48Y           | M090085           | \$299         | A             | 20                     | 115/230 | Auto.                  | 1.8                  | 10.79                   |
| 1/2 | 1625            | 48Y           | M090086           | 323           | A             | 22                     | 115/230 | Auto.                  | 2.5                  | 10.79                   |
|     | 825             | 56Z           | 114620∇           | 561           | A             | 35                     | 115/230 | Auto.                  | 3.2                  | 12.63                   |
|     | 850             | 48Y           | M099250**∇        | 363           | A             | 24                     | 115/230 | Auto.                  | 3.0                  | 11.00                   |

### SINGLE & THREE PHASE • TEAO • C FACE LESS BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | Phase | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|-------|----------------------|-------------------------|
| 1/2 | 850             | S56C          | M099251∇          | \$366         | A             | 24                     | 115/230     | Auto.                  | 1     | 3.0                  | 10.40                   |
| 1   | 850             | S56CZ         | M009644∇*         | 614           | A             | 45                     | 230         | Auto.                  | 1     | 4.6                  | 15.60                   |
| 1/2 | 850             | 56C           | 116201            | 505           | A             | 35                     | 208-230/460 | ...                    | 3     | 3.0                  | 10.90                   |
| 1   | 850             | 56C           | 116202            | 628           | A             | 45                     | 208-230/460 | ...                    | 3     | 5.0                  | 12.90                   |



## AGRICULTURAL MOTORS

SINGLE AND THREE PHASE

### AERATION FAN MOTORS BELT-DRIVEN • DUST-TIGHT

**Totally enclosed air over motors,** dust-tight, suitable for shaft-mounted fans or belt driven fans. Capacitor start designs. Designed to be used within the airflow of the driven fan, these motors offer protection from the environment and are finished in epoxy enamel to resist corrosion in tough atmospheres. Lubricated with high temperature Exxon POLYREX® EM lubricant. Grounding provisions. Fully gasketed. Single phase motors have built-in terminal panel for quick, easy connections.



### CROP DRYER MOTORS

Open air over, fan-on-shaft design motors for crop drying applications. Designed for continuous duty operation. Class F insulation system. Thermostats provide thermal overload protection on all units. Extra nameplate included for remote mounting. Keyed shaft with 1/4-20 UNC tapped hole in end.

Capacitors supplied on single phase models. All models include sealed bearings, rodent screens, gray epoxy paint and 3/4" leads exiting the motor at 12 o'clock.



### GRAIN STIRRING MOTORS DUST-TIGHT

Dust-Tight Motors designed to operate inside agricultural storage bins for stirring grain, corn and other agricultural products.

#### Mechanical Features:

External cast aluminum cooling fan at shaft end keeps grain from obstructing fan operation. Prelubricated double shielded ball bearings packed with Exxon POLYREX® EM grease (temperature range -20°F to +350°F). Totally enclosed construction with gasketed conduit box and capacitor cases. Moisture drain hole in endshield opposite shaft for vertical shaft up mounting. Rugged 205 bearing shaft-end. Shaft is 7/8" diameter, useable length of 15/16". "BA" dimension is 35/8".

#### Electrical Features:

Energy-saving, extra high torque designs.



### SINGLE PHASE • CAPACITOR START • TEAO • RIGID BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------------|
| 3/4 | 3450            | 56            | <b>111332</b> ⑦   | \$353         | A             | 27                     | 115/230 | None                   | 5.0                  | 10.90                   |
| 1   | 3450            | 56            | <b>111333</b> ⑦   | 418           | A             | 29                     | 115/230 | None                   | 6.0                  | 10.90                   |
| 1½  | 3450            | 56            | <b>111949</b> ⑦   | 541           | A             | 32                     | 115/230 | None                   | 8.5                  | 11.40                   |
|     | 3450            | 143TZ         | <b>120374</b> ⑧   | 581           | B             | 31                     | 115/230 | None                   | 8.5                  | 11.84                   |
| 2   | 3450            | 145TZ         | <b>120375</b> ⑧   | 708           | B             | 41                     | 230     | None                   | 10.0                 | 13.34                   |
| 3   | 3450            | 145T          | <b>120376</b> ☆   | 745           | B             | 45                     | 230     | None                   | 12.8                 | 13.84                   |

### THREE PHASE • TEAO • RIGID BASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 3/4 | 3450            | 56Z           | <b>111334</b> ⑦   | \$360         | A             | 21                     | 208-230/460 | 2.4                  | 75.5              | 9.90                    |
| 1   | 3450            | 56Z           | <b>111335</b> ⑦   | 392           | A             | 22                     | 208-230/460 | 3.2                  | 77.0              | 9.90                    |
| 1½  | 3450            | 143TZ         | <b>120377</b> ⑧   | 450           | B             | 31                     | 208-230/460 | 4.2                  | 82.5              | 11.34                   |
| 2   | 3450            | 145TZ         | <b>120378</b> ⑧   | 532           | B             | 34                     | 208-230/460 | 5.6                  | 82.5              | 11.84                   |
| 3   | 3450            | 145T          | <b>120379</b> ⑧   | 598           | B             | 38                     | 230/460     | 7.6                  | 84.0              | 12.34                   |

### SINGLE PHASE

| HP     | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|--------|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------------|
| 5-7    | 3450            | 182TZ         | <b>131847</b>     | \$1108        | B             | 91                     | 230     | T-Stat                 | 27.2-35.0            | 16.44                   |
| 7.5-10 | 3450            | 182TZ         | <b>131848</b>     | 1231          | B             | 95                     | 230     | T-Stat                 | 31.0-42.0            | 16.44                   |
| 10-15  | 3450            | 215TZ         | <b>140640</b>     | 1893          | B             | 159                    | 230     | T-Stat                 | 39.5-61.5            | 20.42                   |

### THREE PHASE

| HP     | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|--------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 5-7.5  | 3450            | 184TZ         | <b>131849</b>     | \$897         | B             | 70                     | 208-230/460 | T-Stat                 | 19.0                 | 13.94                   |
| 7.5-10 | 3450            | 184TZ         | <b>131850</b>     | 1048          | B             | 85                     | 208-230/460 | T-Stat                 | 24.2                 | 15.44                   |
| 10-15  | 3450            | 215TZ         | <b>140641</b>     | 1265          | B             | 95                     | 208-220/440 | T-Stat                 | 40.0                 | 17.41                   |

### SINGLE PHASE • RIGID BASE • TEFC

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1½ | 1725            | 56HZ          | <b>111330</b> ☆   | \$688         | A             | 42                     | 115/208-230 | Man.                   | 8.6                  | 12.31                   |

### THREE PHASE • RIGID BASE • TEFC

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 1½ | 1725            | 56HZ          | <b>111329</b>     | \$700         | A             | 38                     | 208-230/460 | 5.4                  | 80.0              | 11.81                   |

These Grain Stirring motors have NEMA Service Factor of 1.0

⑦ Standard 5/8" diameter shaft with keyway plus 3/4" deep hole drilled and tapped to 1/4-20 UNC in end of shaft to facilitate mounting of some fan blades.

⑧ Standard 7/8" diameter shaft with keyway plus 3/4" deep hole drilled and tapped to 1/4-20 UNC in end of shaft to facilitate mounting of some fan blades.

☆ Capacitor start/capacitor run design for reduced amperage, others are capacitor start/induction run.

All 180 and 210 frame Rolled Steel motors have Class F Insulation.



### CATFISH POND MOTORS

Specially designed for aeration systems used on aquaculture ponds, these motors are designed for dependable outdoor applications. Typically C-face connected to a right-angle gearbox and installed on a floating aeration platform.



Hi-torque motors are epoxy-painted with a corrosion-resistant interior coating. Stainless hardware, fan guard, lifting lug, and conduit box cover for maximum protection against corrosion. Drain holes in the conduit box and in four positions on each end of the frame to purge condensate and moisture that may enter the motor. Ball bearings are double-sealed and lubricated with Exxon POLYREX® EM high temperature, moisture resistant lubricant.

All 180 and 210 frame Rolled Steel motors have Class F Insulation.

### IRRIGATION BOOSTER PUMP MOTOR

Threaded-shaft jet pump motor for shaft-down mounting. TEFC with rain canopy. Locked bearing on shaft end, for longer motor life. Neoprene shaft flinger repels moisture. Drain holes in C face and conduit box. Epoxy paint and fully gasketed. Stator impregnated with extra-heavy varnish system.



### IRRIGATION DRIVE MOTORS

Specially designed for pivoting irrigation systems exposed to severe weather environments and operating conditions.

#### Mechanical Features:

Double sealed ball bearings prelubricated with Exxon POLYREX® EM grease having an operating temperature range of -20°F to +350°F and special formulation to provide extra long life and moisture resistance. Moisture drain holes at shaft-end of motor. Die cast aluminum conduit box fully gasketed. Epoxy paint for corrosion resistance. Externally fan cooled with rain canopy over cooling fan, for shaft down mounting.



#### Electrical Features:

"Extra high" starting torque, Class "F" copper windings. Specially treated windings for excessive moisture conditions. Capable of multiple starts and stops. Automatic protector for overload and low voltage protection.

### MILK TRANSFER PUMP MOTOR

#### General Specifications:

Totally enclosed non-ventilated motor. Direct replacement for Surge milk pumps, Babson motor #27732.



#### Mechanical Features:

Special moisture resistant design with double sealed ball bearings. Bearings and bearing cavities packed with high temperature moisture resistant lubricant. Drain holes to expel moisture and water. Epoxy paint.

#### Electrical Features:

Permanent split capacitor design for reliability and improved efficiency. High temperature Class F insulation system. Requires 30 MFD, 370 VAC capacitor, separately mounted – not supplied.

### SINGLE AND THREE PHASE • C FACE WITH BASE • TEFC

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Phase | F.L.<br>Amps<br>460V | "C"<br>Dim.<br>(Inches) |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|-------|----------------------|-------------------------|
| 10 | 1740            | 215TC         | 140705*           | \$2091        | B             | 204                    | 230         | 1     | 40.0                 | 20.71                   |
|    | 1740            | 215TC         | G140709           | 1206          | B             | 169                    | 208-230/460 | 3     | 26.0                 | 18.71                   |

\* Single phase motor has manual reset overload protection

### THREE PHASE • IRRIGATION BOOSTER • TEFC

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | F.L.<br>Amps<br>460V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|----------------------|-------------------|-------------------------|
| 2  | 3450            | 56J           | 112991            | \$671         | A             | 33                     | 460     | 2.8                  | 84.0              | 14.34                   |

### C FACE LESS BASE • THREE PHASE • TEFC

| HP | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|----------------------|-------------------|-------------------------|
| 1  | 1725            | 56C           | 111304            | \$648         | A             | 30                     | 460     | 2.4                  | 75.0              | 12.34                   |

These Irrigation Drive motors have a 1.25 Service Factor.

