



# Z18 SERIES SERVO SPINDLE MOTOR

(1.1 ~ 400kW)



超同步股份有限公司  
CTB Co., Ltd.

2019.03.01

Z18 series servo spindle motor, which is developed, designed and produced by Z18, is a new type of AC spindle induction servo motor with international advanced level which is making it go international.

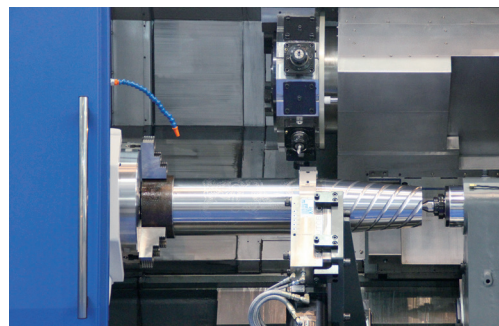
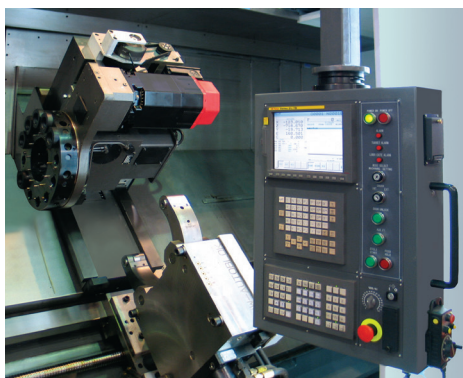
Z18 series servo spindle motor has a compact structure, superior function, good shape and high efficiency, widely used in various fields of machinery manufacturing with very good cost performance.

The design and production of Z18 series servo spindle meet is accord with relevant standards, such as ISO, IEC, GB, etc.

Z18 series servo spindle motor can reach energy efficiency grade 2 of GBZ18613-2012 standard and IE3 of IEC60034-30 standard.

### The latest patent design

- ◆ Good shape
- ◆ Compact structure
- ◆ Low noise
- ◆ High efficiency
- ◆ Enclosed cooling air duct
- ◆ Optimal energy-saving design



### Industry applications

- ◆ CNC lathe, turn-milling machine tool, vertical lathe, Heavy duty horizontal lathe
- ◆ CNC milling machine, vertical machine center, horizontal machine center
- ◆ CNC boring lathe, double housing planer, planer type milling machine
- ◆ CNC grinding machine, vertical grinder, floor type boring and milling machine
- ◆ Drilling and tapping center, engraving and milling machine, gear hobbing machine, gear shaping machine, gear milling machine

### Standard spindle control function

- ◆ High torque cutting at low speed
- ◆ Constant power cutting with high speed
- ◆ Zero speed spindle lock
- ◆ C-axis function
- ◆ Accurate stop control
- ◆ Rigid tapping

### Series specification and standard

- ◆ Power range: 1.1 - 400kw (1500rpm)
- ◆ Pole number: 4 pole
- ◆ Max speed: 15000r/m
- ◆ Encoder: Built-in(incremental encoder, rotary transformer, sin-cos encoder, absolute encoder)
- ◆ Cooling method: forced-air cooling
- ◆ Working system: continuous duty (S1)
- ◆ Installation structure type: B3/B5/B35(according to IEC60034-7standard)
- ◆ Noise: ≤70dB(A)
- ◆ Protection class: IP55(IEC60034-5)
- ◆ Insulation and voltage resistance: AC1800V
- ◆ Insulation class: F class
- ◆ Vibration class: A
- ◆ Environment temperature: -15-45°C
- ◆ Environment humidity: below 95%RH (Non-condensate)



CTB

## SPINDLE MOTOR

TYPE: Z18-47P5CB15-60H5G CODE: 12364

kW V A Hz r/min cosφ

7.5 380 18 51.7 1500 0.87

n<sub>max</sub>: 8000 r/min Ins F IP55 S1 Y

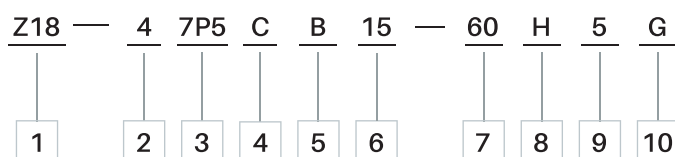
Encoder: MG-128-0L 57Kg NO.CM13100024

CTB Co.,Ltd.

Made in China

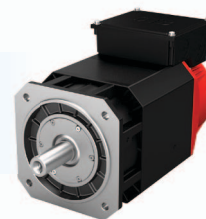


## ◆ Model Explanation (For Example 7.5KW Spindle Motor)



## Model Explanation

| No | ITEM                          | Description                                                                                                                                                                                                                  | Model Meaning                        |
|----|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| 1  | Plant Code                    | Z18: Motor Series Code                                                                                                                                                                                                       | CTB Company Product                  |
| 2  | Voltage Class                 | 2: 200V 4: 400V                                                                                                                                                                                                              | 400V                                 |
| 3  | Power Code                    | See Standard Specification Table                                                                                                                                                                                             | 7.5KW                                |
| 4  | Encoder Code                  | Code Encoder Type<br>B: Without Encoder<br>C: Magnetic Encoder 128T 256T (Standard Configuration)<br>G: Incremental Encoder 1024P 2500P 8192P<br>R: Resolver 1024P<br>S: Sin-Cos Encoder 2048P<br>A: Absolute Encoder 23 bit | Inbuilt Incremental Encoder          |
| 5  | Motor Frame Size Code         | Code Flange Size (Length x Width) mm<br>A: 175×175 E: 320×320<br>B: 205×205 F: 380×380<br>C: 265×265 G: 480×480<br>D: 300×300 H: 580×580                                                                                     | B Frame Size                         |
| 6  | Basic Speed Code              | Code Speed r/min Code Speed r/min<br>05: 500 45: 4500<br>07: 750 60: 6000<br>10: 1000 80: 8000<br>15: 1500 90: 9000                                                                                                          | Rated Speed: 1500r/min               |
| 7  | Constant Power Max Speed Code | 20: 2000 A0: 10000<br>30: 3000 A2: 12000<br>40: 4000 A5: 15000                                                                                                                                                               | Constant Power Max Speed: 6000 r/min |
| 8  | Max Speed Code                | Code Speed r/min<br>L: 3000 HF: 10000 (A B Motor Base)<br>M: 6000 F: 12000 (A B Motor Base)<br>H: 8000 FF: 15000 (A Motor Base)                                                                                              | Max Speed: 8000 r/min                |
| 9  | Mounting Type Code            | 3: Horizontally - Mounted 5: Flanged - Mounting<br>35: Horizontally - Flanged Mounting                                                                                                                                       | Flanged Mounting                     |
| 10 | Motor Shaft Structure         | G: Without Keyslot J: With Keyslot                                                                                                                                                                                           | Without Keyslot                      |

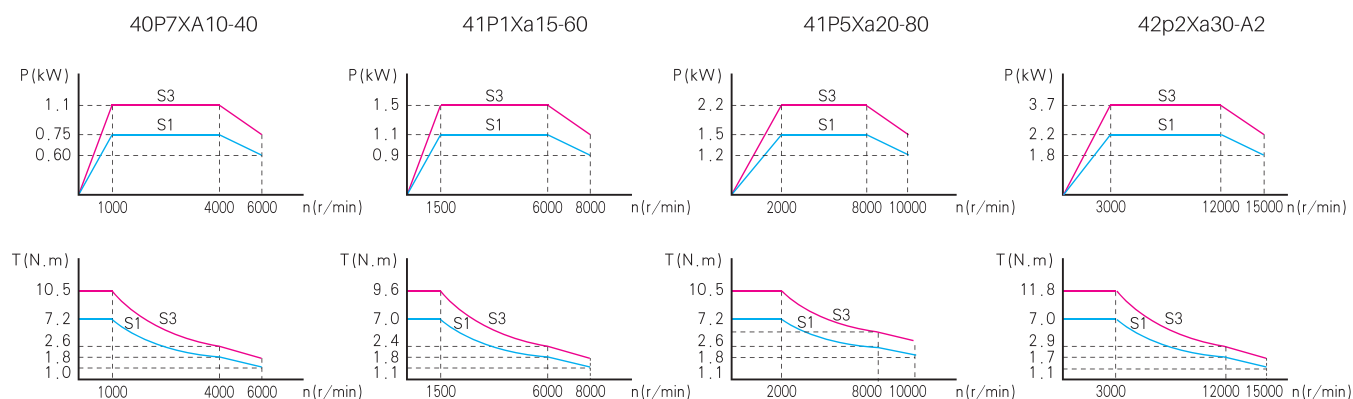


### Electrical Parameter

Voltage Class : 400V Connection : Y Fan Power : 25W Fan Voltage : 380V

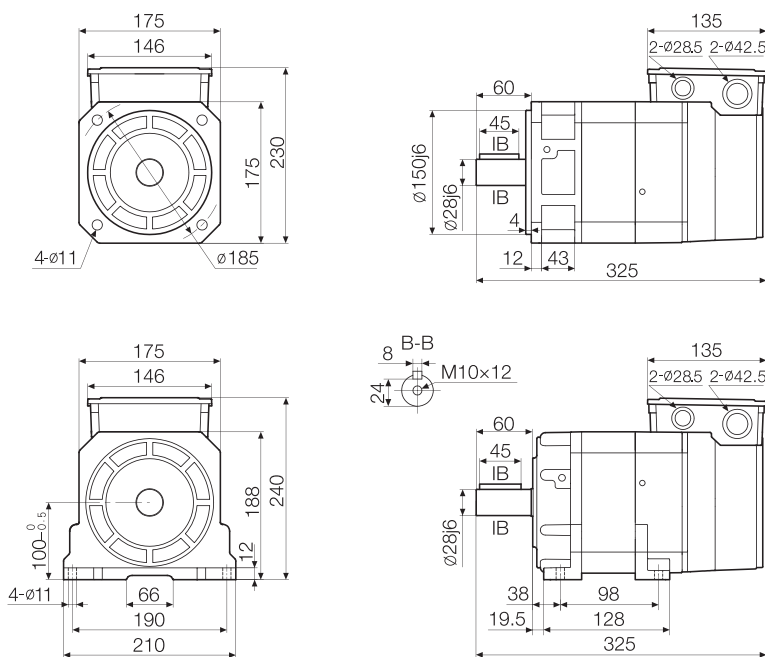
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (Hz) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m2) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|----------------------|---------------------|----------------------------------|-------------------|----------------------------|
| Z18-40P7XA10-XXXX | 0.75             | 1.8/2.0/2.2       | 7.2                | 380/335/305       | 4               | 36.5                 | 1000                | 2000/3000/4000                   | 6000              | 0.0034                     |
| Z18-41P1XA15-XXXX | 1.1              | 2.5/2.7/3.0       | 7.0                | 380/350/320       | 4               | 53.1                 | 1500                | 3000/4500/6000                   | 8000              | 0.0034                     |
| Z18-41P5XA20-XXXX | 1.5              | 3.3/3.6/3.9       | 7.2                | 380/350/320       | 4               | 69.9                 | 2000                | 4000/6000/8000                   | 10000             | 0.0034                     |
| Z18-42P2XA30-XXXX | 2.2              | 4.7/5.1/5.5       | 7.0                | 380/350/320       | 4               | 103.1                | 3000                | 6000/9000/12000                  | 15000             | 0.0034                     |

### Characteristic Curve

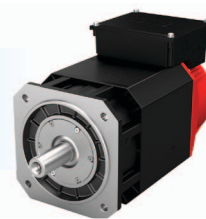


### Performance Index

| ITEM                   | INDEX                 |
|------------------------|-----------------------|
| Encoder (optional)     | MG-128(Magnetic)      |
|                        | CE9-2500(Incremental) |
|                        | CE9-23B(Absolute)     |
|                        | RZ12-1024(Resolver)   |
|                        | SC-2048(SIN-COS)      |
| Shaft Type             | G : Without Keyslot   |
|                        | J : With Keyslot      |
| Mounting Type          | B3 B5 B35             |
| Weight / Gross         | 18 (25) kg            |
| Protection Class       | IP55                  |
| Insulation Class       | F Class               |
| Rated Temperature Rise | 90K                   |
| Vibration Class        | A                     |
| Noise                  | ≤70dB(A)              |
| Environment            | -15 ~ 45°C            |
| Environment            | ≤95%RH                |





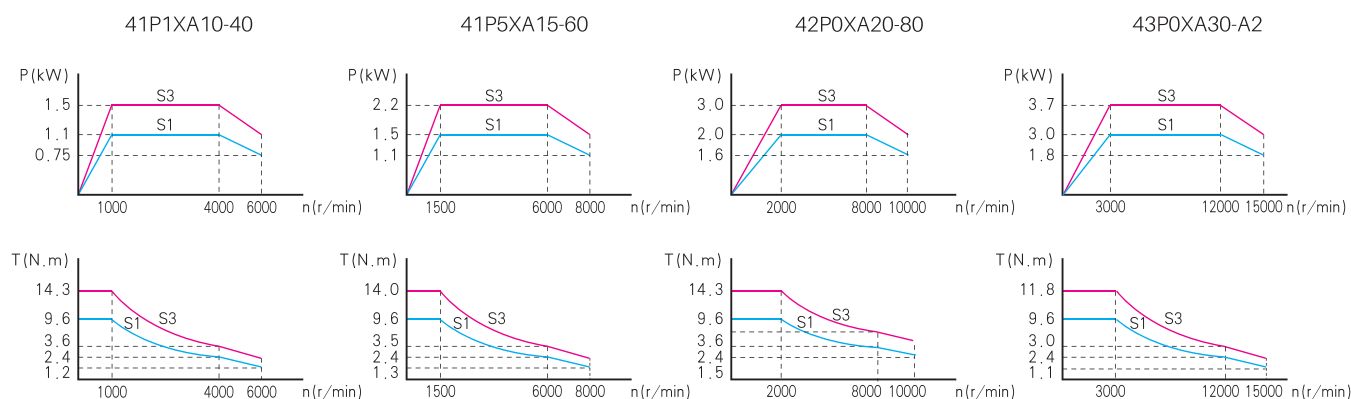


### Electrical Parameter

Voltage Class : 400V Connection : Y Fan Power : 25W Fan Voltage : 380V

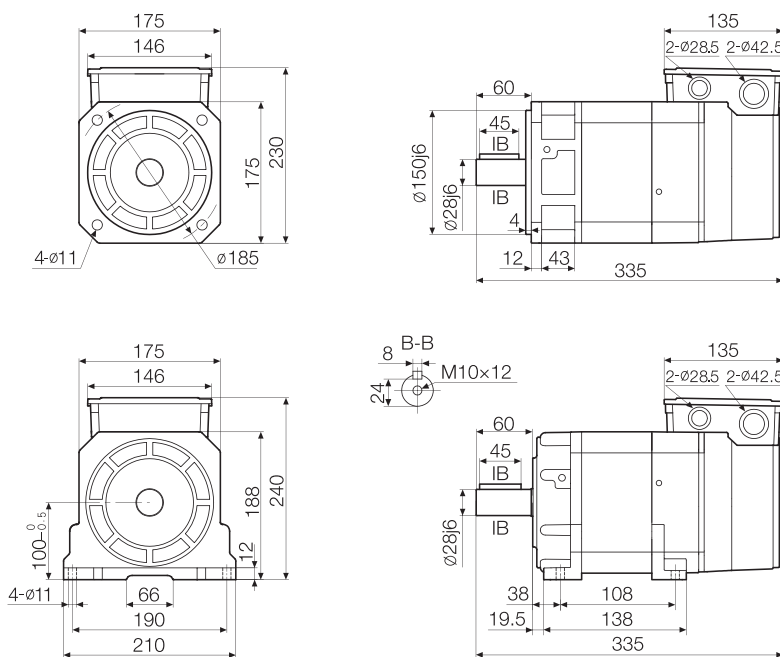
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (H) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m2) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|---------------------|---------------------|----------------------------------|-------------------|----------------------------|
| Z18-41P1XA10-XXXX | 1.1              | 2.6/2.9/3.2       | 10.5               | 380/340/305       | 4               | 36.9                | 1000                | 2000/3000/4000                   | 6000              | 0.0039                     |
| Z18-41P5XA15-XXXX | 1.5              | 3.3/3.6/4.0       | 9.6                | 380/345/315       | 4               | 53.3                | 1500                | 3000/4500/6000                   | 8000              | 0.0039                     |
| Z18-42P0XA20-XXXX | 2.0              | 4.3/4.7/5.3       | 9.6                | 380/345/305       | 4               | 69.9                | 2000                | 4000/6000/8000                   | 10000             | 0.0039                     |
| Z18-43P0XA30-XXXX | 3.0              | 6.2/6.6/7.5       | 9.6                | 380/355/315       | 4               | 103.4               | 3000                | 6000/9000/12000                  | 15000             | 0.0039                     |

### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                 |
|------------------------|-----------------------|
| Encoder (optional)     | MG-128(Magnetic)      |
|                        | CE9-2500(Incremental) |
|                        | CE9-23B(Absolute)     |
|                        | RZ12-1024(Resolver)   |
|                        | SC-2048(SIN-COS)      |
| Shaft Type             | G : Without Keyslot   |
|                        | J : With Keyslot      |
| Mounting Type          | B3 B5 B35             |
| Weight / Gross         | 20 (27) kg            |
| Protection Class       | IP55                  |
| Insulation Class       | F Class               |
| Rated Temperature Rise | 90K                   |
| Vibration Class        | A                     |
| Noise                  | ≤70dB(A)              |
| Environment            | -15 ~ 45°C            |
| Environment            | ≤95%RH                |



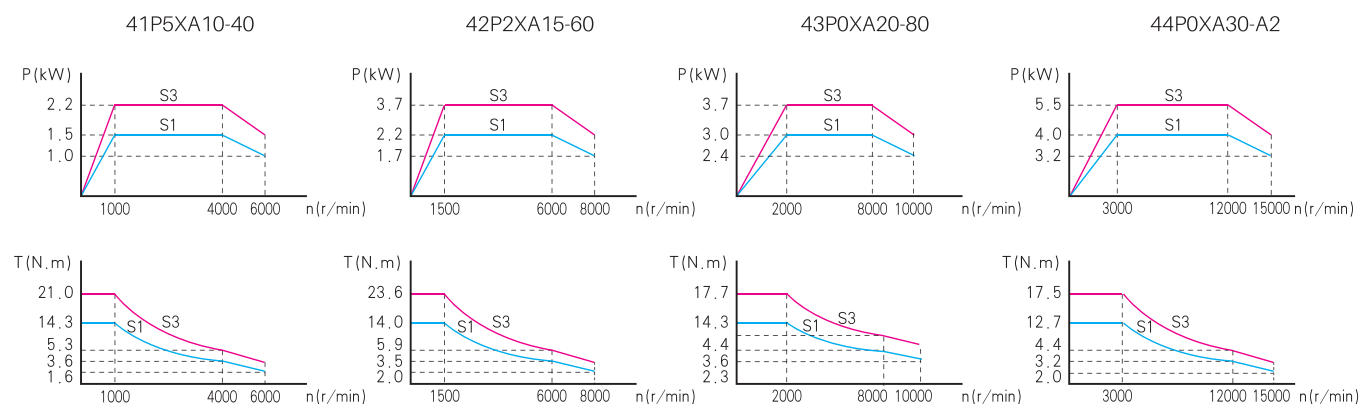


### Electrical Parameter

Voltage Class : 400V Connection : Y Fan Power : 25W Fan Voltage : 380V

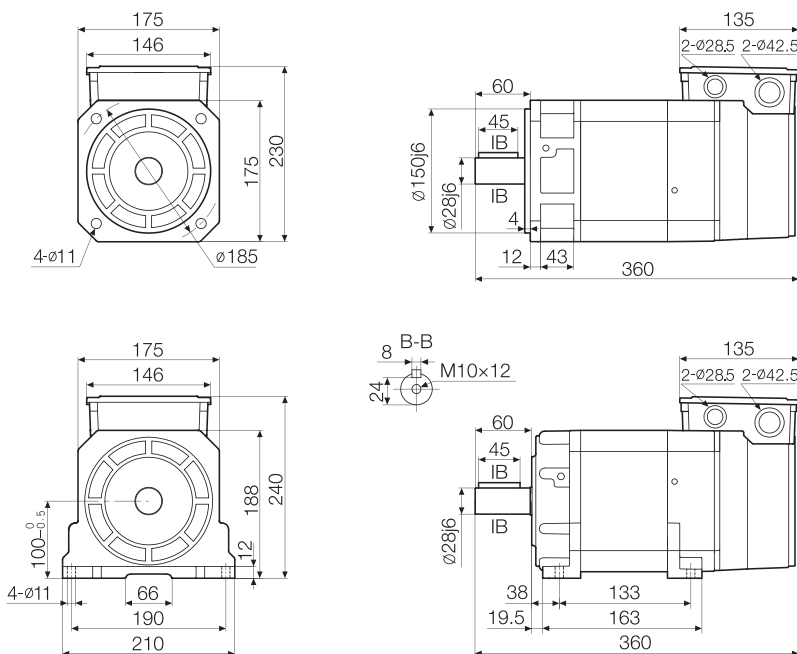
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (Hz) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m <sup>2</sup> ) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|----------------------|---------------------|----------------------------------|-------------------|-----------------------------------------|
| Z18-41P5XA10-XXXX | 1.5              | 3.3/3.6/4.0       | 14.3               | 380/360/320       | 4               | 36.4                 | 1000                | 2000/3000/4000                   | 6000              | 0.0054                                  |
| Z18-42P2XA15-XXXX | 2.2              | 4.7/5.0/5.6       | 14.0               | 380/355/320       | 4               | 53.0                 | 1500                | 3000/4500/6000                   | 8000              | 0.0054                                  |
| Z18-43P0XA20-XXXX | 3.0              | 6.2/6.7/7.4       | 14.3               | 380/350/315       | 4               | 69.8                 | 2000                | 4000/6000/8000                   | 10000             | 0.0054                                  |
| Z18-44P0XA30-XXXX | 4.0              | 8.2/8.2/9.4       | 12.7               | 380/375/335       | 4               | 102.8                | 3000                | 6000/9000/12000                  | 15000             | 0.0054                                  |

