

**WONDER**® *Since 1988*

*In Synchronization with the Future*

ISO14001 ISO9001 ISO45001   CE  RoHS  SASO  TUV  SESCO  UL  UL

# WE Series

Three Phase High Efficiency  
Asynchronous Cast Iron Motors

**IE2**

# WE Series

Three Phase High Efficiency  
Asynchronous Cast Iron Motors



## General Information:

WE Series three phase asynchronous motors are completely new-designed high efficiency motors with cast iron housing. The efficiency indicators are in line with IE2 and Australia MEPS2(Level 1A).

Wonder three phase asynchronous motors are widely applied in general machinery and industries such as pumps & water treatment, road machinery, petroleum, chemical & metallurgy, cement and paper making.

## Technical Characteristics:

- IP55 protection, class F insulation, B-level temperature rise, S1 duty;
- Rated voltage 400V;
- Rated frequency 50Hz;
- Operation ambient temperature: -20°C~40°C;
- Operation altitude ≤1000m.
- Y-connection for motors up to 3kW,  
Δ-connection for 4kW and above.
- Cooling method: IC411 / IC416.

## Mounting Arrangements:

| Types         | Basic Type of Construction | Derived Types of Construction |                   |                  |                  |                  |
|---------------|----------------------------|-------------------------------|-------------------|------------------|------------------|------------------|
| WE<br>160-355 | IM B3<br>IM 1001           | IM V5<br>IM 1011              | IM V6<br>IM 1031  | IM B6<br>IM 1051 | IM B7<br>IM 1061 | IM B8<br>IM 1071 |
|               |                            |                               |                   |                  |                  |                  |
| WE<br>160-355 | IM B35<br>IM 2001          | IM V15<br>IM 2011             | IM V36<br>IM 2031 | *<br>IM 2051     | *<br>IM 2061     | *<br>IM 2071     |
|               |                            |                               |                   |                  |                  |                  |
| WE<br>160-355 | IM B5<br>IM 3001           | IM V1<br>IM 3011              | IM V3<br>IM 3031  |                  |                  |                  |
|               |                            |                               |                   |                  |                  |                  |

Basic types of construction may be used in all derived types of construction.

1) "\*" means not-defined mounting by IEC 60034-7.

2) for the types of construction IM V6, IM B6, IM B8 inquiry is necessary.

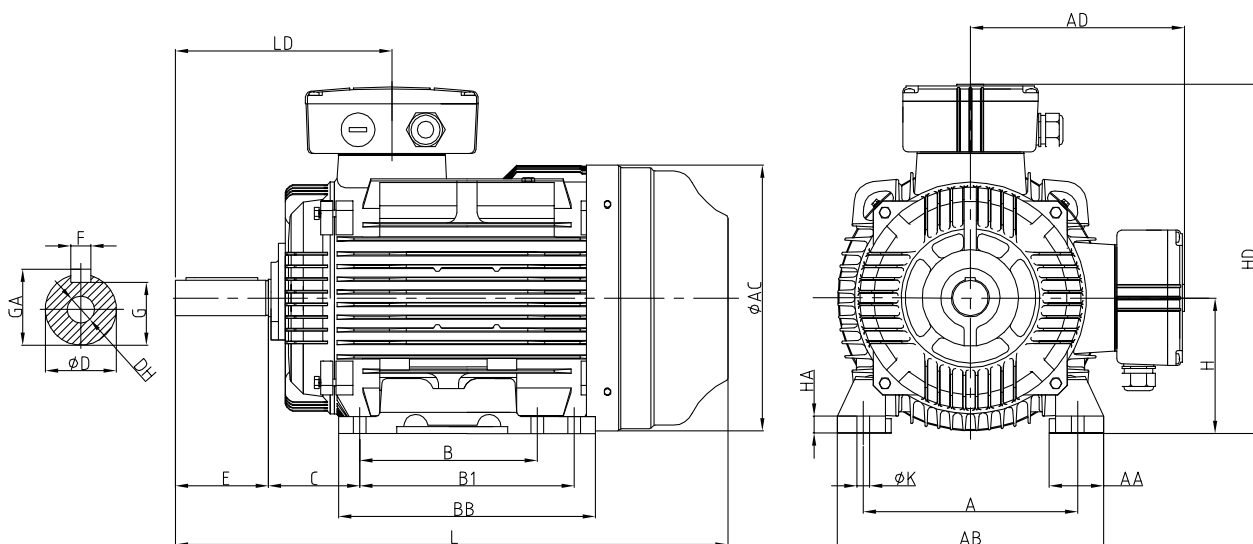
## Technical Specifications (1/2)