### SINGLE PHASE • RIGID BASE • TENV

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------------|
| 1/2 | 3450            | 56CZ          | 113939            | \$450         | A             | 42                     | 230     | None                   | 4.5                  | 13.07                   |



## POULTRY MOTORS

### SINGLE AND THREE PHASE

### FEED-AUGER DRIVE MOTORS DUST-TIGHT

#### Dust-tight, capacitor start motor

with your choice of field proven electronic or protected mechanical starting switch—both eliminate damage caused when motor is over-speeded by obstructed auger.



Ball bearing, heavy duty industrial quality designs for high overload capacity.

Side mounted conduit box. Flange mounts directly to drive assembly. Fully gasketed to keep out feed dust. Has screw driver slot in rear shaft. Continuous duty, with manual thermal overload protection.

Motors of 3/4 HP and less in the two adjacent charts have shaft of 1/2" diameter x 1 1/2" length, with flat; motors 1 HP and larger have 5/8" diameter x 1.97" length, with key.

### SINGLE PHASE • TEFC • 60 HERTZ

| HP    | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|-------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|-------------------------|
| 1/3   | 1725            | 48YZ          | 101159            | \$459         | A             | 21                     | 115/230     | Man.                   | 3.1                  | 10.47                   |
|       | 1725            | 48YZ          | 101435®           | 442           | A             | 21                     | 115/230     | Man.                   | 3.1                  | 10.47                   |
| 1/2   | 1725            | 48YZ          | 101120            | 517           | A             | 22                     | 115/208-230 | Man.                   | 4.0                  | 10.72                   |
|       | 1725            | 48YZ          | 101436®           | 505           | A             | 22                     | 115/208-230 | Man.                   | 4.0                  | 10.47                   |
| 3/4   | 1725            | 48YZ          | 101119            | 604           | A             | 24                     | 115/208-230 | Man.                   | 5.4                  | 11.47                   |
|       | 1725            | 48YZ          | 101437®           | 520           | A             | 28                     | 115/230     | Man.                   | 5.4                  | 11.47                   |
| 1     | 1725            | 56YZ          | 112615            | 669           | A             | 35                     | 115/230     | Man.                   | 7.0                  | 12.11                   |
|       | 1725            | 56YZ          | 113302®           | 652           | A             | 35                     | 115/208-230 | Man.                   | 7.0                  | 12.61                   |
| 1 1/2 | 1725            | 56YZ          | 113280☆           | 1111          | A             | 47                     | 115/208-230 | Man.                   | 6.5                  | 13.62                   |
|       | 1725            | 56YZ          | 113301☆®          | 1096          | A             | 44                     | 115/230     | Man.                   | 6.5                  | 13.62                   |

### SINGLE PHASE • TEFC • 50 HERTZ

| HP    | RPM<br>50<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>220V | "C"<br>Dim.<br>(Inches) |
|-------|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------------|
| 1/2   | 1425            | 48YZ          | 101643®           | \$559         | A             | 26                     | 110/220 | Man.                   | 4.0                  | 11.47                   |
| 3/4   | 1425            | 48YZ          | 101644®           | 601           | A             | 30                     | 110/220 | Man.                   | 5.8                  | 12.22                   |
| 1     | 1425            | 56YZ          | 113906®           | 730           | A             | 39                     | 110/220 | Man.                   | 6.4                  | 12.61                   |
| 1 1/2 | 1425            | 56YZ          | 113907®           | 1221          | A             | 48                     | 110/220 | Man.                   | 8.6                  | 13.61                   |

### HATCHERY AND INCUBATOR FAN MOTORS



Cat. No. 101341



Cat. No. 114102

#### General Specifications:

Capacitor-type replacement motors for hatchery and incubator fan motors.

**Catalog number 101341** is a permanent split capacitor motor for fan on shaft incubator fans. Band mounted, with 1" long extended through bolts for fan shroud. Shaft diameter 1/2" by 2 1/4", with full length flat. Connections in end of motor through 1/2"-14 NPT tap. UL Listed thermal overload. 15 MFD, 3700 run capacitor shipped loose with motor.

### SINGLE PHASE • TEAO

| HP           | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(Inches) |
|--------------|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------------|
| 1/4          | 1625            | 48Y           | 101341            | \$347         | A             | 17                     | 115/230 | Auto.                  | 1.4                  | 8.93                    |
| 1/2-<br>0.22 | 1725/<br>1140   | 56H           | 114102            | 454           | A             | 33                     | 115     | Auto.                  | 9.3-5.6              | 11.81                   |

**Catalog number 114102** is a split phase two-speed motor, dust-tight and totally enclosed for belt driven hatchery cooling fans. Resilient base. With UL Listed automatic thermal overload. Requires no capacitor.

#### Mechanical Features:

Double shielded ball bearings permanently lubricated with Exxon POLYREX® EM lubricant having a temperature range of -40°F to +320°F and special formulation for extra long life and moisture resistance.

### FEATHER PICKER MOTORS

Motors with the dimensions to replace the MEYN drive motor. Phosphatized or stainless, drilled and tapped metric shaft for easy mounting. Special duty rating with extra high breakdown torques for superior performance on this demanding application. See page 25 for complete listing of WASHGUARD features.



Totally enclosed fan cooled construction, sealed bearings, condensate drains, USDA approved food-safe tough white epoxy finish.

All 180 and 210 frame Rolled Steel motors have Class F Insulation.

### THREE PHASE • TEFC

| HP/KW  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|--------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|----------------------|-------------------|-------------------------|
| 2      | 1740            | 145T          | G121191           | \$581         | B             | 46                     | 208-230/460 | 5.6                  | 84.0              | 13.75                   |
| 2*     | 1140            | 184TZ         | G131575           | 886           | B             | 84                     | 230/460     | 7.2                  | 86.5              | 15.96                   |
| 2/1.5* | 1140            | 112MD         | G131635           | 927           | B             | 84                     | 230/460     | 7.2                  | 86.5              | 15.96                   |
| 3      | 1740            | 56HZ          | 115751■           | 810           | A             | 45                     | 208-230/460 | 8.6                  | 82.5              | 14.25                   |

Note: Catalog Number 115751 has a 303 stainless steel shaft.

- Combination 56HZ base has mounting holes for NEMA 56 and 143-5T and a standard NEMA 145T frame shaft of 7/8" diameter.
- ✧ These motors have a 1.5 continuous duty service factor, 3 HP continuous.
- ▶ IEC frame. See page 310 for dimensions.
- ☆ Capacitor start/capacitor run design for reduced amperage, others are capacitor start/induction run.
- ® Mechanical centrifugal starting switch with overspeed protection, others have electronic switch.
- ※※ F.L. Amps listed are for high speed and low speeds, respectively, at 115 volts.

Catalog numbers in green are EPACT motors.

# AGRICULTURAL MOTORS

## GENERAL PURPOSE, FAN AND BLOWER - SINGLE PHASE



### INDUSTRY-AG • 115-208/230V • TEFC 1725 RPM • HIGH TORQUE RIGID BASE

Industry-Ag is a new line of heavy duty single phase hi-torque motors built to withstand the tough applications in industry and agriculture.

**Mechanical Features:**  
Gasketed capacitor housing and conduit boxes provide protection in all environments. Double sealed ball bearings provide extra bearing protection.

Rubber boot over manual protector reset button provides weather protection.

**Electrical Features:** Manual thermal protector protects against overload. Capacitor start provides high starting torque with normal starting current.



### RIGID BASE • 115-208/230V • TEFC

| HP       | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(in.) |
|----------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|----------------------|
| 1/3      | 1725            | 56            | M002256           | \$355         | A             | 24                     | 115-208/230 | Man.                   | 2.9                  | 11.00                |
| 1/2      | 1725            | 56            | M009086           | 418           | A             | 27                     | 115-208/230 | Man.                   | 3.9                  | 11.00                |
| 3/4      | 1725            | 56            | M009087           | 487           | A             | 30                     | 115-208/230 | Man.                   | 5.0                  | 11.50                |
| 1        | 1725            | 56            | M009088           | 513           | A             | 34                     | 115-208/230 | Man.                   | 6.8                  | 11.50                |
| 1½       | 1725            | 56            | M009089           | 607           | A             | 41                     | 115-208/230 | Man.                   | 9.0                  | 12.88                |
| 2        | 1725            | 56HZ          | M009090           | 865           | A             | 48                     | 230         | Man.                   | 9.5                  | 14.00                |
| C Flange |                 | 56            | M064076           | 47            | A             | 3                      | —           | —                      | —                    | —                    |

### C FACE LESS BASE • 115-208/230 • TEFC

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(in.) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|----------------------|
| 1/3 | 1725            | 56C           | M002290           | \$430         | A             | 24                     | 115-208/230 | Man.                   | 2.9                  | 10.81                |
| 1/2 | 1725            | 56C           | M009492           | 472           | A             | 27                     | 115-208/230 | Man.                   | 3.9                  | 10.81                |
| 3/4 | 1725            | 56C           | M009493           | 532           | A             | 30                     | 115-208/230 | Man.                   | 5.0                  | 11.31                |
| 1   | 1725            | 56C           | M009494           | 554           | A             | 34                     | 115-208/230 | Man.                   | 6.8                  | 11.81                |

### VARIABLE SPEED HIGH-PERFORMANCE AG FAN MOTORS

The all new **PERFORMA+** brings fan motor performance to a new level. These high-efficiency motors feature exceptional variable speed performance.

**Features:**  
Water-tight connection end compartment with removable cover, houses the capacitor, thermal protector and wiring—allowing unimpeded airflow over the motor frame.

Locked, double-sealed bearings for all angle mounting, including vertical shaft up.

Oil seal in drive end repels moisture and contaminants.

Class F insulation with Class B rise.

Permanent split capacitor type design eliminates the centrifugal switch for "three phase" type reliability.

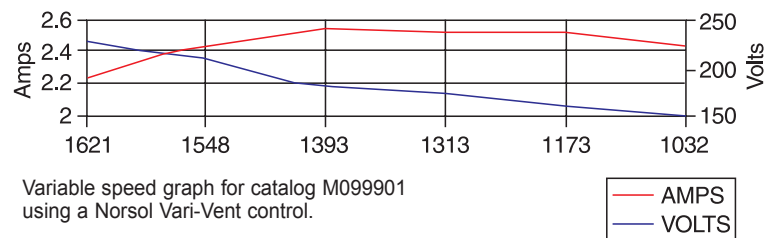
Automatic thermal overload protection.