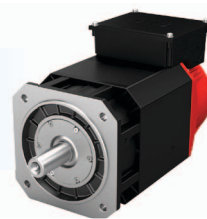
### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                 |
|------------------------|-----------------------|
| Encoder (optional)     | MG-128(Magnetic)      |
|                        | CE9-2500(Incremental) |
|                        | CE9-23B(Absolute)     |
|                        | RZ12-1024(Resolver)   |
|                        | SC-2048(SIN-COS)      |
| Shaft Type             | G : Without Keyslot   |
|                        | J : With Keyslot      |
| Mounting Type          | B3 B5 B35             |
| Weight / Gross         | 24 (31) kg            |
| Protection Class       | IP55                  |
| Insulation Class       | F Class               |
| Rated Temperature Rise | 90K                   |
| Vibration Class        | A                     |
| Noise                  | ≤70dB(A)              |
| Environment            | -15 ~ 45°C            |
| Environment            | ≤95%RH                |



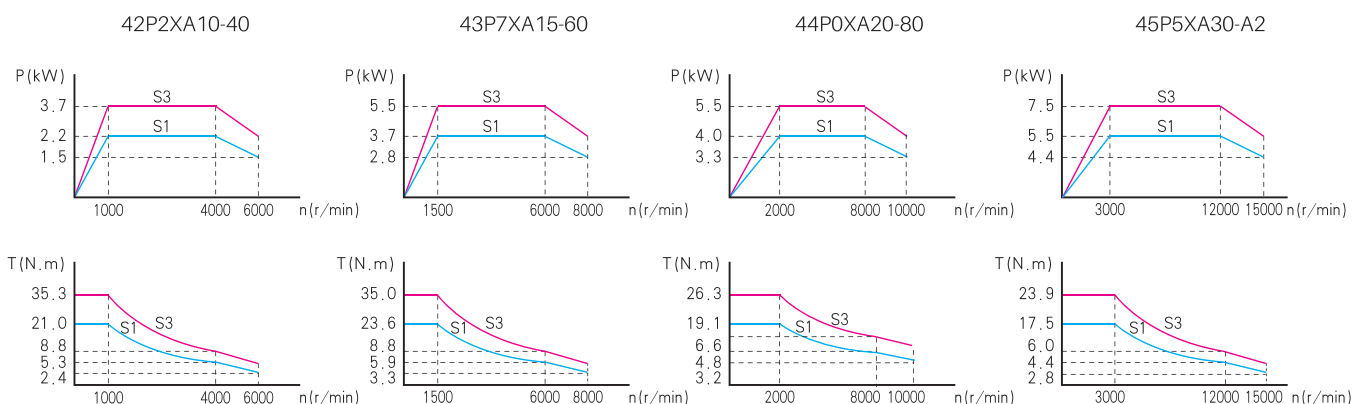


### Electrical Parameter

Voltage Class : 400V Connection : Y Fan Power : 25W Fan Voltage : 380V

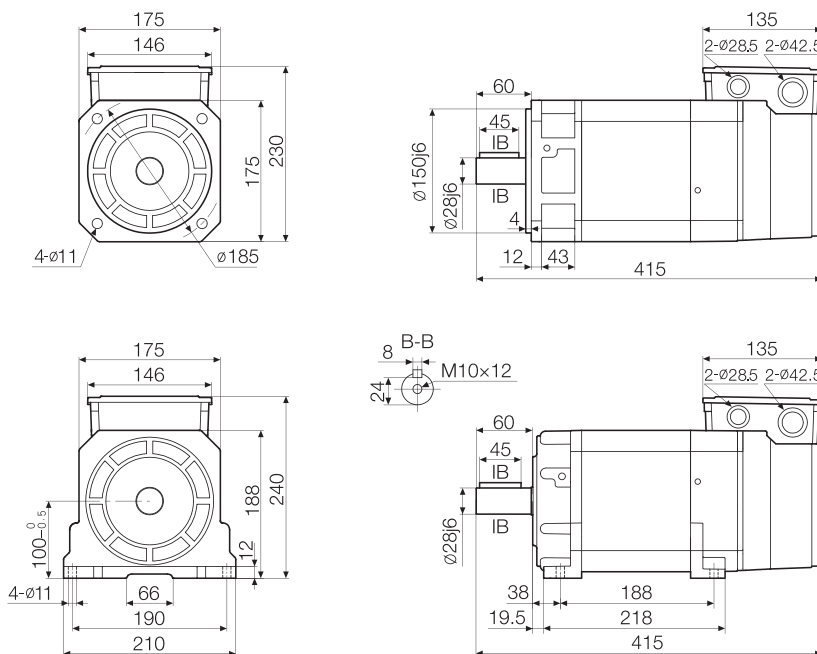
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (Hz) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m2) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|----------------------|---------------------|----------------------------------|-------------------|----------------------------|
| Z18-42P2XA10-XXXX | 2.2              | 4.8/4.9/5.3       | 21.0               | 380/375/345       | 4               | 35.8                 | 1000                | 2000/3000/4000                   | 6000              | 0.0086                     |
| Z18-43P7XA15-XXXX | 3.7              | 7.7/8.1/8.7       | 23.6               | 380/360/335       | 4               | 52.6                 | 1500                | 3000/4500/6000                   | 8000              | 0.0086                     |
| Z18-44P0XA20-XXXX | 4.0              | 8.2/8.4/9.0       | 19.1               | 380/375/355       | 4               | 69.0                 | 2000                | 4000/6000/8000                   | 10000             | 0.0086                     |
| Z18-45P5XA30-XXXX | 5.5              | 11.2/12.1/12.1    | 17.5               | 380/365/365       | 4               | 102.1                | 3000                | 6000/9000/12000                  | 15000             | 0.0086                     |

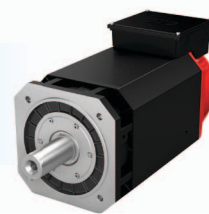
### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                 |
|------------------------|-----------------------|
| Encoder (optional)     | MG-128(Magnetic)      |
|                        | CE9-2500(Incremental) |
|                        | CE9-23B(Absolute)     |
|                        | RZ12-1024(Resolver)   |
|                        | SC-2048(SIN-COS)      |
| Shaft Type             | G : Without Keyslot   |
|                        | J : With Keyslot      |
| Mounting Type          | B3 B5 B35             |
| Weight / Gross         | 33 (40) kg            |
| Protection Class       | IP55                  |
| Insulation Class       | F Class               |
| Rated Temperature Rise | 90K                   |
| Vibration Class        | A                     |
| Noise                  | ≤70dB(A)              |
| Environment            | -15 ~ 45°C            |
| Environment            | ≤95%RH                |





### ◆ Electrical Parameter

Voltage Class : 400V

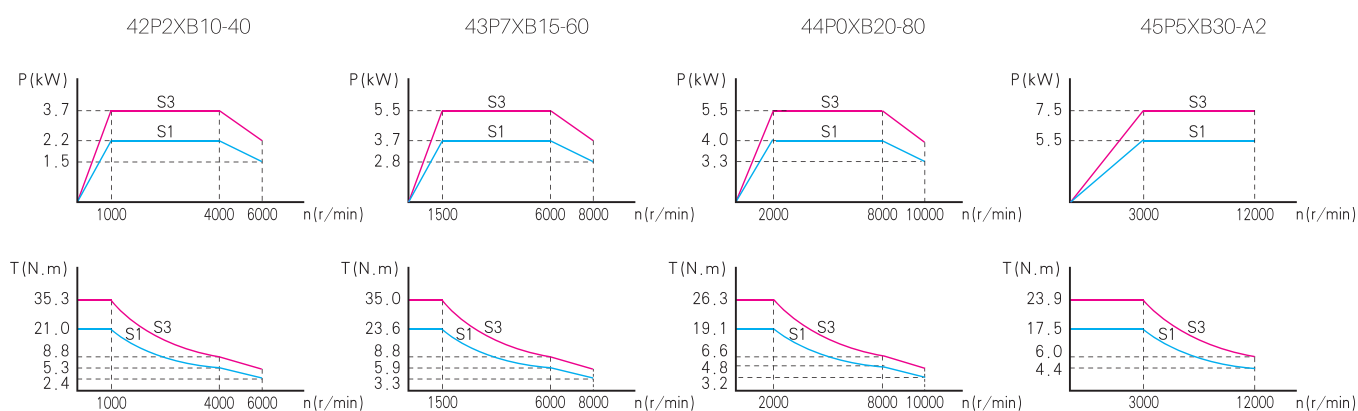
Connection: Y

Fan Power: 55W

Fan Voltage : 380V

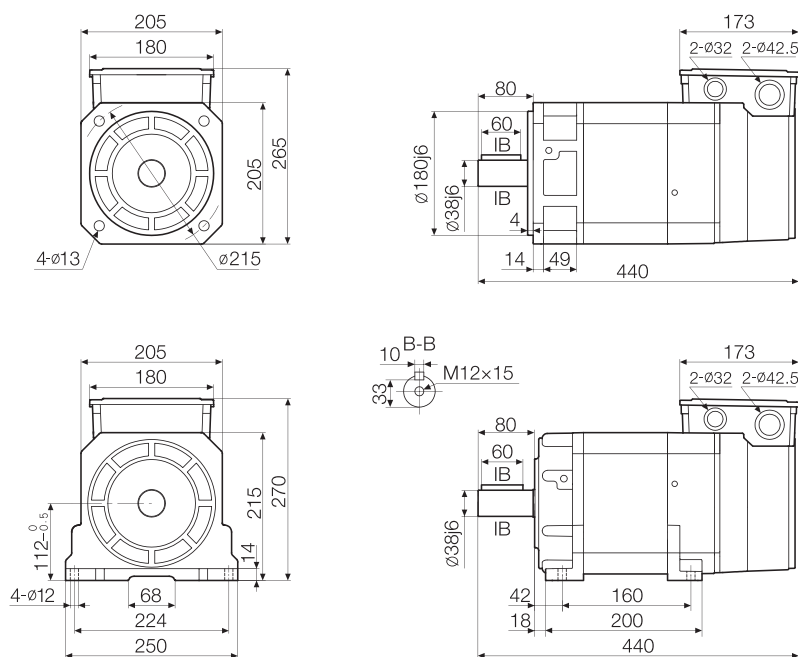
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (H) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m2) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|---------------------|---------------------|----------------------------------|-------------------|----------------------------|
| Z18-42P2XB10-XXXX | 2.2              | 4.6/4.8/5.4       | 21.0               | 380/360/320       | 4               | 34.9                | 1000                | 2000/3000/4000                   | 6000              | 0.0154                     |
| Z18-43P7XB15-XXXX | 3.7              | 7.4/8.1/9.3       | 23.6               | 380/340/300       | 4               | 51.8                | 1500                | 3000/4500/6000                   | 8000              | 0.0154                     |
| Z18-44P0XB20-XXXX | 4.0              | 7.8/8.1/9.2       | 19.1               | 380/375/330       | 4               | 68.2                | 2000                | 4000/6000/8000                   | 10000             | 0.0154                     |
| Z18-45P5XB30-XXXX | 5.5              | 10.9/11.0/12.4    | 17.5               | 380/375/335       | 4               | 101.3               | 3000                | 6000/9000/12000                  | 12000             | 0.0154                     |

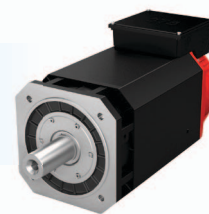
### ◆ Characteristic Curve



### ◆ Performance Index

| ITEM                      | INDEX                 |
|---------------------------|-----------------------|
| Encoder<br>(optional)     | MG-128(Magnetic)      |
|                           | CE9-2500(Incremental) |
|                           | CE9-23B(Absolute)     |
|                           | RZ12-1024(Resolver)   |
|                           | SC-2048(SIN-COS)      |
| Shaft Type                | G : Without Keyslot   |
|                           | J : With Keyslot      |
| Mounting Type             | B3 B5 B35             |
| Weight / Gross            | 38 (45) kg            |
| Protection Class          | IP55                  |
| Insulation Class          | F Class               |
| Rated Temperature<br>Rise | 90K                   |
| Vibration Class           | A                     |
| Noise                     | ≤70dB(A)              |
| Environment               | -15 ~ 45℃             |
| Environment               | ≤95%RH                |



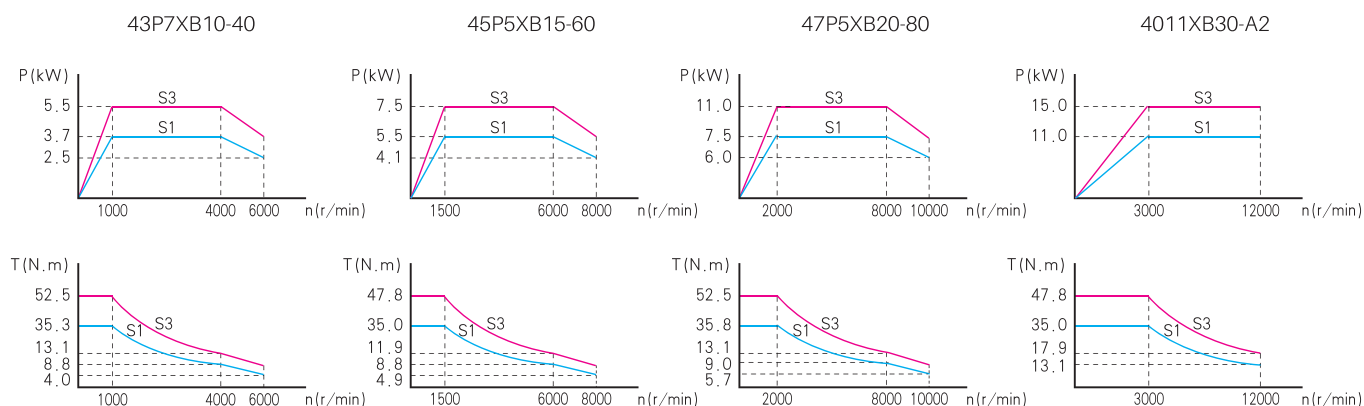


### Electrical Parameter

Voltage Class : 400V Connection : Y Fan Power : 55W Fan Voltage : 380V

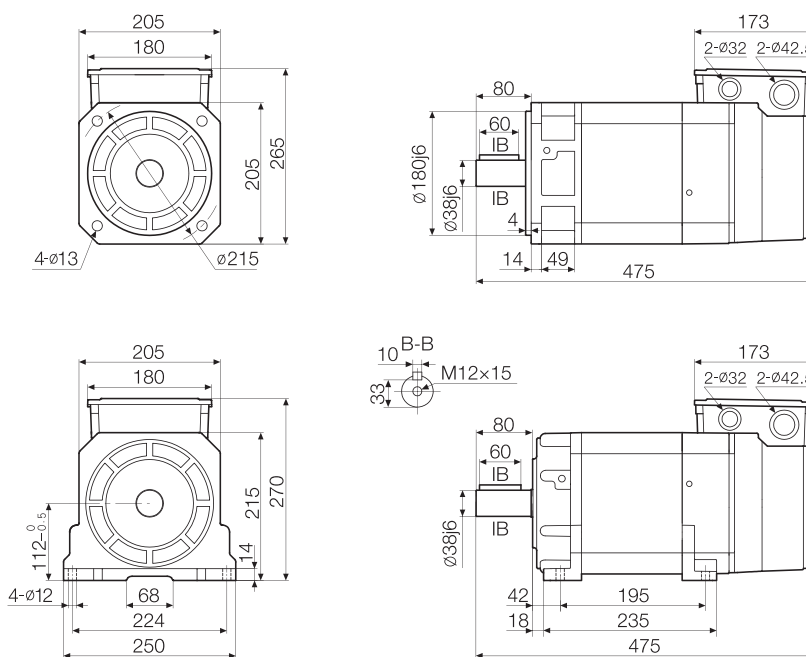
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (Hz) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m <sup>2</sup> ) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|----------------------|---------------------|----------------------------------|-------------------|-----------------------------------------|
| Z18-43P7XB10-XXXX | 3.7              | 7.5/8.4/9.3       | 35.3               | 380/335/305       | 4               | 35.1                 | 1000                | 2000/3000/4000                   | 6000              | 0.0199                                  |
| Z18-45P5XB15-XXXX | 5.5              | 10.7/12.3/13.4    | 35.0               | 380/330/305       | 4               | 51.8                 | 1500                | 3000/4500/6000                   | 8000              | 0.0199                                  |
| Z18-47P5XB20-XXXX | 7.5              | 14.4/16.1/18.2    | 35.8               | 380/340/300       | 4               | 68.5                 | 2000                | 4000/6000/8000                   | 10000             | 0.0199                                  |
| Z18-4011XB30-XXXX | 11               | 20.7/24.5/26.8    | 35.0               | 380/320/295       | 4               | 101.8                | 3000                | 6000/9000/12000                  | 12000             | 0.0199                                  |

### Characteristic Curve

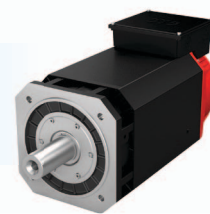


### Performance Index

| ITEM                   | INDEX                 |
|------------------------|-----------------------|
| Encoder (optional)     | MG-128(Magnetic)      |
|                        | CE9-2500(Incremental) |
|                        | CE9-23B(Absolute)     |
|                        | RZ12-1024(Resolver)   |
|                        | SC-2048(SIN-COS)      |
| Shaft Type             | G : Without Keyslot   |
|                        | J : With Keyslot      |
| Mounting Type          | B3 B5 B35             |
| Weight / Gross         | 46 (53) kg            |
| Protection Class       | IP55                  |
| Insulation Class       | F Class               |
| Rated Temperature Rise | 90K                   |
| Vibration Class        | A                     |
| Noise                  | ≤70dB(A)              |
| Environment            | -15 ~ 45°C            |
| Environment            | ≤95%RH                |





