

# ACM CAST IRON HOUSING IE2

DIN EN 60034-30 | High Efficiency (HE)

2 poles, idle speed 3000 rpm

400 V / 50 Hz, 460 V / 60 Hz

| Frame size | Power at 50/60 Hz | Rated speed at 50/60 Hz | Efficiency at 100% load | 75%  | 50%  | Power factor at 50/60 Hz | Rated current at 400 V / 50 Hz | Rated torque | Starting current to Rated current | Starting torque to rated torque | Breakdown torque to Rated torque | Moment of inertia     | Weight |
|------------|-------------------|-------------------------|-------------------------|------|------|--------------------------|--------------------------------|--------------|-----------------------------------|---------------------------------|----------------------------------|-----------------------|--------|
| Type       | kW                | rpm                     | %                       | %    | %    | cos φ                    | A                              | Nm           | Ia/In                             | Ta/Tn                           | Tk/Tn                            | J [kgm <sup>2</sup> ] | kg     |
| 160 MA-2   | 11.0 / 13.2       | 2930 / 3516             | 89.4                    | 89.4 | 87.6 | 0.89                     | 19.96                          | 35.9         | 7.9                               | 2.2                             | 2.3                              | 0.0385                | 108    |
| 160 MB-2   | 15.0 / 18.0       | 2930 / 3516             | 90.3                    | 90.3 | 88.5 | 0.89                     | 26.94                          | 48.9         | 7.9                               | 2.2                             | 2.3                              | 0.0466                | 122    |
| 160 L-2    | 18.5 / 22.2       | 2937 / 3524             | 90.9                    | 90.9 | 89.1 | 0.89                     | 33.01                          | 60.2         | 8.0                               | 2.2                             | 2.3                              | 0.0550                | 140    |
| 180 M-2    | 22.0 / 26.4       | 2940 / 3528             | 91.3                    | 91.3 | 89.5 | 0.88                     | 39.52                          | 71.5         | 8.1                               | 2.2                             | 2.3                              | 0.0810                | 178    |
| 200 LA-2   | 30.0 / 36.0       | 2950 / 3540             | 92.0                    | 92.0 | 90.2 | 0.88                     | 53.49                          | 97.1         | 7.5                               | 2.0                             | 2.3                              | 0.1250                | 229    |
| 200 LB-2   | 37.0 / 44.4       | 2950 / 3540             | 92.5                    | 92.5 | 90.7 | 0.89                     | 64.87                          | 119.8        | 7.5                               | 2.0                             | 2.3                              | 0.1450                | 249    |
| 225 M-2    | 45.0 / 54.0       | 2960 / 3552             | 92.9                    | 92.9 | 91.0 | 0.89                     | 78.56                          | 145.2        | 7.5                               | 2.2                             | 2.3                              | 0.2280                | 322    |
| 250 M-2    | 55.0 / 66.0       | 2965 / 3558             | 93.2                    | 93.2 | 91.3 | 0.90                     | 94.64                          | 177.2        | 7.6                               | 2.2                             | 2.3                              | 0.3050                | 401    |
| 280 S-2    | 75.0 / 90.0       | 2970 / 3564             | 93.8                    | 93.8 | 91.9 | 0.90                     | 126.83                         | 241.2        | 6.9                               | 1.8                             | 2.3                              | 0.6000                | 533    |
| 280 M-2    | 90.0 / 108        | 2970 / 3564             | 94.1                    | 94.1 | 92.2 | 0.91                     | 151.71                         | 289.4        | 6.9                               | 1.8                             | 2.3                              | 0.6860                | 568    |
| 315 S-2    | 110 / 132         | 2975 / 3570             | 94.3                    | 94.3 | 92.4 | 0.91                     | 185.03                         | 353.1        | 7.0                               | 1.8                             | 2.2                              | 1.1700                | 914    |
| 315 M-2    | 132 / 158         | 2975 / 3570             | 94.6                    | 94.6 | 92.7 | 0.91                     | 221.33                         | 423.7        | 7.0                               | 1.8                             | 2.2                              | 1.8000                | 1029   |
| 315 LA-2   | 160 / 192         | 2975 / 3570             | 94.8                    | 94.8 | 92.9 | 0.92                     | 264.80                         | 513.6        | 7.1                               | 1.8                             | 2.2                              | 2.1200                | 1067   |
| 315 LB-2   | 200 / 240         | 2975 / 3570             | 95.0                    | 95.0 | 93.1 | 0.92                     | 330.30                         | 642.0        | 7.1                               | 1.8                             | 2.2                              | 2.5000                | 1194   |
| 355 M-2    | 250 / 300         | 2980 / 3576             | 95.0                    | 95.0 | 93.1 | 0.92                     | 412.88                         | 801.2        | 7.1                               | 1.6                             | 2.2                              | 3.1000                | 1597   |
| 355 L-2    | 315 / 378         | 2980 / 3576             | 95.0                    | 95.0 | 93.1 | 0.92                     | 520.23                         | 1009.5       | 7.2                               | 1.6                             | 2.2                              | 3.6000                | 1702   |