### TEAO • RIGID BASE • EXTENDED THRU-BOLTS

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | Shaft<br>Length<br>(in.) | "C"<br>Dim.<br>(in.) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|----------------------|--------------------------|----------------------|
| 1/4 | 1625            | 48Y           | M099899           | \$268         | A             | 18                     | 115-208/230 | Auto.                  | 1.3                  | 2                        | 11.30                |
|     | 1075            | 48Y           | M099460           | 288           | A             | 21                     | 115/208-230 | Auto.                  | 1.3                  | 2                        | 11.80                |
| 1/3 | 1625            | 48Y           | M099900           | 284           | A             | 19                     | 115-208/230 | Auto.                  | 1.8                  | 2                        | 11.30                |
|     | 1075            | 48Y           | M099461           | 309           | A             | 22                     | 115/208-230 | Auto.                  | 1.9                  | 2                        | 11.80                |
| 1/2 | 1650            | 48Y           | M099901           | 316           | A             | 22                     | 115-208/230 | Auto.                  | 2.6                  | 2                        | 11.70                |
|     | 1075            | 48Y           | M099462           | 336           | A             | 25                     | 115/208-230 | Auto.                  | 2.8                  | 2                        | 12.20                |

PERFORMA+ Fan Motor Performance @ 0.05 Inches S.P.



### AGRICULTURAL FAN MOTORS BELT DRIVE • TEAO

FHP motors designed for use in agricultural belted fan applications. These motors feature capacitor start/capacitor run configuration for hi-efficiency. They should be mounted in the airstream for proper cooling. They also feature a heavy gauge steel frame with rigid 56/140 combination base.



### HIGH-EFFICIENCY • SINGLE PHASE

| HP  | RPM<br>60<br>Hz | NEMA<br>Frame | Catalog<br>Number    | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | Eff. | Over-<br>load<br>Prot. | F.L.<br>Amps<br>230V | "C"<br>Dim.<br>(in.) |
|-----|-----------------|---------------|----------------------|---------------|---------------|------------------------|-------------|------|------------------------|----------------------|----------------------|
| 1/2 | 1725            | 56            | M009580              | \$386         | A             | 27                     | 115/208-230 | —    | —                      | —                    | —                    |
| 3/4 | 1725            | 56H           | M009581              | 410           | A             | 30                     | 115/208-230 | 82   | Auto.                  | 3.4                  | 10.83                |
| 1   | 1725            | 56H           | M009782              | 427           | A             | 37                     | 115/208-230 | 85   | Auto.                  | 4.3                  | 11.80                |
| 1½  | 1725            | 56H           | M009594              | 509           | A             | 39                     | 115/208-230 | 78   | Auto.                  | 6.8                  | 12.60                |
| 2   | 1725            | 145T          | M009595 <sup>①</sup> | 565           | A             | 47                     | 230         | 82   | Auto.                  | 9.5                  | 12.80                |

① Motor M009595 has a frame mounted conduit box.



# LEESON® 50 HERTZ MOTORS SINGLE PHASE

## 50 HZ • SINGLE PHASE

### General Specifications:

50 Hz single phase designs produce full rated HP on 50 Hz power supply. Designed for general purpose application.

### Electrical Features:

High efficiency energy saving designs. Centrifugal switch specifically designed for 50 Hz service. Conduit box with leads. Torque at rated HP on 50 Hz power supply is 20% greater than the running torque of a 60 Hz motor. All 180 and 210 frame Rolled Steel motors have Class F Insulation.



### SINGLE PHASE • DRIP-PROOF • RIGID BASE • IP22

| HP  | RPM<br>50<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>220V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------------|
| 1/3 | 2850            | ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |
|     | 1425            | 56            | 110394            | \$368         | A             | 22                     | 110/220 | None                   | 3.2                  | 9.88                    |
|     | 1425            | ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |
| 1/2 | 2850            | 56            | 113901            | 329           | A             | 25                     | 110/220 | None                   | 3.8                  | 10.34                   |
|     | 1425            | 56            | 110395            | 466           | A             | 25                     | 110/220 | None                   | 4.1                  | 10.38                   |
|     | 1425            | ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |
| 3/4 | 2850            | 56            | 113902            | 412           | A             | 27                     | 110/220 | None                   | 5.6                  | 10.34                   |
|     | 1425            | 56            | 110396            | 559           | A             | 30                     | 110/220 | None                   | 5.9                  | 10.88                   |
|     | 1425            | ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |
| 1   | 2850            | 56            | 113903            | 457           | A             | 31                     | 110/220 | None                   | 6.6                  | 10.84                   |
|     | 1425            | 56H           | 110397□           | 616           | A             | 35                     | 110/220 | None                   | 6.4                  | 11.88                   |
|     | 1425            | ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |
| 1½  | 2850            | 56H           | 113904            | 587           | A             | 37                     | 110/220 | None                   | 8.6                  | 11.84                   |
|     | 1425            | 56H           | 110398☆□          | 694           | A             | 43                     | 110/220 | None                   | 8.4                  | 12.35                   |
|     | 1425            | ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |
| 2   | 2850            | 56H           | 113905            | 719           | A             | 42                     | 110/220 | None                   | 10.7                 | 12.34                   |
|     | 1440            | 182T          | 131553            | 835           | B             | 70                     | 220     | None                   | 11.8                 | 13.69                   |
|     | 1440            | ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |
| 3   | 2850            | 56H           | 113937†           | 852           | A             | 47                     | 220     | None                   | 12.4                 | 12.84                   |
|     | 2850            | ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |
|     | 1440            | 184T          | 131554            | 954           | B             | 80                     | 220     | None                   | 16.8                 | 14.69                   |
| 5   | 2850            | ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |
|     | 1440            | 184T          | 131555☆           | 1952          | B             | 95                     | 220     | None                   | 23.2                 | 15.69                   |
|     | 1440            | ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |

### SINGLE PHASE • TEFC • RIGID BASE • IP54

| NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>220V | "C"<br>Dim.<br>(Inches) |
|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------------|
| 56            | 113916            | \$339         | A             | 25                     | 110/220 | None                   | 3.2                  | 10.81                   |
| 56            | 110423            | 429           | A             | 24                     | 110/220 | None                   | 3.2                  | 10.81                   |
| 56            | 113908            | 433           | A             | 26                     | 110/220 | Man.                   | 3.2                  | 10.81                   |
| 56            | 113917            | 362           | A             | 27                     | 110/220 | None                   | 3.8                  | 11.31                   |
| 56            | 110064            | 492           | A             | 25                     | 110/220 | None                   | 4.1                  | 11.31                   |
| 56            | 113909            | 492           | A             | 29                     | 110/220 | Man.                   | 4.1                  | 11.31                   |
| 56            | 113918            | 412           | A             | 29                     | 110/220 | None                   | 5.6                  | 11.31                   |
| 56            | 110065†           | 563           | A             | 32                     | 110/220 | None                   | 5.9                  | 11.81                   |
| 56            | 113910            | 584           | A             | 32                     | 110/220 | Man.                   | 5.9                  | 11.81                   |
| 56            | 113919            | 478           | A             | 32                     | 110/220 | None                   | 6.6                  | 11.81                   |
| 56H           | 110066□           | 677           | A             | 38                     | 110/220 | None                   | 6.4                  | 12.81                   |
| 56            | 113911†           | 677           | A             | 34                     | 110/220 | Man.                   | 6.4                  | 12.31                   |
| 56H           | 113920            | 629           | A             | 44                     | 110/220 | None                   | 8.0                  | 13.31                   |
| 56H           | 110424†☆□         | 767           | A             | 47                     | 110/220 | None                   | 8.6                  | 13.31                   |
| 56H           | 113929†☆          | 700           | A             | 49                     | 110/220 | Man.                   | 8.6                  | 13.31                   |
| 56HZ          | 113928†■          | 761           | A             | 44                     | 110/220 | None                   | 10.7                 | 13.76                   |
| 182T          | 131556            | 1151          | B             | 95                     | 220     | None                   | 11.2                 | 15.96                   |
| 182T          | 131600            | 1136          | B             | 71                     | 220     | Man.                   | 12.0                 | 14.96                   |
| 145T          | 121070†☆          | 936           | B             | 50                     | 220     | None                   | 12.4                 | 12.84                   |
| 56H           | 113936†☆          | 936           | A             | 48                     | 220     | None                   | 12.4                 | 13.81                   |
| 184T          | 131557            | 1644          | B             | 98                     | 220     | None                   | 15.9                 | 16.96                   |
| 184T          | 131601            | 1618          | B             | 98                     | 220     | Man.                   | 15.9                 | 16.96                   |
| 184T          | 131638☆           | 1083          | B             | 98                     | 220     | None                   | 20.5                 | 17.46                   |
| 184T          | 131578☆           | 2085          | B             | 103                    | 220     | None                   | 21.0                 | 17.46                   |
| 213TZ         | 140475☆           | 2095          | B             | 163                    | 220     | Man.                   | 24.5                 | 18.71                   |

### SINGLE PHASE • DRIP-PROOF • RESILIENT BASE • IP22

| HP  | RPM<br>50<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>220V | "C"<br>Dim.<br>(Inches) |
|-----|-----------------|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------------|
| 1/3 | 2850            | 56            | 114222            | \$287         | A             | 24                     | 110/220 | None                   | 3.2                  | 10.82                   |
|     | 1425            | 56            | 114223            | 376           | A             | 24                     | 110/220 | None                   | 3.2                  | 10.81                   |
|     | 1425            | ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |
| 1/2 | 2850            | 56            | 114224            | 335           | A             | 26                     | 110/220 | None                   | 3.8                  | 11.32                   |
|     | 1425            | 56            | 114225            | 469           | A             | 27                     | 110/220 | None                   | 4.1                  | 11.31                   |
|     | 1425            | ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |
| 3/4 | 2850            | 56            | 114226            | 408           | A             | 28                     | 110/220 | None                   | 5.6                  | 11.32                   |
|     | 1425            | 56            | 114227            | 560           | A             | 31                     | 110/220 | None                   | 5.9                  | 11.81                   |
|     | 1425            | ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |
| 1   | 2850            | 56            | 114228            | 464           | A             | 31                     | 110/220 | None                   | 6.6                  | 11.82                   |
|     | 1425            | 56            | 114229            | 617           | A             | 35                     | 110/220 | None                   | 6.4                  | 12.31                   |
|     | 1425            | ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |
| 1½  | 2850            | ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |
|     | 1425            | 56H           | 114231☆           | 693           | A             | 42                     | 110/220 | None                   | 8.4                  | 13.32                   |
|     | 1425            | ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |
| 2   | 2850            | ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |
|     | 1440            | 56H           | 114233†           | 845           | A             | 49                     | 220     | None                   | 9.6                  | 13.82                   |
|     | 1440            | ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |

### SINGLE PHASE • TEFC • C FACE LESS BASE • IP54

| NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | Over-<br>load<br>Prot. | F.L.<br>Amps<br>220V | "C"<br>Dim.<br>(Inches) |
|---------------|-------------------|---------------|---------------|------------------------|---------|------------------------|----------------------|-------------------------|
| ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |
| 56C           | 113921            | \$442         | A             | 22                     | 110/220 | Man.                   | 3.2                  | 10.81                   |
| 56C           | 113912            | 380           | A             | 25                     | 110/220 | None                   | 3.8                  | 11.31                   |
| ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |
| 56C           | 113922            | 505           | A             | 29                     | 110/220 | Man.                   | 4.1                  | 11.31                   |
| 56C           | 113913            | 422           | A             | 28                     | 110/220 | None                   | 5.6                  | 11.31                   |
| ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |
| 56C           | 113923            | 578           | A             | 31                     | 110/220 | Man.                   | 5.9                  | 11.81                   |
| 56C           | 113914            | 520           | A             | 32                     | 110/220 | None                   | 6.6                  | 11.81                   |
| ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |
| 56C           | 113924†           | 609           | A             | 34                     | 110/220 | Man.                   | 6.4                  | 12.31                   |
| 56C           | 113915            | 676           | A             | 43                     | 110/220 | None                   | 8.0                  | 13.31                   |
| ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |
| 56C           | 113925†☆          | 738           | A             | 42                     | 110/220 | Man.                   | 8.6                  | 13.31                   |
| 145TC         | 120990†☆          | 780           | B             | 47                     | 110/220 | None                   | 8.6                  | 13.75                   |
| ...           | ...               | ...           | ...           | ...                    | ...     | ...                    | ...                  | ...                     |
| 182TC         | 131599            | 1164          | B             | 70                     | 220     | Man.                   | 12.0                 | 14.97                   |

■ Combination 56HZ base has mounting holes for NEMA 56 and 143-5T and a standard NEMA 145T frame shaft of 7/8" diameter.  
□ Combination 56H base motors have mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 56 shaft.  
☆ Capacitor start/capacitor run design for reduced amperage, others are capacitor start/induction run.  
† Class F insulated.

**50 HZ • THREE PHASE****General Specifications:**

Totally enclosed fan cooled, 12-lead motors designed specifically for 50 Hz service. These motors are intended for equipment built in North America and destined for use in 50 Hz service areas of the world.

**Features:**

These NEMA frame motors are designed to North American performance standards, but for 50 Hz service. Suitable for 220/380 volt, 50 Hz, or 440 volt, 50 Hz, three phase power. Torques exceed NEMA performance standards for Design B motors and produce the full rated horsepower at 50 Hz speeds.

Construction meets IEC, IP54 degree of protection standards and utilizes external fan cooling (IEC cooling method IC41). Gasketed conduit box is in the North American standardized F1 location, with leads.

All 180 and 210 frame Rolled Steel motors have Class F Insulation.

**THREE PHASE • TEFC • RIGID BASE • IP54**

| KW/HP     | RPM<br>50<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>380 V. | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|-------------------|-------------------------|
| 0.18/1/4  | 1425            | 48            | 102685            | \$357         | A             | 19                     | 220/380/440 | 1.00                   | 56.0              | 9.06                    |
| 0.25/1/3  | 2850            | 48            | 102686            | 356           | A             | 19                     | 220/380/440 | 0.80                   | 60.0              | 9.93                    |
|           | 1425            | 48            | 102688            | 429           | A             | 19                     | 220/380/440 | 1.10                   | 65.0              | 9.31                    |
|           | 1425            | S56           | 102183            | 401           | A             | 19                     | 220/380/440 | 1.10                   | 65.0              | 9.69                    |
| 0.37/1/2  | 2850            | 48            | 102690            | 412           | A             | 20                     | 220/380/440 | 1.00                   | 69.0              | 10.43                   |
|           | 1425            | 48            | 102692            | 485           | A             | 20                     | 220/380/440 | 1.40                   | 72.0              | 9.81                    |
|           | 1425            | S56           | 102693            | 448           | A             | 20                     | 220/380/440 | 1.40                   | 72.0              | 10.19                   |
|           | 1425            | 56            | 114304●           | 482           | A             | 25                     | 220/380/440 | 1.02                   | 78.0              | 10.38                   |
| 0.55/3/4  | 2850            | 56            | 114306            | 436           | A             | 24                     | 220/380/440 | 1.75                   | 72.0              | 10.81                   |
|           | 1425            | 56            | 114307            | 514           | A             | 27                     | 220/380/440 | 1.85                   | 74.0              | 11.31                   |
| 0.75/1    | 2850            | 56            | 114308            | 523           | A             | 26                     | 220/380/440 | 2.40                   | 71.0              | 11.31                   |
|           | 1425            | 56            | 114888            | 519           | A             | 28                     | 220/380/440 | 2.00                   | 77.0              | 11.31                   |
|           | 1425            | 143T          | 121096            | 519           | B             | 35                     | 220/380/440 | 2.00                   | 77.0              | 12.75                   |
| 1.1/1 1/2 | 2850            | 145T          | 121097            | 538           | B             | 34                     | 220/380/440 | 2.90                   | 80.0              | 12.76                   |
|           | 1425            | 145T          | 121093            | 538           | B             | 40                     | 220/380/440 | 3.30                   | 75.5              | 12.75                   |
| 1.5/2     | 2850            | 145T          | 121094            | 582           | B             | 42                     | 220/380/440 | 3.60                   | 80.0              | 12.76                   |
|           | 1425            | 145T          | 121095            | 609           | B             | 40                     | 220/380/440 | 3.65                   | 81.5              | 13.25                   |
| 2.2/3     | 2850            | 182T          | 131480            | 751           | B             | 58                     | 220/380/440 | 4.80                   | 82.5              | 13.46                   |
|           | 1425            | 182T          | 131459            | 718           | B             | 64                     | 220/380/440 | 4.70                   | 84.0              | 13.46                   |
| 3.7/5     | 2850            | 184T          | 131481            | 886           | B             | 76                     | 220/380/440 | 7.40                   | 84.0              | 14.46                   |
|           | 1425            | 184T          | 131454            | 819           | B             | 82                     | 220/380/440 | 8.10                   | 85.0              | 15.46                   |

● These motors are totally enclosed, non-ventilated, IEC cooling method IC40.

**THREE PHASE • TEFC • C FACE LESS BASE • IP54**

| KW/HP     | RPM<br>50<br>Hz | NEMA<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage     | F.L.<br>Amps<br>380 V. | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----------|-----------------|---------------|-------------------|---------------|---------------|------------------------|-------------|------------------------|-------------------|-------------------------|
| 0.18/1/4  | 1425            | S56C          | 102184            | \$380         | A             | 18                     | 220/380/440 | 1.00                   | 56.0              | 9.44                    |
| 0.25/1/3  | 2850            | S56C          | 102687            | 374           | A             | 19                     | 220/380/440 | 0.80                   | 60.0              | 10.31                   |
|           | 1425            | S56C          | 102689            | 410           | A             | 19                     | 220/380/440 | 1.10                   | 65.0              | 9.69                    |
|           | 1425            | 56C           | 114889            | 439           | A             | 18                     | 220/380/440 | 1.10                   | 68.0              | 10.31                   |
| 0.37/1/2  | 2850            | S56C          | 102691            | 434           | A             | 20                     | 220/380/440 | 1.00                   | 69.0              | 10.81                   |
|           | 1425            | S56C          | 102694            | 482           | A             | 20                     | 220/380/440 | 1.40                   | 72.0              | 10.19                   |
|           | 1425            | 56C           | 114891            | 486           | A             | 20                     | 220/380/440 | 1.15                   | 73.0              | 10.81                   |
|           | 950             | 56C           | 114892            | 538           | A             | 28                     | 220/380/440 | 1.50                   | 68.0              | 11.31                   |
| 0.55/3/4  | 2850            | 56C           | 114893            | 436           | A             | 24                     | 220/380/440 | 1.75                   | 72.0              | 10.81                   |
|           | 1425            | 56C           | 114894            | 520           | A             | 27                     | 220/380/440 | 1.85                   | 74.0              | 11.31                   |
| 0.75/1    | 2850            | 56C           | 114895            | 526           | A             | 26                     | 220/380/440 | 2.40                   | 71.0              | 11.31                   |
|           | 1425            | 56C           | 114896            | 542           | A             | 28                     | 220/380/440 | 2.00                   | 77.0              | 11.31                   |
|           | 1425            | 143TC         | 121272            | 542           | B             | 31                     | 220/380/440 | 2.00                   | 77.0              | 11.75                   |
|           | 950             | 145TC         | 121273            | 623           | B             | 39                     | 220/380/440 | 2.65                   | 73.0              | 13.25                   |
| 1.1/1 1/2 | 2850            | 143TC         | 121274            | 559           | B             | 33                     | 220/380/440 | 2.90                   | 80.0              | 12.25                   |
|           | 1440            | 145TC         | 121275            | 567           | B             | 37                     | 220/380/440 | 3.30                   | 75.5              | 12.75                   |
| 1.5/2     | 2850            | 145TC         | 121276            | 560           | B             | 41                     | 220/380/440 | 3.60                   | 80.0              | 12.75                   |
|           | 1440            | 145TC         | 121277            | 610           | B             | 40                     | 220/380/440 | 3.65                   | 81.5              | 13.75                   |
| 2.2/3     | 2850            | 182TC         | 131505            | 765           | B             | 59                     | 220/380/440 | 4.80                   | 82.5              | 13.97                   |
|           | 1440            | 182TC         | 131506            | 710           | B             | 63                     | 220/380/440 | 4.70                   | 84.0              | 13.97                   |
| 3.7/5     | 2850            | 184TC         | 131507            | 905           | B             | 75                     | 220/380/440 | 7.40                   | 84.0              | 14.47                   |
|           | 1440            | 184TC         | 131508            | 810           | B             | 82                     | 220/380/440 | 8.10                   | 85.0              | 15.47                   |

# LEESON AC METRIC (IEC) MOTORS

## THREE PHASE

### AC METRIC MOTORS

These high efficiency motors meet North American performance standards and EPACT energy efficiency mandates, and have 1.15 service factors.

Typically used for replacement on machine tools, textile machinery and other equipment with metric dimensions but requiring the heavy-duty torque and performance of motors designed for use in North America.

#### Two frame constructions are offered:

**Aluminum frame** models are designated with a 192000 series catalog number, while **cast iron frame** models are 193000 series.

