

# ELECTRICAL DATA

Asynchronous three-phase motors, squirrel-case rotor.  
External cooling IC 411, continuous service S1.  
Isolating class 155(F), protection grade IP 55.

Aluminum motors **IE1-MS** series

Cast iron motors **IE1-EG** series

Synchronous speed 1500 rpm - 4 poles

400 V, 50 Hz

| TYPE            | Power |      | M <sub>N</sub><br>N.m | n<br>rpm | IE1 efficiency class<br>EN 60034-2-1<br>100% | I <sub>N</sub><br>400 V<br>A | I <sub>A</sub> /I <sub>N</sub> | Cosφ | M <sub>A</sub> /M <sub>N</sub> | M <sub>K</sub> /M <sub>N</sub> | J<br>Kgm <sup>2</sup> | Noise<br>level<br>dB(A) | m<br>Kg |
|-----------------|-------|------|-----------------------|----------|----------------------------------------------|------------------------------|--------------------------------|------|--------------------------------|--------------------------------|-----------------------|-------------------------|---------|
|                 | kW    | CV   |                       |          |                                              |                              |                                |      |                                |                                |                       |                         |         |
| MS 56 1-4       | 0.06  | 0.08 | 0.42                  | 1360     | 50                                           | 0.35                         | 4                              | 0.56 | 2.3                            | 2.4                            | 0.00009               | 50                      | 2.9     |
| MS 56 2-4       | 0.09  | 0.12 | 0.63                  | 1360     | 52                                           | 0.45                         | 4                              | 0.59 | 2.3                            | 2.4                            | 0.00011               | 50                      | 3.2     |
| • MS 56 3-4     | 0.12  | 0.17 | 0.84                  | 1360     | 52                                           | 0.55                         | 4                              | 0.64 | 2.2                            | 2.4                            | 0.00014               | 52                      | 3.7     |
| MS 63 1-4       | 0.12  | 0.17 | 0.84                  | 1360     | 52                                           | 0.55                         | 4                              | 0.64 | 2.2                            | 2.4                            | 0.00016               | 52                      | 3.7     |
| MS 63 2-4       | 0.18  | 0.25 | 1.31                  | 1310     | 57                                           | 0.7                          | 4                              | 0.65 | 2.2                            | 2.4                            | 0.00020               | 52                      | 4.2     |
| • MS 63 3-4     | 0.25  | 0.33 | 1.78                  | 1340     | 60                                           | 0.91                         | 4                              | 0.66 | 2.2                            | 2.2                            | 0.00023               | 54                      | 5.0     |
| MS 71 1-4       | 0.25  | 0.33 | 1.77                  | 1350     | 60                                           | 0.84                         | 6                              | 0.72 | 2.2                            | 2.4                            | 0.00058               | 55                      | 5.0     |
| MS 71 2-4       | 0.37  | 0.5  | 2.58                  | 1370     | 65                                           | 1.11                         | 6                              | 0.74 | 2.2                            | 2.4                            | 0.00065               | 55                      | 5.8     |
| • MS 71 3-4     | 0.55  | 0.75 | 3.81                  | 1380     | 66                                           | 1.6                          | 6                              | 0.75 | 2.2                            | 2.4                            | 0.00087               | 57                      | 6.5     |
| MS 80 1-4       | 0.55  | 0.75 | 3.83                  | 1370     | 67                                           | 1.58                         | 6                              | 0.75 | 2.2                            | 2.4                            | 0.00124               | 58                      | 8.1     |
| IE1-MS 80 2-4   | 0.75  | 1    | 5.19                  | 1380     | 72                                           | 1.93                         | 6                              | 0.78 | 2.2                            | 2.4                            | 0.00167               | 58                      | 9.1     |
| • MS 80 3-4     | 1.1   | 1.5  | 7.56                  | 1390     | 76.2                                         | 2.67                         | 6                              | 0.78 | 2.2                            | 2.4                            | 0.00185               | 60                      | 11.0    |
| IE1-MS 90 S-4   | 1.1   | 1.5  | 7.50                  | 1400     | 76.2                                         | 2.64                         | 6                              | 0.79 | 2.2                            | 2.4                            | 0.00168               | 61                      | 11.7    |
| IE1-MS 90 L1-4  | 1.5   | 2    | 10.23                 | 1400     | 78.5                                         | 3.45                         | 6                              | 0.80 | 2.2                            | 2.4                            | 0.00217               | 61                      | 14.4    |
| • MS 90 L2-4    | 2.2   | 3    | 15.01                 | 1400     | 81                                           | 4.9                          | 7                              | 0.80 | 2.2                            | 2.4                            | 0.00262               | 63                      | 17.6    |
| IE1-MS 100 L1-4 | 2.2   | 3    | 14.80                 | 1420     | 81                                           | 4.84                         | 7                              | 0.81 | 2.2                            | 2.3                            | 0.00335               | 64                      | 19.2    |
| IE1-MS 100 L2-4 | 3     | 4    | 20.18                 | 1420     | 82.6                                         | 6.47                         | 7                              | 0.81 | 2.2                            | 2.3                            | 0.00463               | 64                      | 22.5    |
| • MS 100 L3-4   | 4     | 5.5  | 26.71                 | 1430     | 84.2                                         | 8.36                         | 7                              | 0.82 | 2.2                            | 2.3                            | 0.00508               | 65                      | 27.3    |
| IE1-MS 112 M-4  | 4     | 5.5  | 26.71                 | 1430     | 84.2                                         | 8.26                         | 7                              | 0.83 | 2.2                            | 2.2                            | 0.00866               | 65                      | 29.0    |