4 poles, idle speed 1500 rpm

400 V / 50 Hz, 460 V / 60 Hz

| Frame size | Power at 50/60 Hz | Rated speed at 50/60 Hz | Efficiency at 100% load | 75%  | 50%  | Power factor at 50/60 Hz | Rated current at 400 V / 50 Hz | Rated torque | Starting current to Rated current | Starting torque to rated torque | Breakdown torque to Rated torque | Moment of inertia     | Weight |
|------------|-------------------|-------------------------|-------------------------|------|------|--------------------------|--------------------------------|--------------|-----------------------------------|---------------------------------|----------------------------------|-----------------------|--------|
| Type       | kW                | rpm                     | %                       | %    | %    | cos φ                    | A                              | Nm           | Ia/In                             | Ta/Tn                           | Tk/Tn                            | J [kgm <sup>2</sup> ] | kg     |
| 160 M-4    | 11.0 / 13.2       | 1460 / 1752             | 89.8                    | 89.8 | 88.0 | 0.84                     | 21.05                          | 72.0         | 6.9                               | 2.1                             | 2.8                              | 0.0740                | 114    |
| 160 L-4    | 15.0 / 18.0       | 1460 / 1752             | 90.6                    | 90.6 | 88.8 | 0.85                     | 28.11                          | 98.1         | 7.5                               | 2.1                             | 2.8                              | 0.0918                | 136    |
| 180 M-4    | 18.5 / 22.2       | 1470 / 1764             | 91.2                    | 91.2 | 89.4 | 0.86                     | 34.05                          | 120.2        | 7.8                               | 2.1                             | 2.8                              | 0.1350                | 176    |
| 180 L-4    | 22.0 / 26.4       | 1470 / 1764             | 91.6                    | 91.6 | 89.8 | 0.86                     | 40.31                          | 142.9        | 7.5                               | 2.1                             | 2.8                              | 0.1600                | 196    |
| 200 L-4    | 30.0 / 36.0       | 1470 / 1764             | 92.3                    | 92.3 | 90.5 | 0.86                     | 54.55                          | 194.9        | 7.1                               | 2.0                             | 2.8                              | 0.2650                | 259    |
| 225 S-4    | 37.0 / 44.4       | 1480 / 1776             | 92.7                    | 92.7 | 90.8 | 0.87                     | 66.22                          | 238.8        | 7.5                               | 2.0                             | 2.5                              | 0.4200                | 302    |
| 225 M-4    | 45.0 / 54.0       | 1480 / 1776             | 93.1                    | 93.1 | 91.2 | 0.87                     | 80.19                          | 290.4        | 7.6                               | 1.8                             | 2.5                              | 0.4700                | 329    |
| 250 M-4    | 55.0 / 66.0       | 1480 / 1776             | 93.5                    | 93.5 | 91.6 | 0.87                     | 97.59                          | 354.9        | 7.3                               | 1.8                             | 2.5                              | 0.6600                | 418    |
| 280 S-4    | 75.0 / 90.0       | 1480 / 1776             | 94.0                    | 94.0 | 92.1 | 0.87                     | 132.38                         | 484.0        | 7.6                               | 1.8                             | 2.2                              | 1.1400                | 546    |
| 280 M-4    | 90.0 / 108        | 1480 / 1776             | 94.2                    | 94.2 | 92.3 | 0.87                     | 158.51                         | 580.7        | 7.5                               | 1.8                             | 2.2                              | 1.4200                | 638    |
| 315 S-4    | 110 / 132         | 1485 / 1782             | 94.5                    | 94.5 | 92.6 | 0.88                     | 190.93                         | 707.4        | 7.1                               | 1.8                             | 2.2                              | 3.4000                | 939    |
| 315 M-4    | 132 / 158         | 1485 / 1782             | 94.7                    | 94.7 | 92.8 | 0.88                     | 228.63                         | 848.9        | 7.3                               | 1.8                             | 2.2                              | 3.5800                | 1033   |
| 315 LA-4   | 160 / 192         | 1485 / 1782             | 94.9                    | 94.9 | 93.0 | 0.89                     | 273.44                         | 1029         | 7.4                               | 1.8                             | 2.2                              | 4.1000                | 1126   |
| 315 LB-4   | 200 / 240         | 1485 / 1782             | 95.1                    | 95.1 | 93.2 | 0.89                     | 341.61                         | 1286         | 7.6                               | 1.8                             | 2.2                              | 4.9000                | 1229   |
| 355 M-4    | 250 / 300         | 1490 / 1788             | 95.1                    | 95.1 | 93.2 | 0.90                     | 421.61                         | 1602         | 7.5                               | 1.8                             | 2.2                              | 6.7000                | 1670   |
| 355 L-4    | 315 / 378         | 1490 / 1788             | 95.1                    | 95.1 | 93.2 | 0.90                     | 531.23                         | 2019         | 7.4                               | 1.8                             | 2.2                              | 8.4000                | 2848   |