### ALUMINUM FRAME

CSA: File number LR33543

UL: File number E57948 for motors produced January 2004 and later

**IP55 weatherproof enclosure** allows for use in a wide range of applications.

**Drain Hole** locations in four quadrants can be drilled-out for multi-position condensate drainage.

**D flange (B5) and C face (B14)** models available. Field conversion kits also offered.

**"Captive Shaft" keyway.**

**Drilled and tapped shaft.**

**Oil seals** on both the drive end and non drive end.

**High efficiency design** utilizes low-loss steel laminations for optimum power and performance.

**Terminal Boards** included.

- 230/460V motors have 9 leads.
- 575V motors have 3 leads.
- All terminal boards have 6 posts.

**Conduit box** with neoprene gaskets. Reposition metric "PG" tapped lead exit hole by rotating box in 90 degree increments. Move box to F1 or F2 position by relocating motor feet.

**Special design steel fan cover** and low-noise fan maximize airflow efficiency.

**External grounding** provision.

**Multi-mount repositionable feet** allow for three conduit box positions (F2, F1, F3).

**Aluminum "full fact" nameplate** with information on motor efficiency and power factor. Stamped with 60 Hz and 50 Hz data.

**Class F insulation system** with Class B temperature rise or lower.

**Removable feet.**

### CAST IRON FRAME

CSA: File number LR62104

UL: File number E57948 for motors produced June 2003 and later

**Terminal Boards** included.

- 230/460V motors, 132-frame and larger have 12 leads and 9 post terminal boards.
- 230/460V motors, smaller than 132-frame have 9 leads and 6 post terminal boards.
- 575V motors have 3 leads and 6 post terminal boards.

**IP55 weatherproof enclosure** allows for use in a wide range of applications.

**D flange (B5) and C face (B14)** models available. Field conversion kits also offered.

**Drilled and tapped shaft.**

**Oil seals** on both the drive end and non drive end.

**Cast iron mounting feet** are precision machined for accurate alignment.

**Conduit box** with neoprene gaskets. Reposition metric "PG" threaded lead exit by rotating box in 90 degree increments. Motors 132 frame and larger have second lead exit hole for auxiliary box. Box is fixed at F3 location.

**Heavy-duty cast iron** construction includes frame, endbells and conduit box.

**High efficiency design** utilizes low-loss steel laminations for optimum power and performance.

**Non-sparking fan.** Small size reduces noise and enhances efficiency.

**Steel fan cover.**

**Stainless steel "full fact" nameplate** with information on motor efficiency and power factor. Stamped with 60 Hz and 50 Hz data.

**Class F insulation system** with Class B temperature rise or lower.



CONFORMITE  
EUROPEENE

Both types are built to meet international standards and feature IP55 weatherproof enclosures, 60/50 Hz interchangeability (60Hz 230/460 V & 50Hz 200/400V), dual stamped nameplates, CE mark, and F3 conduit box location. Kits are available for field conversion from B3 to B3/B5 or B3/B14.

**LEESON's Inverter Rated Insulation System, (IRIS™)** provides superior protection against voltage spikes induced by variable frequency drives. Always available on cast iron motors now available on aluminum motors produced January 2004 and later.





**B3 FOOT-MOUNTED METRIC MOTORS • 230/460V**

Metric-dimensioned, AC motors meeting North American performance standards, including 1.15 service factor and EPACT efficiencies. For replacement use on machine tools, textile machinery and other equipment with metric dimensions but requiring the heavy-duty torque and performance characteristics of motors designed for use in North America.

IP55 weatherproof enclosures, 60/50 Hz interchangeability (60Hz 230/460V & 50Hz 200/400V), dual stamped nameplates, CE mark, and F3 conduit box location. Kits are available for field conversion from B3 to B3/B5 or B3/B14. See pages 74 and 75 for details.

Motors are available in one of two frame constructions: aluminum or cast iron. Aluminum frame models are designated with a 192000 series catalog number; cast iron models are 193000 series.

**THREE PHASE • IP55 • 1.15 S.F.**

| HP-KW     | RPM<br>60<br>Hz | IEC<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----------|-----------------|--------------|-------------------|---------------|---------------|------------------------|---------|----------------------|-------------------|-------------------------|
| 1/4-0.18  | 3425            | D63          | 192010            | \$209         | A             | 10                     | 230/460 | 0.8                  | 72.0              | 8.55                    |
|           | 1700            | D63          | 192011            | 218           | A             | 11                     | 230/460 | 1.1                  | 68.0              | 8.55                    |
|           | 1100            | D71          | 192012            | 371           | A             | 12                     | 230/460 | 1.2                  | 64.0              | 9.16                    |
| 1/3-0.25  | 3425            | D63          | 192020            | 240           | A             | 11                     | 230/460 | 1.1                  | 72.0              | 8.55                    |
|           | 1700            | D71          | 192021            | 254           | A             | 13                     | 230/460 | 1.4                  | 68.0              | 9.46                    |
|           | 1100            | D80          | 192022            | 397           | A             | 17                     | 230/460 | 1.3                  | 70.0              | 11.11                   |
| 1/2-0.37  | 3425            | D71          | 192030            | 261           | A             | 13                     | 230/460 | 1.6                  | 74.0              | 9.46                    |
|           | 1700            | D71          | 192031            | 265           | A             | 14                     | 230/460 | 1.8                  | 74.0              | 9.46                    |
|           | 1100            | D80          | 192032            | 415           | A             | 19                     | 230/460 | 1.9                  | 72.0              | 11.11                   |
| 3/4-0.55  | 3425            | D71          | 192040            | 272           | A             | 15                     | 230/460 | 2.4                  | 74.0              | 9.46                    |
|           | 1700            | D80          | 192041            | 287           | A             | 18                     | 230/460 | 2.5                  | 74.0              | 11.11                   |
|           | 1100            | D80          | 192042            | 444           | A             | 22                     | 230/460 | 2.7                  | 72.0              | 11.11                   |
| 1-0.75    | 3425            | D80          | 192050            | 309           | A             | 21                     | 230/460 | 2.8                  | 75.5              | 11.11                   |
|           | 1700            | D80          | 192051            | 315           | A             | 26                     | 230/460 | 3.2                  | 80.0              | 11.11                   |
|           | 1100            | D90S         | 192052            | 463           | B             | 33                     | 230/460 | 3.3                  | 80.0              | 12.61                   |
| 1 1/2-1.1 | 3425            | D80          | 192060            | 342           | B             | 27                     | 230/460 | 4.0                  | 84.0              | 11.11                   |
|           | 1700            | D90S         | 192061            | 350           | B             | 37                     | 230/460 | 4.6                  | 85.5              | 12.61                   |
| 2-1.5     | 3425            | D90S         | 192070            | 365           | B             | 33                     | 230/460 | 5.2                  | 85.5              | 12.61                   |
|           | 1700            | D90L         | 192071            | 377           | B             | 38                     | 230/460 | 5.8                  | 84.0              | 12.61                   |
|           | 1100            | DF100L       | 193072            | 613           | B             | 82                     | 230/460 | 6.4                  | 84.0              | 14.97                   |
| 3-2.2     | 3425            | D90L         | 192080            | 525           | B             | 39                     | 230/460 | 7.2                  | 86.5              | 12.61                   |
|           | 1750            | DF100L       | 193081            | 594           | B             | 84                     | 230/460 | 8.2                  | 87.5              | 14.97                   |
|           | 1140            | DF112M       | 193082            | 862           | B             | 100                    | 230/460 | 9.6                  | 87.5              | 15.76                   |
| 4-3       | 3510            | DF100L       | 193090            | 633           | B             | 71                     | 230/460 | 10.0                 | 87.5              | 14.97                   |
|           | 1750            | DF100L       | 193091            | 645           | B             | 84                     | 230/460 | 10.4                 | 85.5              | 14.97                   |
|           | 1180            | DF132S       | 193092            | 1045          | B             | 154                    | 230/460 | 13.4                 | 87.5              | 18.72                   |
| 5 1/2-4   | 3510            | DF112M       | 193100            | 814           | B             | 104                    | 230/460 | 13.6                 | 87.5              | 15.76                   |
|           | 1750            | DF112M       | 193101            | 785           | B             | 104                    | 230/460 | 15.0                 | 87.5              | 15.76                   |
|           | 1180            | DF132M       | 193102            | 1208          | B             | 176                    | 230/460 | 17.6                 | 87.5              | 20.29                   |
| 7 1/2-5.5 | 3510            | DF132S       | 193110            | 1021          | B             | 152                    | 230/460 | 18.4                 | 88.5              | 18.72                   |
|           | 1760            | DF132S       | 193111            | 1021          | B             | 150                    | 230/460 | 19.8                 | 89.5              | 18.72                   |
|           | 1180            | DF132M       | 193112            | 1452          | B             | 180                    | 230/460 | 22.0                 | 89.5              | 20.29                   |
| 10-7.5    | 3510            | DF132S       | 193120            | 1093          | B             | 163                    | 230/460 | 24.0                 | 89.5              | 18.72                   |
|           | 1760            | DF132M       | 193121            | 1211          | B             | 174                    | 230/460 | 26.2                 | 89.5              | 20.29                   |
|           | 1180            | DF160M       | 193122            | 1883          | C             | 251                    | 230/460 | 27.2                 | 89.5              | 23.64                   |
| 15-11     | 3550            | DF160M       | 193130            | 1769          | C             | 260                    | 230/460 | 34.4                 | 91.0              | 23.64                   |
|           | 1760            | DF160M       | 193131            | 1769          | C             | 264                    | 230/460 | 36.6                 | 91.0              | 23.64                   |
|           | 1180            | DF160L       | 193132            | 2417          | C             | 330                    | 230/460 | 38.8                 | 90.2              | 25.39                   |

**THREE PHASE • IP55 • 1.15 S.F.**

| HP-KW   | RPM<br>60<br>Hz | IEC<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|---------|-----------------|--------------|-------------------|---------------|---------------|------------------------|---------|----------------------|-------------------|-------------------------|
| 20-15   | 3550            | DF160M       | 193140            | \$2076        | C             | 269                    | 230/460 | 47.0                 | 91.0              | 23.64                   |
|         | 1760            | DF160L       | 193141            | 2188          | C             | 311                    | 230/460 | 47.6                 | 91.7              | 25.41                   |
|         | 1180            | DF180L       | 193142            | 3389          | C             | 385                    | 230/460 | 51.4                 | 90.2              | 27.97                   |
| 25-18.5 | 3550            | DF160L       | 193150            | 2527          | C             | 319                    | 230/460 | 57.2                 | 91.0              | 25.41                   |
|         | 1775            | DF180M       | 193151            | 2781          | C             | 381                    | 230/460 | 59.4                 | 92.4              | 26.40                   |
|         | 1180            | DF200L       | 193152            | 4252          | C             | 517                    | 230/460 | 64.0                 | 91.7              | 30.54                   |
| 30-22   | 3550            | DF180M       | 193160            | 3003          | C             | 355                    | 230/460 | 68.8                 | 91.0              | 26.40                   |
|         | 1775            | DF180L       | 193161            | 3125          | C             | 427                    | 230/460 | 71.0                 | 93.0              | 27.97                   |
|         | 1180            | DF200L       | 193162            | 4816          | C             | 467                    | 230/460 | 76.0                 | 91.7              | 30.54                   |
| 40-30   | 3550            | DF200L       | 193170            | 4275          | C             | 522                    | 230/460 | 94.0                 | 91.7              | 30.54                   |
|         | 1775            | DF200L       | 193171            | 4602          | C             | 531                    | 230/460 | 94.0                 | 93.0              | 30.54                   |
|         | 1180            | DF225M       | 193172            | 7234          | C             | 633                    | 230/460 | 100.0                | 93.0              | 33.29                   |
| 50-37   | 3550            | DF200L       | 193180            | 5606          | C             | 546                    | 230/460 | 117.0                | 92.4              | 30.54                   |
|         | 1775            | DF225S       | 193181            | 6384          | C             | 632                    | 230/460 | 118.0                | 93.0              | 32.31                   |
|         | 1180            | DF250M       | 193182            | 10140         | C             | 655                    | 230/460 | 120.0                | 93.0              | 36.61                   |

**METRIC (IEC) B5 FLANGE KITS**

Includes parts to convert these B3 rigid mount motors to a B5 flange mounting. See kits on page 78.

