



# APPLICATION

## Single-Phase Motors

**Table 13 Single-Phase Motor Specifications (60 Hz) 3450 rpm**

| TYPE               | MOTOR MODEL PREFIX | RATING |      |       |    |      | FULL LOAD               |       | MAXIMUM (S.F. LOAD)     |       | WINDING (1) RES. IN OHMS |      | EFFICIENCY % |      | POWER FACTOR % |      | LOCKED ROTOR AMPS | KVA CODE |
|--------------------|--------------------|--------|------|-------|----|------|-------------------------|-------|-------------------------|-------|--------------------------|------|--------------|------|----------------|------|-------------------|----------|
|                    |                    | HP     | KW   | VOLTS | HZ | S.F. | (2) AMPS                | WATTS | (2) AMPS                | WATTS | M=MAIN RES. S=START RES. | S.F. | F.L.         | S.F. | F.L.           |      |                   |          |
| 4" 2-WIRE          | 244504             | 1/2    | 0.37 | 115   | 60 | 1.6  | 10.0                    | 670   | 12.0                    | 960   | 1.0-1.3                  | 62   | 56           | 73   | 58             | 64.4 | R                 |          |
|                    | 244505             | 1/2    | 0.37 | 230   | 60 | 1.6  | 5.0                     | 670   | 6.0                     | 960   | 4.2-5.2                  | 62   | 56           | 73   | 58             | 32.2 | R                 |          |
|                    | 244507             | 3/4    | 0.55 | 230   | 60 | 1.5  | 6.8                     | 940   | 8.0                     | 1310  | 3.0-3.6                  | 64   | 59           | 74   | 62             | 40.7 | N                 |          |
|                    | 244508             | 1      | 0.75 | 230   | 60 | 1.4  | 8.2                     | 1210  | 9.8                     | 1600  | 2.2-2.7                  | 65   | 62           | 74   | 63             | 48.7 | N                 |          |
|                    | 244309             | 1.5    | 1.1  | 230   | 60 | 1.3  | 10.6                    | 1770  | 13.1                    | 2280  | 1.5-2.1                  | 64   | 63           | 83   | 76             | 66.2 | M                 |          |
| 4" 3-WIRE          | 214504             | 1/2    | 0.37 | 115   | 60 | 1.6  | Y10.0<br>B10.0<br>R0    | 670   | Y12.0<br>B12.0<br>R0    | 960   | M1.0-1.3<br>S4.1-5.1     | 62   | 56           | 73   | 58             | 50.5 | M                 |          |
|                    | 214505             | 1/2    | 0.37 | 230   | 60 | 1.6  | Y5.0<br>B5.0<br>R0      | 670   | Y6.0<br>B6.0<br>R0      | 960   | M4.2-5.2<br>S16.7-20.5   | 62   | 56           | 73   | 58             | 23   | M                 |          |
|                    | 214507             | 3/4    | 0.55 | 230   | 60 | 1.5  | Y6.8<br>B6.8<br>R0      | 940   | Y8.0<br>B8.0<br>R0      | 1310  | M3.0-3.6<br>S10.7-13.1   | 64   | 59           | 74   | 62             | 34.2 | M                 |          |
|                    | 214508             | 1      | 0.75 | 230   | 60 | 1.4  | Y8.2<br>B8.2<br>R0      | 1210  | Y9.8<br>B9.8<br>R0      | 1600  | M2.2-2.7<br>S9.9-12.1    | 65   | 62           | 74   | 63             | 41.8 | L                 |          |