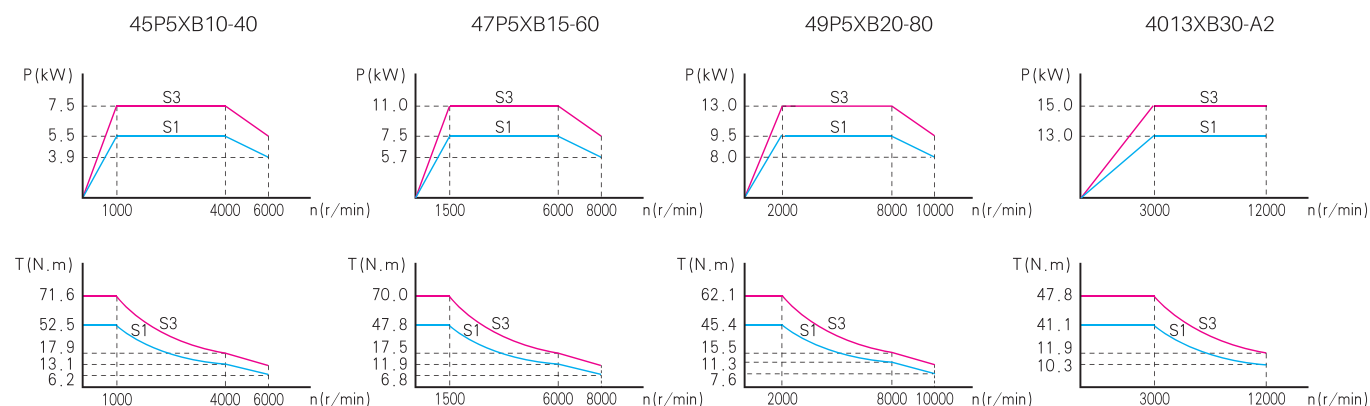


### Electrical Parameter

Voltage Class : 400V Connection : Y Fan Power : 55W Fan Voltage : 380V

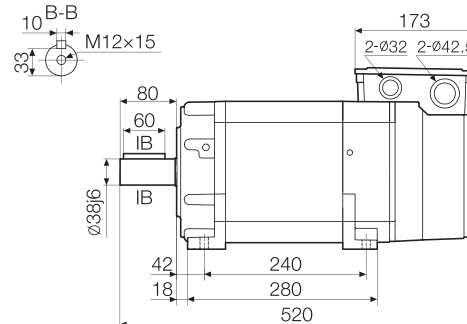
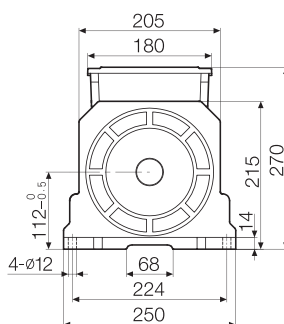
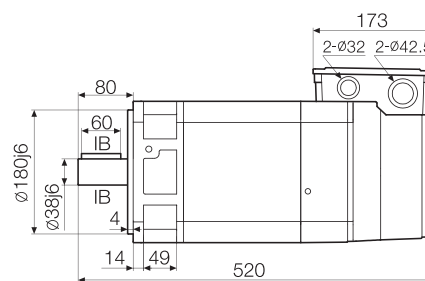
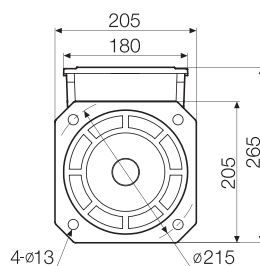
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (Hz) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m2) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|----------------------|---------------------|----------------------------------|-------------------|----------------------------|
| Z18-45P5XB10-XXXX | 5.5              | 10.9/12.8/14.8    | 52.5               | 380/325/280       | 4               | 35.2                 | 1000                | 2000/3000/4000                   | 6000              | 0.0256                     |
| Z18-47P5XB15-XXXX | 7.5              | 14.4/15.9/18.0    | 47.8               | 380/345/305       | 4               | 51.8                 | 1500                | 3000/4500/6000                   | 8000              | 0.0256                     |
| Z18-49P5XB20-XXXX | 9.5              | 17.8/20.0/23.5    | 45.4               | 380/345/300       | 4               | 68.3                 | 2000                | 4000/6000/8000                   | 10000             | 0.0256                     |
| Z18-4013XB30-XXXX | 13               | 24.3/26.8/30.2    | 41.4               | 380/350/310       | 4               | 101.6                | 3000                | 6000/9000/12000                  | 12000             | 0.0256                     |

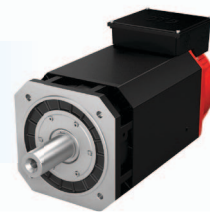
### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                 |
|------------------------|-----------------------|
| Encoder (optional)     | MG-128(Magnetic)      |
|                        | CE9-2500(Incremental) |
|                        | CE9-23B(Absolute)     |
|                        | RZ12-1024(Resolver)   |
|                        | SC-2048(SIN-COS)      |
| Shaft Type             | G : Without Keyslot   |
|                        | J : With Keyslot      |
| Mounting Type          | B3 B5 B35             |
| Weight / Gross         | 57 (65) kg            |
| Protection Class       | IP55                  |
| Insulation Class       | F Class               |
| Rated Temperature Rise | 90K                   |
| Vibration Class        | A                     |
| Noise                  | ≤70dB(A)              |
| Environment            | -15 ~ 45°C            |
| Environment            | ≤95%RH                |



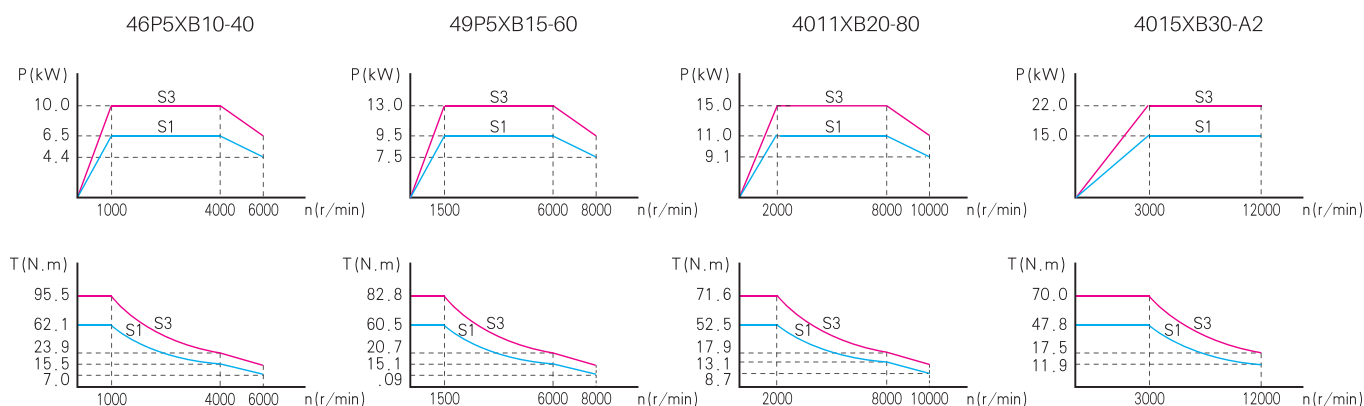


### Electrical Parameter

Voltage Class : 400V Connection : Y Fan Power : 55W Fan Voltage : 380V

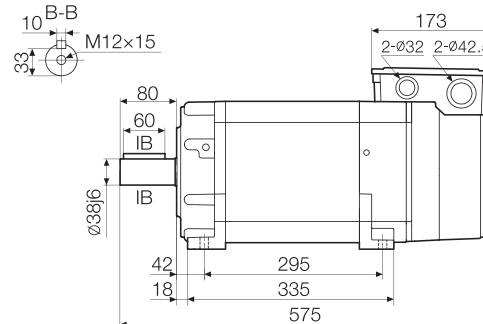
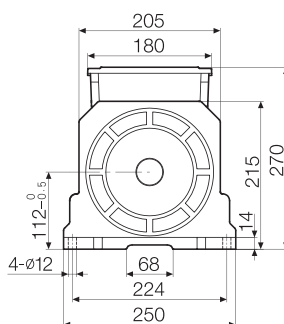
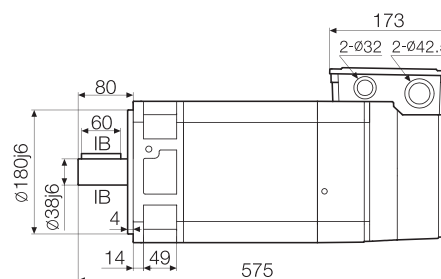
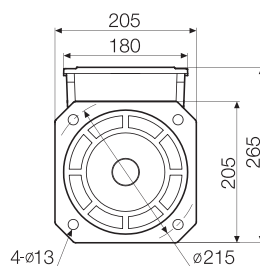
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (Hz) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m2) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|----------------------|---------------------|----------------------------------|-------------------|----------------------------|
| Z18-46P5XB10-XXXX | 6.5              | 12.8/14.1/15.9    | 62.1               | 380/345/305       | 4               | 35.0                 | 1000                | 2000/3000/4000                   | 6000              | 0.0325                     |
| Z18-49P5XB15-XXXX | 9.5              | 17.9/20.3/23.0    | 60.5               | 380/340/290       | 4               | 51.8                 | 1500                | 3000/4500/6000                   | 8000              | 0.0325                     |
| Z18-4011XB20-XXXX | 11               | 21.3/21.3/26.0    | 52.5               | 380/375/305       | 4               | 68.0                 | 2000                | 4000/6000/8000                   | 10000             | 0.0325                     |
| Z18-4015XB30-XXXX | 15               | 27.7/30.9/36.1    | 47.8               | 380/355/300       | 4               | 101.5                | 3000                | 6000/9000/12000                  | 12000             | 0.0325                     |

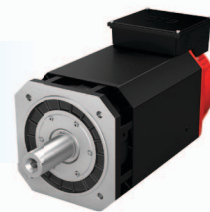
### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                 |
|------------------------|-----------------------|
| Encoder (optional)     | MG-128(Magnetic)      |
|                        | CE9-2500(Incremental) |
|                        | CE9-23B(Absolute)     |
|                        | RZ12-1024(Resolver)   |
|                        | SC-2048(SIN-COS)      |
| Shaft Type             | G : Without Keyslot   |
|                        | J : With Keyslot      |
| Mounting Type          | B3 B5 B35             |
| Weight / Gross         | 71 (81) kg            |
| Protection Class       | IP55                  |
| Insulation Class       | F Class               |
| Rated Temperature Rise | 90K                   |
| Vibration Class        | A                     |
| Noise                  | ≤70dB(A)              |
| Environment            | -15 ~ 45°C            |
| Environment            | ≤95%RH                |



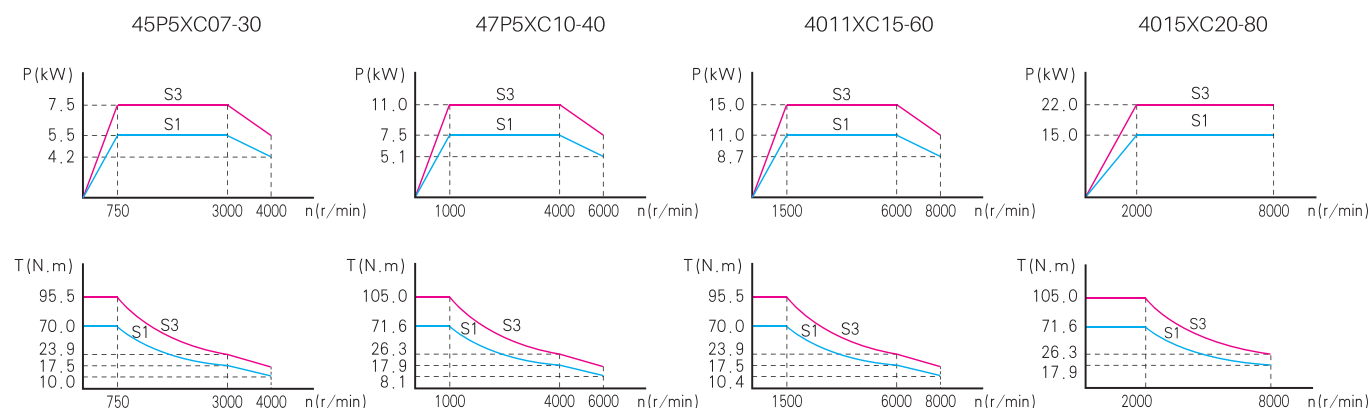


### Electrical Parameter

Voltage Class : 400V Connection : Y Fan Power : 110W Fan Voltage : 380V

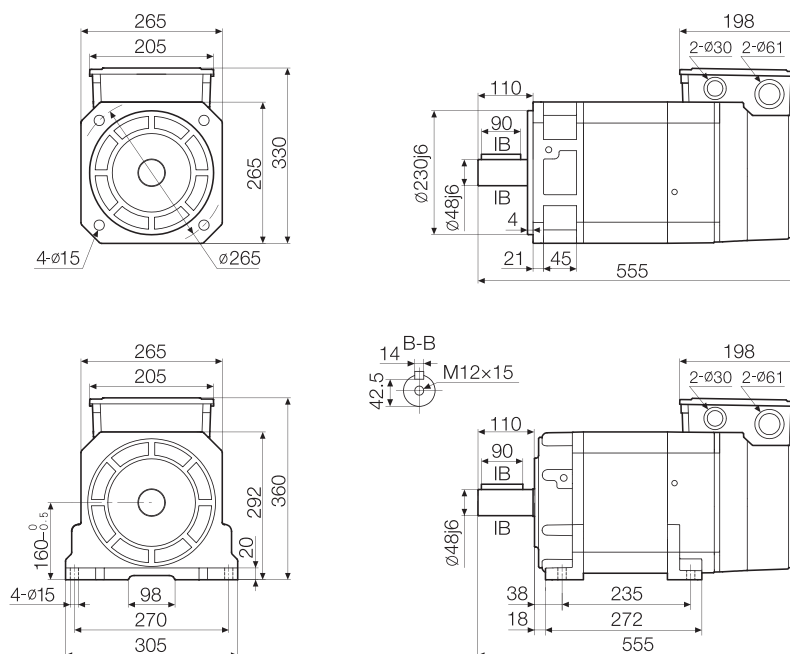
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (Hz) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m2) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|----------------------|---------------------|----------------------------------|-------------------|----------------------------|
| Z18-45P5XC07-XXXX | 5.5              | 10.7/12.1/13.7    | 70.0               | 380/340/300       | 4               | 26.1                 | 750                 | 1500/2200/3000                   | 4000              | 0.0717                     |
| Z18-47P5XC10-XXXX | 7.5              | 14.4/16.0/18.5    | 71.6               | 380/340/295       | 4               | 34.4                 | 1000                | 2000/3000/4000                   | 6000              | 0.0717                     |
| Z18-4011XC15-XXXX | 11               | 20.6/23.4/27.2    | 70.0               | 380/335/290       | 4               | 51.1                 | 1500                | 3000/4500/6000                   | 8000              | 0.0717                     |
| Z18-4015XC20-XXXX | 15               | 27.9/30.6/37.2    | 71.6               | 380/345/285       | 4               | 67.7                 | 2000                | 4000/6000/8000                   | 8000              | 0.0717                     |

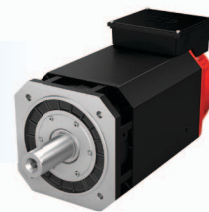
### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                 |
|------------------------|-----------------------|
| Encoder (optional)     | MG-128(Magnetic)      |
|                        | CE9-2500(Incremental) |
|                        | CE9-23B(Absolute)     |
|                        | RZ12-1024(Resolver)   |
|                        | SC-2048(SIN-COS)      |
| Shaft Type             | G : Without Keyslot   |
|                        | J : With Keyslot      |
| Mounting Type          | B3 B5 B35             |
| Weight / Gross         | 93 (103) kg           |
| Protection Class       | IP55                  |
| Insulation Class       | F Class               |
| Rated Temperature Rise | 90K                   |
| Vibration Class        | A                     |
| Noise                  | ≤70dB(A)              |
| Environment            | -15 ~ 45°C            |
| Environment            | ≤95%RH                |



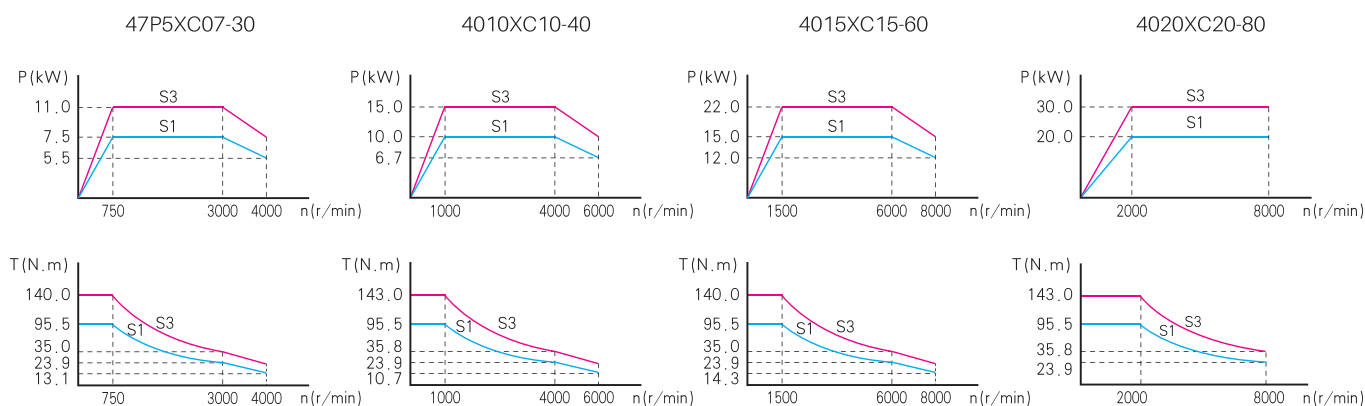


### Electrical Parameter

Voltage Class : 400V Connection : Y Fan Power : 110W Fan Voltage : 380V

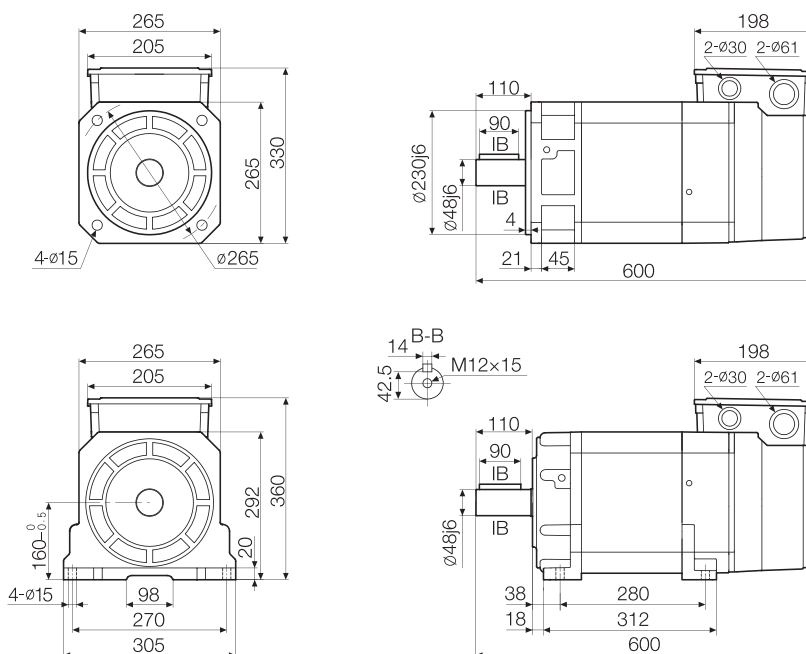
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (Hz) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m2) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|----------------------|---------------------|----------------------------------|-------------------|----------------------------|
| Z18-47P5XC07-XXXX | 7.5              | 14.4/16.4/19.0    | 95.5               | 380/335/290       | 4               | 26.1                 | 750                 | 1500/2200/3000                   | 4000              | 0.0890                     |
| Z18-4010XC10-XXXX | 10               | 18.7/21.4/24.4    | 95.5               | 380/335/295       | 4               | 34.5                 | 1000                | 2000/3000/4000                   | 6000              | 0.0890                     |
| Z18-4015XC15-XXXX | 15               | 27.4/31.1/37.8    | 95.5               | 380/340/280       | 4               | 51.2                 | 1500                | 3000/4500/6000                   | 8000              | 0.0890                     |
| Z18-4020XC20-XXXX | 20               | 36.0/42.5/48.9    | 95.5               | 380/330/285       | 4               | 67.7                 | 2000                | 4000/6000/8000                   | 8000              | 0.0890                     |