**METRIC (IEC) B14 FACE KITS**

Includes parts to convert these B3 rigid mount motors to a B14 face mounting. See kits on page 79.

**REDUCED DIAMETER METRIC FLANGES**

Imported OEM equipment can often have a flange face that is different from it's motor's frame size. LEESON now stocks metric (IEC) reduced diameter B14 flanges so you can put a 71 frame flange on an 80 frame motor for example. Flanges come pre-fitted with oil seals and have all the necessary hardware for easy field mounting.

| Motor<br>Frame | B14 Flange<br>Frame | Catalogue<br>Number | List<br>Price |
|----------------|---------------------|---------------------|---------------|
| 63             | 56                  | 175900              | \$48          |
| 71             | 63                  | 175901              | 54            |
| 80             | 71                  | 175902              | 62            |
| 90             | 80                  | 175903              | 65            |



12-lead Delta windings (160MD frame and larger)  
for across-the-line or wye-delta starts.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

Catalog numbers in green are EPACT motors.



# AC METRIC (IEC) MOTORS

## THREE PHASE • RIGID BASE WITH FLANGE

### B3/B5 FLANGE-MOUNTED METRIC MOTORS • 230/460V

Metric-dimensioned, AC motors meeting North American performance standards, including 1.15 service factor and EPACT efficiencies. Motors have both B5 flange mounting and B3 base.

Typically used for replacement on machine tools, textile machinery and other equipment with metric dimensions but requiring the heavy-duty torque and performance characteristics of motors designed for use in North America.

IP55 weatherproof enclosures, 60/50 Hz interchangeability (60Hz 230/460V & 50Hz 200/400V), dual stamped nameplates, CE mark, and F3 conduit box location.

Motors are available in one of two frame constructions: aluminum or cast iron. Aluminum frame models are designated with a 192000 series catalog number; cast iron models are 193000 series.



### THREE PHASE • IP55 • 1.15 S.F.

| HP-KW     | RPM<br>60<br>Hz | IEC<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----------|-----------------|--------------|-------------------|---------------|---------------|------------------------|---------|----------------------|-------------------|-------------------------|
| 1/4-0.18  | 3425            | D63D         | 192014            | \$240         | A             | 10                     | 230/460 | 0.8                  | 72.0              | 8.54                    |
|           | 1700            | D63D         | 192015            | 248           | A             | 11                     | 230/460 | 1.0                  | 68.0              | 8.54                    |
|           | 1100            | D71D         | 192016            | 425           | A             | 12                     | 230/460 | 1.2                  | 64.0              | 9.45                    |
| 1/3-0.25  | 3425            | D63D         | 192024            | 277           | A             | 11                     | 230/460 | 1.1                  | 72.0              | 8.54                    |
|           | 1700            | D71D         | 192025            | 286           | A             | 13                     | 230/460 | 1.4                  | 68.0              | 9.45                    |
|           | 1100            | D80D         | 192026            | 458           | A             | 17                     | 230/460 | 1.3                  | 70.0              | 11.10                   |
| 1/2-0.37  | 3425            | D71D         | 192034            | 285           | A             | 13                     | 230/460 | 1.6                  | 74.0              | 9.45                    |
|           | 1700            | D71D         | 192035            | 295           | A             | 14                     | 230/460 | 1.8                  | 74.0              | 9.45                    |
|           | 1100            | D80D         | 192036            | 474           | A             | 19                     | 230/460 | 1.9                  | 72.0              | 11.10                   |
| 3/4-0.55  | 3425            | D71D         | 192044            | 301           | A             | 15                     | 230/460 | 2.4                  | 74.0              | 9.45                    |
|           | 1700            | D80D         | 192045            | 320           | A             | 18                     | 230/460 | 2.5                  | 74.0              | 11.10                   |
|           | 1100            | D80D         | 192046            | 504           | A             | 22                     | 230/460 | 2.7                  | 72.0              | 11.10                   |
| 1-0.75    | 3425            | D80D         | 192054            | 332           | A             | 21                     | 230/460 | 2.8                  | 75.5              | 11.10                   |
|           | 1700            | D80D         | 192055            | 347           | A             | 26                     | 230/460 | 3.2                  | 80.0              | 11.10                   |
|           | 1100            | D90SD        | 192056            | 530           | B             | 35                     | 230/460 | 3.3                  | 80.0              | 12.60                   |
| 1 1/2-1.1 | 3425            | D80D         | 192064            | 377           | A             | 30                     | 230/460 | 4.0                  | 84.0              | 11.10                   |
|           | 1700            | D90SD        | 192065            | 384           | B             | 37                     | 230/460 | 4.6                  | 85.5              | 12.60                   |
| 2-1.5     | 3425            | D90SD        | 192074            | 418           | B             | 33                     | 230/460 | 5.2                  | 85.5              | 12.60                   |
|           | 1700            | D90LD        | 192075            | 430           | B             | 38                     | 230/460 | 5.8                  | 84.0              | 12.60                   |
|           | 1100            | DF100LD      | 193076            | 704           | B             | 82                     | 230/460 | 6.4                  | 84.0              | 14.96                   |
| 3-2.2     | 3425            | D90LD        | 192084            | 592           | B             | 39                     | 230/460 | 7.2                  | 86.5              | 12.60                   |
|           | 1750            | DF100LD      | 193085            | 683           | B             | 84                     | 230/460 | 8.2                  | 87.5              | 14.96                   |
|           | 1140            | DF112MD      | 193086            | 964           | B             | 100                    | 230/460 | 9.6                  | 87.5              | 15.75                   |
| 4-3       | 3510            | DF100LD      | 193094            | 724           | B             | 71                     | 230/460 | 10.0                 | 87.5              | 14.96                   |
|           | 1750            | DF100LD      | 193095            | 734           | B             | 84                     | 230/460 | 10.4                 | 85.5              | 14.96                   |
|           | 1180            | DF132SD      | 193096            | 1179          | B             | 154                    | 230/460 | 13.4                 | 87.5              | 18.70                   |
| 5 1/2-4   | 3510            | DF112MD      | 193104            | 912           | B             | 104                    | 230/460 | 13.6                 | 87.5              | 15.75                   |
|           | 1750            | DF112MD      | 193105            | 883           | B             | 104                    | 230/460 | 15.0                 | 87.5              | 15.75                   |
|           | 1180            | DF132MD      | 193106            | 1343          | B             | 176                    | 230/460 | 17.6                 | 87.5              | 20.28                   |
| 7 1/2-5.5 | 3510            | DF132SD      | 193114            | 1152          | B             | 152                    | 230/460 | 18.4                 | 88.5              | 18.70                   |
|           | 1760            | DF132SD      | 193115            | 1152          | B             | 150                    | 230/460 | 19.8                 | 89.5              | 18.70                   |
|           | 1180            | DF132MD      | 193116            | 1588          | B             | 180                    | 230/460 | 22.0                 | 89.5              | 20.28                   |
| 10-7.5    | 3510            | DF132SD      | 193124            | 1230          | B             | 163                    | 230/460 | 24.0                 | 89.5              | 18.70                   |
|           | 1760            | DF132MD      | 193125            | 1348          | B             | 174                    | 230/460 | 26.2                 | 89.5              | 20.28                   |
|           | 1180            | DF160MD      | 193126            | 2140          | C             | 251                    | 230/460 | 27.2                 | 89.5              | 23.62                   |
| 15-11     | 3550            | DF160MD      | 193134            | 2028          | C             | 260                    | 230/460 | 34.4                 | 91.0              | 23.62                   |
|           | 1760            | DF160MD      | 193135            | 2028          | C             | 264                    | 230/460 | 36.6                 | 91.0              | 23.62                   |
|           | 1180            | DF160LD      | 193136            | 2675          | C             | 330                    | 230/460 | 38.8                 | 90.2              | 25.39                   |

Note: Aluminum motors have removable feet for round-body applications.

**12-lead Delta windings (160MD frame and larger)  
for across-the-line or wye-delta starts.**

### THREE PHASE • IP55 • 1.15 S.F.

| HP-KW   | RPM<br>60<br>Hz | IEC<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|---------|-----------------|--------------|-------------------|---------------|---------------|------------------------|---------|----------------------|-------------------|-------------------------|
| 20-15   | 3550            | DF160MD      | 193144            | \$2187        | C             | 269                    | 230/460 | 47.0                 | 91.0              | 23.62                   |
|         | 1760            | DF160LD      | 193145            | 2307          | C             | 311                    | 230/460 | 47.6                 | 91.7              | 25.39                   |
|         | 1180            | DF180LD      | 193146            | 3508          | C             | 385                    | 230/460 | 51.4                 | 90.2              | 27.95                   |
| 25-18.5 | 3550            | DF160LD      | 193154            | 2630          | C             | 319                    | 230/460 | 57.2                 | 91.0              | 25.39                   |
|         | 1775            | DF180MD      | 193155            | 2936          | C             | 381                    | 230/460 | 59.4                 | 92.4              | 26.38                   |
| 30-22   | 3550            | DF180MD      | 193164            | 3144          | C             | 355                    | 230/460 | 68.0                 | 91.0              | 26.38                   |
|         | 1775            | DF180LD      | 193165            | 3262          | C             | 427                    | 230/460 | 71.0                 | 93.0              | 27.95                   |

Larger HP B3 Foot-Mounted metric motors on page 77 can be converted to B3/B5 Flange-Mount by installing B5 Flange Kits.