# ACM CAST IRON HOUSING IE2

DIN EN 60034-30 | High Efficiency (HE)

6 poles, idle speed 1000 rpm

400 V / 50 Hz, 460 V / 60 Hz

| Frame size | Power at 50/60 Hz | Rated speed at 50/60 Hz | Efficiency at 100% load | 75%  | 50%  | Power factor at 50/60 Hz | Rated current at 400 V / 50 Hz | Rated torque | Starting current to Rated current | Starting torque to rated torque | Breakdown torque to Rated torque | Moment of inertia     | Weight |
|------------|-------------------|-------------------------|-------------------------|------|------|--------------------------|--------------------------------|--------------|-----------------------------------|---------------------------------|----------------------------------|-----------------------|--------|
| Type       | kW                | rpm                     | %                       | %    | %    | cos φ                    | A                              | Nm           | Ia/In                             | Ta/Tn                           | Tk/Tn                            | J [kgm <sup>2</sup> ] | kg     |
| 160 M-6    | 7.50 / 9.00       | 970 / 1164              | 87.2                    | 87.2 | 85.5 | 0.78                     | 15.92                          | 73.8         | 6.8                               | 2.0                             | 2.1                              | 0.0880                | 112    |
| 160 L-6    | 11.0 / 13.2       | 970 / 1164              | 88.7                    | 88.7 | 86.9 | 0.78                     | 22.95                          | 108.3        | 6.9                               | 2.0                             | 2.1                              | 0.1150                | 133    |
| 180 L-6    | 15.0 / 18.0       | 975 / 1170              | 89.7                    | 89.7 | 87.9 | 0.81                     | 29.80                          | 146.9        | 7.3                               | 2.0                             | 2.1                              | 0.2100                | 183    |
| 200 LA-6   | 18.5 / 22.2       | 980 / 1176              | 90.4                    | 90.4 | 88.6 | 0.81                     | 36.47                          | 180.3        | 7.2                               | 2.0                             | 2.1                              | 0.3100                | 224    |
| 200 LB-6   | 22.0 / 26.4       | 980 / 1176              | 90.9                    | 90.9 | 89.1 | 0.83                     | 42.09                          | 214.4        | 7.3                               | 2.0                             | 2.1                              | 0.3500                | 240    |
| 225 M-6    | 30.0 / 36.0       | 980 / 1176              | 91.7                    | 91.7 | 89.9 | 0.84                     | 56.22                          | 292.3        | 6.8                               | 2.1                             | 2.1                              | 0.5340                | 285    |
| 250 M-6    | 37.0 / 44.4       | 980 / 1176              | 92.2                    | 92.2 | 90.4 | 0.86                     | 67.35                          | 360.6        | 7.0                               | 2.0                             | 2.1                              | 0.8250                | 389    |
| 280 S-6    | 45.0 / 54.0       | 980 / 1176              | 92.7                    | 92.7 | 90.8 | 0.86                     | 81.48                          | 438.5        | 7.2                               | 2.0                             | 2.0                              | 1.3500                | 489    |
| 280 M-6    | 55.0 / 66.0       | 980 / 1176              | 93.1                    | 93.1 | 91.8 | 0.86                     | 99.15                          | 536.0        | 7.2                               | 2.0                             | 2.0                              | 1.6000                | 550    |
| 315 S-6    | 75.0 / 90.0       | 985 / 1182              | 93.7                    | 93.7 | 93.9 | 0.86                     | 134.34                         | 727.2        | 6.5                               | 2.0                             | 2.0                              | 4.0000                | 838    |
| 315 M-6    | 90.0 / 108        | 985 / 1182              | 94.0                    | 94.0 | 92.1 | 0.86                     | 160.70                         | 872.6        | 6.6                               | 2.0                             | 2.0                              | 4.6000                | 941    |
| 315 LA-6   | 110 / 132         | 985 / 1182              | 94.3                    | 94.3 | 92.5 | 0.86                     | 195.78                         | 1066         | 6.6                               | 2.0                             | 2.0                              | 5.2500                | 986    |
| 315 LB-6   | 132 / 158         | 985 / 1182              | 94.6                    | 94.6 | 92.7 | 0.87                     | 231.50                         | 1280         | 6.6                               | 2.0                             | 2.0                              | 6.2000                | 1121   |
| 355 MA-6   | 160 / 192         | 990 / 1188              | 94.8                    | 94.8 | 92.9 | 0.88                     | 276.84                         | 1543         | 6.7                               | 2.0                             | 2.0                              | 9.6000                | 1650   |
| 355 MB-6   | 200 / 240         | 990 / 1188              | 95.0                    | 95.0 | 93.1 | 0.88                     | 345.32                         | 1929         | 6.8                               | 2.0                             | 2.0                              | 10.800                | 1752   |
| 355 L-6    | 250 / 300         | 990 / 1188              | 95.0                    | 95.0 | 93.1 | 0.88                     | 431.64                         | 2412         | 6.8                               | 2.0                             | 2.0                              | 12.500                | 1990   |

8 poles, idle speed 750 rpm

400 V / 50 Hz, 460 V / 60 Hz

| Frame size | Power at 50/60 Hz | Rated speed at 50/60 Hz | Efficiency at 100% load | 75%  | 50%  | Power factor at 50/60 Hz | Rated current at 400 V / 50 Hz | Rated torque | Starting current to Rated current | Starting torque to rated torque | Breakdown torque to Rated torque | Moment of inertia     | Weight |
|------------|-------------------|-------------------------|-------------------------|------|------|--------------------------|--------------------------------|--------------|-----------------------------------|---------------------------------|----------------------------------|-----------------------|--------|
| Type       | kW                | rpm                     | %                       | %    | %    | cos φ                    | A                              | Nm           | Ia/In                             | Ta/Tn                           | Tk/Tn                            | J [kgm <sup>2</sup> ] | kg     |
| 160 MA-8   | 4.00 / 4.80       | 725 / 870               | 81.9                    | 81.9 | 80.3 | 0.73                     | 9.66                           | 52.7         | 6.0                               | 1.9                             | 2.0                              | 0.0480                | 92     |
| 160 MB-8   | 5.50 / 6.60       | 725 / 870               | 83.8                    | 83.8 | 82.1 | 0.74                     | 12.80                          | 72.4         | 6.0                               | 1.9                             | 2.0                              | 0.0600                | 115    |
| 160 L-8    | 7.50 / 9.00       | 725 / 870               | 85.3                    | 85.3 | 83.6 | 0.75                     | 16.92                          | 98.8         | 6.0                               | 1.9                             | 2.0                              | 0.0708                | 124    |
| 180 L-8    | 11.0 / 13.2       | 735 / 882               | 86.9                    | 86.9 | 85.2 | 0.75                     | 24.36                          | 142.9        | 6.5                               | 2.0                             | 2.0                              | 0.1116                | 180    |
| 200 L-8    | 15.0 / 18.0       | 730 / 876               | 88.0                    | 88.0 | 86.2 | 0.76                     | 32.37                          | 196.2        | 6.6                               | 2.0                             | 2.0                              | 0.1680                | 213    |
| 225 S-8    | 18.5 / 22.2       | 730 / 876               | 88.6                    | 88.6 | 86.8 | 0.76                     | 39.66                          | 242.0        | 6.6                               | 1.9                             | 2.0                              | 0.1956                | 263    |
| 225 M-8    | 22.0 / 26.4       | 730 / 876               | 89.1                    | 89.1 | 87.3 | 0.78                     | 45.69                          | 287.8        | 6.6                               | 1.9                             | 2.0                              | 0.2940                | 301    |
| 250 M-8    | 30.0 / 36.0       | 735 / 882               | 89.8                    | 89.8 | 88.0 | 0.79                     | 61.04                          | 389.8        | 6.5                               | 1.9                             | 2.0                              | 0.3960                | 394    |
| 280 S-8    | 37.0 / 44.4       | 735 / 882               | 90.3                    | 90.3 | 88.5 | 0.79                     | 74.87                          | 480.7        | 6.6                               | 1.9                             | 2.0                              | 0.7800                | 480    |
| 280 M-8    | 45.0 / 54.0       | 735 / 882               | 90.7                    | 90.7 | 88.9 | 0.79                     | 90.65                          | 584.7        | 6.6                               | 1.9                             | 2.0                              | 0.8520                | 539    |
| 315 S-8    | 55.0 / 66.0       | 735 / 882               | 91.0                    | 91.0 | 89.2 | 0.81                     | 107.70                         | 714.6        | 6.6                               | 1.8                             | 2.0                              | 1.5600                | 820    |
| 315 M-8    | 75.0 / 90.0       | 735 / 882               | 91.6                    | 91.6 | 89.8 | 0.81                     | 145.91                         | 974.5        | 6.2                               | 1.8                             | 2.0                              | 2.4000                | 916    |
| 315 LA-8   | 90.0 / 108        | 735 / 882               | 91.9                    | 91.9 | 90.1 | 0.82                     | 172.39                         | 1169         | 6.4                               | 1.8                             | 2.0                              | 2.8200                | 1000   |
| 315 LB-8   | 110 / 132         | 735 / 882               | 92.3                    | 92.3 | 90.5 | 0.82                     | 209.78                         | 1429         | 6.4                               | 1.8                             | 2.0                              | 3.2400                | 1015   |
| 355 MA-8   | 132 / 158         | 740 / 888               | 92.6                    | 92.6 | 90.7 | 0.82                     | 250.92                         | 1703         | 6.4                               | 1.8                             | 2.0                              | 4.0800                | 1715   |
| 355 MB-8   | 160 / 192         | 740 / 888               | 93.0                    | 93.0 | 91.1 | 0.82                     | 302.84                         | 2065         | 6.4                               | 1.8                             | 2.0                              | 4.6800                | 1866   |
| 355 L-8    | 200 / 240         | 740 / 888               | 93.5                    | 93.5 | 91.6 | 0.83                     | 371.99                         | 2518         | 6.4                               | 1.8                             | 2.0                              | 4.0800                | 1948   |

# PROGRESSIVE

IE2 motors with increased power in a smaller housing

2 poles, idle speed 3000 rpm 400 V / 50 Hz, 460 V / 60 Hz

| Frame size | Power at 50/60 Hz | Rated speed at 50/60 Hz | Efficiency at 100% load | 75%  | 50%  | Power factor at 50/60 Hz | Rated current at 400 V / 50 Hz | Rated torque | Starting current to Rated current | Starting torque to Rated torque | Breakdown torque to Rated torque | Moment of inertia     | Weight |
|------------|-------------------|-------------------------|-------------------------|------|------|--------------------------|--------------------------------|--------------|-----------------------------------|---------------------------------|----------------------------------|-----------------------|--------|
| Type       | kW                | rpm                     | %                       | %    | %    | cos φ                    | A                              | Nm           | Ia/In                             | Ta/Tn                           | Tk/Tn                            | J [kgm <sup>2</sup> ] | kg     |
| 80 C-2     | 1.50              | 2850                    | 81.3                    | 81.6 | 79.7 | 0.84                     | 3.2                            | 5.0          | 6.5                               | 2.2                             | 2.3                              | 0.0011                | 13.0   |
| 90 LC-2    | 3.00              | 2850                    | 84.6                    | 84.9 | 82.9 | 0.87                     | 5.9                            | 10.1         | 7.0                               | 2.2                             | 2.3                              | 0.0026                | 17.0   |
| 100 LC-2   | 4.00              | 2870                    | 85.8                    | 86.1 | 84.1 | 0.88                     | 7.6                            | 13.3         | 7.5                               | 2.2                             | 2.3                              | 0.0048                | 22.5   |
| 112 MC-2   | 5.50              | 2900                    | 87.0                    | 87.3 | 85.3 | 0.88                     | 10.4                           | 18.1         | 7.5                               | 2.2                             | 2.3                              | 0.0069                | 30.5   |
| 132 MC-2   | 11.0              | 2910                    | 89.4                    | 89.8 | 87.6 | 0.89                     | 20.0                           | 36.1         | 7.8                               | 2.2                             | 2.3                              | 0.0170                | 49.0   |
| 160 LC-2   | 22.0              | 2940                    | 91.3                    | 91.7 | 89.5 | 0.89                     | 39.1                           | 71.5         | 7.8                               | 2.2                             | 2.3                              | 0.0600                | 145    |
| 180 MC-2   | 30.0              | 2940                    | 92.0                    | 92.4 | 90.2 | 0.89                     | 52.9                           | 97.5         | 7.5                               | 2.0                             | 2.3                              | 0.0930                | 190    |
| 200 LC-2   | 45.0              | 2960                    | 92.9                    | 93.3 | 91.0 | 0.90                     | 77.7                           | 145.2        | 7.8                               | 2.2                             | 2.3                              | 0.1680                | 290    |
| 225 MC-2   | 55.0              | 2960                    | 93.2                    | 93.6 | 91.3 | 0.90                     | 94.6                           | 177.5        | 7.5                               | 2.1                             | 2.3                              | 0.2570                | 320    |
| 250 MC-2   | 75.0              | 2970                    | 93.8                    | 94.2 | 91.9 | 0.90                     | 128.2                          | 241.2        | 7.2                               | 2.1                             | 2.3                              | 0.3500                | 432    |
| 280 MC-2   | 110.0             | 2975                    | 94.3                    | 94.7 | 92.4 | 0.90                     | 187.1                          | 353.2        | 7.5                               | 2.0                             | 2.3                              | 0.7270                | 800    |

4 poles, idle speed 1500 rpm 400 V / 50 Hz, 460 V / 60 Hz

| Frame size | Power at 50/60 Hz | Rated speed at 50/60 Hz | Efficiency at 100% load | 75%  | 50%  | Power factor at 50/60 Hz | Rated current at 400 V / 50 Hz | Rated torque | Starting current to Rated current | Starting torque to Rated torque | Breakdown torque to Rated torque | Moment of inertia     | Weight |
|------------|-------------------|-------------------------|-------------------------|------|------|--------------------------|--------------------------------|--------------|-----------------------------------|---------------------------------|----------------------------------|-----------------------|--------|
| Type       | kW                | rpm                     | %                       | %    | %    | cos φ                    | A                              | Nm           | Ia/In                             | Ta/Tn                           | Tk/Tn                            | J [kgm <sup>2</sup> ] | kg     |
| 80 C-4     | 1.10              | 1400                    | 81.4                    | 81.7 | 79.8 | 0.77                     | 2.5                            | 7.5          | 6.5                               | 2.2                             | 2.3                              | 0.0024                | 10.3   |
| 90 LC-4    | 2.20              | 1420                    | 84.3                    | 84.6 | 82.6 | 0.81                     | 4.7                            | 14.8         | 7.0                               | 2.2                             | 2.3                              | 0.0053                | 20.3   |
| 100 LC-4   | 4.00              | 1435                    | 86.6                    | 86.9 | 84.9 | 0.82                     | 8.1                            | 26.6         | 7.0                               | 2.2                             | 2.3                              | 0.0095                | 30.5   |
| 112 MC-4   | 5.50              | 1440                    | 87.7                    | 88.0 | 85.9 | 0.82                     | 11.0                           | 36.5         | 7.5                               | 2.2                             | 2.3                              | 0.0110                | 36.5   |
| 132 MC-4   | 11.0              | 1460                    | 89.8                    | 90.1 | 88.0 | 0.84                     | 21.0                           | 72.0         | 7.5                               | 2.2                             | 2.3                              | 0.0395                | 56.0   |
| 160 LC-4   | 18.5              | 1460                    | 91.2                    | 91.5 | 89.4 | 0.86                     | 33.1                           | 121.0        | 7.5                               | 2.1                             | 2.3                              | 0.0980                | 150    |
| 180 MC-4   | 22.0              | 1460                    | 91.6                    | 91.9 | 89.8 | 0.86                     | 40.3                           | 143.9        | 7.5                               | 2.2                             | 2.3                              | 0.1600                | 134    |
| 180 LC-4   | 30.0              | 1470                    | 92.3                    | 92.6 | 90.5 | 0.86                     | 54.5                           | 194.9        | 7.5                               | 2.2                             | 2.3                              | 0.1820                | 205    |
| 200 LC-4   | 37.0              | 1470                    | 92.7                    | 93.0 | 90.8 | 0.86                     | 67.0                           | 240.4        | 7.5                               | 2.2                             | 2.3                              | 0.2950                | 280    |
| 225 MC-4   | 55.0              | 1470                    | 93.5                    | 93.8 | 91.6 | 0.86                     | 98.7                           | 357.4        | 7.2                               | 2.2                             | 2.3                              | 0.5300                | 346    |
| 250 MC-4   | 75.0              | 1480                    | 94.0                    | 94.3 | 92.1 | 0.87                     | 132.4                          | 484.0        | 7.2                               | 2.2                             | 2.3                              | 0.7200                | 440    |
| 280 MC-4   | 110.0             | 1485                    | 94.5                    | 94.8 | 92.6 | 0.88                     | 190.9                          | 707.5        | 7.2                               | 2.2                             | 2.3                              | 1.5900                | 830    |
| 315 MC-4   | 200.0             | 1485                    | 95.1                    | 95.4 | 93.2 | 0.89                     | 341.1                          | 1286.4       | 7.5                               | 2.2                             | 2.3                              | 4.9000                | 1150   |