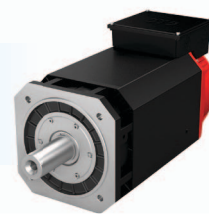
### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                 |
|------------------------|-----------------------|
| Encoder (optional)     | MG-128(Magnetic)      |
|                        | CE9-2500(Incremental) |
|                        | CE9-23B(Absolute)     |
|                        | RZ12-1024(Resolver)   |
|                        | SC-2048(SIN-COS)      |
| Shaft Type             | G : Without Keyslot   |
|                        | J : With Keyslot      |
| Mounting Type          | B3 B5 B35             |
| Weight / Gross         | 111 (121) kg          |
| Protection Class       | IP55                  |
| Insulation Class       | F Class               |
| Rated Temperature Rise | 90K                   |
| Vibration Class        | A                     |
| Noise                  | ≤70dB(A)              |
| Environment            | -15 ~ 45°C            |
| Environment            | ≤95%RH                |



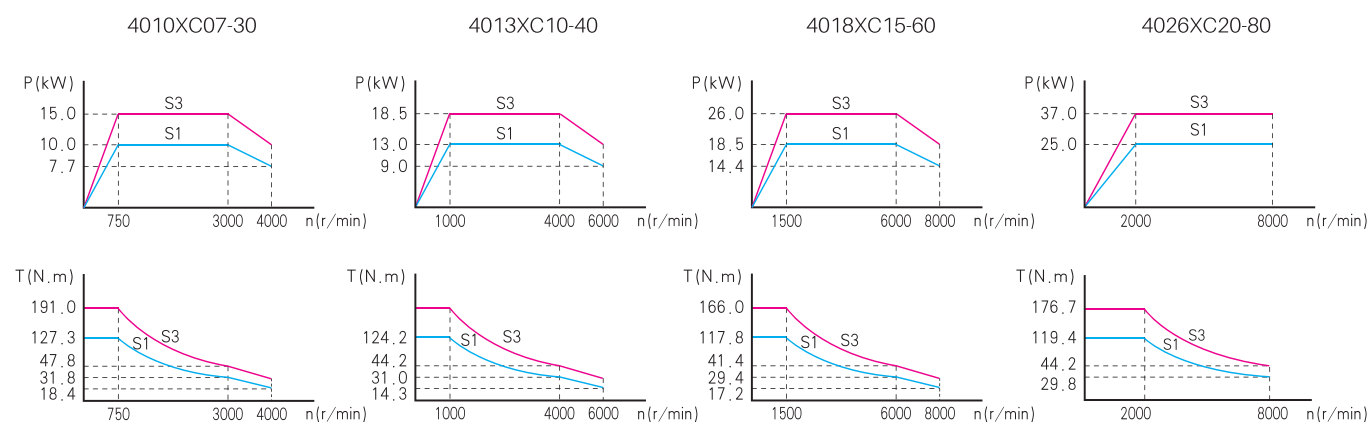


### ◆ Electrical Parameter

Voltage Class: 400V   Connection: Y   Fan Power: 110W   Fan Voltage: 380V

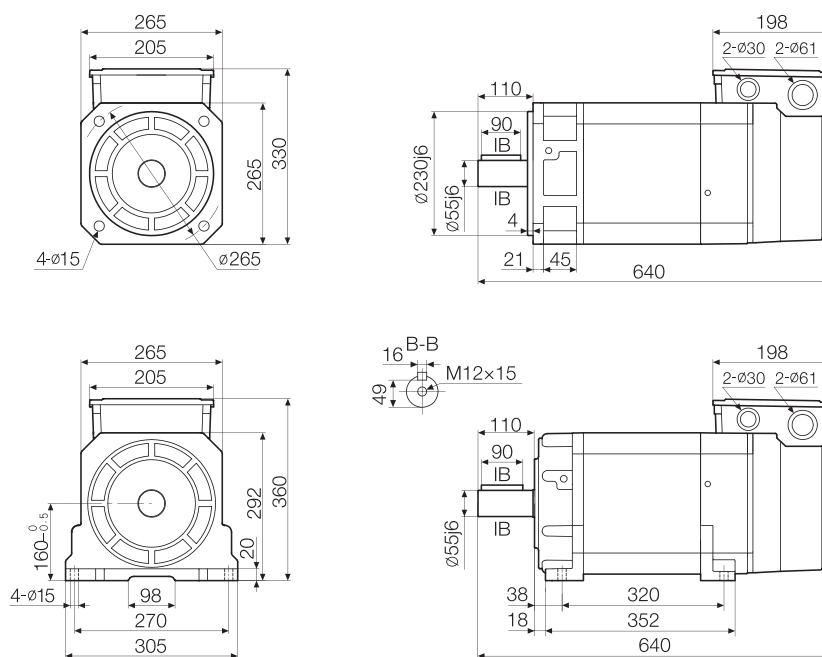
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (H) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m2) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|---------------------|---------------------|----------------------------------|-------------------|----------------------------|
| Z18-4010XC07-XXXX | 10               | 19.1/21.8/25.1    | 121.0              | 380/335/290       | 4               | 26.1                | 750                 | 1500/2200/3000                   | 4000              | 0.1057                     |
| Z18-4013XC10-XXXX | 13               | 24.4/28.1/33.1    | 124.2              | 380/330/280       | 4               | 34.4                | 1000                | 2000/3000/4000                   | 6000              | 0.1057                     |
| Z18-4018XC15-XXXX | 18.5             | 34.5/38.7/43.4    | 117.8              | 380/335/300       | 4               | 51.1                | 1500                | 3000/4500/6000                   | 8000              | 0.1057                     |
| Z18-4025XC20-XXXX | 25               | 45.2/50.8/58.9    | 119.4              | 380/340/295       | 4               | 67.8                | 2000                | 4000/6000/8000                   | 8000              | 0.1057                     |

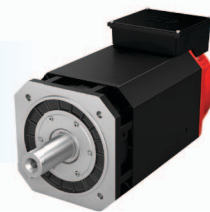
### ◆ Characteristic Curve



### ◆ Performance Index

| ITEM                      | INDEX                 |
|---------------------------|-----------------------|
| Encoder<br>(optional)     | MG-128(Magnetic)      |
|                           | CE9-2500(Incremental) |
|                           | CE9-23B(Absolute)     |
|                           | RZ12-1024(Resolver)   |
|                           | SC-2048(SIN-COS)      |
| Shaft Type                | G : Without Keyslot   |
|                           | J : With Keyslot      |
| Mounting Type             | B3 B5 B35             |
| Weight / Gross            | 126 (136) kg          |
| Protection Class          | IP55                  |
| Insulation Class          | F Class               |
| Rated Temperature<br>Rise | 90K                   |
| Vibration Class           | A                     |
| Noise                     | ≤70dB(A)              |
| Environment               | -15 ~ 45℃             |
| Environment               | ≤95%RH                |



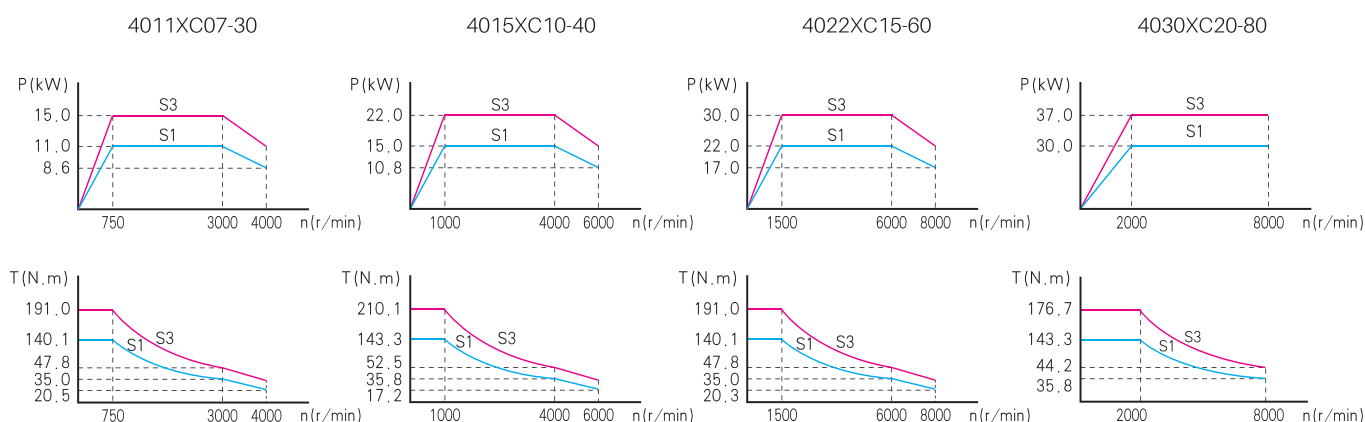


### Electrical Parameter

Voltage Class : 400V Connection : Y Fan Power : 110W Fan Voltage : 380V

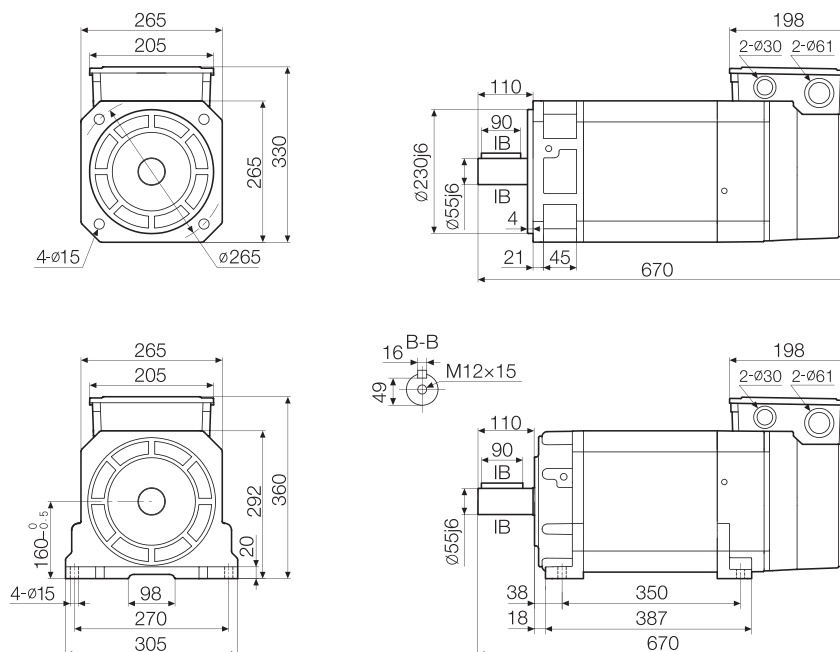
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (Hz) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m2) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|----------------------|---------------------|----------------------------------|-------------------|----------------------------|
| Z18-4011XC07-XXXX | 11               | 20.8/24.2/28.3    | 140.1              | 380/330/280       | 4               | 26.1                 | 750                 | 1500/2200/3000                   | 4000              | 0.1186                     |
| Z18-4015XC10-XXXX | 15               | 28.3/33.3/36.9    | 143.3              | 380/315/290       | 4               | 34.4                 | 1000                | 2000/3000/4000                   | 6000              | 0.1186                     |
| Z18-4022XC15-XXXX | 22               | 40.5/45.7/52.1    | 140.1              | 380/335/295       | 4               | 51.0                 | 1500                | 3000/4500/6000                   | 8000              | 0.1186                     |
| Z18-4030XC20-XXXX | 30               | 54.2/62.6/74.3    | 143.3              | 380/330/280       | 4               | 67.8                 | 2000                | 4000/6000/8000                   | 8000              | 0.1186                     |

### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                 |
|------------------------|-----------------------|
| Encoder (optional)     | MG-128(Magnetic)      |
|                        | CE9-2500(Incremental) |
|                        | CE9-23B(Absolute)     |
|                        | RZ12-1024(Resolver)   |
|                        | SC-2048(SIN-COS)      |
| Shaft Type             | G : Without Keyslot   |
|                        | J : With Keyslot      |
| Mounting Type          | B3 B5 B35             |
| Weight / Gross         | 138 (148) kg          |
| Protection Class       | IP55                  |
| Insulation Class       | F Class               |
| Rated Temperature Rise | 90K                   |
| Vibration Class        | A                     |
| Noise                  | ≤70dB(A)              |
| Environment            | -15 ~ 45°C            |
| Environment            | ≤95%RH                |





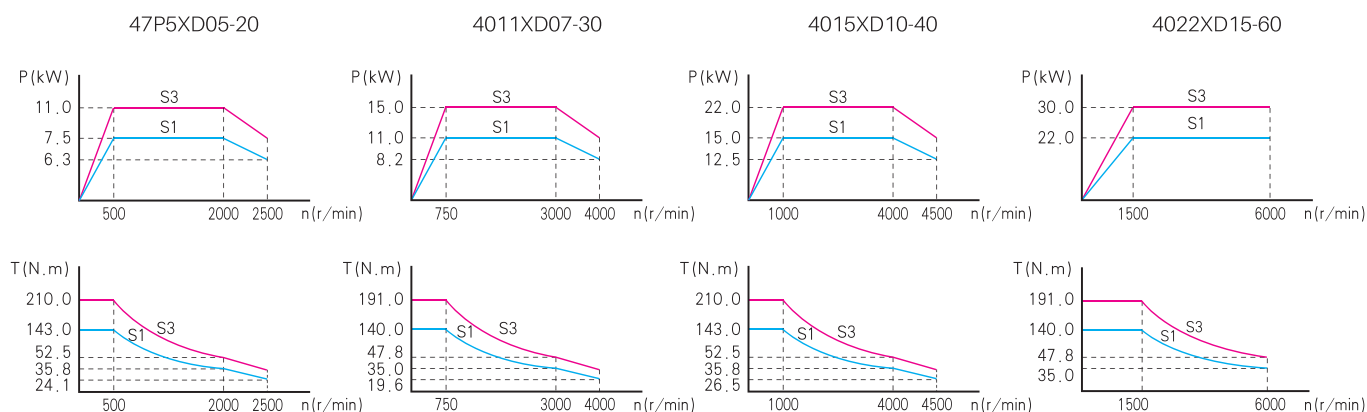


### Electrical Parameter

Voltage Class : 400V Connection : Y Fan Power : 600W Fan Voltage : 380V

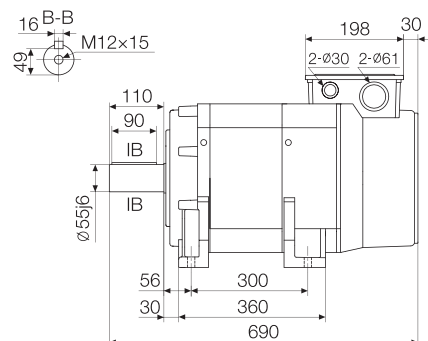
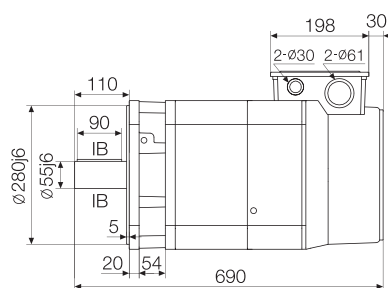
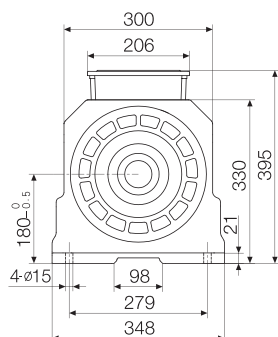
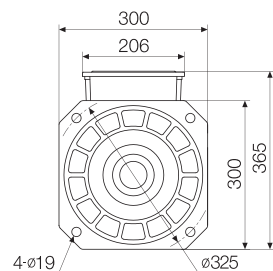
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (Hz) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m <sup>2</sup> ) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|----------------------|---------------------|----------------------------------|-------------------|-----------------------------------------|
| Z18-47P5XD05-XXXX | 7.5              | 14.3/15.6/17.6    | 143                | 380/350/310       | 4               | 17.5                 | 500                 | 1000/1500/2000                   | 2500              | 0.1587                                  |
| Z18-4011XD07-XXXX | 11               | 20.3/21.7/24.5    | 140                | 380/355/315       | 4               | 25.8                 | 750                 | 1500/2200/3000                   | 4000              | 0.1587                                  |
| Z18-4015XD10-XXXX | 15               | 27.3/28.7/32.3    | 143                | 380/360/320       | 4               | 34.1                 | 1000                | 2000/3000/4000                   | 4500              | 0.1587                                  |
| Z18-4022XD15-XXXX | 22               | 39.0/40.3/45.8    | 140                | 380/370/325       | 4               | 50.8                 | 1500                | 3000/4500/6000                   | 6000              | 0.1587                                  |

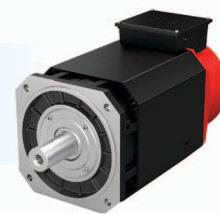
### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                 |
|------------------------|-----------------------|
| Encoder (optional)     | MG-128(Magnetic)      |
|                        | CE9-2500(Incremental) |
|                        | CE9-23B(Absolute)     |
|                        | RZ12-1024(Resolver)   |
|                        | SC-2048(SIN-COS)      |
| Shaft Type             | G : Without Keyslot   |
|                        | J : With Keyslot      |
| Mounting Type          | B3 B5 B35             |
| Weight / Gross         | 187 (199) kg          |
| Protection Class       | IP55                  |
| Insulation Class       | F Class               |
| Rated Temperature Rise | 90K                   |
| Vibration Class        | A                     |
| Noise                  | ≤70dB(A)              |
| Environment            | -15 ~ 45°C            |
| Environment            | ≤95%RH                |