### METRIC (IEC) B5 FLANGE KITS

Includes parts to convert a B3 rigid mount motor (page 73) to B5 flange mounting.



### For Aluminum Frame Motors Only (192000 Series)

|             | 63 Frame   |          |                  | 71 Frame   |          |                  | 80 Frame   |          |                  | 90 Frame   |          |                  |
|-------------|------------|----------|------------------|------------|----------|------------------|------------|----------|------------------|------------|----------|------------------|
|             | List Price | Cat. No. | App. Wgt. (lbs.) | List Price | Cat. No. | App. Wgt. (lbs.) | List Price | Cat. No. | App. Wgt. (lbs.) | List Price | Cat. No. | App. Wgt. (lbs.) |
| (B5) Flange | \$56       | 175850   | 1                | \$67       | 175852   | 1                | \$73       | 175854   | 2                | \$76       | 175856   | 2                |

### For Cast Iron Frame Motors Only (193000 Series)

These kits are for use only on IEC cast iron motors built after May, 2000. For information on kits for such motors built prior to May, 2000, contact LEESON.

|                          | 100 Frame  |          |                  | 112 Frame  |          |                  | 132 Frame  |          |                  | 160 Frame  |          |                  | 180 Frame  |          |                  |
|--------------------------|------------|----------|------------------|------------|----------|------------------|------------|----------|------------------|------------|----------|------------------|------------|----------|------------------|
|                          | List Price | Cat. No. | App. Wgt. (lbs.) | List Price | Cat. No. | App. Wgt. (lbs.) | List Price | Cat. No. | App. Wgt. (lbs.) | List Price | Cat. No. | App. Wgt. (lbs.) | List Price | Cat. No. | App. Wgt. (lbs.) |
| (B5) Flange <sup>①</sup> | \$108      | 175882   | 13               | \$116      | 175884   | 16               | \$154      | 175886   | 20               | \$290      | 175888   | 36               | \$360      | 175890   | 43               |
| (B5) Flange <sup>②</sup> | \$108      | 175984   | 13               | \$116      | 175986   | 16               | \$154      | 175988   | 20               | \$290      | 175990   | 36               | Use 175890 |          |                  |

|             | 200 Frame  |          |                  | 225 Frame  |          |                  |
|-------------|------------|----------|------------------|------------|----------|------------------|
|             | List Price | Cat. No. | App. Wgt. (lbs.) | List Price | Cat. No. | App. Wgt. (lbs.) |
| (B5) Flange | \$470      | 175994   | 58               | \$601      | 175995   | 73               |

① Use with F2-mount motors – date code April 2002 and earlier.

② Use with F3-mount motors – date code May 2002 and later.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

Catalog numbers in green are EPACT motors.

# AC METRIC (IEC) MOTORS

## THREE PHASE • RIGID BASE WITH FACE



Metric (IEC)

### B3/B14 FACE-MOUNTED METRIC MOTORS • 230/460V

Metric-dimensioned, AC motors meeting North American performance standards, including 1.15 service factor and EPACT efficiencies. These motors have both B14 face mounting and B3 base.

Typically used for replacement on machine tools, textile machinery and other equipment with metric dimensions but requiring the heavy-duty torque and performance characteristics of motors designed for use in North America.

IP55 weatherproof enclosures, 60/50 Hz interchangeability (60Hz 230/460V & 50Hz 200/400V), dual stamped nameplates, CE mark, and F3 conduit box location.

Motors are available in one of two frame constructions: aluminum or cast iron. Aluminum frame models are designated with a 192000 series catalog number; cast iron models are 193000 series.



#### THREE PHASE • IP55 • 1.15 S.F.

| HP-KW     | RPM<br>60<br>Hz | IEC<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|-----------|-----------------|--------------|-------------------|---------------|---------------|------------------------|---------|----------------------|-------------------|-------------------------|
| 1/4-0.18  | 3425            | D63C         | 192017            | \$235         | A             | 10                     | 230/460 | 0.8                  | 72.0              | 8.55                    |
|           | 1700            | D63C         | 192018            | 244           | A             | 11                     | 230/460 | 1.0                  | 68.0              | 8.55                    |
|           | 1100            | D71C         | 192019            | 425           | A             | 12                     | 230/460 | 1.2                  | 64.0              | 9.46                    |
| 1/3-0.25  | 3425            | D63C         | 192027            | 275           | A             | 11                     | 230/460 | 1.1                  | 72.0              | 8.55                    |
|           | 1700            | D71C         | 192028            | 278           | A             | 13                     | 230/460 | 1.4                  | 68.0              | 9.46                    |
|           | 1100            | D80C         | 192029            | 458           | A             | 17                     | 230/460 | 1.3                  | 70.0              | 11.11                   |
| 1/2-0.37  | 3425            | D71C         | 192037            | 279           | A             | 13                     | 230/460 | 1.6                  | 74.0              | 9.46                    |
|           | 1700            | D71C         | 192038            | 290           | A             | 14                     | 230/460 | 1.8                  | 74.0              | 9.46                    |
|           | 1100            | D80C         | 192039            | 474           | A             | 19                     | 230/460 | 1.9                  | 72.0              | 11.11                   |
| 3/4-0.55  | 3425            | D71C         | 192047            | 295           | A             | 15                     | 230/460 | 2.4                  | 74.0              | 9.46                    |
|           | 1700            | D80C         | 192048            | 316           | A             | 18                     | 230/460 | 2.5                  | 74.0              | 11.11                   |
|           | 1100            | D80C         | 192049            | 504           | A             | 22                     | 230/460 | 2.7                  | 72.0              | 11.11                   |
| 1-0.75    | 3425            | D80C         | 192057            | 323           | A             | 21                     | 230/460 | 2.8                  | 75.5              | 11.11                   |
|           | 1700            | D80C         | 192058            | 339           | A             | 26                     | 230/460 | 3.2                  | 80.0              | 11.11                   |
|           | 1100            | D90SC        | 192059            | 530           | B             | 35                     | 230/460 | 3.3                  | 80.0              | 12.60                   |
| 1 1/2-1.1 | 3425            | D80C         | 192067            | 369           | A             | 27                     | 230/460 | 4.0                  | 84.0              | 11.11                   |
|           | 1700            | D90SC        | 192068            | 376           | B             | 37                     | 230/460 | 4.6                  | 85.5              | 12.61                   |
| 2-1.5     | 3425            | D90SC        | 192077            | 410           | B             | 33                     | 230/460 | 5.2                  | 85.5              | 12.61                   |
|           | 1700            | D90LC        | 192078            | 418           | B             | 38                     | 230/460 | 5.8                  | 84.0              | 12.61                   |
|           | 1100            | DF100LC      | 193079            | 704           | B             | 82                     | 230/460 | 6.4                  | 84.0              | 14.97                   |
| 3-2.2     | 3425            | D90LC        | 192087            | 592           | B             | 39                     | 230/460 | 7.2                  | 86.5              | 12.61                   |
|           | 1750            | DF100LC      | 193088            | 683           | B             | 84                     | 230/460 | 8.2                  | 87.5              | 14.97                   |
|           | 1140            | DF112MC      | 193089            | 964           | B             | 84                     | 230/460 | 9.6                  | 87.5              | 15.76                   |
| 4-3       | 3510            | DF100LC      | 193097            | 724           | B             | 71                     | 230/460 | 10.0                 | 87.5              | 14.97                   |
|           | 1750            | DF100LC      | 193098            | 734           | B             | 84                     | 230/460 | 10.4                 | 85.5              | 14.97                   |
|           | 1180            | DF132SC      | 193099            | 1179          | B             | 154                    | 230/460 | 13.4                 | 87.5              | 18.72                   |
| 5 1/2-4   | 3510            | DF112MC      | 193107            | 912           | B             | 104                    | 230/460 | 13.6                 | 87.5              | 15.76                   |
|           | 1750            | DF112MC      | 193108            | 883           | B             | 104                    | 230/460 | 15.0                 | 87.5              | 15.76                   |
|           | 1180            | DF132MC      | 193109            | 1343          | B             | 176                    | 230/460 | 17.6                 | 87.5              | 20.29                   |
| 7 1/2-5.5 | 3510            | DF132SC      | 193117            | 1152          | B             | 152                    | 230/460 | 18.4                 | 88.5              | 18.72                   |
|           | 1760            | DF132SC      | 193118            | 1152          | B             | 150                    | 230/460 | 19.8                 | 89.5              | 18.72                   |
|           | 1180            | DF132MC      | 193119            | 1588          | B             | 180                    | 230/460 | 22.0                 | 89.5              | 20.29                   |
| 10-7.5    | 3510            | DF132SC      | 193127            | 1230          | B             | 163                    | 230/460 | 24.0                 | 89.5              | 18.72                   |
|           | 1760            | DF132MC      | 193128            | 1348          | B             | 174                    | 230/460 | 26.2                 | 89.5              | 20.29                   |
|           | 1180            | DF160MC      | 193129            | 2140          | C             | 251                    | 230/460 | 27.2                 | 89.5              | 23.64                   |
| 15-11     | 3550            | DF160MC      | 193137            | 2028          | C             | 260                    | 230/460 | 34.4                 | 91.0              | 23.64                   |
|           | 1760            | DF160MC      | 193138            | 2028          | C             | 264                    | 230/460 | 36.6                 | 91.0              | 23.64                   |
|           | 1180            | DF160LC      | 193139            | 2675          | C             | 330                    | 230/460 | 38.8                 | 90.2              | 25.41                   |

Note: Aluminum motors have removable feet for round-body applications.

**12-lead Delta windings (160MD frame and larger)  
for across-the-line or wye-delta starts.**

#### THREE PHASE • IP55 • 1.15 S.F.

| HP-KW   | RPM<br>60<br>Hz | IEC<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | F.L.<br>Amps<br>230V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(Inches) |
|---------|-----------------|--------------|-------------------|---------------|---------------|------------------------|---------|----------------------|-------------------|-------------------------|
| 20-15   | 3550            | DF160MC      | 193147            | \$2318        | C             | 269                    | 230/460 | 47.0                 | 91.0              | 23.64                   |
|         | 1760            | DF160LC      | 193148            | 2445          | C             | 311                    | 230/460 | 47.6                 | 91.7              | 25.41                   |
| 25-18.5 | 3550            | DF160LC      | 193157            | 2787          | C             | 319                    | 230/460 | 57.2                 | 91.0              | 25.41                   |

Larger HP B3 Foot-Mounted metric motors on page 77 can be converted to B3/B14 Flange-Mount by installing B14 Face Kits

#### METRIC (IEC) B14 FACE KITS

Includes parts to convert a B3 rigid mount motor (page 77) to B14 face mounting.