| • MS 112 L-4    | 5.5   | 7.5  | 36.48                 | 1440     | 85.7                                         | 11.2                         | 7                              | 0.83 | 2.2                            | 2.2                            | 0.00955               | 68                      | 35.7    |
| IE1-MS 132 S-4  | 5.5   | 7.5  | 36.22                 | 1450     | 85.7                                         | 11                           | 7                              | 0.84 | 2.2                            | 2.2                            | 0.01803               | 71                      | 39.0    |
| IE1-MS 132 M-4  | 7.5   | 10   | 49.40                 | 1450     | 87                                           | 14.6                         | 7                              | 0.85 | 2.2                            | 2.2                            | 0.02218               | 71                      | 48.6    |
| • MS 132 L1-4   | 9.2   | 12.5 | 60.18                 | 1460     | 87.5                                         | 17.9                         | 7.5                            | 0.85 | 2.2                            | 2.2                            | 0.02436               | 74                      | 56.5    |
| • MS 132 L2-4   | 11    | 15   | 71.95                 | 1460     | 88.4                                         | 20.9                         | 7.5                            | 0.86 | 2.2                            | 2.2                            | 0.02672               | 74                      | 64      |
| IE1-MS 160 M-4  | 11    | 15   | 71.95                 | 1460     | 88.4                                         | 20.6                         | 7                              | 0.87 | 2.2                            | 2.2                            | 0.04575               | 75                      | 73.0    |
| IE1-MS 160 L-4  | 15    | 20   | 98.12                 | 1460     | 88.4                                         | 28.2                         | 7.5                            | 0.87 | 2.2                            | 2.2                            | 0.05968               | 75                      | 88.5    |
| IE1-EG 160 M-4  | 11    | 15   | 72                    | 1460     | 88.4                                         | 22.5                         | 7                              | 0.84 | 2.2                            | 2.3                            | 0.0747                | 80                      | 118     |
| IE1-EG 160 L-4  | 15    | 20   | 98.1                  | 1460     | 89.4                                         | 30                           | 7.5                            | 0.85 | 2.2                            | 2.3                            | 0.0918                | 79                      | 138     |
| IE1-EG 180 M-4  | 18.5  | 25   | 120.2                 | 1470     | 90                                           | 36.3                         | 7.5                            | 0.86 | 2.2                            | 2.3                            | 0.1390                | 80                      | 182     |
| IE1-EG 180 L-4  | 22    | 30   | 142.9                 | 1470     | 90.5                                         | 43                           | 7.5                            | 0.86 | 2.2                            | 2.3                            | 0.1580                | 80                      | 190     |
| IE1-EG 200 L-4  | 30    | 40   | 194.9                 | 1470     | 91.4                                         | 58                           | 7.2                            | 0.86 | 2.2                            | 2.3                            | 0.2620                | 83                      | 243     |
| IE1-EG 225 S-4  | 37    | 50   | 239                   | 1480     | 92                                           | 70.2                         | 7.2                            | 0.87 | 2.2                            | 2.3                            | 0.4060                | 85                      | 284     |
| IE1-EG 225 M-4  | 45    | 60   | 290                   | 1480     | 92.5                                         | 85                           | 7.2                            | 0.87 | 2.2                            | 2.3                            | 0.4690                | 84                      | 320     |
| IE1-EG 250 M-4  | 55    | 75   | 355                   | 1480     | 93                                           | 103                          | 7.2                            | 0.87 | 2.2                            | 2.3                            | 0.6600                | 86                      | 452     |
| IE1-EG 280 S-4  | 75    | 100  | 484                   | 1480     | 93.6                                         | 140                          | 7.2                            | 0.87 | 2.2                            | 2.3                            | 1.1200                | 89                      | 562     |
| IE1-EG 280 M-4  | 90    | 125  | 577                   | 1490     | 93.9                                         | 167                          | 7.2                            | 0.87 | 2.2                            | 2.3                            | 1.4600                | 89                      | 667     |
| IE1-EG 315 S-4  | 110   | 150  | 705                   | 1490     | 94.5                                         | 201                          | 6.9                            | 0.88 | 2.1                            | 2.2                            | 3.1100                | 96                      | 1000    |
| IE1-EG 315 M-4  | 132   | 180  | 846                   | 1490     | 94.8                                         | 240                          | 6.9                            | 0.88 | 2.1                            | 2.2                            | 3.6200                | 96                      | 1100    |
| IE1-EG 315 L1-4 | 160   | 220  | 1026                  | 1490     | 94.9                                         | 288                          | 6.9                            | 0.89 | 2.1                            | 2.2                            | 4.1300                | 100                     | 1160    |
| IE1-EG 315 L2-4 | 200   | 270  | 1282                  | 1490     | 94.9                                         | 360                          | 6.9                            | 0.89 | 2.1                            | 2.2                            | 4.9400                | 100                     | 1270    |
| IE1-EG 355 M-4  | 250   | 340  | 1608                  | 1485     | 95.2                                         | 443                          | 6.9                            | 0.90 | 2.1                            | 2.2                            | 5.6700                | 104                     | 1700    |
| IE1-EG 355 L2-4 | 315   | 430  | 2026                  | 1485     | 95.2                                         | 559                          | 6.9                            | 0.90 | 2.1                            | 2.2                            | 6.6600                | 104                     | 1850    |

• Reduced frame size.

\* The electrical data are not restricted to the series, for more detailed information please ask. Data MSL Series and EGO series.