| Rated Output          |     | IEC Frame | Rated Speed<br>r/m | Full Load Current<br>I <sub>n</sub> (A) | Efficiency<br>η% |      |      | Power Factor<br>cosφ |      |      | Locked Rotor Current<br>I <sub>L</sub> /I <sub>n</sub> | Locked Rotor Torque<br>T <sub>L</sub> /T <sub>n</sub> | Break-down Torque<br>T <sub>b</sub> /T <sub>n</sub> | Sound LP<br>dB(A) | Moment of Inertia<br>J(kgm <sup>2</sup> ) | Weight<br>kg |
|-----------------------|-----|-----------|--------------------|---|------------------|------|------|----------------------|------|------|--|---|---|-------------------|---|--------------|
|                       |     |           |                    |   | % of Full Load   |      |      |                      |      |      |  |   |   |                   |   |              |
| kW                    | HP  |           |                    | 400V                                    | 100              | 75   | 50   | 100                  | 75   | 50   |  |   |   |                   |   |              |
| 3000r/m (2 Pole) 50Hz |     |           |                    |   |                  |      |      |                      |      |      |  |   |   |                   |   |              |
| 11                    | 15  | 160M      | 2935               | 19.6                                    | 89.9             | 89.7 | 88.1 | 0.90                 | 0.98 | 0.84 | 7.5  | 2.2   | 2.5   | 68                | 0.0549                                    | 109          |
| 15                    | 20  | 160M      | 2935               | 26.5                                    | 90.7             | 90.7 | 89.5 | 0.90                 | 0.88 | 0.83 | 7.5  | 2.2   | 2.5   | 68                | 0.0635                                    | 119          |
| 18.5                  | 25  | 160L      | 2940               | 32.2                                    | 91.2             | 91.2 | 90.1 | 0.91                 | 0.98 | 0.84 | 7.5  | 2.2   | 2.2   | 68                | 0.0725                                    | 136          |
| 22                    | 30  | 180M      | 2950               | 38.1                                    | 91.5             | 91.2 | 89.6 | .91                  | 0.98 | 0.83 | 7.5  | 2.0   | 2.2   | 70                | 0.1025                                    | 172          |
| 30                    | 40  | 200L      | 2950               | 51.6                                    | 92.2             | 91.7 | 90.4 | 0.91                 | 0.90 | 0.86 | 7.5  | 2.0   | 2.3   | 73                | 0.173                                     | 223          |
| 37                    | 50  | 200L      | 2950               | 63.4                                    | 92.6             | 92.6 | 91.5 | 0.91                 | 0.90 | 0.87 | 7.5  | 2.0   | 2.3   | 73                | 0.195                                     | 242          |
| 45                    | 60  | 225M      | 2965               | 76.7                                    | 93.1             | 92.7 | 91.2 | 0.91                 | 0.90 | 0.86 | 7.5  | 2.0   | 2.3   | 75                | 0.325                                     | 302          |
| 55                    | 75  | 250S/M    | 2970               | 94.4                                    | 93.4             | 93.0 | 91.4 | 0.90                 | 0.89 | 0.84 | 7.5  | 2.0   | 2.3   | 78                | 0.395                                     | 382          |
| 75                    | 100 | 280S      | 2975               | 127                                     | 94.0             | 93.5 | 92.0 | 0.91                 | 0.90 | 0.86 | 7.5  | 2.0   | 2.3   | 79                | 0.683                                     | 515          |
| 90                    | 125 | 280M      | 2980               | 151                                     | 94.5             | 94.1 | 92.7 | 0.91                 | 0.90 | 0.86 | 7.5  | 2.0   | 2.3   | 79                | 0.765                                     | 545          |
| 110                   | 150 | 315S      | 2975               | 184                                     | 94.6             | 93.9 | 92.3 | 0.91                 | 0.89 | 0.83 | 7.1  | 1.8   | 2.2   | 80                | 1.558                                     | 860          |
| 132                   | 175 | 315M      | 2975               | 221                                     | 94.8             | 94.2 | 92.7 | 0.91                 | 0.89 | 0.84 | 7.1  | 1.8   | 2.2   | 80                | 1.726                                     | 970          |
| 160                   | 215 | 315M/L    | 2980               | 267                                     | 95.0             | 94.5 | 93.0 | 0.91                 | 0.89 | 0.84 | 7.1  | 1.8   | 2.2   | 82                | 1.941                                     | 1000         |
| 200                   | 270 | 315M/L    | 2980               | 333                                     | 95.2             | 94.8 | 93.6 | 0.91                 | 0.90 | 0.85 | 7.1  | 1.8   | 2.2   | 82                | 2.212                                     | 1080         |
| 250                   | 335 | 335M/L    | 2985               | 420                                     | 95.4             | 94.8 | 93.3 | 0.90                 | 0.89 | 0.88 | 7.1  | 1.6   | 2.2   | 83                | 3.848                                     | 1710         |
| 280                   | 375 | 335M/L    | 2985               | 470                                     | 95.6             | 95.0 | 93.6 | 0.90                 | 0.89 | 0.88 | 7.1  | 1.6   | 2.2   | 83                | 3.949                                     | 1870         |
| 315                   | 420 | 335M/L    | 2985               | 521                                     | 95.9             | 95.3 | 93.9 | 0.91                 | 0.91 | 0.89 | 7.1  | 1.6   | 2.2   | 83                | 3.995                                     | 1920         |
| 1500r/m (4 Pole) 50Hz |     |           |                    |   |                  |      |      |                      |      |      |  |   |   |                   |   |              |
| 11                    | 150 | 160M      | 1460               | 20.7                                    | 90.3             | 90.7 | 90.2 | 0.85                 | 0.82 | 0.76 | 7.0  | 2.2   | 2.5   | 60                | 0.1052                                    | 115          |
| 15                    | 20  | 160L      | 1460               | 27.7                                    | 91.0             | 91.4 | 90.8 | 0.86                 | 0.83 | 0.77 | 7.5  | 2.2   | 2.5   | 60                | 0.1123                                    | 135          |
| 18.5                  | 25  | 180M      | 1470               | 34.0                                    | 91.3             | 91.3 | 90.6 | 0.86                 | 0.83 | 0.76 | 7.5  | 2.2   | 2.5   | 65                | 0.1659                                    | 170          |
| 22                    | 30  | 180L      | 1470               | 40.2                                    | 91.8             | 91.8 | 90.9 | 0.86                 | 0.83 | 0.76 | 7.5  | 2.2   | 2.5   | 65                | 0.1865                                    | 184          |
| 30                    | 40  | 200L      | 1470               | 52.6                                    | 92.5             | 92.5 | 91.8 | 0.89                 | 0.88 | 0.80 | 7.2  | 2.2   | 2.5   | 68                | 0.302                                     | 235          |
| 37                    | 50  | 225S      | 1480               | 66.1                                    | 92.9             | 93.0 | 92.2 | 0.87                 | 0.86 | 0.80 | 7.2  | 2.2   | 2.5   | 68                | 0.538                                     | 290          |
| 45                    | 60  | 225M      | 1480               | 80.0                                    | 93.3             | 93.3 | 92.6 | 0.87                 | 0.85 | 0.80 | 7.2  | 2.2   | 2.5   | 68                | 0.635                                     | 326          |
| 55                    | 75  | 250S/M    | 1480               | 95.0                                    | 93.9             | 93.7 | 92.6 | 0.89                 | 0.87 | 0.81 | 7.2  | 2.2   | 2.5   | 69                | 0.785                                     | 385          |
| 75                    | 100 | 280S      | 1485               | 132                                     | 94.1             | 94.0 | 92.9 | 0.87                 | 0.85 | 0.79 | 7.2  | 2.2   | 2.5   | 70                | 1.552                                     | 515          |
| 90                    | 125 | 280M      | 1485               | 158                                     | 94.3             | 94.0 | 93.3 | 0.87                 | 0.85 | 0.79 | 7.2  | 2.2   | 2.5   | 70                | 1.865                                     | 605          |
| 110                   | 150 | 315S      | 1485               | 190                                     | 94.8             | 94.2 | 92.5 | 0.88                 | 0.84 | 0.76 | 6.9  | 2.1   | 2.2   | 74                | 3.48                                      | 880          |
| 132                   | 175 | 315M      | 1485               | 228                                     | 94.9             | 94.3 | 92.9 | 0.88                 | 0.85 | 0.78 | 6.9  | 2.1   | 2.2   | 74                | 3.678                                     | 990          |
| 160                   | 215 | 315M/L    | 1485               | 276                                     | 95.2             | 94.9 | 94.4 | 0.88                 | 0.87 | 0.82 | 6.9  | 2.1   | 2.2   | 74                | 4.472                                     | 1060         |
| 200                   | 270 | 315M/L    | 1485               | 345                                     | 95.2             | 94.9 | 93.7 | 0.88                 | 0.87 | 0.82 | 6.9  | 2.1   | 2.2   | 76                | 4.856                                     | 1150         |
| 250                   | 335 | 355M/L    | 1490               | 416                                     | 95.3             | 94.9 | 93.6 | 0.91                 | 0.90 | 0.86 | 7.1  | 2.1   | 2.2   | 79                | 7.364                                     | 1740         |
| 280                   | 375 | 355M/L    | 1490               | 474                                     | 95.8             | 95.2 | 94.0 | 0.89                 | 0.87 | 0.82 | 6.9  | 2.1   | 2.2   | 80                | 8.014                                     | 1870         |
| 315                   | 420 | 355M/L    | 1490               | 534                                     | 95.7             | 95.2 | 94.0 | 0.89                 | 0.87 | 0.82 | 6.9  | 2.1   | 2.2   | 80                | 9.1                                       | 1975         |

## Technical Specifications (2/2)

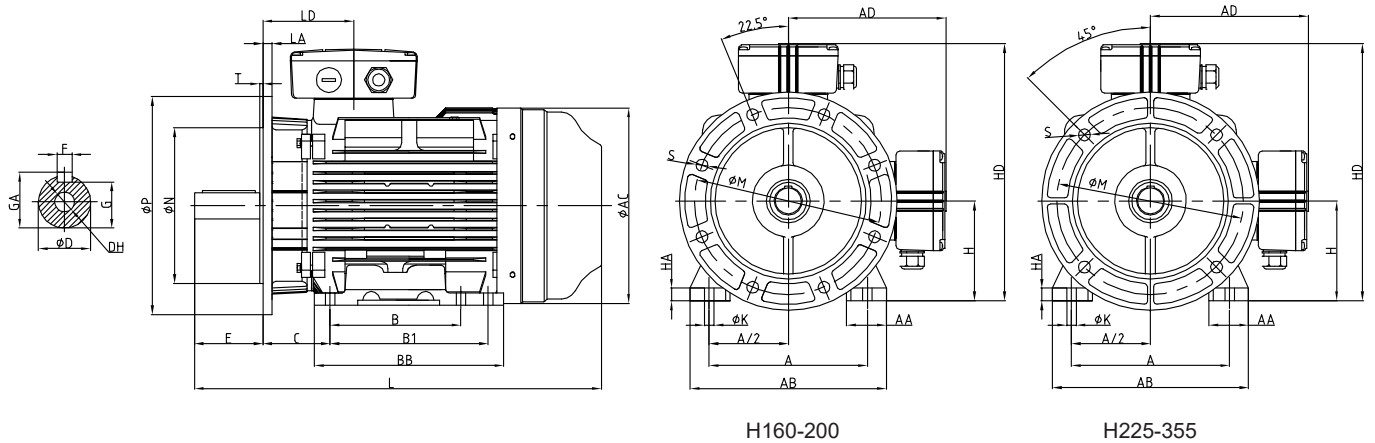
| Rated Output          |     | IEC Frame | Rated Speed<br>r/m | Full Load Current<br>$I_n$ (A) | Efficiency<br>$\eta\%$ |      |      | Power Factor<br>$\cos\phi$ |      |      | Locked Rotor Current<br>$I_L/I_n$ | Locked Rotor Torque<br>$T_L/T_n$ | Break-down Torque<br>$T_b/T_n$ | Sound LP<br>dB(A) | Moment of Inertia<br>J(kgm <sup>2</sup> ) | Weight<br>kg |
|-----------------------|-----|-----------|--------------------|--------------------------------|------------------------|------|------|----------------------------|------|------|-----------------------------------|----------------------------------|--------------------------------|-------------------|---|--------------|
|                       |     |           |                    |                                | % of Full Load         |      |      |                            |      |      |                                   |                                  |                                |                   |   |              |
| kW                    | HP  |           |                    | 400V                           | 100                    | 75   | 50   | 100                        | 75   | 50   |                                   |                                  |                                |                   |   |              |
| 1000r/m (6 Pole) 50Hz |     |           |                    |                                |                        |      |      |                            |      |      |                                   |                                  |                                |                   |   |              |
| 7.5                   | 10  | 160M      | 970                | 15.9                           | 87.4                   | 87.4 | 86.2 | 0.78                       | 0.71 | 0.59 | 6.5                               | 2                                | 2.3                            | 56                | 0.121                                     | 110          |
| 11                    | 15  | 160L      | 970                | 22.9                           | 88.9                   | 88.9 | 87.8 | 0.78                       | 0.72 | 0.6  | 6.4                               | 2                                | 2.3                            | 56                | 0.145                                     | 133          |
| 15                    | 20  | 180L      | 975                | 29.7                           | 89.9                   | 89.9 | 88.5 | 0.81                       | 0.76 | 0.66 | 7                                 | 2                                | 2.3                            | 56                | 0.229                                     | 174          |
| 18.5                  | 25  | 200L      | 980                | 36.4                           | 90.5                   | 90.6 | 89.6 | 0.81                       | 0.77 | 0.68 | 7                                 | 2.1                              | 2.4                            | 59                | 0.342                                     | 219          |
| 22                    | 30  | 200L      | 980                | 43.1                           | 90.9                   | 90.9 | 89.8 | 0.81                       | 0.76 | 0.67 | 7                                 | 2.1                              | 2.4                            | 59                | 0.386                                     | 228          |
| 30                    | 40  | 225M      | 980                | 56.2                           | 91.8                   | 91.8 | 90.9 | 0.84                       | 0.81 | 0.74 | 7                                 | 2                                | 2.3                            | 61                | 0.625                                     | 296          |
| 37                    | 50  | 250S/M    | 980                | 66.5                           | 92.3                   | 92.4 | 91.4 | 0.87                       | 0.85 | 0.78 | 7                                 | 2.1                              | 2.5                            | 61                | 0.985                                     | 380          |
| 45                    | 60  | 280S      | 985                | 81.4                           | 92.8                   | 92.7 | 91.7 | 0.86                       | 0.84 | 0.78 | 7                                 | 2.1                              | 2.5                            | 66                | 1.733                                     | 470          |
| 55                    | 75  | 280M      | 985                | 99                             | 93.2                   | 93.2 | 92.3 | 0.86                       | 0.85 | 0.8  | 7                                 | 2.1                              | 2.5                            | 66                | 1.965                                     | 545          |
| 75                    | 100 | 315S      | 985                | 136                            | 93.8                   | 93.5 | 92.1 | 0.85                       | 0.83 | 0.77 | 7                                 | 2                                | 2.2                            | 70                | 3.723                                     | 866          |
| 90                    | 125 | 315M      | 985                | 162                            | 94.2                   | 93.7 | 92.3 | 0.85                       | 0.83 | 0.75 | 7                                 | 2                                | 2.2                            | 70                | 4.526                                     | 948          |
| 110                   | 150 | 315M/L    | 985                | 196                            | 94.4                   | 94.3 | 93.3 | 0.86                       | 0.84 | 0.79 | 6.7                               | 2                                | 2.2                            | 70                | 5.157                                     | 1120         |
| 132                   | 175 | 315M/L    | 985                | 234                            | 94.6                   | 94.4 | 93.5 | 0.86                       | 0.85 | 0.8  | 6.7                               | 2                                | 2.2                            | 70                | 5.685                                     | 1185         |
| 160                   | 215 | 355M/L    | 990                | 277                            | 94.9                   | 94.6 | 93.5 | 0.88                       | 0.86 | 0.79 | 6.7                               | 1.9                              | 2                              | 75                | 9.57                                      | 1705         |
| 180                   | 240 | 355M/L    | 990                | 310                            | 95.1                   | 94.9 | 94   | 0.88                       | 0.86 | 0.8  | 6.7                               | 1.9                              | 2                              | 75                | 9.89                                      | 1785         |
| 200                   | 270 | 355M/L    | 990                | 345                            | 95.1                   | 94.9 | 94   | 0.88                       | 0.86 | 0.8  | 6.7                               | 1.9                              | 2                              | 75                | 11.1                                      | 1890         |
| 225                   | 300 | 355M/L    | 990                | 388                            | 95.1                   | 94.9 | 94   | 0.88                       | 0.86 | 0.8  | 6.7                               | 1.9                              | 2                              | 75                | 11.3                                      | 1950         |
| 250                   | 335 | 355M/L    | 990                | 431                            | 95.1                   | 94.9 | 94   | 0.88                       | 0.86 | 0.8  | 6.7                               | 1.9                              | 2                              | 75                | 11.8                                      | 2000         |
| 280                   | 375 | 355M/L    | 990                | 483                            | 95.1                   | 94.9 | 94   | 0.88                       | 0.86 | 0.8  | 6.7                               | 1.9                              | 2                              | 75                | 12.9                                      | 2080         |
| 750r/m (8 Pole) 50Hz  |     |           |                    |                                |                        |      |      |                            |      |      |                                   |                                  |                                |                   |   |              |
| 4                     | 5.5 | 160M      | 725                | 9.55                           | 82.8                   | 83.4 | 82.2 | 0.73                       | 0.67 | 0.54 | 6                                 | 2.1                              | 2.2                            | 53                | 0.089                                     | 98           |
| 5.5                   | 7.5 | 160M      | 730                | 12.7                           | 84.5                   | 85.1 | 84.1 | 0.74                       | 0.67 | 0.55 | 6                                 | 2.1                              | 2.2                            | 53                | 0.096                                     | 109          |
| 7.5                   | 10  | 160L      | 730                | 17                             | 86                     | 86.6 | 85.7 | 0.74                       | 0.67 | 0.55 | 6                                 | 2                                | 2.2                            | 53                | 0.102                                     | 131          |
| 10                    | 15  | 180L      | 730                | 24.5                           | 87.7                   | 87.9 | 86.5 | 0.74                       | 0.68 | 0.56 | 6.6                               | 2                                | 2.3                            | 53                | 0.228                                     | 173          |
| 15                    | 20  | 200L      | 735                | 32.5                           | 88.9                   | 89   | 87.7 | 0.75                       | 0.69 | 0.57 | 6.6                               | 2                                | 2.3                            | 55                | 0.395                                     | 234          |
| 18.5                  | 25  | 225S      | 735                | 39.2                           | 89.7                   | 89.9 | 88.8 | 0.76                       | 0.7  | 0.59 | 6.6                               | 1.9                              | 2                              | 55                | 0.603                                     | 276          |
| 22                    | 30  | 225M      | 735                | 46.3                           | 90.2                   | 90.3 | 89.3 | 0.76                       | 0.7  | 0.59 | 6.6                               | 1.9                              | 2                              | 55                | 0.698                                     | 298          |
| 30                    | 40  | 250S/M    | 735                | 60.1                           | 91.2                   | 91.4 | 90.7 | 0.79                       | 0.75 | 0.64 | 6.6                               | 1.9                              | 2                              | 58                | 0.983                                     | 375          |
| 37                    | 50  | 280S      | 735                | 73.6                           | 91.8                   | 91.9 | 91   | 0.79                       | 0.75 | 0.65 | 6.6                               | 1.9                              | 2.2                            | 58                | 1.857                                     | 480          |
| 45                    | 60  | 280M      | 735                | 89                             | 92.4                   | 92.6 | 91.9 | 0.79                       | 0.76 | 0.67 | 6.6                               | 1.9                              | 2.2                            | 58                | 1.998                                     | 560          |
| 55                    | 75  | 315S      | 740                | 106                            | 92.9                   | 92.6 | 92.2 | 0.81                       | 0.77 | 0.67 | 6.6                               | 1.8                              | 2                              | 63                | 4.959                                     | 915          |
| 75                    | 100 | 315M      | 740                | 143                            | 93.7                   | 93.4 | 92.2 | 0.81                       | 0.77 | 0.67 | 6.6                               | 1.8                              | 2                              | 63                | 5.825                                     | 991          |
| 90                    | 125 | 315M/L    | 740                | 168                            | 94.1                   | 93.8 | 92.6 | 0.82                       | 0.78 | 0.67 | 6.6                               | 1.8                              | 2                              | 63                | 6.753                                     | 1083         |
| 110                   | 150 | 315M/L    | 740                | 205                            | 94.5                   | 94.1 | 92.8 | 0.82                       | 0.77 | 0.67 | 6.4                               | 1.8                              | 2                              | 63                | 7.352                                     | 1174         |
| 132                   | 175 | 355M/L    | 745                | 245                            | 94.8                   | 94.5 | 93.4 | 0.82                       | 0.79 | 0.7  | 6.4                               | 1.8                              | 2                              | 70                | 12.94                                     | 1815         |
| 160                   | 215 | 355M/L    | 745                | 296                            | 95.2                   | 94.9 | 93.7 | 0.82                       | 0.78 | 0.69 | 6.4                               | 1.8                              | 2                              | 70                | 13.32                                     | 1905         |
| 180                   | 240 | 355M/L    | 745                | 333                            | 95.2                   | 94.9 | 93.8 | 0.82                       | 0.79 | 0.69 | 6.4                               | 1.8                              | 2                              | 70                | 14  | 1985         |
| 200                   | 270 | 355M/L    | 745                | 370                            | 95.2                   | 94.9 | 93.8 | 0.82                       | 0.79 | 0.69 | 6.4                               | 1.8                              | 2                              | 70                | 14.9                                      | 2060         |

## B3 Mounting and Overall Dimensions



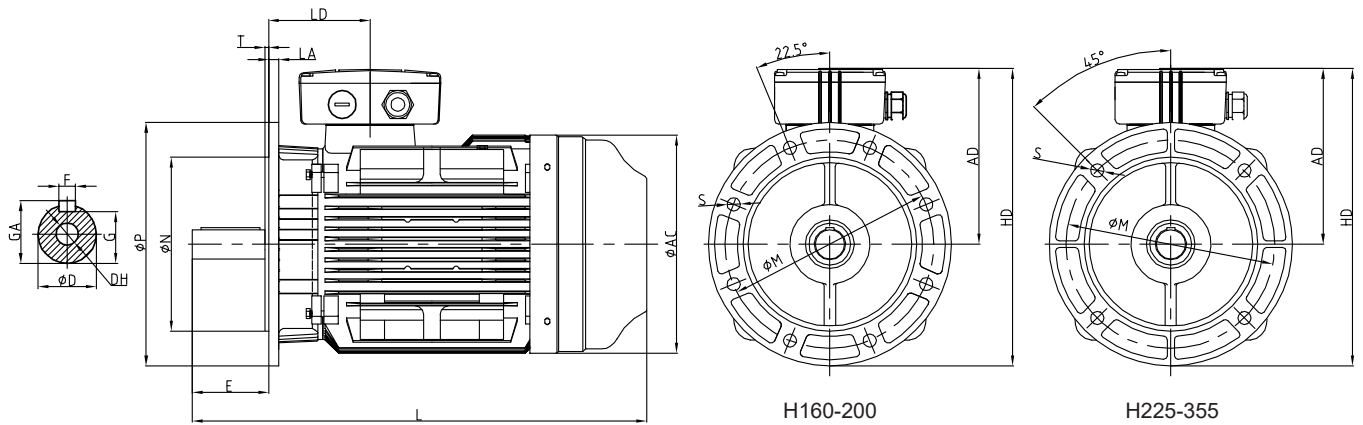
| Frame Size | Poles | Mounting and Overall Dimensions (mm) |     |     |     |    |     |    |      |     |    |        |      |     |     |     |     |    |     |     |     |      |
|------------|-------|--------------------------------------|-----|-----|-----|----|-----|----|------|-----|----|--------|------|-----|-----|-----|-----|----|-----|-----|-----|------|
|            |       | A                                    | B   | B1  | C   | D  | E   | F  | G    | H   | K  | DH     | GA   | AA  | AB  | AC  | AD  | HA | HD  | BB  | LD  | L    |
| 160M       | 2~8   | 254                                  | 210 | /   | 108 | 42 | 110 | 12 | 37   | 160 | 15 | M16×36 | 45   | 64  | 315 | 314 | 265 | 20 | 413 | 260 | 256 | 610  |
| 160L       | 2~8   | 254                                  | 254 | /   | 108 | 42 | 110 | 12 | 37   | 160 | 15 | M16×36 | 45   | 64  | 315 | 314 | 265 | 20 | 413 | 304 | 256 | 654  |
| 180M       | 2.4   | 279                                  | 241 | /   | 121 | 48 | 110 | 14 | 42.5 | 180 | 15 | M16×36 | 51.5 | 68  | 350 | 355 | 280 | 22 | 449 | 311 | 271 | 684  |
| 180L       | 4~8   | 279                                  | 279 | /   | 121 | 48 | 110 | 14 | 42.5 | 180 | 15 | M16×36 | 51.5 | 68  | 351 | 355 | 280 | 22 | 449 | 349 | 271 | 722  |
| 200L       | 2~8   | 318                                  | 305 | /   | 133 | 55 | 110 | 16 | 49   | 200 | 19 | M20×42 | 59   | 70  | 351 | 397 | 310 | 25 | 496 | 370 | 296 | 774  |
| 225S       | 4.8   | 356                                  | 286 | /   | 149 | 60 | 140 | 18 | 53   | 225 | 19 | M20×42 | 64   | 79  | 430 | 445 | 335 | 28 | 544 | 361 | 329 | 822  |
| 225M       | 2     | 356                                  | 311 | /   | 149 | 55 | 110 | 16 | 49   | 225 | 19 | M20×42 | 59   | 79  | 430 | 445 | 335 | 28 | 544 | 386 | 299 | 816  |
|            | 4~8   | 356                                  | 311 | /   | 149 | 60 | 140 | 18 | 53   | 225 | 19 | M20×42 | 64   | 79  | 430 | 445 | 335 | 28 | 544 | 386 | 329 | 847  |
| 250S/M     | 2     | 406                                  | 311 | 349 | 168 | 60 | 140 | 18 | 53   | 250 | 24 | M20×42 | 64   | 97  | 484 | 484 | 375 | 30 | 620 | 445 | 329 | 911  |
|            | 4~8   | 406                                  | 311 | 349 | 168 | 65 | 140 | 18 | 58   | 250 | 24 | M20×42 | 69   | 97  | 484 | 484 | 375 | 30 | 620 | 445 | 348 | 911  |
| 280S       | 2     | 457                                  | 368 | /   | 190 | 65 | 140 | 18 | 58   | 280 | 24 | M20×42 | 69   | 85  | 542 | 546 | 405 | 35 | 680 | 490 | 357 | 965  |
|            | 4~8   | 457                                  | 368 | /   | 190 | 75 | 140 | 20 | 67.5 | 280 | 24 | M20×42 | 79.5 | 85  | 542 | 546 | 405 | 35 | 680 | 490 | 357 | 965  |
| 280M       | 2     | 457                                  | 419 | /   | 190 | 65 | 140 | 18 | 58   | 280 | 24 | M20×42 | 69   | 85  | 542 | 546 | 405 | 35 | 680 | 540 | 357 | 1016 |
|            | 4~8   | 457                                  | 419 | /   | 190 | 75 | 140 | 20 | 67.5 | 280 | 24 | M20×42 | 79.5 | 85  | 542 | 546 | 405 | 35 | 680 | 540 | 357 | 1016 |
| 315S       | 2     | 508                                  | 406 | /   | 216 | 65 | 140 | 18 | 58   | 315 | 28 | M20×46 | 69   | 120 | 628 | 620 | 530 | 45 | 817 | 570 | 397 | 1201 |
|            | 4~8   | 508                                  | 406 | /   | 216 | 80 | 170 | 22 | 71   | 315 | 28 | M20×46 | 85   | 120 | 628 | 620 | 530 | 45 | 817 | 570 | 427 | 1231 |
| 315M/L     | 2     | 508                                  | 457 | 508 | 216 | 65 | 140 | 18 | 58   | 315 | 28 | M20×46 | 69   | 120 | 628 | 620 | 530 | 45 | 817 | 680 | 397 | 1311 |
|            | 4~8   | 508                                  | 457 | 508 | 216 | 80 | 170 | 22 | 71   | 315 | 28 | M20×46 | 85   | 120 | 628 | 620 | 530 | 45 | 817 | 680 | 427 | 1341 |
| 355M/L     | 2     | 610                                  | 560 | 630 | 254 | 75 | 140 | 20 | 67.5 | 355 | 28 | M20×46 | 79.5 | 120 | 726 | 698 | 615 | 52 | 945 | 750 | 427 | 1501 |
|            | 4~8   | 610                                  | 560 | 630 | 254 | 95 | 170 | 25 | 86   | 355 | 28 | M24×56 | 100  | 116 | 726 | 698 | 615 | 52 | 945 | 750 | 455 | 1531 |

# B35 Mounting and Overall Dimensions



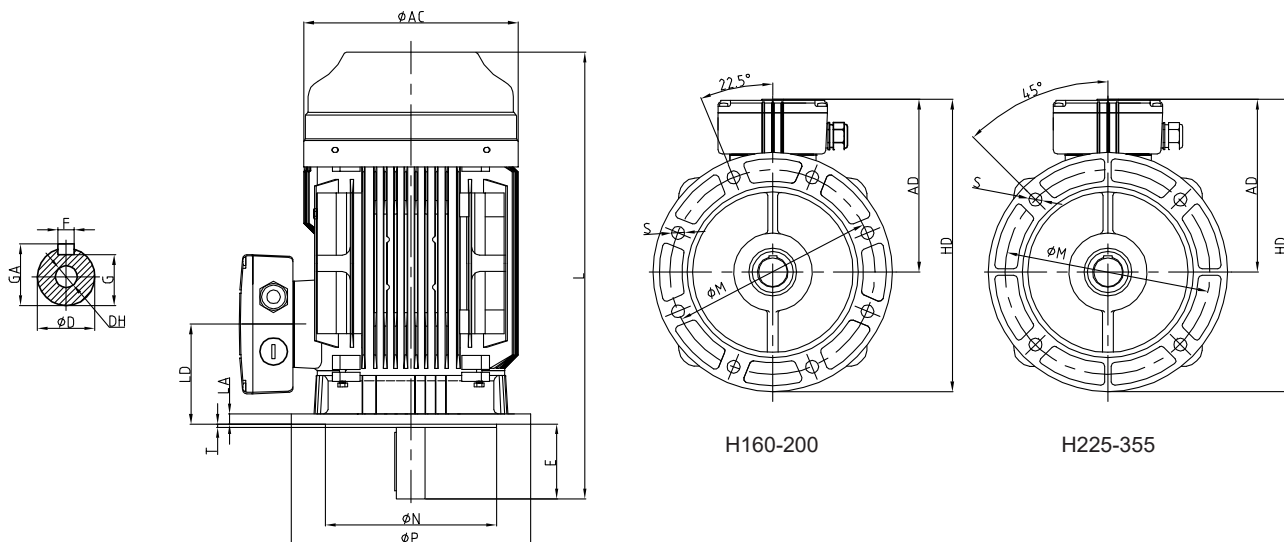
| Frame Size | Poles | Mounting and Overall Dimensions (mm) |     |     |     |    |     |    |      |     |    |     |     |     |       |   |        |      |     |     |     |     |     |    |     |    |     |      |
|------------|-------|--------------------------------------|-----|-----|-----|----|-----|----|------|-----|----|-----|-----|-----|-------|---|--------|------|-----|-----|-----|-----|-----|----|-----|----|-----|------|
|            |       | A                                    | B   | BI  | C   | D  | E   | F  | G    | H   | K  | M   | N   | P   | S     | T | DH     | GA   | AA  | AB  | AC  | AD  | BB  | HA | HD  | LA | LD  | L    |
| 160M       | 2~8   | 254                                  | 210 | /   | 108 | 42 | 110 | 12 | 37   | 160 | 15 | 300 | 250 | 350 | 4-Φ19 | 5 | M16×36 | 45   | 64  | 315 | 314 | 265 | 260 | 20 | 413 | 15 | 146 | 610  |
| 160L       | 2~8   | 254                                  | 254 | /   | 108 | 42 | 110 | 12 | 37   | 160 | 15 | 300 | 250 | 350 | 4-Φ19 | 5 | M16×36 | 45   | 64  | 315 | 314 | 265 | 304 | 20 | 413 | 15 | 146 | 654  |
| 180M       | 2     | 279                                  | 241 | /   | 121 | 48 | 110 | 14 | 42.5 | 180 | 15 | 300 | 250 | 350 | 4-Φ19 | 5 | M16×36 | 51.5 | 68  | 351 | 355 | 280 | 311 | 22 | 449 | 15 | 161 | 684  |
| 180L       | 4~8   | 279                                  | 279 | /   | 121 | 48 | 110 | 14 | 42.5 | 180 | 15 | 300 | 250 | 350 | 4-Φ19 | 5 | M16×36 | 51.5 | 68  | 351 | 355 | 280 | 349 | 22 | 449 | 15 | 161 | 722  |
| 200L       | 2~8   | 318                                  | 305 | /   | 133 | 55 | 110 | 16 | 49   | 200 | 19 | 350 | 300 | 400 | 4-Φ19 | 5 | M20×42 | 59   | 70  | 388 | 397 | 310 | 369 | 25 | 496 | 17 | 186 | 774  |
| 225S       | 4~8   | 356                                  | 286 | /   | 149 | 60 | 140 | 18 | 53   | 225 | 19 | 400 | 350 | 450 | 8-Φ19 | 5 | M20×42 | 64   | 79  | 430 | 445 | 335 | 361 | 28 | 544 | 20 | 189 | 822  |
| 225M       | 2     | 356                                  | 311 | /   | 149 | 55 | 110 | 16 | 49   | 225 | 19 | 400 | 350 | 450 | 8-Φ19 | 5 | M20×42 | 59   | 79  | 430 | 445 | 335 | 386 | 28 | 544 | 20 | 189 | 816  |
|            | 4~8   | 356                                  | 311 | /   | 149 | 60 | 140 | 18 | 53   | 225 | 19 | 400 | 350 | 450 | 8-Φ19 | 5 | M20×42 | 64   | 79  | 430 | 445 | 335 | 386 | 28 | 544 | 20 | 189 | 847  |
| 250S/M     | 2     | 406                                  | 311 | 349 | 168 | 60 | 140 | 18 | 53   | 250 | 24 | 500 | 450 | 550 | 8-Φ19 | 5 | M20×42 | 64   | 97  | 484 | 484 | 375 | 445 | 32 | 620 | 22 | 208 | 911  |
|            | 4~8   | 406                                  | 311 | 349 | 168 | 65 | 140 | 18 | 58   | 250 | 24 | 500 | 450 | 550 | 8-Φ19 | 5 | M20×42 | 69   | 97  | 484 | 484 | 375 | 445 | 32 | 620 | 22 | 208 | 911  |
| 280S       | 2     | 457                                  | 368 | /   | 190 | 65 | 140 | 18 | 58   | 280 | 24 | 500 | 450 | 550 | 8-Φ19 | 5 | M20×42 | 69   | 85  | 542 | 546 | 405 | 485 | 35 | 680 | 22 | 217 | 965  |
|            | 4~8   | 457                                  | 368 | /   | 190 | 75 | 140 | 20 | 67.5 | 280 | 24 | 500 | 450 | 550 | 8-Φ19 | 5 | M20×42 | 79.5 | 85  | 542 | 546 | 405 | 485 | 35 | 680 | 22 | 217 | 965  |
| 280M       | 2     | 457                                  | 419 | /   | 190 | 65 | 140 | 18 | 58   | 280 | 24 | 500 | 450 | 550 | 8-Φ19 | 5 | M20×42 | 69   | 85  | 542 | 546 | 405 | 536 | 35 | 680 | 22 | 217 | 1016 |
|            | 4~8   | 457                                  | 419 | /   | 190 | 75 | 140 | 20 | 67.5 | 280 | 24 | 500 | 450 | 550 | 8-Φ19 | 5 | M20×42 | 79.5 | 85  | 542 | 546 | 405 | 536 | 35 | 680 | 22 | 217 | 1016 |
| 315S       | 2     | 508                                  | 406 | /   | 216 | 65 | 140 | 18 | 58   | 315 | 28 | 600 | 550 | 660 | 8-Φ24 | 6 | M20×46 | 69   | 120 | 628 | 620 | 530 | 570 | 45 | 817 | 22 | 257 | 1201 |
|            | 4~8   | 508                                  | 406 | /   | 216 | 80 | 170 | 22 | 71   | 315 | 28 | 600 | 550 | 660 | 8-Φ24 | 6 | M20×46 | 58   | 120 | 628 | 620 | 530 | 570 | 45 | 817 | 22 | 257 | 1231 |
| 315M/L     | 2     | 508                                  | 457 | 508 | 216 | 65 | 140 | 18 | 58   | 315 | 28 | 600 | 550 | 660 | 8-Φ24 | 6 | M20×46 | 69   | 120 | 628 | 620 | 530 | 680 | 45 | 817 | 22 | 257 | 1311 |
|            | 4~8   | 508                                  | 457 | 508 | 216 | 80 | 170 | 22 | 71   | 315 | 28 | 600 | 550 | 660 | 8-Φ24 | 6 | M20×46 | 58   | 120 | 628 | 620 | 530 | 680 | 45 | 817 | 22 | 257 | 1341 |
| 355M/L     | 2     | 610                                  | 500 | 630 | 254 | 75 | 140 | 20 | 67.5 | 355 | 28 | 740 | 680 | 800 | 8-Φ24 | 6 | M20×46 | 79.5 | 120 | 730 | 698 | 615 | 750 | 52 | 945 | 25 | 284 | 1501 |
|            | 4~8   | 610                                  | 500 | 630 | 254 | 95 | 170 | 25 | 86   | 355 | 28 | 740 | 680 | 800 | 8-Φ24 | 6 | M20×46 | 100  | 116 | 726 | 698 | 615 | 750 | 52 | 945 | 25 | 284 | 1531 |

## B5 Mounting and Overall Dimensions



| Frame Size | Poles | Mounting and Overall Dimensions (mm) |     |    |      |     |     |     |         |   |        |      |     |     |    |     |      |
|------------|-------|--------------------------------------|-----|----|------|-----|-----|-----|---------|---|--------|------|-----|-----|----|-----|------|
|            |       | D                                    | E   | F  | G    | M   | N   | P   | S       | T | DH     | GA   | AC  | HD  | LA | LD  | L    |
| 160M       | 2~8   | 42                                   | 110 | 12 | 37   | 300 | 250 | 350 | 4-Φ19   | 5 | M16×36 | 45   | 314 | 428 | 15 | 114 | 610  |
| 160L       | 2~8   | 42                                   | 110 | 12 | 37   | 300 | 250 | 350 | 4-Φ19   | 5 | M16×36 | 45   | 314 | 428 | 15 | 146 | 654  |
| 180M       | 2.4.6 | 48                                   | 110 | 14 | 42.5 | 300 | 250 | 350 | 4-Φ19   | 5 | M16×36 | 51.5 | 334 | 444 | 15 | 161 | 684  |
| 180L       | 4.6.8 | 48                                   | 110 | 14 | 42.5 | 300 | 250 | 350 | 4-Φ19   | 5 | M16×36 | 51.5 | 355 | 444 | 15 | 161 | 722  |
| 200L       | 2~8   | 55                                   | 110 | 16 | 49   | 350 | 300 | 400 | 4-Φ19   | 5 | M20×42 | 59   | 397 | 496 | 17 | 186 | 774  |
| 225S       | 4.8   | 60                                   | 140 | 18 | 53   | 400 | 350 | 450 | 8-Φ19   | 5 | M20×42 | 64   | 445 | 544 | 20 | 189 | 822  |
| 225M       | 2     | 55                                   | 110 | 16 | 49   | 400 | 350 | 450 | 8-Φ19   | 5 | M20×42 | 59   | 445 | 544 | 20 | 189 | 816  |
|            | 4~8   | 60                                   | 140 | 18 | 53   | 400 | 350 | 450 | 8-Φ19   | 5 | M20×42 | 64   | 445 | 544 | 20 | 189 | 847  |
| 250S/M     | 2     | 60                                   | 140 | 18 | 53   | 500 | 450 | 550 | 8-Φ19   | 5 | M20×42 | 64   | 484 | 645 | 22 | 208 | 911  |
|            | 4~8   | 65                                   | 140 | 18 | 58   | 500 | 450 | 550 | 8-Φ19   | 5 | M20×42 | 69   | 484 | 645 | 22 | 208 | 911  |
| 280S       | 2     | 65                                   | 140 | 18 | 58   | 500 | 450 | 550 | 8-Φ19   | 5 | M20×42 | 69   | 546 | 675 | 22 | 217 | 965  |
|            | 4~8   | 75                                   | 140 | 20 | 67.5 | 500 | 450 | 550 | 8-Φ18.5 | 5 | M20×42 | 79.5 | 546 | 675 | 22 | 217 | 965  |
| 280M       | 2     | 65                                   | 140 | 18 | 58   | 500 | 450 | 550 | 8-Φ18.5 | 5 | M20×42 | 69   | 546 | 675 | 22 | 217 | 1016 |
|            | 4~8   | 75                                   | 140 | 20 | 67.5 | 500 | 450 | 550 | 8-Φ18.5 | 5 | M20×42 | 79.5 | 546 | 675 | 22 | 217 | 1016 |

## VI Mounting and Overall Dimensions



H160-200

H225-355

| Frame Size | Poles | Mounting and Overall Dimensions (mm) |     |    |      |     |     |     |         |   |        |      |     |    |     |     |      |
|------------|-------|--------------------------------------|-----|----|------|-----|-----|-----|---------|---|--------|------|-----|----|-----|-----|------|
|            |       | D                                    | E   | F  | G    | M   | N   | P   | S       | T | DH     | GA   | AC  | HD | LA  | LD  | L    |
| 160M       | 2~8   | 42                                   | 110 | 12 | 37   | 300 | 250 | 350 | 4-φ19   | 5 | M16×36 | 45   | 314 | 15 | 428 | 146 | 610  |
| 160L       | 2~8   | 42                                   | 110 | 12 | 37   | 300 | 250 | 350 | 4-φ19   | 5 | M16×36 | 45   | 314 | 15 | 428 | 146 | 654  |
| 180M       | 2.4   | 48                                   | 110 | 14 | 42.5 | 300 | 250 | 350 | 4-φ19   | 5 | M16×36 | 51.5 | 355 | 15 | 444 | 161 | 684  |
| 180L       | 4~8   | 48                                   | 110 | 14 | 45.2 | 300 | 250 | 350 | 4-φ19   | 5 | M16×36 | 51.5 | 355 | 15 | 444 | 161 | 722  |
| 200L       | 2~8   | 55                                   | 110 | 16 | 49   | 350 | 300 | 400 | 4-φ19   | 5 | M20×42 | 59   | 397 | 17 | 496 | 186 | 774  |
| 225S       | 4.8   | 60                                   | 140 | 18 | 53   | 400 | 350 | 450 | 8-φ19   | 5 | M20×42 | 64   | 445 | 20 | 544 | 189 | 822  |
| 225M       | 2     | 55                                   | 110 | 16 | 49   | 400 | 350 | 450 | 8-φ19   | 5 | M20×42 | 59   | 445 | 20 | 544 | 189 | 816  |
|            | 4~8   | 60                                   | 140 | 18 | 53   | 400 | 350 | 450 | 8-φ19   | 5 | M20×42 | 64   | 445 | 20 | 544 | 189 | 847  |
| 250S/M     | 2     | 60                                   | 140 | 18 | 53   | 500 | 450 | 550 | 8-φ19   | 5 | M20×42 | 64   | 484 | 22 | 645 | 208 | 911  |
|            | 4~8   | 65                                   | 140 | 18 | 58   | 500 | 450 | 550 | 8-φ19   | 5 | M20×42 | 69   | 484 | 22 | 645 | 208 | 911  |
| 280S       | 2     | 65                                   | 140 | 18 | 58   | 500 | 450 | 550 | 8-φ18.5 | 5 | M20×42 | 69   | 546 | 22 | 675 | 217 | 965  |
|            | 4~8   | 75                                   | 140 | 20 | 67.5 | 500 | 450 | 550 | 8-φ18.5 | 5 | M20×42 | 79.5 | 546 | 22 | 675 | 217 | 965  |
| 280M       | 2     | 65                                   | 140 | 18 | 58   | 500 | 450 | 550 | 8-φ18.5 | 5 | M20×42 | 69   | 546 | 22 | 675 | 217 | 1016 |
|            | 4~8   | 75                                   | 140 | 20 | 67.5 | 500 | 450 | 550 | 8-φ18.5 | 5 | M20×42 | 79.5 | 546 | 22 | 675 | 217 | 1016 |
| 315S       | 2     | 65                                   | 140 | 18 | 58   | 600 | 550 | 660 | 8-φ24   | 6 | M20×46 | 69   | 620 | 22 | 842 | 257 | 1201 |
|            | 4~8   | 80                                   | 170 | 22 | 71   | 600 | 550 | 660 | 8-φ24   | 6 | M20×46 | 85   | 620 | 22 | 842 | 257 | 1231 |
| 315M/L     | 2     | 65                                   | 140 | 18 | 58   | 600 | 550 | 660 | 8-φ24   | 6 | M20×46 | 69   | 620 | 22 | 842 | 257 | 1311 |
|            | 4~8   | 80                                   | 170 | 22 | 71   | 600 | 550 | 660 | 8-φ24   | 6 | M20×46 | 85   | 620 | 22 | 842 | 257 | 1341 |
| 355M/L     | 2     | 75                                   | 140 | 20 | 67.5 | 740 | 680 | 800 | 8-φ24   | 6 | M20×46 | 79.5 | 698 | 25 | 990 | 284 | 1501 |
|            | 4~8   | 95                                   | 170 | 25 | 86   | 740 | 680 | 800 | 8-φ24   | 6 | M20×46 | 100  | 698 | 25 | 990 | 284 | 1531 |



## Terminal Box

| Frame Size | Thread of Cable Gland (mm) | Overall Dimensions (mm) |
|------------|----------------------------|-------------------------|
| 160-180    | 2-M40×1.5                  | 200×160×80              |
| 200-225    | 2-M50×1.5                  | 250×200×92              |
| 250-280    | 2-M63×1.5                  | 340×210×106             |
| 315        | 2-M63×1.5                  | 413×258×165             |
| 355        | 2-M72×1.5                  | 461×300×190             |

## Bearings

| Frame Size | Driving End |            | Non-driving End  |                  |
|------------|-------------|------------|------------------|------------------|
|            | 2 pole      | 4,6,8 pole | 2 pole           | 4,6,8 pole       |
| 160        | 6209 2Z/C3  | 6209 2Z/C3 | 6209 2Z/C3       | 6209 2Z/C3       |
| 180        | 6211/C3     | 6311/C3    | 6211/C3          | 6211/C3          |
| 200        | 6212/C3     | 6312/C3    | 6212/C3          | 6212/C3          |
| 225        | 6312/C3     | 6313/C3    | 6312/C3          | 6312/C3          |
| 250        | 6313/C3     | 6314/C3    | 6313/C3          | 6313/C3          |
| 280        | 6314/C3     | 6317/C3    | 6314/C3          | 6314/C3          |
| 315        | 6317/C3     | NU319      | 6317C3/7317B(V1) | 6319C3/7319B(V1) |
| 355        | 6319/C3     | NU322      | 6319C3/7319B(V1) | 6322C3/7322B(V1) |

**The motors above can be loaded directly.  
In case of high radial force, NU bearings are recommended.**



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