#### For Aluminum Frame Motors Only (192000 Series)

|            | 63 Frame   |          |                  | 71 Frame   |          |                  | 80 Frame   |          |                  | 90 Frame   |          |                  |
|------------|------------|----------|------------------|------------|----------|------------------|------------|----------|------------------|------------|----------|------------------|
|            | List Price | Cat. No. | App. Wgt. (lbs.) | List Price | Cat. No. | App. Wgt. (lbs.) | List Price | Cat. No. | App. Wgt. (lbs.) | List Price | Cat. No. | App. Wgt. (lbs.) |
| (B14) Face | \$52       | 175851   | 1                | \$56       | 175853   | 1                | \$65       | 175855   | 1                | \$70       | 175857   | 1                |

#### For Cast Iron Frame Motors Only (193000 Series)

These kits are for use only on IEC cast iron motors built after May, 2000. For information on kits for such motors built prior to May, 2000, contact LEESON.

|                         | 100 Frame  |          |                  | 112 Frame  |          |                  | 132 Frame  |          |                  | 160 Frame  |          |                  |
|-------------------------|------------|----------|------------------|------------|----------|------------------|------------|----------|------------------|------------|----------|------------------|
|                         | List Price | Cat. No. | App. Wgt. (lbs.) | List Price | Cat. No. | App. Wgt. (lbs.) | List Price | Cat. No. | App. Wgt. (lbs.) | List Price | Cat. No. | App. Wgt. (lbs.) |
| (B14) Face <sup>①</sup> | \$99       | 175883   | 8                | \$108      | 175885   | 8                | \$145      | 175887   | 12               | \$280      | 175889   | 25               |
| (B14) Face <sup>②</sup> | \$99       | 175985   | 8                | \$108      | 175987   | 8                | \$145      | 175989   | 12               | \$280      | 175991   | 25               |

① Use with F2-mount motors – date code April 2002 and earlier.

② Use with F3-mount motors – date code May 2002 and later.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

Catalog numbers in green are EPACT motors.





# AC METRIC (IEC) MOTORS

THREE PHASE • RIGID BASE

## B3 FOOT-MOUNTED METRIC MOTORS • 575 VOLT

Metric-dimensioned, AC motors meeting North American performance standards, including 1.15 service factor and EPACT efficiencies. For replacement use on machine tools, textile machinery and other equipment with metric dimensions but requiring the heavy-duty torque and performance characteristics of motors designed for use in North America.

IP55 weatherproof enclosures, stamped nameplates, CE mark, and F3 conduit box location. Kits are available for field conversion from B3 to B3/B5 or B3/B14. See pages 78 & 79 for details.

Motors are available in one of two frame constructions: aluminum or cast iron. Aluminum frame models are designated with a 192000 series catalog number; cast iron models are 193000 series.



### THREE PHASE • IP55 • 1.15 S.F.

| HP-KW            | RPM<br>60<br>Hz | IEC<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | F.L.<br>Amps<br>575V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(in.) |
|------------------|-----------------|--------------|-------------------|---------------|---------------|------------------------|---------|----------------------|-------------------|----------------------|
| <b>1/4-0.18</b>  | 3425            | D63          | <b>192088</b>     | \$209         | A             | 10                     | 575     | 0.3                  | 72.0              | 8.54                 |
|                  | 1700            | D63          | <b>192089</b>     | 218           | A             | 11                     | 575     | 0.4                  | 68.0              | 8.54                 |
| <b>1/3-0.25</b>  | 3425            | D63          | <b>192097</b>     | 244           | A             | 11                     | 575     | 0.4                  | 74.0              | 8.54                 |
|                  | 1700            | D71          | <b>192098</b>     | 254           | A             | 13                     | 575     | 0.6                  | 67.0              | 9.45                 |
| <b>1/2-0.37</b>  | 3425            | D71          | <b>192106</b>     | 261           | A             | 13                     | 575     | 0.7                  | 74.0              | 9.45                 |
|                  | 1700            | D71          | <b>192107</b>     | 265           | A             | 14                     | 575     | 0.7                  | 74.0              | 9.45                 |
| <b>3/4-0.56</b>  | 3425            | D71          | <b>192115</b>     | 272           | A             | 15                     | 575     | 0.9                  | 74.0              | 9.45                 |
|                  | 1700            | D80          | <b>192116</b>     | 287           | A             | 18                     | 575     | 1.0                  | 73.0              | 11.10                |
| <b>1-0.75</b>    | 3425            | D80          | <b>192124</b>     | 309           | A             | 21                     | 575     | 1.1                  | 75.5              | 11.10                |
|                  | 1700            | D80          | <b>192125</b>     | 315           | A             | 26                     | 575     | 1.4                  | 82.5              | 11.10                |
| <b>1 1/2-1.1</b> | 3425            | D80          | <b>192133</b>     | 342           | B             | 27                     | 575     | 1.6                  | 82.5              | 11.10                |
|                  | 1700            | D90S         | <b>192134</b>     | 350           | B             | 37                     | 575     | 1.8                  | 84.0              | 12.60                |
| <b>2-1.5</b>     | 3425            | D90S         | <b>192142</b>     | 365           | B             | 33                     | 575     | 2.1                  | 84.0              | 12.60                |
|                  | 1700            | D90L         | <b>192143</b>     | 377           | B             | 38                     | 575     | 2.4                  | 84.0              | 12.60                |
| <b>3-2.2</b>     | 3425            | D90L         | <b>192148</b>     | 789           | B             | 39                     | 575     | 2.9                  | 85.8              | 12.60                |
|                  | 1750            | DF100L       | <b>193193</b>     | 594           | B             | 84                     | 575     | 3.5                  | 87.5              | 14.96                |
| <b>4-3</b>       | 3510            | DF100L       | <b>193199</b>     | 633           | B             | 71                     | 575     | 4.0                  | 87.5              | 14.96                |
|                  | 1750            | DF100L       | <b>193200</b>     | 645           | B             | 84                     | 575     | 4.2                  | 87.5              | 14.96                |
| <b>5 1/2-4</b>   | 3510            | DF112M       | <b>193208</b>     | 814           | B             | 104                    | 575     | 5.0                  | 87.5              | 15.75                |
|                  | 1750            | DF112M       | <b>193209</b>     | 785           | B             | 104                    | 575     | 5.4                  | 87.5              | 15.75                |
| <b>7 1/2-5.5</b> | 3510            | DF132S       | <b>193217</b>     | 1021          | B             | 152                    | 575     | 7.2                  | 88.5              | 18.70                |
|                  | 1760            | DF132S       | <b>193218</b>     | 1021          | B             | 150                    | 575     | 7.9                  | 89.5              | 18.70                |
| <b>10-7.5</b>    | 3510            | DF132S       | <b>193226</b>     | 1093          | B             | 163                    | 575     | 9.6                  | 89.5              | 18.70                |
|                  | 1760            | DF132M       | <b>193227</b>     | 1211          | B             | 174                    | 575     | 10.5                 | 89.5              | 20.28                |
| <b>15-11</b>     | 3550            | DF160M       | <b>193235</b>     | 1769          | C             | 260                    | 575     | 13.8                 | 90.2              | 23.62                |
|                  | 1760            | DF160M       | <b>193236</b>     | 1769          | C             | 264                    | 575     | 14.6                 | 91.0              | 23.62                |

### THREE PHASE • IP55 • 1.15 S.F.

| HP-KW          | RPM<br>60<br>Hz | IEC<br>Frame | Catalog<br>Number | List<br>Price | Disc.<br>Sym. | App.<br>Wgt.<br>(lbs.) | Voltage | F.L.<br>Amps<br>575V | %<br>F.L.<br>Eff. | "C"<br>Dim.<br>(in.) |
|----------------|-----------------|--------------|-------------------|---------------|---------------|------------------------|---------|----------------------|-------------------|----------------------|
| <b>20-15</b>   | 3550            | DF160M       | <b>193244</b>     | \$2076        | C             | 269                    | 575     | 18.8                 | 90.2              | 23.62                |
|                | 1760            | DF160L       | <b>193245</b>     | 2188          | C             | 311                    | 575     | 19.0                 | 91.0              | 25.39                |
| <b>25-18.5</b> | 3550            | DF160L       | <b>193253</b>     | 2527          | C             | 319                    | 575     | 22.9                 | 91.0              | 25.39                |
|                | 1775            | DF180M       | <b>193254</b>     | 2781          | C             | 381                    | 575     | 23.8                 | 92.4              | 26.38                |
| <b>30-22</b>   | 3550            | DF180M       | <b>193262</b>     | 3003          | C             | 355                    | 575     | 27.5                 | 91.0              | 26.38                |
|                | 1775            | DF180L       | <b>193263</b>     | 3125          | C             | 427                    | 575     | 28.4                 | 92.4              | 27.95                |
| <b>40-30</b>   | 3550            | DF200L       | <b>193271</b>     | 4275          | C             | 522                    | 575     | 38.4                 | 91.7              | 30.51                |
|                | 1775            | DF200L       | <b>193272</b>     | 4602          | C             | 531                    | 575     | 37.6                 | 93.0              | 30.51                |
| <b>50-37</b>   | 3550            | DF200L       | <b>193280</b>     | 5606          | C             | 546                    | 575     | 46.8                 | 92.4              | 30.51                |
|                | 1775            | DF225S       | <b>193281</b>     | 6384          | C             | 632                    | 575     | 47.2                 | 93.0              | 33.26                |

### METRIC (IEC) B5 FLANGE KITS

Includes parts to convert these B3 rigid mount motors to a B5 flange mounting. See kits on page 78.



### METRIC (IEC) B14 FACE KITS

Includes parts to convert these B3 rigid mount motors to a B14 face mounting. See kits on page 79.



### REDUCED DIAMETER METRIC FLANGES

Imported OEM equipment can often have a flange face that is different from its motor's frame size. LEESON now stocks metric (IEC) reduced diameter B14 flanges so you can put a 71 frame flange on an 80 frame motor for example. Flanges come pre-fitted with oil seals and have all the necessary hardware for easy field mounting.

| Motor<br>Frame | B14 Flange<br>Frame | Catalogue<br>Number | List<br>Price |
|----------------|---------------------|---------------------|---------------|
| 63             | 56                  | <b>175900</b>       | \$48          |
| 71             | 63                  | <b>175901</b>       | 54            |
| 80             | 71                  | <b>175902</b>       | 62            |
| 90             | 80                  | <b>175903</b>       | 65            |



12-lead Delta windings (160MD frame and larger)  
for across-the-line or wye-delta starts.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION