



Application - Three-Phase Motors

TABLE 17 Three-Phase Motor Specifications (50 Hz), 2875 RPM, 1.0 Service Factor

| Type | Motor Model Prefix | Nameplate Rating | | | | | Full Load Watts | Line to Line Resistance (Ohms) | Efficiency % | | | Power Factor % | | | Locked Rotor Amps | Circuit Breakers or Fuse Amps | |
|--------|--------------------|------------------|-------|---------|-------------------|-------------------------|----------------------------|--------------------------------|----------------|----------------|----------------|----------------|----------------|-------------------|----------------------|--|------------------------------|
| | | KW | HP | Volts | Line Volts | Amps** | | | F.L. | 3/4 | 1/2 | F.L. | 3/4 | 1/2 | | Typical Submersible | |
| | | | | | | | | | | | | | | | | Nontime Delay (Std.) Fuse or Circuit Breaker | Dual Element Time Delay Fuse |
| 6 Inch | 236 610 | 3.7 | 5 | 380-415 | 380 400 415 | 8.9 8.8 9.3 | 4850 4900 4950 | 3.9 - 4.8 | 77 77 75 | 76 71 73 | 73 59 67 | 84 79 74 | 78 71 64 | 66 59 52 | 39 42 43 | 25 25 25 | 10 10 10 |
| | 236 611 | 5.5 | 7 1/2 | 380-415 | 380 400 415 | 12.7 12.5 12.8 | 7175 7100 7175 | 2.4 - 2.9 | 78 79 78 | 79 78 77 | 77 74 74 | 85 82 78 | 80 75 70 | 70 63 57 | 61 64 66 | 35 35 35 | 15 15 15 |
| | 236 612 | 7.5 | 10 | 380-415 | 380 400 415 | 16.5 16.0 16.2 | 9450 9450 9450 | 1.9 - 2.4 | 79 79 79 | 80 79 78 | 77 75 75 | 87 86 81 | 83 80 74 | 74 70 62 | 83 83 91 | 45 45 45 | 20 20 20 |
| | 236 613 | 11 | 15 | 380-415 | 380 400 415 | 24.2 23.0 24.1 | 13750 13750 13750 | 1.1 - 1.4 | 81 81 81 | 82 80 80 | 80 78 77 | 87 84 82 | 82 80 75 | 72 64 63 | 126 125 133 | 60 60 60 | 30 30 30 |
| | 236 614 | 15 | 20 | 380-415 | 380 400 415 | 32.0 31.3 31.0 | 18200 18500 18500 | .83 - 1.0 | 82 81 81 | 83 81 81 | 81 79 77 | 87 85 83 | 84 80 77 | 75 69 65 | 164 170 174 | 80 80 80 | 35 35 35 |
| | 236 615 | 18.5 | 25 | 380-415 | 380 400 415 | 40.0 38.5 38.5 | 23000 22700 22700 | .62 - .77 | 81 82 82 | 83 83 82 | 82 81 80 | 89 85 82 | 85 79 75 | 76 68 62 | 197 206 215 | 100 100 100 | 45 45 45 |
| | 236 616 | 22 | 30 | 380-415 | 380 400 415 | 47.0 45.3 45.5 | 27250 27000 27000 | .52 - .64 | 82 83 83 | 83 83 82 | 82 81 80 | 88 86 84 | 86 81 78 | 78 71 66 | 255 268 278 | 125 125 125 | 55 55 55 |
| | 236 617 | 30 | 40 | 380-415 | 380 400 415 | 64.1 63.5 64.6 | 36000 36000 36000 | .34 - .42 | 83 83 83 | 84 82 82 | 83 83 80 | 87 82 79 | 82 76 71 | 72 64 58 | 362 382 397 | 175 175 175 | 75 75 75 |
| | 276 698 | 37 | 50 | 415 | 415 | 76.6 | 45000 | .34 - .43 | 82 | 84 | 83 | 85 | 90 | 91 | 362 | 200 | 90 |
| | 276 699 | 45 | 60 | 415 | 415 | 87.9 | 54000 | .27 - .35 | 84 | 84 | 82 | 87 | 84 | 76 | 432 | 250 | 110 |
| 8 Inch | 239 600 | 30 | 40 | 380-415 | 380 400 415 | 61.0 61.0 62.0 | 34700 34700 34700 | .247 - .303 | 86 86 86 | 86 86 85 | 85 83 80 | 88 84 73 | 84 78 62 | 75 68 433 | 397 418 433 | 175 175 175 | 70 70 70 |
| | 239 601 | 37 | 50 | 380-415 | 380 400 415 | 75.0 74.0 74.0 | 43000 43000 43000 | .185 - .226 | 87 87 87 | 87 87 86 | 85 84 83 | 85 86 83 | 78 81 76 | 507 534 654 | 200 200 200 | 90 90 90 | |
| | 239 602 | 45 | 60 | 380-415 | 380 400 415 | 89.0 89.0 89.0 | 51500 51500 51500 | .142 - .174 | 87 87 87 | 87 87 86 | 86 85 85 | 89 85 81 | 85 77 71 | 612 645 669 | 250 250 250 | 100 100 100 | |
| | 239 603 | 55 | 75 | 380-415 | 380 400 415 | 111.0 108.0 108.0 | 64000 64000 64000 | .106 - .130 | 88 88 88 | 88 87 87 | 86 84 84 | 89 86 84 | 86 79 78 | 79 81 66 | 819 862 895 | 300 300 300 | 125 125 125 |
| | 239 604 | 75 | 100 | 380-415 | 380 400 415 | 148.0 145.0 145.0 | 85000 86000 86000 | .073 - .089 | 88 87 87 | 88 87 87 | 86 85 84 | 89 87 84 | 86 82 78 | 79 72 67 | 1099 1157 1200 | 400 400 400 | 175 175 175 |
| | 239 105 | 93 | 125 | 380-415 | 380 400 415 | 194.0 190.0 191.0 | 107000 107000 107000 | .055 - .067 | 87 87 87 | 87 86 86 | 85 84 83 | 86 83 80 | 83 78 74 | 75 68 63 | 1265 1332 1382 | 500 500 500 | 225 225 225 |
| | 239 106 | 110 | 150 | 380-415 | 380 400 415 | 226.0 222.0 223.0 | 127000 127000 127000 | .042 - .051 | 88 88 88 | 88 87 87 | 86 85 84 | 87 84 81 | 84 80 75 | 77 70 64 | 1517 1597 1657 | 600 600 600 | 300 300 300 |
| | 239 107 | 130 | 175 | 380-415 | 380 400 415 | 260.0 252.0 247.0 | 150000 148000 148000 | .042 - .052 | 87 88 88 | 87 87 87 | 86 86 85 | 89 87 86 | 87 84 81 | 83 79 74 | 1651 1733 1803 | 700 700 700 | 300 300 300 |
| | 239 108 | 150 | 200 | 380-415 | 380 400 415 | 294.0 284.0 277.0 | 170000 170000 170000 | .036 - .044 | 88 88 88 | 88 88 88 | 86 86 86 | 90 88 87 | 88 86 83 | 83 79 75 | 1765 1858 1928 | 800 800 800 | 350 350 350 |

Performance is typical, not guaranteed, at specified voltages.

Locked rotor amps for Wye start 6 lead motors is 33% of value shown.

Performance also applies to 6 lead model numbers where not listed.

Six lead individual phase resistance = table X 1.5.

* Refer to page 48 for 6" Hi Temp 90°C and 8" Hi Temp 75°C motors

** Amps may also be referred to as Full Load Amps (FLA) Service Factor Amps (SFA) or Name Plate Amps