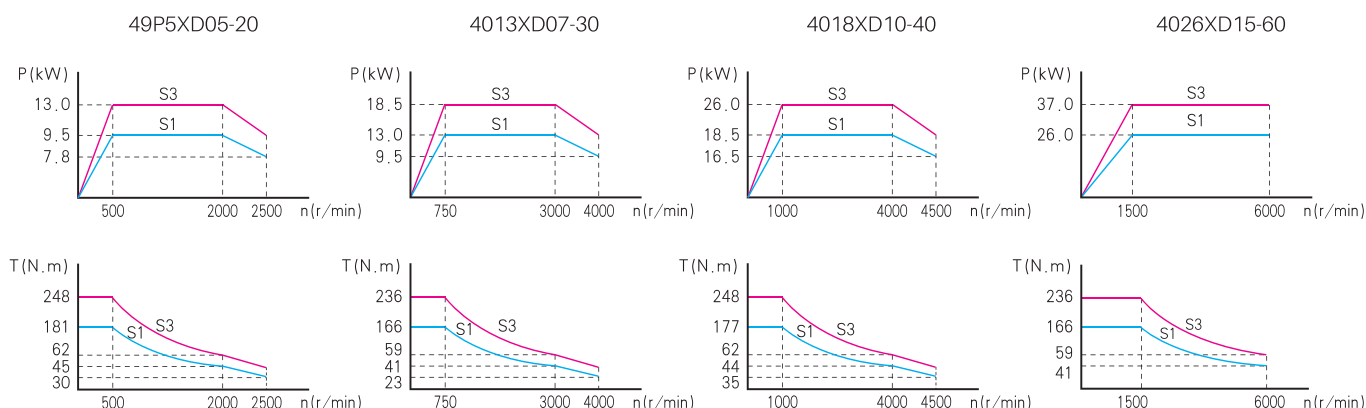


### Electrical Parameter

Voltage Class : 400V Connection : Y Fan Power : 600W Fan Voltage : 380V

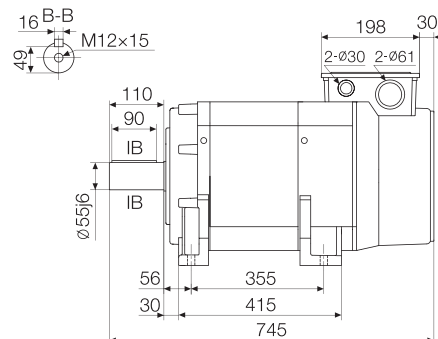
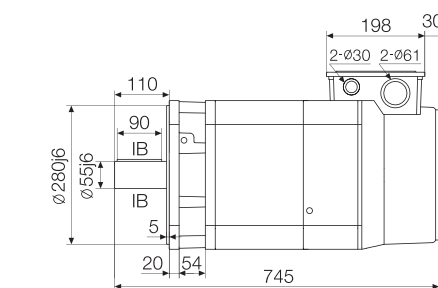
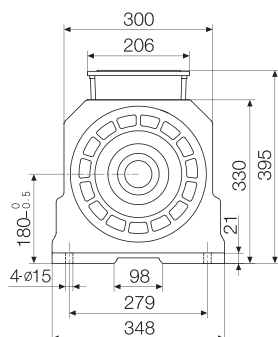
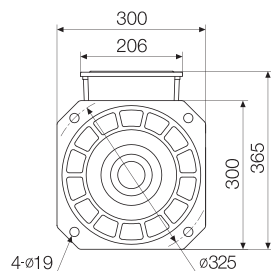
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (Hz) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m <sup>2</sup> ) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|----------------------|---------------------|----------------------------------|-------------------|-----------------------------------------|
| Z18-49P5XD05-XXXX | 9.5              | 18.1/19.6/22.1    | 181                | 380/350/310       | 4               | 17.4                 | 500                 | 1000/1500/2000                   | 2500              | 0.1882                                  |
| Z18-4013XD07-XXXX | 13               | 23.9/25.3/27.5    | 166                | 380/360/330       | 4               | 25.7                 | 750                 | 1500/2200/3000                   | 4000              | 0.1882                                  |
| Z18-4018XD10-XXXX | 18.5             | 33.4/36.3/40.9    | 177                | 380/350/310       | 4               | 34.1                 | 1000                | 2000/3000/4000                   | 4500              | 0.1882                                  |
| Z18-4026XD15-XXXX | 26               | 46.1/48.9/53.2    | 166                | 380/360/330       | 4               | 50.7                 | 1500                | 3000/4500/6000                   | 6000              | 0.1882                                  |

### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                 |
|------------------------|-----------------------|
| Encoder (optional)     | MG-128(Magnetic)      |
|                        | CE9-2500(Incremental) |
|                        | CE9-23B(Absolute)     |
|                        | RZ12-1024(Resolver)   |
|                        | SC-2048(SIN-COS)      |
| Shaft Type             | G : Without Keyslot   |
|                        | J : With Keyslot      |
| Mounting Type          | B3 B5 B35             |
| Weight / Gross         | 208 (220) kg          |
| Protection Class       | IP55                  |
| Insulation Class       | F Class               |
| Rated Temperature Rise | 90K                   |
| Vibration Class        | A                     |
| Noise                  | ≤70dB(A)              |
| Environment            | -15 ~ 45°C            |
| Environment            | ≤95%RH                |



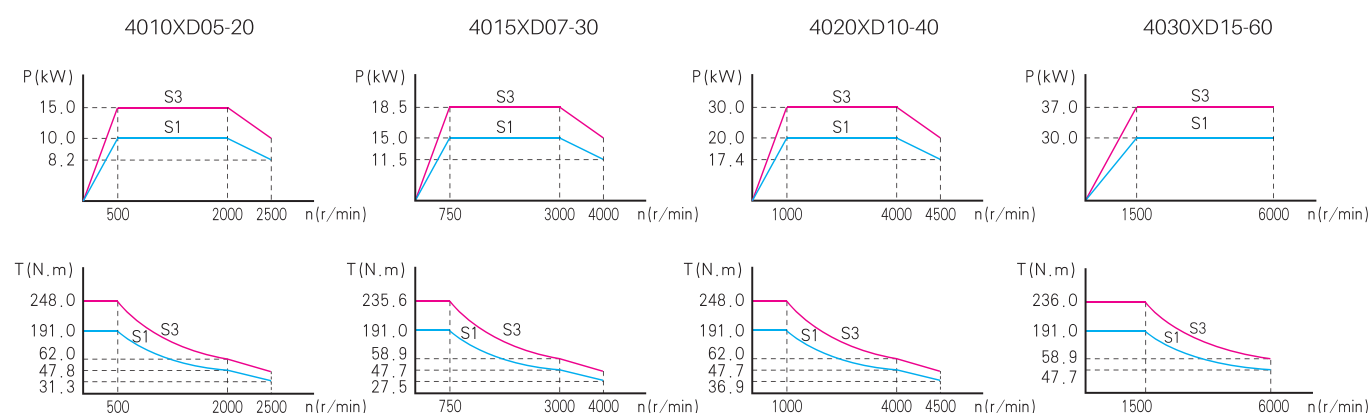


### ◆ Electrical Parameter

Voltage Class : 400V    Connection : Y    Fan Power : 600W    Fan Voltage : 380V

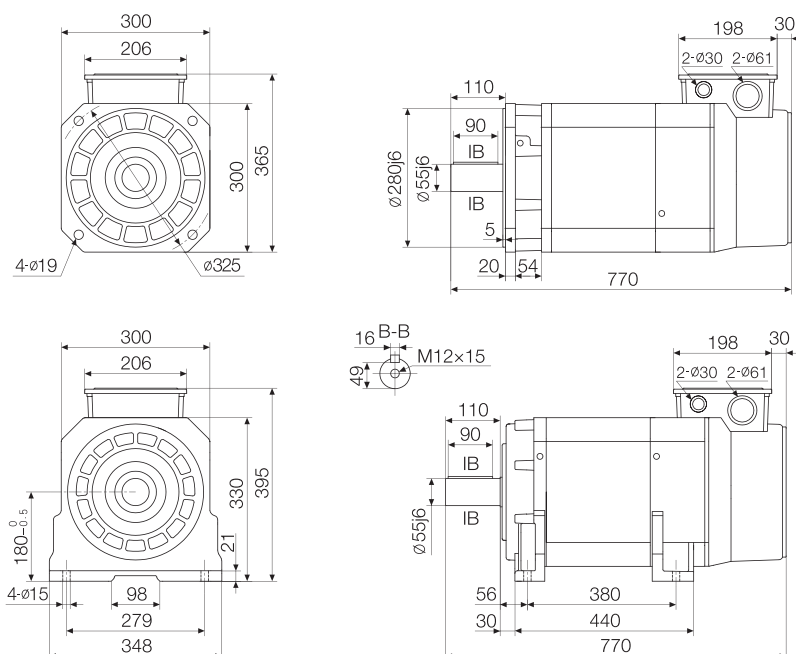
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (H) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m2) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|---------------------|---------------------|----------------------------------|-------------------|----------------------------|
| Z18-4010XD05-XXXX | 10               | 18.9/19.9/22.4    | 191                | 380/360/320       | 4               | 17.4                | 500                 | 1000/1500/2000                   | 2500              | 0.2046                     |
| Z18-4015XD07-XXXX | 15               | 27.3/28.0/32.6    | 191                | 380/370/320       | 4               | 25.8                | 750                 | 1500/2200/3000                   | 4000              | 0.2046                     |
| Z18-4020XD10-XXXX | 20               | 36.0/37.9/42.6    | 191                | 380/360/320       | 4               | 34.1                | 1000                | 2000/3000/4000                   | 4500              | 0.2046                     |
| Z18-4030XD15-XXXX | 30               | 52.7/55.9/65.7    | 191                | 380/360/305       | 4               | 50.8                | 1500                | 3000/4500/6000                   | 6000              | 0.2046                     |

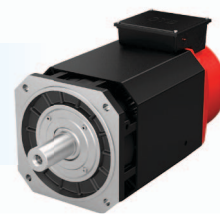
### ◆ Characteristic Curve



### ◆ Performance Index

| ITEM                      | INDEX                 |
|---------------------------|-----------------------|
| Encoder<br>(optional)     | MG-128(Magnetic)      |
|                           | CE9-2500(Incremental) |
|                           | CE9-23B(Absolute)     |
|                           | RZ12-1024(Resolver)   |
|                           | SC-2048(SIN-COS)      |
| Shaft Type                | G : Without Keyslot   |
|                           | J : With Keyslot      |
| Mounting Type             | B3 B5 B35             |
| Weight / Gross            | 221 (233) kg          |
| Protection Class          | IP55                  |
| Insulation Class          | F Class               |
| Rated Temperature<br>Rise | 90K                   |
| Vibration Class           | A                     |
| Noise                     | ≤70dB(A)              |
| Environment               | -15 ~ 45℃             |
| Environment               | ≤95%RH                |



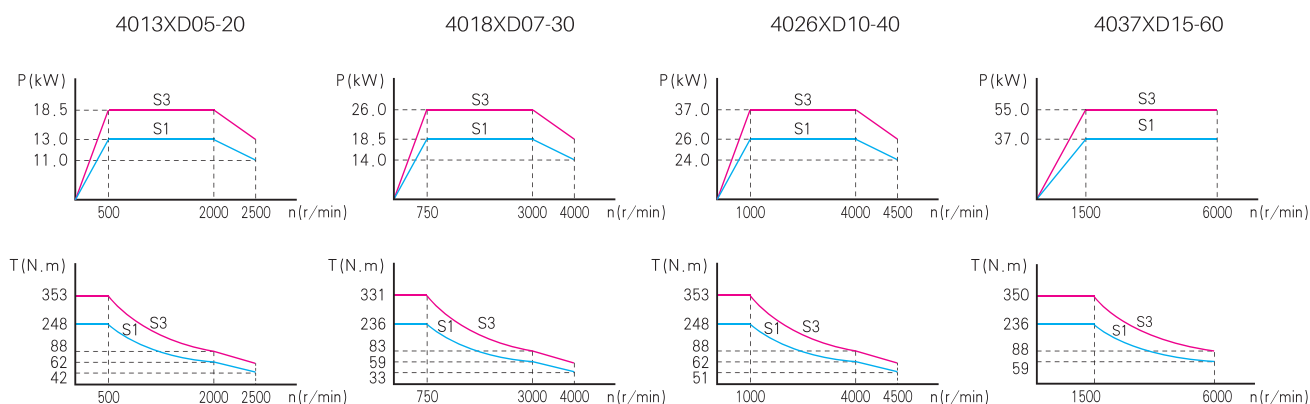


### Electrical Parameter

Voltage Class : 400V Connection : Y Fan Power : 600W Fan Voltage : 380V

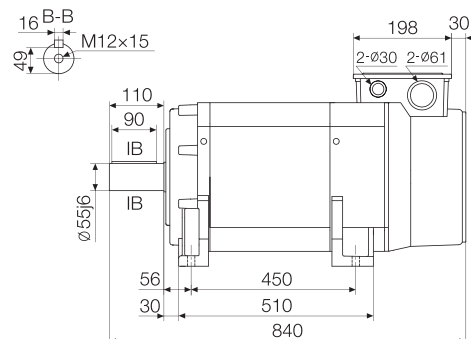
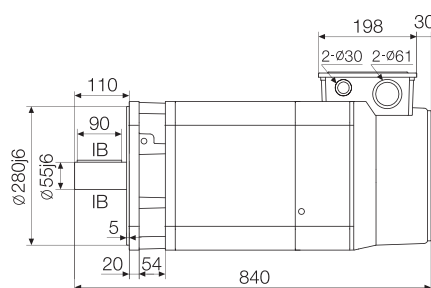
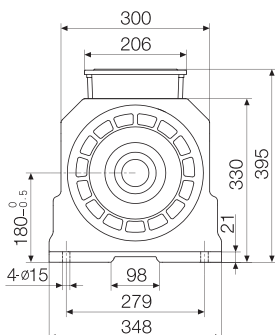
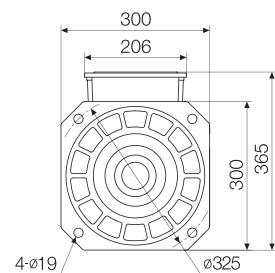
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (Hz) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m <sup>2</sup> ) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|----------------------|---------------------|----------------------------------|-------------------|-----------------------------------------|
| Z18-4013XD05-XXXX | 13               | 24.4/26.9/29.9    | 248                | 380/345/310       | 4               | 17.4                 | 500                 | 1000/1500/2000                   | 2500              | 0.2505                                  |
| Z18-4018XD07-XXXX | 18.5             | 33.4/34.4/39.9    | 236                | 380/370/320       | 4               | 25.8                 | 750                 | 1500/2200/3000                   | 4000              | 0.2505                                  |
| Z18-4026XD10-XXXX | 26               | 46.7/50.4/57.9    | 248                | 380/350/305       | 4               | 34.1                 | 1000                | 2000/3000/4000                   | 4500              | 0.2505                                  |
| Z18-4037XD15-XXXX | 37               | 65.3/71.9/79.9    | 236                | 380/345/310       | 4               | 50.7                 | 1500                | 3000/4500/6000                   | 6000              | 0.2505                                  |

### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                 |
|------------------------|-----------------------|
| Encoder (optional)     | MG-128(Magnetic)      |
|                        | CE9-2500(Incremental) |
|                        | CE9-23B(Absolute)     |
|                        | RZ12-1024(Resolver)   |
|                        | SC-2048(SIN-COS)      |
| Shaft Type             | G : Without Keyslot   |
|                        | J : With Keyslot      |
| Mounting Type          | B3 B5 B35             |
| Weight / Gross         | 255 (267) kg          |
| Protection Class       | IP55                  |
| Insulation Class       | F Class               |
| Rated Temperature Rise | 90K                   |
| Vibration Class        | A                     |
| Noise                  | ≤70dB(A)              |
| Environment            | -15 ~ 45°C            |
| Environment            | ≤95%RH                |



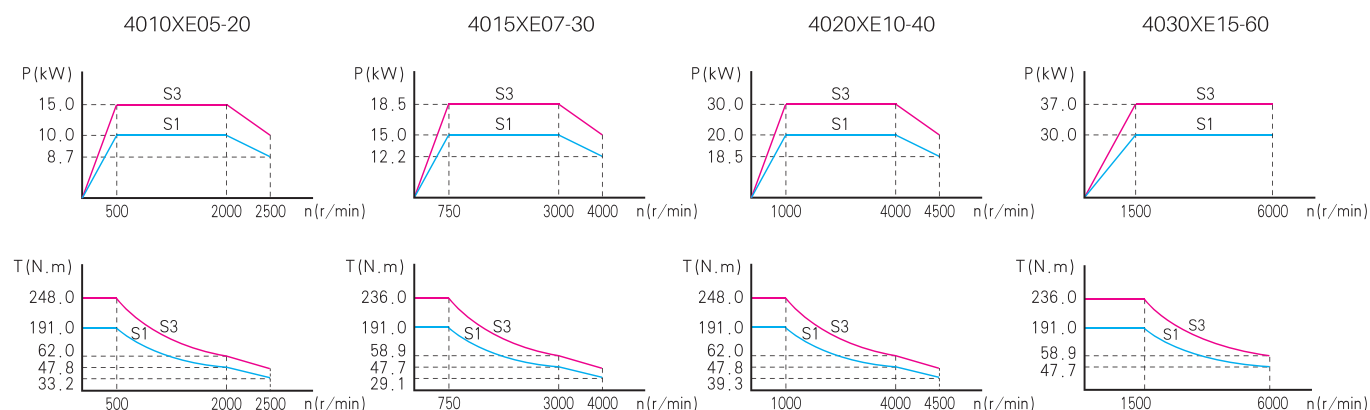


### Electrical Parameter

Voltage Class : 400V Connection : Y Fan Power : 600W Fan Voltage : 380V

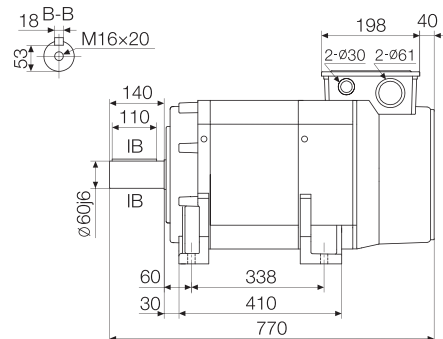
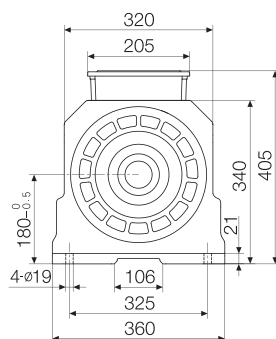
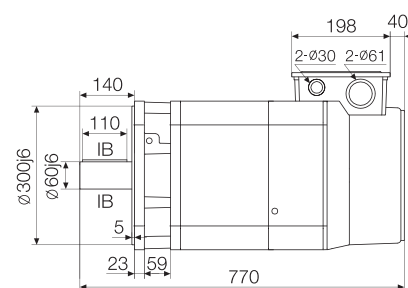
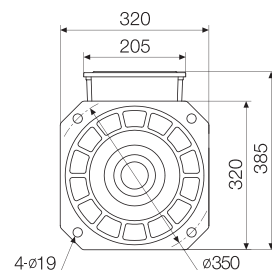
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (Hz) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m <sup>2</sup> ) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|----------------------|---------------------|----------------------------------|-------------------|-----------------------------------------|
| Z18-4010XE05-XXXX | 10               | 18.9/20.6/24.0    | 191                | 380/350/300       | 4               | 17.5                 | 500                 | 1000/1500/2000                   | 2500              | 0.2372                                  |
| Z18-4015XE07-XXXX | 15               | 27.4/30.2/35.4    | 191                | 380/345/295       | 4               | 25.8                 | 750                 | 1500/2200/3000                   | 4000              | 0.2372                                  |
| Z18-4020XE10-XXXX | 20               | 35.8/40.4/45.3    | 191                | 380/340/300       | 4               | 34.2                 | 1000                | 2000/3000/4000                   | 4500              | 0.2372                                  |
| Z18-4030XE15-XXXX | 30               | 52.7/57.7/67.3    | 191                | 380/350/300       | 4               | 50.9                 | 1500                | 3000/4500/6000                   | 6000              | 0.2372                                  |

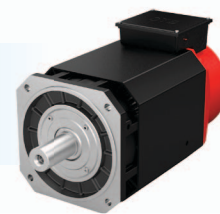
### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                 |
|------------------------|-----------------------|
| Encoder (optional)     | MG-256(Magnetic)      |
|                        | CE9-2500(Incremental) |
|                        | CE9-23B(Absolute)     |
|                        | RZ12-1024(Resolver)   |
|                        | SC-2048(SIN-COS)      |
| Shaft Type             | G : Without Keyslot   |
|                        | J : With Keyslot      |
| Mounting Type          | B3 B5 B35             |
| Weight / Gross         | 227 (239) kg          |
| Protection Class       | IP55                  |
| Insulation Class       | F Class               |
| Rated Temperature Rise | 90K                   |
| Vibration Class        | A                     |
| Noise                  | ≤70dB(A)              |
| Environment            | -15 ~ 45°C            |
| Environment            | ≤95%RH                |



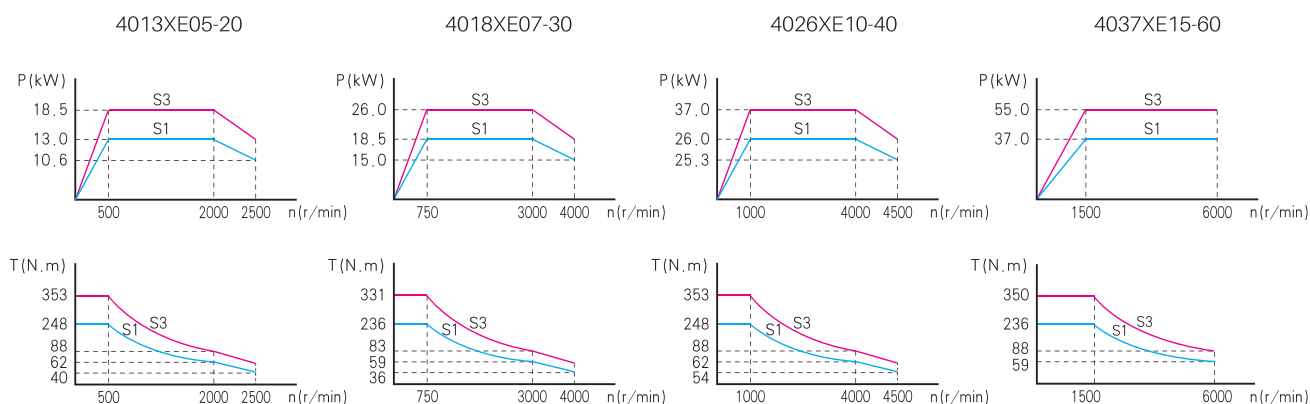


### Electrical Parameter

Voltage Class : 400V Connection : Y Fan Power : 600W Fan Voltage : 380V

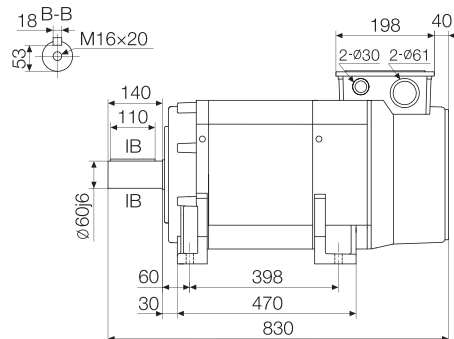
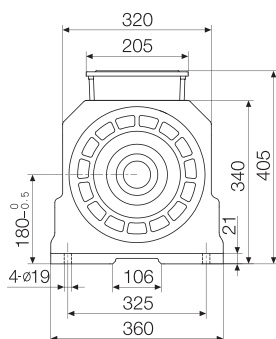
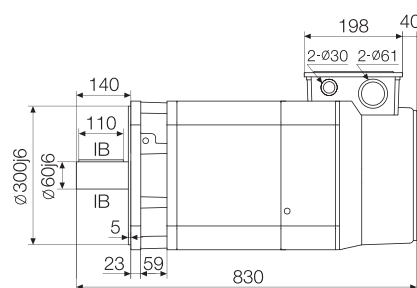
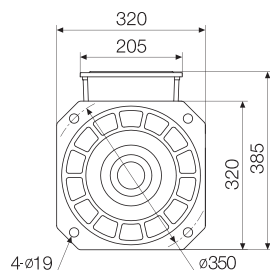
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (Hz) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m <sup>2</sup> ) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|----------------------|---------------------|----------------------------------|-------------------|-----------------------------------------|
| Z18-4013XE05-XXXX | 13               | 24.4/27.3/30.4    | 248                | 380/340/305       | 4               | 17.5                 | 500                 | 1000/1500/2000                   | 2500              | 0.2918                                  |
| Z18-4018XE07-XXXX | 18.5             | 33.8/37.1/42.7    | 236                | 380/345/300       | 4               | 25.7                 | 750                 | 1500/2200/3000                   | 4000              | 0.2918                                  |
| Z18-4026XE10-XXXX | 26               | 46.5/53.3/59.9    | 248                | 380/330/295       | 4               | 34.1                 | 1000                | 2000/3000/4000                   | 4500              | 0.2918                                  |
| Z18-4037XE15-XXXX | 37               | 64.6/72.9/81.0    | 236                | 380/340/300       | 4               | 50.8                 | 1500                | 3000/4500/6000                   | 6000              | 0.2918                                  |

### Characteristic Curve

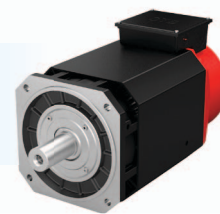


### Performance Index

| ITEM                   | INDEX                 |
|------------------------|-----------------------|
| Encoder (optional)     | MG-256(Magnetic)      |
|                        | CE9-2500(Incremental) |
|                        | CE9-23B(Absolute)     |
|                        | RZ12-1024(Resolver)   |
|                        | SC-2048(SIN-COS)      |
| Shaft Type             | G : Without Keyslot   |
|                        | J : With Keyslot      |
| Mounting Type          | B3 B5 B35             |
| Weight / Gross         | 260 (272) kg          |
| Protection Class       | IP55                  |
| Insulation Class       | F Class               |
| Rated Temperature Rise | 90K                   |
| Vibration Class        | A                     |
| Noise                  | ≤70dB(A)              |
| Environment            | -15 ~ 45°C            |
| Environment            | ≤95%RH                |





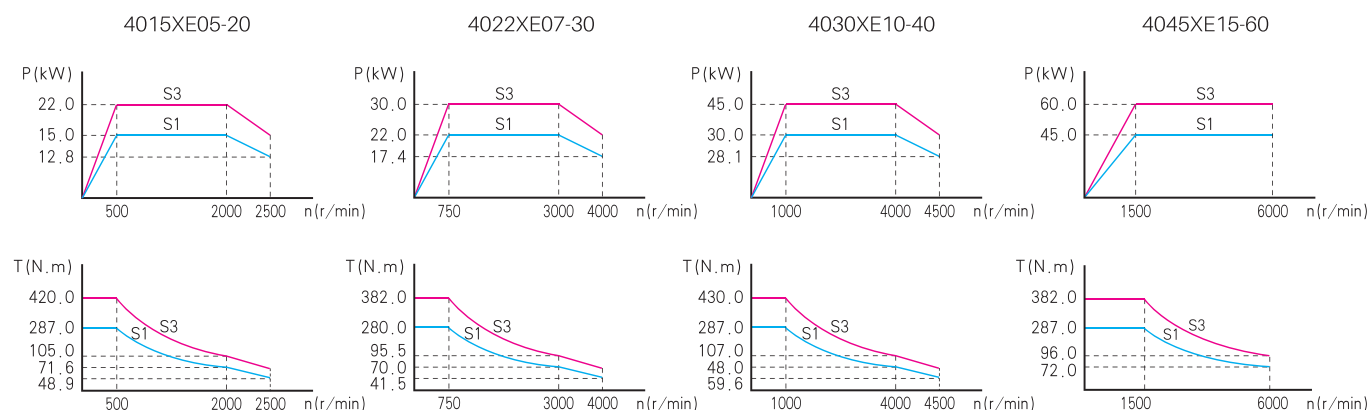


### Electrical Parameter

Voltage Class : 400V Connection : Y Fan Power : 600W Fan Voltage : 380V

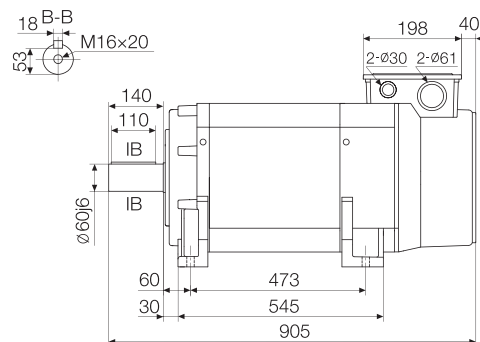
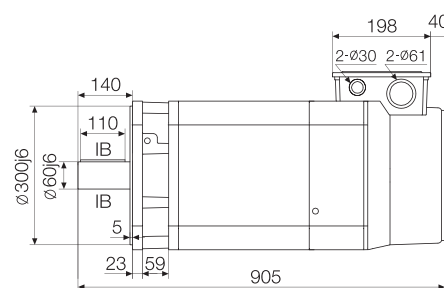
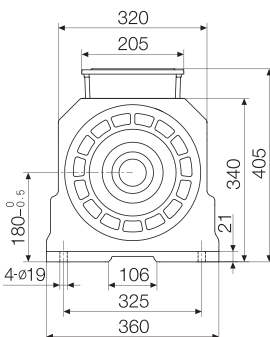
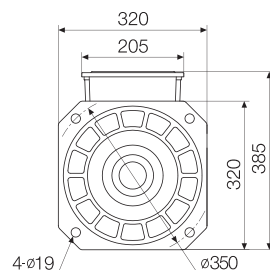
| Motor Model      | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (Hz) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m2) |
|------------------|------------------|-------------------|--------------------|-------------------|-----------------|----------------------|---------------------|----------------------------------|-------------------|----------------------------|
| Z18-4015XE05-XXX | 15               | 27.8/29.4/34.1    | 287                | 380/360/310       | 4               | 17.4                 | 500                 | 1000/1500/2000                   | 2500              | 0.3602                     |
| Z18-4022XE07-XXX | 22               | 39.5/43.0/48.5    | 280                | 380/350/310       | 4               | 25.8                 | 750                 | 1500/2200/3000                   | 4000              | 0.3602                     |
| Z18-4030XE10-XXX | 30               | 53.2/56.3/66.2    | 287                | 380/360/305       | 4               | 34.1                 | 1000                | 2000/3000/4000                   | 4500              | 0.3602                     |
| Z18-4045XE15-XXX | 45               | 78.8/87.9/98.2    | 287                | 380/340/305       | 4               | 50.7                 | 1500                | 3000/4500/6000                   | 6000              | 0.3602                     |

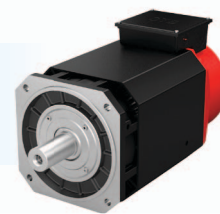
### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                 |
|------------------------|-----------------------|
| Encoder (optional)     | MG-256(Magnetic)      |
|                        | CE9-2500(Incremental) |
|                        | CE9-23B(Absolute)     |
|                        | RZ12-1024(Resolver)   |
|                        | SC-2048(SIN-COS)      |
| Shaft Type             | G : Without Keyslot   |
|                        | J : With Keyslot      |
| Mounting Type          | B3 B5 B35             |
| Weight / Gross         | 301 (313) kg          |
| Protection Class       | IP55                  |
| Insulation Class       | F Class               |
| Rated Temperature Rise | 90K                   |
| Vibration Class        | A                     |
| Noise                  | ≤70dB(A)              |
| Environment            | -15 ~ 45°C            |
| Environment            | ≤95%RH                |



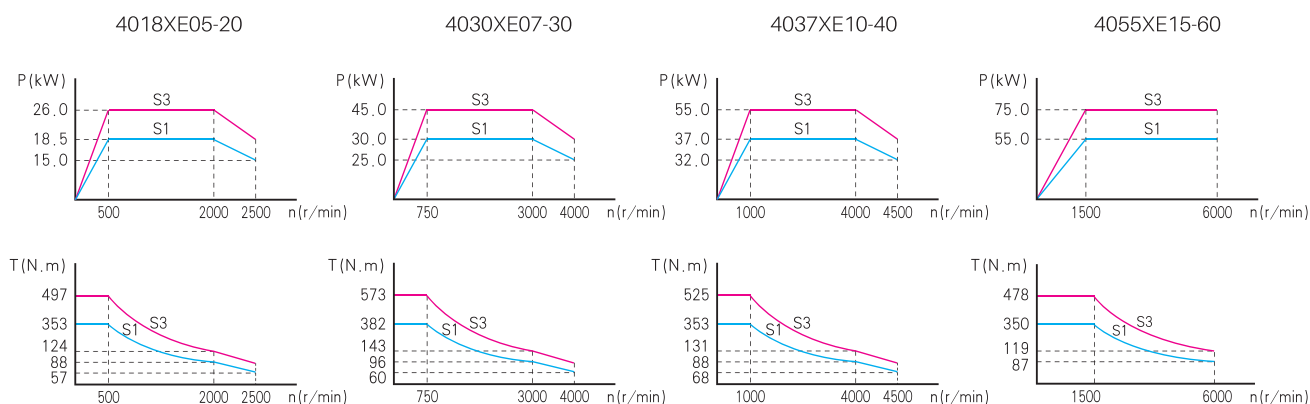


### Electrical Parameter

Voltage Class : 400V Connection : Y Fan Power : 600W Fan Voltage : 380V

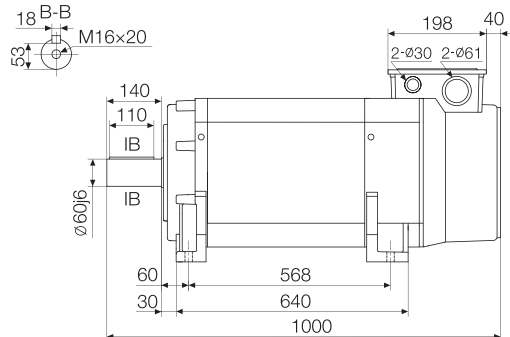
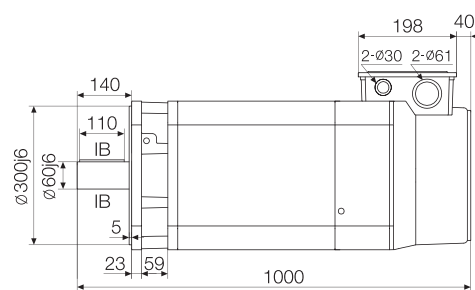
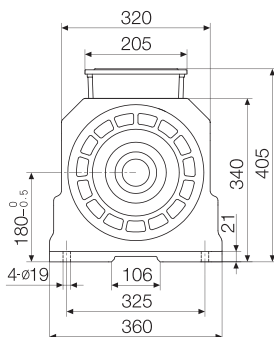
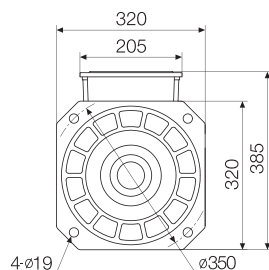
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (H) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m2) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|---------------------|---------------------|----------------------------------|-------------------|----------------------------|
| Z18-4018XE05-XXXX | 18.5             | 34.1/37.1/40.6    | 353                | 380/350/320       | 4               | 17.4                | 500                 | 1000/1500/2000                   | 2500              | 0.4467                     |
| Z18-4030XE07-XXXX | 30               | 54.3/58.6/68.4    | 382                | 380/350/300       | 4               | 25.7                | 750                 | 1500/2200/3000                   | 4000              | 0.4467                     |
| Z18-4037XE10-XXXX | 37               | 65.4/69.7/77.8    | 353                | 380/360/320       | 4               | 34.0                | 1000                | 2000/3000/4000                   | 4500              | 0.4467                     |
| Z18-4055XE15-XXXX | 55               | 96.1/109.2/128.1  | 350                | 380/335/285       | 4               | 50.7                | 1500                | 3000/4500/6000                   | 6000              | 0.4467                     |

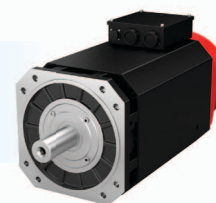
### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                 |
|------------------------|-----------------------|
| Encoder (optional)     | MG-256(Magnetic)      |
|                        | CE9-2500(Incremental) |
|                        | CE9-23B(Absolute)     |
|                        | RZ12-1024(Resolver)   |
|                        | SC-2048(SIN-COS)      |
| Shaft Type             | G : Without Keyslot   |
|                        | J : With Keyslot      |
| Mounting Type          | B3 B5 B35             |
| Weight / Gross         | 353 (365) kg          |
| Protection Class       | IP55                  |
| Insulation Class       | F Class               |
| Rated Temperature Rise | 90K                   |
| Vibration Class        | A                     |
| Noise                  | ≤70dB(A)              |
| Environment            | -15 ~ 45°C            |
| Environment            | ≤95%RH                |



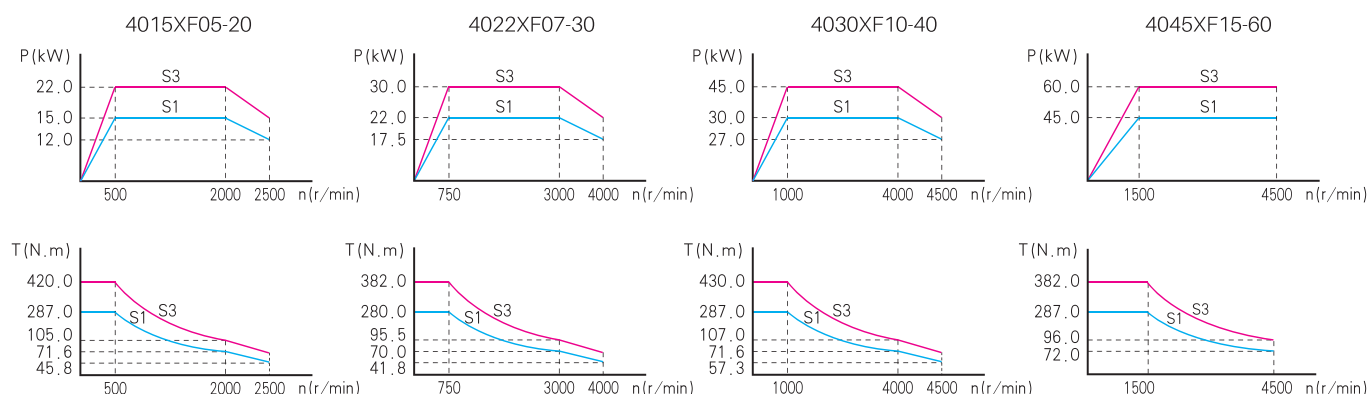


### Electrical Parameter

Voltage Class : 400V Connection :  $\Delta$  Fan Power : 1.1kW Fan Voltage : 380V

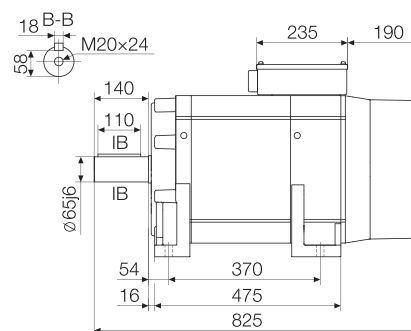
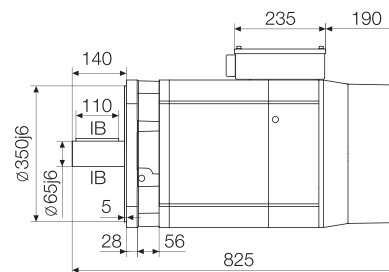
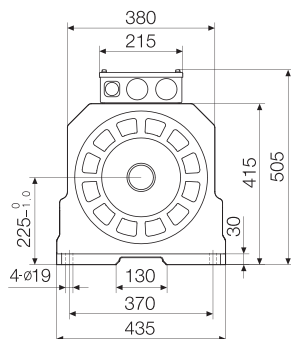
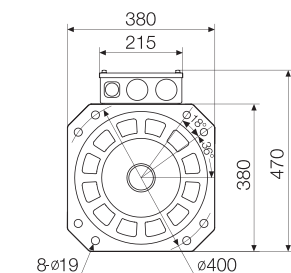
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (Hz) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m <sup>2</sup> ) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|----------------------|---------------------|----------------------------------|-------------------|-----------------------------------------|
| Z18-4015XF05-XXXX | 15               | 28/28/31          | 287                | 380/375/340       | 4               | 17.3                 | 500                 | 1000/1500/2000                   | 2500              | 0.4133                                  |
| Z18-4022XF07-XXXX | 22               | 40/41/45          | 280                | 380/375/335       | 4               | 25.6                 | 750                 | 1500/2200/3000                   | 4000              | 0.4133                                  |
| Z18-4030XF10-XXXX | 30               | 53/54/60          | 287                | 380/375/335       | 4               | 34.0                 | 1000                | 2000/3000/4000                   | 4500              | 0.4133                                  |
| Z18-4045XF15-XXXX | 45               | 79/80/93          | 287                | 380/375/325       | 4               | 50.6                 | 1500                | 3000/4500                        | 4500              | 0.4133                                  |