# PROGRESSIVE

IE2 motors with increased power in a smaller housing

6 poles, idle speed 1000 rpm

400 V / 50 Hz, 460 V / 60 Hz

| Frame size | Power at 50/60 Hz | Rated speed at 50/60 Hz | Efficiency at 100% load | 75%  | 50%  | Power factor at 50/60 Hz | Rated current at 400 V / 50 Hz | Rated torque | Starting current to Rated current | Starting torque to Rated torque | Breakdown torque to Rated torque | Moment of inertia     | Weight |
|------------|-------------------|-------------------------|-------------------------|------|------|--------------------------|--------------------------------|--------------|-----------------------------------|---------------------------------|----------------------------------|-----------------------|--------|
| Type       | kW                | rpm                     | %                       | %    | %    | cos $\varphi$            | A                              | Nm           | I <sub>a</sub> /I <sub>n</sub>    | T <sub>a</sub> /T <sub>n</sub>  | T <sub>k</sub> /T <sub>n</sub>   | J [kgm <sup>2</sup> ] | kg     |
| 90 LC-6    | 1.50              | 920                     | 79.8                    | 80.0 | 78.2 | 0.74                     | 3.7                            | 15.6         | 6.0                               | 2.0                             | 2.1                              | 0.0072                | 20.5   |
| 100 LC-6   | 2.20              | 940                     | 81.8                    | 82.0 | 80.2 | 0.74                     | 5.2                            | 22.4         | 6.5                               | 2.1                             | 2.2                              | 0.0130                | 25.0   |
| 112 MC-6   | 3.00              | 940                     | 83.3                    | 83.5 | 81.6 | 0.76                     | 6.8                            | 30.5         | 6.5                               | 2.0                             | 2.1                              | 0.0200                | 39.0   |
| 112 MD-6   | 4.00              | 950                     | 84.6                    | 84.9 | 82.9 | 0.76                     | 9.0                            | 40.2         | 6.5                               | 2.0                             | 2.1                              | 0.0250                | 46.0   |
| 132 MC-6   | 7.50              | 960                     | 87.2                    | 87.5 | 85.5 | 0.77                     | 16.1                           | 74.6         | 6.5                               | 2.1                             | 2.1                              | 0.0510                | 65.0   |
| 160 LC-6   | 15.0              | 965                     | 89.7                    | 90.0 | 87.9 | 0.79                     | 30.6                           | 148.5        | 7.0                               | 2.1                             | 2.1                              | 0.1210                | 160    |
| 180 LC-6   | 18.5              | 975                     | 90.4                    | 90.7 | 88.6 | 0.81                     | 35.5                           | 151.2        | 7.0                               | 2.2                             | 2.1                              | 0.2530                | 203    |
| 200 LC-6   | 30.0              | 975                     | 91.7                    | 92.1 | 89.9 | 0.82                     | 57.6                           | 293.9        | 7.0                               | 2.1                             | 2.1                              | 0.4200                | 450    |
| 250 MC-6   | 45.0              | 980                     | 92.7                    | 93.0 | 90.8 | 0.85                     | 82.4                           | 438.6        | 7.0                               | 2.1                             | 2.1                              | 1.0500                | 580    |
| 280 MC-6   | 75.0              | 985                     | 93.7                    | 94.0 | 91.8 | 0.86                     | 134.3                          | 727.2        | 7.0                               | 2.1                             | 2.1                              | 1.9800                | 270    |