| 4" 3-WIRE W/CRC CB | 214505             | 1/2    | 0.37 | 230   | 60 | 1.6  | Y3.6<br>B3.7<br>R2.0    | 655   | Y4.3<br>B4.0<br>R2.0    | 890   | M4.2-5.2<br>S16.7-20.5   | 67   | 57           | 90   | 81             | 23   | M                 |          |
|                    | 214507             | 3/4    | 0.55 | 230   | 60 | 1.5  | Y4.9<br>B5.0<br>R3.2    | 925   | Y5.7<br>B5.2<br>R3.1    | 1220  | M3.0-3.6<br>S10.7-13.1   | 69   | 60           | 92   | 84             | 34.2 | M                 |          |
|                    | 214508             | 1      | 0.75 | 230   | 60 | 1.4  | Y6.0<br>B5.7<br>R3.4    | 1160  | Y7.1<br>B6.2<br>R3.3    | 1490  | M2.2-2.7<br>S9.9-12.1    | 70   | 64           | 92   | 86             | 41.8 | L                 |          |
| 4" 3-WIRE          | 214508 W/1-1.5 CB  | 1      | 0.75 | 230   | 60 | 1.4  | Y6.6<br>B6.6<br>R1.3    | 1130  | Y8.0<br>B7.9<br>R1.3    | 1500  | M2.2-2.7<br>S9.9-12.1    | 70   | 66           | 82   | 72             | 43   | L                 |          |
|                    | 224300             | 1.5    | 1.1  | 230   | 60 | 1.3  | Y10.0<br>B9.9<br>R1.3   | 1620  | Y11.5<br>B11.0<br>R1.3  | 2080  | M1.7-2.1<br>S7.5-9.2     | 70   | 69           | 85   | 79             | 51.4 | J                 |          |
|                    | 224301             | 2      | 1.5  | 230   | 60 | 1.25 | Y10.0<br>B9.3<br>R2.6   | 2025  | Y13.2<br>B11.9<br>R2.6  | 2555  | M1.8-2.3<br>S5.5-7.2     | 73   | 74           | 95   | 94             | 53.1 | G                 |          |
|                    | 224302 (3)         | 3      | 2.2  | 230   | 60 | 1.15 | Y14.0<br>B11.2<br>R6.1  | 3000  | Y17.0<br>B12.6<br>R6.0  | 3400  | M1.1-1.4<br>S4.0-4.8     | 75   | 75           | 99   | 99             | 83.4 | H                 |          |
|                    | 224303 (4)         | 5      | 3.7  | 230   | 60 | 1.15 | Y23.0<br>B15.9<br>R11.0 | 4830  | Y27.5<br>B19.1<br>R10.8 | 5500  | M.71-.82<br>S1.8-2.2     | 78   | 77           | 100  | 100            | 129  | G                 |          |
| 6"                 | 226110 (5)         | 5      | 3.7  | 230   | 60 | 1.15 | Y23.0<br>B14.3<br>R10.8 | 4910  | Y27.5<br>B17.4<br>R10.5 | 5570  | M.55-.68<br>S1.3-1.7     | 77   | 76           | 100  | 99             | 99   | E                 |          |
|                    | 226111             | 7.5    | 5.5  | 230   | 60 | 1.15 | Y36.5<br>B34.4<br>R5.5  | 7300  | Y42.1<br>B40.5<br>R5.4  | 8800  | M.36-.50<br>S.88-1.1     | 73   | 74           | 91   | 90             | 165  | F                 |          |
|                    | 226112             | 10     | 7.5  | 230   | 60 | 1.15 | Y44.0<br>B39.5<br>R9.3  | 9800  | Y51.0<br>B47.5<br>R8.9  | 11300 | M.27-.33<br>S.80-.99     | 76   | 77           | 96   | 96             | 204  | E                 |          |
|                    | 226113             | 15     | 11   | 230   | 60 | 1.15 | Y62.0<br>B52.0<br>R17.5 | 13900 | Y75.0<br>B62.5<br>R16.9 | 16200 | M.17-.22<br>S.68-.93     | 79   | 80           | 97   | 98             | 303  | E                 |          |

- Main winding - yellow to black  
Start winding - yellow to red
- Y = Yellow lead - line amps  
B = Black lead - main winding amps  
R = Red lead - start or auxiliary winding amps
- Control Boxes date coded 02C and older have **35 MFD** run capacitors. Current values should be Y14.0 @ FL and Y17.0 @ SF Load.  
B12.2                      B14.5  
R4.7                         R4.5
- Control Boxes date coded 01M and older have **60 MFD** run capacitors and the current values on a 4" motor will be Y23.0 @ FL - Y27.5 @ SF Load.  
B19.1                      B23.2  
R8.0                        R7.8
- Control Boxes date coded 01M and older have **60 MFD** run capacitors and the current values on a 6" motor will be Y23.0 @ FL - Y27.5 @ SF Load.  
B18.2                      B23.2  
R8.0                        R7.8

Performance is typical, not guaranteed, at specified voltages and specified capacitor values. Performance at voltage ratings not shown is similar, except amps vary inversely with voltage.



# APPLICATION

## Single-Phase Motors

**Table 14 Single-Phase Motor Fuse Sizing**

| TYPE               | MOTOR MODEL PREFIX    | RATING |      |       | CIRCUIT BREAKERS OR FUSE AMPS |                              |                 | CIRCUIT BREAKERS OR FUSE AMPS |                              |                 |
|--------------------|-----------------------|--------|------|-------|-------------------------------|------------------------------|-----------------|-------------------------------|------------------------------|-----------------|
|                    |                       |        |      |       | (MAXIMUM PER NEC)             |                              |                 | (TYPICAL SUBMERSIBLE)         |                              |                 |
|                    |                       | HP     | KW   | VOLTS | STANDARD FUSE                 | DUAL ELEMENT TIME DELAY FUSE | CIRCUIT BREAKER | STANDARD FUSE                 | DUAL ELEMENT TIME DELAY FUSE | CIRCUIT BREAKER |
| 4" 2-WIRE          | 244504                | 1/2    | 0.37 | 115   | 35                            | 20                           | 30              | 30                            | 15                           | 30              |
|                    | 244505                | 1/2    | 0.37 | 230   | 20                            | 10                           | 15              | 15                            | 8                            | 15              |
|                    | 244507                | 3/4    | 0.55 | 230   | 25                            | 15                           | 20              | 20                            | 10                           | 20              |
|                    | 244508                | 1      | 0.75 | 230   | 30                            | 20                           | 25              | 25                            | 11                           | 25              |
|                    | 244309                | 1.5    | 1.1  | 230   | 35                            | 20                           | 30              | 35                            | 15                           | 30              |
| 4" 3-WIRE          | 214504                | 1/2    | 0.37 | 115   | 35                            | 20                           | 30              | 30                            | 15                           | 30              |
|                    | 214505                | 1/2    | 0.37 | 230   | 20                            | 10                           | 15              | 15                            | 8                            | 15              |
|                    | 214507                | 3/4    | 0.55 | 230   | 25                            | 15                           | 20              | 20                            | 10                           | 20              |
|                    | 214508                | 1      | 0.75 | 230   | 30                            | 20                           | 25              | 25                            | 11                           | 25              |
| 4" 3-WIRE W/CRC CB | 214505                | 1/2    | 0.37 | 230   | 20                            | 10                           | 15              | 15                            | 8                            | 15              |
|                    | 214507                | 3/4    | 0.55 | 230   | 25                            | 15                           | 20              | 20                            | 10                           | 20              |
|                    | 214508                | 1      | 0.75 | 230   | 30                            | 20                           | 25              | 25                            | 11                           | 25              |
| 4" 3-WIRE          | 214508<br>W/ 1-1.5 CB | 1      | 0.75 | 230   | 30                            | 20                           | 25              | 25                            | 11                           | 25              |
|                    | 224300                | 1.5    | 1.1  | 230   | 35                            | 20                           | 30              | 30                            | 15                           | 30              |
|                    | 224301                | 2      | 1.5  | 230   | 30                            | 20                           | 25              | 30                            | 15                           | 25              |
|                    | 224302                | 3      | 2.2  | 230   | 45                            | 30                           | 40              | 45                            | 20                           | 40              |
|                    | 224303                | 5      | 3.7  | 230   | 80                            | 45                           | 60              | 70                            | 30                           | 60              |
| 6"                 | 226110                | 5      | 3.7  | 230   | 80                            | 45                           | 60              | 70                            | 30                           | 60              |
|                    | 226111                | 7.5    | 5.5  | 230   | 125                           | 70                           | 100             | 110                           | 50                           | 100             |
|                    | 226112                | 10     | 7.5  | 230   | 150                           | 80                           | 125             | 150                           | 60                           | 125             |
|                    | 226113                | 15     | 11   | 230   | 200                           | 125                          | 175             | 200                           | 90                           | 175             |