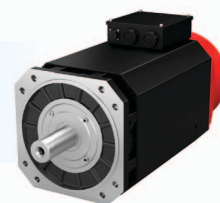
### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                  |
|------------------------|------------------------|
| Encoder (optional)     | MG-256(Magnetic)       |
|                        | CE30-2500(Incremental) |
|                        | CE30-8192(Incremental) |
|                        | RZ30-1024(Resolver)    |
| Shaft Type             | G : Without Keyslot    |
|                        | J : With Keyslot       |
| Mounting Type          | B3 B5 B35              |
| Weight / Gross         | 355 (367) kg           |
| Protection Class       | IP55                   |
| Insulation Class       | F Class                |
| Rated Temperature Rise | 90K                    |
| Vibration Class        | A                      |
| Noise                  | $\leq 70$ dB(A)        |
| Environment            | -15 ~ 45°C             |
| Environment            | $\leq 95\%$ RH         |



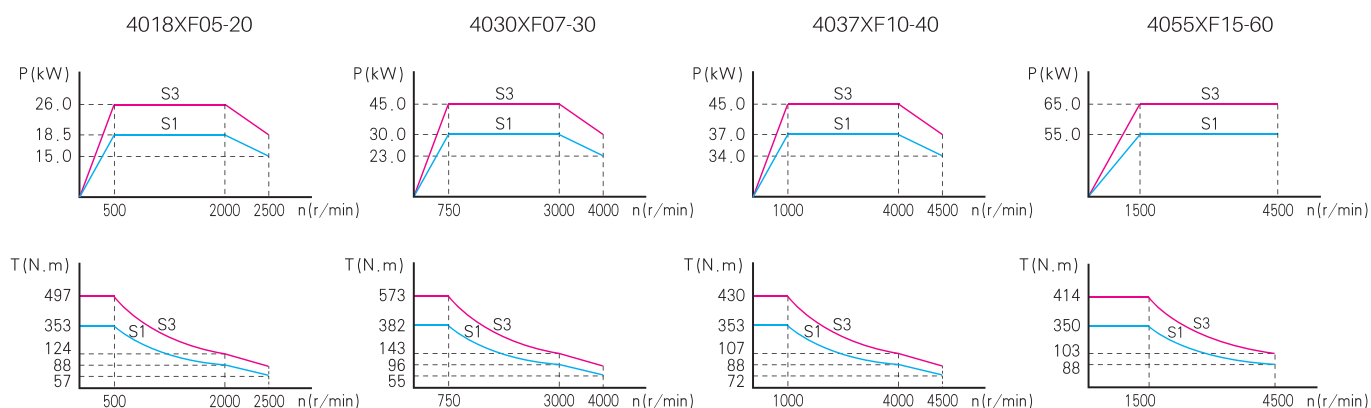


### Electrical Parameter

Voltage Class : 400V Connection :  $\Delta$  Fan Power : 1.1kW Fan Voltage : 380V

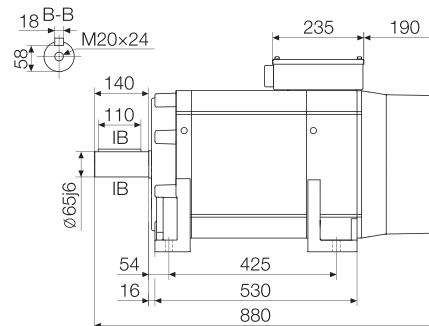
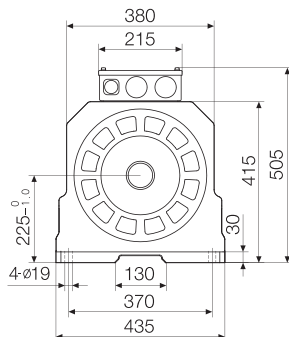
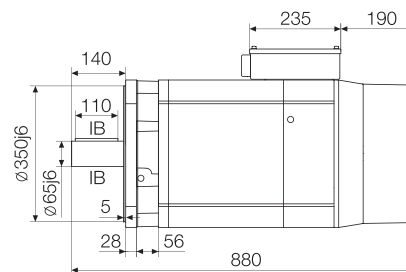
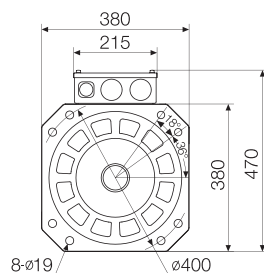
| Motor Model      | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (H) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m2) |
|------------------|------------------|-------------------|--------------------|-------------------|-----------------|---------------------|---------------------|----------------------------------|-------------------|----------------------------|
| Z18-4018XF05-XXX | 18.5             | 34/35/38          | 353                | 380/375/340       | 4               | 17.3                | 500                 | 1000/1500/2000                   | 2500              | 0.4996                     |
| Z18-4030XF07-XXX | 30               | 54/55/62          | 382                | 380/375/330       | 4               | 25.6                | 750                 | 1500/2200/3000                   | 4000              | 0.4996                     |
| Z18-4037XF10-XXX | 37               | 66/67/74          | 353                | 380/375/335       | 4               | 33.9                | 1000                | 2000/3000/4000                   | 4500              | 0.4996                     |
| Z18-4055XF15-XXX | 55               | 97/98/111         | 350                | 380/375/330       | 4               | 50.6                | 1500                | 3000/4500                        | 4500              | 0.4996                     |

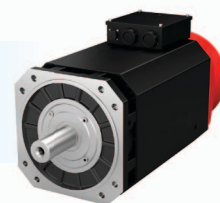
### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                         |
|------------------------|-------------------------------|
| Encoder (optional)     | MG-256(Magnetic)              |
|                        | CE30-2500(Incremental)        |
|                        | CE30-8192(Incremental)        |
|                        | RZ30-1024(Resolver)           |
| Shaft Type             | G : Without Keyslot           |
|                        | J : With Keyslot              |
| Mounting Type          | B3 B5 B35                     |
| Weight / Gross         | 398 (413) kg                  |
| Protection Class       | IP55                          |
| Insulation Class       | F Class                       |
| Rated Temperature Rise | 90K                           |
| Vibration Class        | A                             |
| Noise                  | $\leq 70\text{dB(A)}$         |
| Environment            | $-15 \sim 45^{\circ}\text{C}$ |
| Environment            | $\leq 95\%\text{RH}$          |



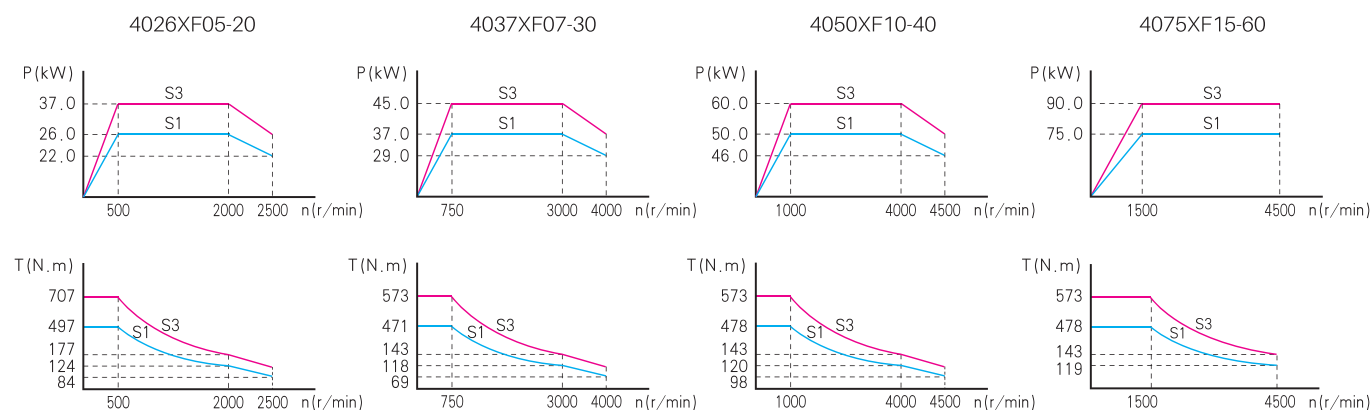


### Electrical Parameter

Voltage Class : 400V Connection :  $\Delta$  Fan Power : 1.1kW Fan Voltage : 380V

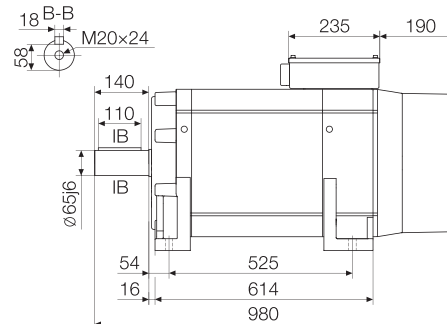
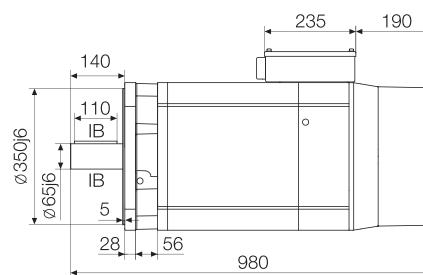
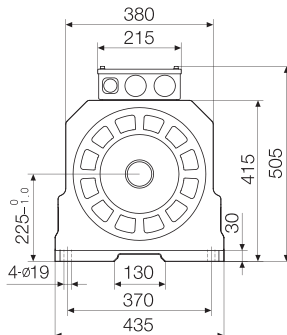
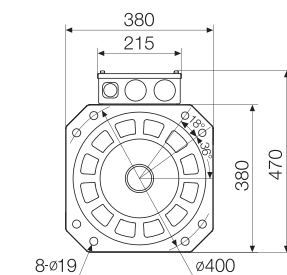
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (Hz) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m <sup>2</sup> ) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|----------------------|---------------------|----------------------------------|-------------------|-----------------------------------------|
| Z18-4026XF05-XXXX | 26               | 47/48/55          | 497                | 380/375/330       | 4               | 17.3                 | 500                 | 1000/1500/2000                   | 2500              | 0.6565                                  |
| Z18-4037XF07-XXXX | 37               | 66/66/75          | 471                | 380/375/335       | 4               | 25.6                 | 750                 | 1500/2200/3000                   | 4000              | 0.6565                                  |
| Z18-4050XF10-XXXX | 50               | 88/89/99          | 478                | 380/375/340       | 4               | 33.9                 | 1000                | 2000/3000/4000                   | 4500              | 0.6565                                  |
| Z18-4075XF15-XXXX | 75               | 131/133/146       | 478                | 380/375/340       | 4               | 50.6                 | 1500                | 3000/4500                        | 4500              | 0.6565                                  |

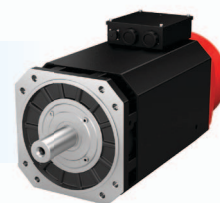
### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                  |
|------------------------|------------------------|
| Encoder (optional)     | MG-256(Magnetic)       |
|                        | CE30-2500(Incremental) |
|                        | CE30-8192(Incremental) |
|                        | RZ30-1024(Resolver)    |
| Shaft Type             | G : Without Keyslot    |
|                        | J : With Keyslot       |
| Mounting Type          | B3 B5 B35              |
| Weight / Gross         | 478 (493) kg           |
| Protection Class       | IP55                   |
| Insulation Class       | F Class                |
| Rated Temperature Rise | 90K                    |
| Vibration Class        | A                      |
| Noise                  | ≤70dB(A)               |
| Environment            | -15~45°C               |
| Environment            | ≤95%RH                 |



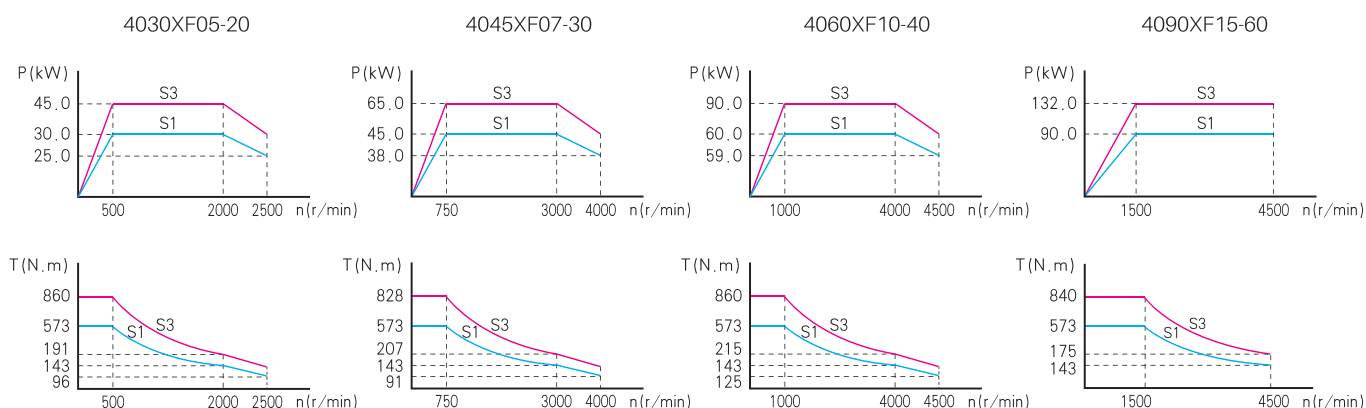


### Electrical Parameter

Voltage Class : 400V Connection :  $\Delta$  Fan Power : 1.1kW Fan Voltage : 380V

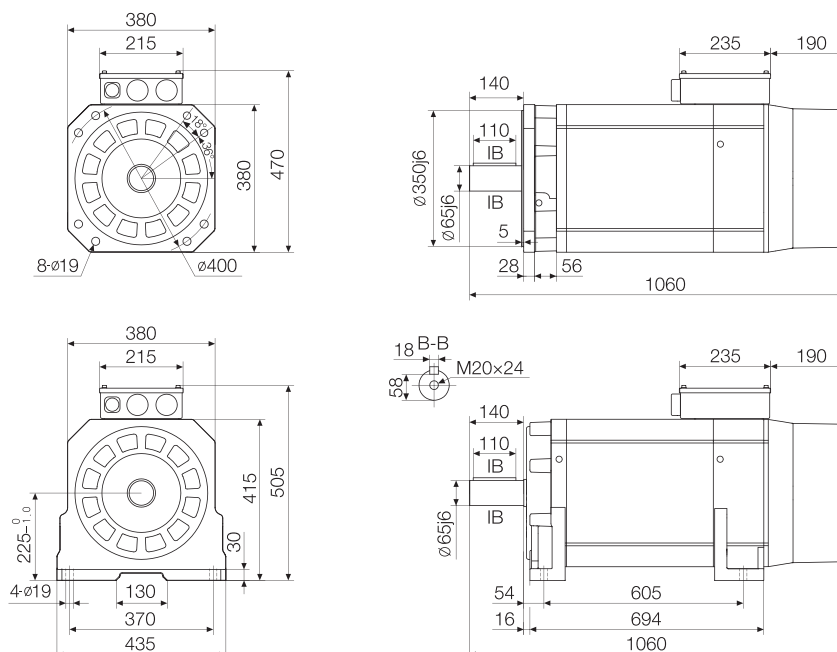
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (H) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m2) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|---------------------|---------------------|----------------------------------|-------------------|----------------------------|
| Z18-4030XF05-XXXX | 30               | 54/55/61          | 573                | 380/375/340       | 4               | 17.2                | 500                 | 1000/1500/2000                   | 2500              | 0.7820                     |
| Z18-4045XF07-XXXX | 45               | 80/80/92          | 573                | 380/375/330       | 4               | 25.6                | 750                 | 1500/2200/3000                   | 4000              | 0.7820                     |
| Z18-4060XF10-XXXX | 60               | 106/107/122       | 573                | 380/375/330       | 4               | 33.9                | 1000                | 2000/3000/4000                   | 4500              | 0.7820                     |
| Z18-4090XF15-XXXX | 90               | 157/159/175       | 573                | 380/375/340       | 4               | 50.6                | 1500                | 3000/4500                        | 4500              | 0.7820                     |

### Characteristic Curve

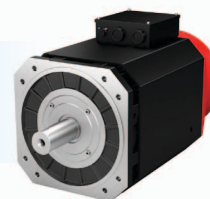


### Performance Index

| ITEM                   | INDEX                  |
|------------------------|------------------------|
| Encoder (optional)     | MG-256(Magnetic)       |
|                        | CE30-2500(Incremental) |
|                        | CE30-8192(Incremental) |
|                        | RZ30-1024(Resolver)    |
| Shaft Type             | G : Without Keyslot    |
|                        | J : With Keyslot       |
| Mounting Type          | B3 B5 B35              |
| Weight / Gross         | 542 (557) kg           |
| Protection Class       | IP55                   |
| Insulation Class       | F Class                |
| Rated Temperature Rise | 90K                    |
| Vibration Class        | A                      |
| Noise                  | $\leq 70$ dB(A)        |
| Environment            | -15 ~ 45°C             |
| Environment            | $\leq 95\%$ RH         |





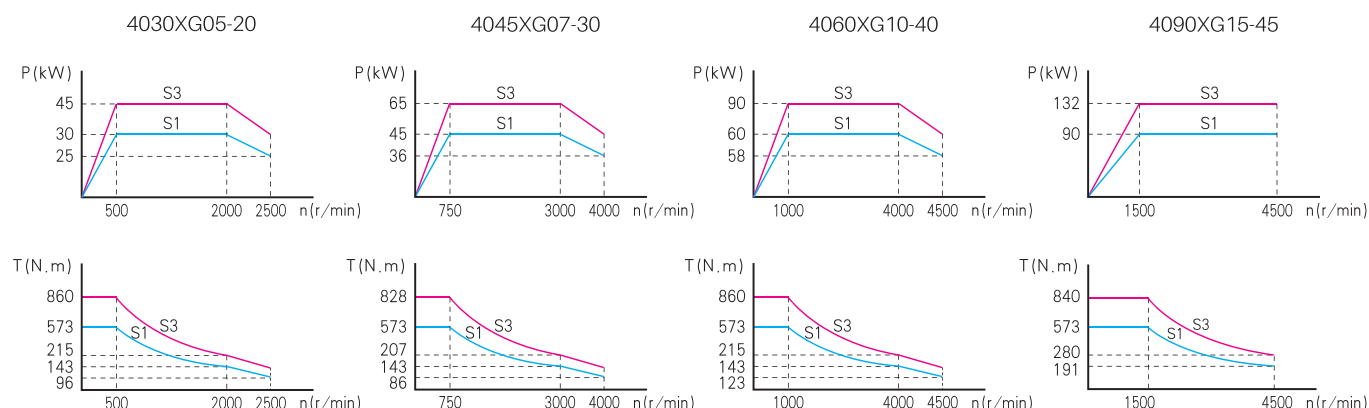


### Electrical Parameter

Voltage Class : 400V Connection :  $\Delta$  Fan Power : 1.5kW Fan Voltage : 380V

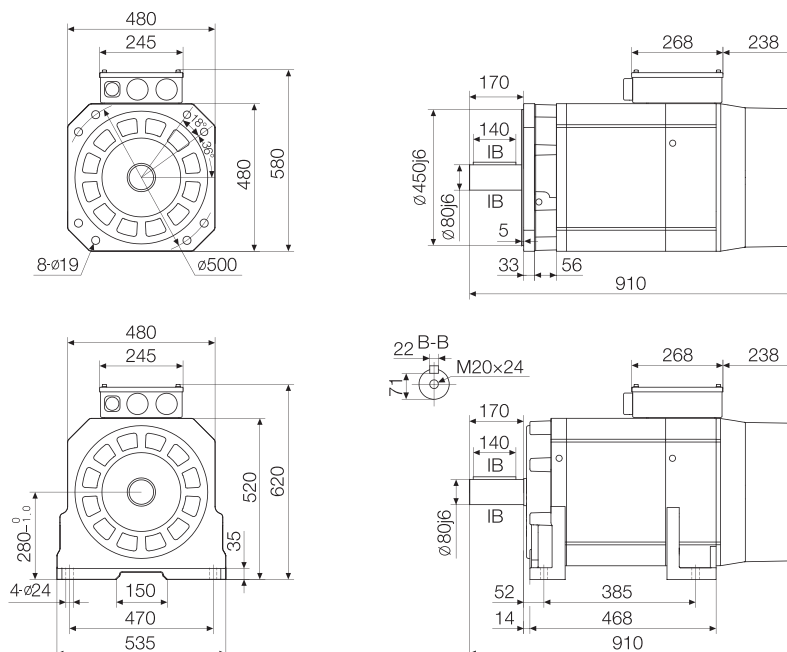
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (Hz) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m <sup>2</sup> ) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|----------------------|---------------------|----------------------------------|-------------------|-----------------------------------------|
| Z18-4030XG05-XXXX | 30               | 55/56/61          | 573                | 380/375/345       | 6               | 25.5                 | 500                 | 1000/1500/2000                   | 2500              | 1.813                                   |
| Z18-4045XG07-XXXX | 45               | 81/82/92          | 573                | 380/375/330       | 6               | 38.0                 | 750                 | 1500/2200/3000                   | 4000              | 1.813                                   |
| Z18-4060XG10-XXXX | 60               | 106/107/122       | 573                | 380/375/335       | 6               | 50.5                 | 1000                | 2000/3000/4000                   | 4500              | 1.813                                   |
| Z18-4090XG15-XXXX | 90               | 158/160           | 573                | 380/375           | 6               | 75.5                 | 1500                | 3000/4500                        | 4500              | 1.813                                   |

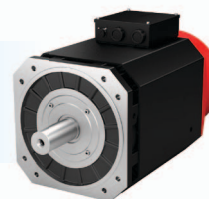
### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                         |
|------------------------|-------------------------------|
| Encoder (optional)     | MG-256(Magnetic)              |
|                        | CE30-2500(Incremental)        |
|                        | CE30-8192(Incremental)        |
|                        | RZ30-1024(Resolver)           |
| Shaft Type             | G : Without Keyslot           |
|                        | J : With Keyslot              |
| Mounting Type          | B3 B5 B35                     |
| Weight / Gross         | 566 (586) kg                  |
| Protection Class       | IP55                          |
| Insulation Class       | F Class                       |
| Rated Temperature Rise | 90K                           |
| Vibration Class        | A                             |
| Noise                  | $\leq 70\text{dB(A)}$         |
| Environment            | $-15 \sim 45^{\circ}\text{C}$ |
| Environment            | $\leq 95\%\text{RH}$          |



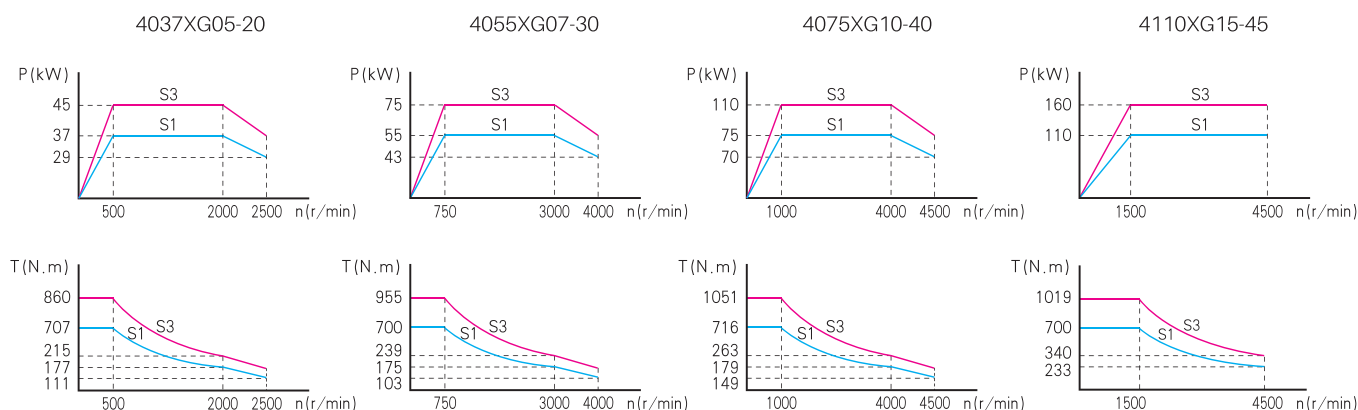


### Electrical Parameter

Voltage Class : 400V Connection :  $\Delta$  Fan Power : 1.5kW Fan Voltage : 380V

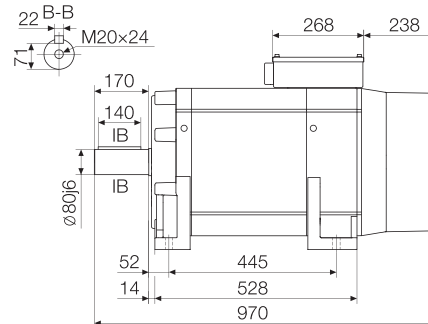
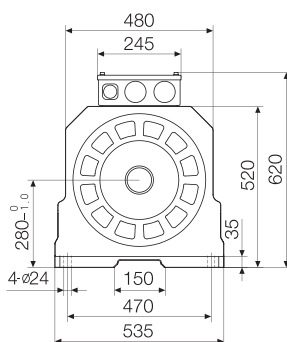
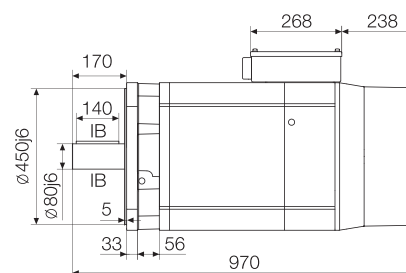
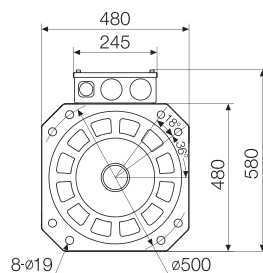
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (H) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m <sup>2</sup> ) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|---------------------|---------------------|----------------------------------|-------------------|-----------------------------------------|
| Z18-4037XG05-XXXX | 37               | 67/68/73          | 707                | 380/375/350       | 6               | 25.5                | 500                 | 1000/1500/2000                   | 2500              | 2.063                                   |
| Z18-4055XG07-XXXX | 55               | 98/99/108         | 700                | 380/375/345       | 6               | 38.0                | 750                 | 1500/2200/3000                   | 4000              | 2.063                                   |
| Z18-4075XG10-XXXX | 75               | 132/133/147       | 716                | 380/375/345       | 6               | 50.5                | 1000                | 2000/3000/4000                   | 4500              | 2.063                                   |
| Z18-4110XG15-XXXX | 110              | 195/197           | 700                | 380/375           | 6               | 75.5                | 1500                | 3000/4500                        | 4500              | 2.063                                   |

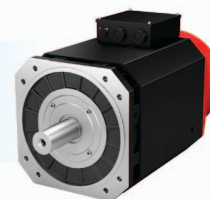
### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                  |
|------------------------|------------------------|
| Encoder (optional)     | MG-256(Magnetic)       |
|                        | CE30-2500(Incremental) |
|                        | CE30-8192(Incremental) |
|                        | RZ30-1024(Resolver)    |
| Shaft Type             | G : Without Keyslot    |
|                        | J : With Keyslot       |
| Mounting Type          | B3 B5 B35              |
| Weight / Gross         | 642 (662) kg           |
| Protection Class       | IP55                   |
| Insulation Class       | F Class                |
| Rated Temperature Rise | 90K                    |
| Vibration Class        | A                      |
| Noise                  | $\leq 70$ dB(A)        |
| Environment            | -15 ~ 45°C             |
| Environment            | $\leq 95\%$ RH         |



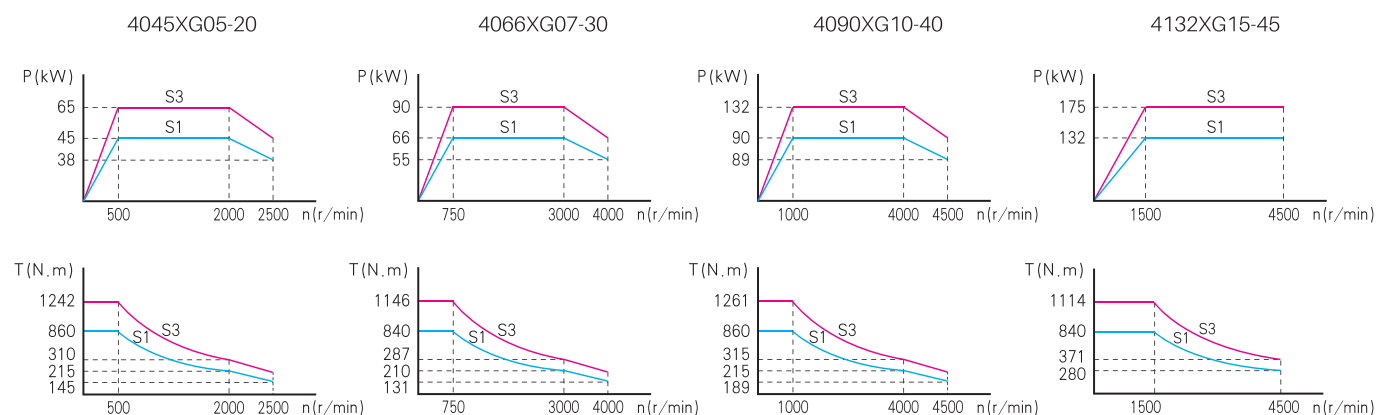


### Electrical Parameter

Voltage Class : 400V Connection :  $\Delta$  Fan Power : 1.5kW Fan Voltage : 380V

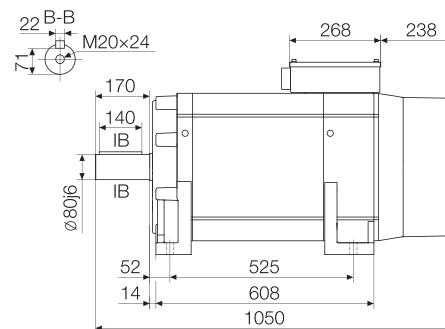
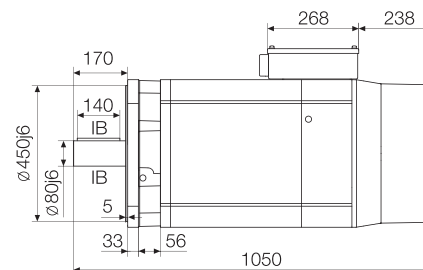
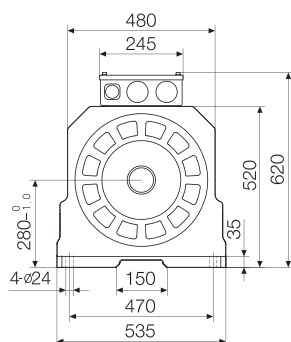
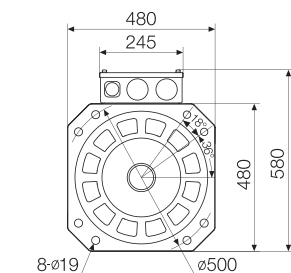
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (H) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m2) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|---------------------|---------------------|----------------------------------|-------------------|----------------------------|
| Z18-4045XG05-XXXX | 45               | 82/82/88          | 860                | 380/375/350       | 6               | 25.5                | 500                 | 1000/1500/2000                   | 2500              | 2.555                      |
| Z18-4066XG07-XXXX | 66               | 117/118/130       | 840                | 380/375/345       | 6               | 38.0                | 750                 | 1500/2200/3000                   | 4000              | 2.555                      |
| Z18-4090XG10-XXXX | 90               | 161/162/176       | 860                | 380/375/345       | 6               | 50.5                | 1000                | 2000/3000/4000                   | 4500              | 2.555                      |
| Z18-4132XG15-XXXX | 132              | 232/234           | 840                | 380/375           | 6               | 75.5                | 1500                | 3000/4500                        | 4500              | 2.555                      |

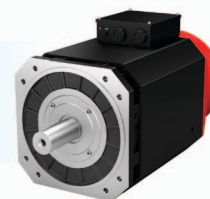
### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                         |
|------------------------|-------------------------------|
| Encoder (optional)     | MG-256(Magnetic)              |
|                        | CE30-2500(Incremental)        |
|                        | CE30-8192(Incremental)        |
|                        | RZ30-1024(Resolver)           |
| Shaft Type             | G : Without Keyslot           |
|                        | J : With Keyslot              |
| Mounting Type          | B3 B5 B35                     |
| Weight / Gross         | 735 (755) kg                  |
| Protection Class       | IP55                          |
| Insulation Class       | F Class                       |
| Rated Temperature Rise | 90K                           |
| Vibration Class        | A                             |
| Noise                  | $\leq 70\text{dB(A)}$         |
| Environment            | $-15 \sim 45^{\circ}\text{C}$ |
| Environment            | $\leq 95\%\text{RH}$          |



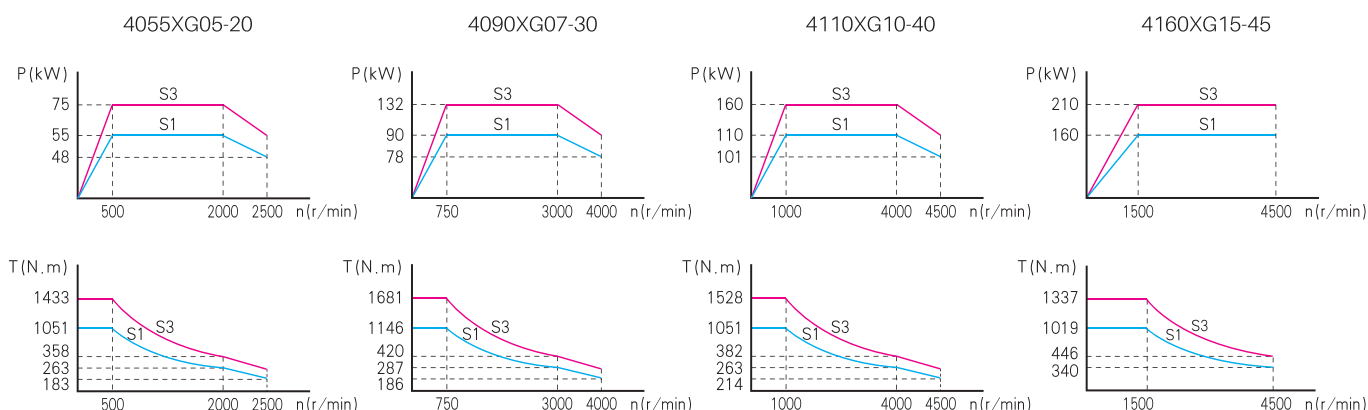


### Electrical Parameter

Voltage Class: 400V Connection:  $\Delta$  Fan Power: 1.5kW Fan Voltage: 380V

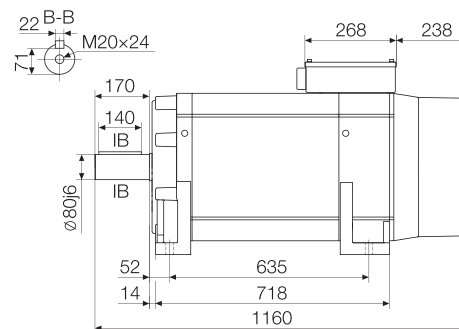
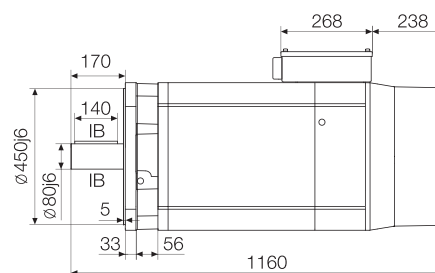
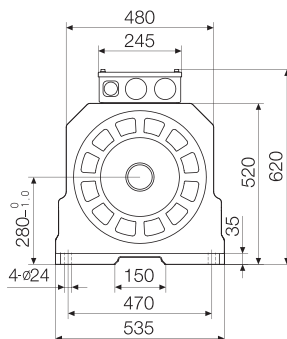
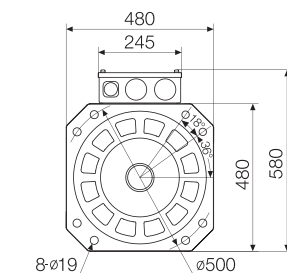
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (Hz) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m <sup>2</sup> ) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|----------------------|---------------------|----------------------------------|-------------------|-----------------------------------------|
| Z18-4055XG05-XXXX | 55               | 99/100/107        | 1051               | 380/375/355       | 6               | 25.5                 | 500                 | 1000/1500/2000                   | 2500              | 3.232                                   |
| Z18-4090XG07-XXXX | 90               | 159/160/184       | 1146               | 380/375/330       | 6               | 38.0                 | 750                 | 1500/2200/3000                   | 4000              | 3.232                                   |
| Z18-4110XG10-XXXX | 110              | 192/194/205       | 1051               | 380/375/360       | 6               | 50.5                 | 1000                | 2000/3000/4000                   | 4500              | 3.232                                   |
| Z18-4160XG15-XXXX | 160              | 284/286           | 1019               | 380/375           | 6               | 75.5                 | 1500                | 3000/4500                        | 4500              | 3.232                                   |

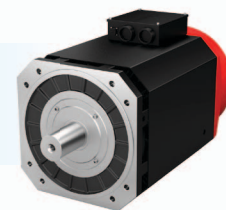
### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                  |
|------------------------|------------------------|
| Encoder (optional)     | MG-256(Magnetic)       |
|                        | CE30-2500(Incremental) |
|                        | CE30-8192(Incremental) |
|                        | RZ30-1024(Resolver)    |
| Shaft Type             | G: Without Keyslot     |
|                        | J: With Keyslot        |
| Mounting Type          | B3 B5 B35              |
| Weight / Gross         | 877 (897) kg           |
| Protection Class       | IP55                   |
| Insulation Class       | F Class                |
| Rated Temperature Rise | 90K                    |
| Vibration Class        | A                      |
| Noise                  | $\leq 70$ dB(A)        |
| Environment            | -15 ~ 45°C             |
| Environment            | $\leq 95\%$ RH         |



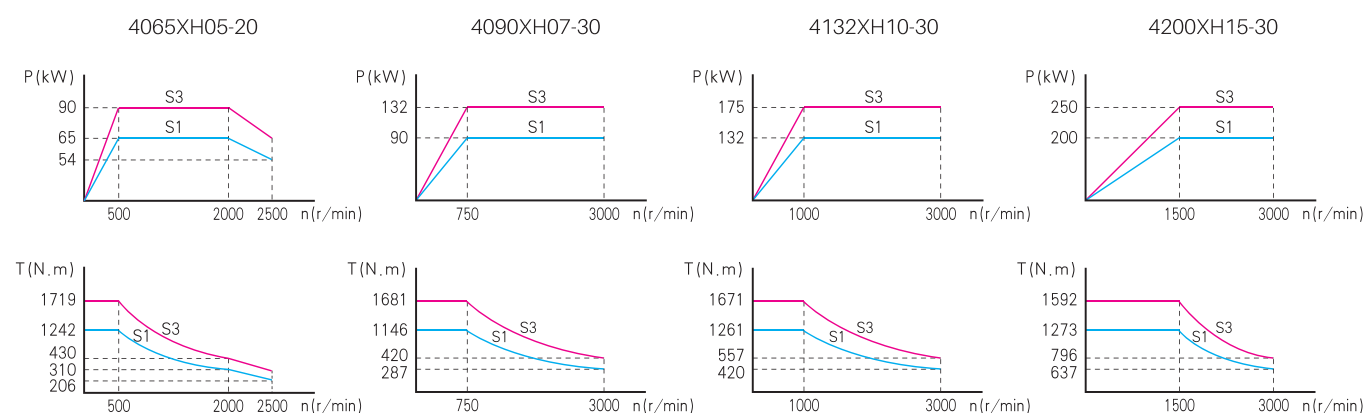


### Electrical Parameter

Voltage Class : 400V Connection :  $\Delta$  Fan Power : 1.5kW Fan Voltage : 380V

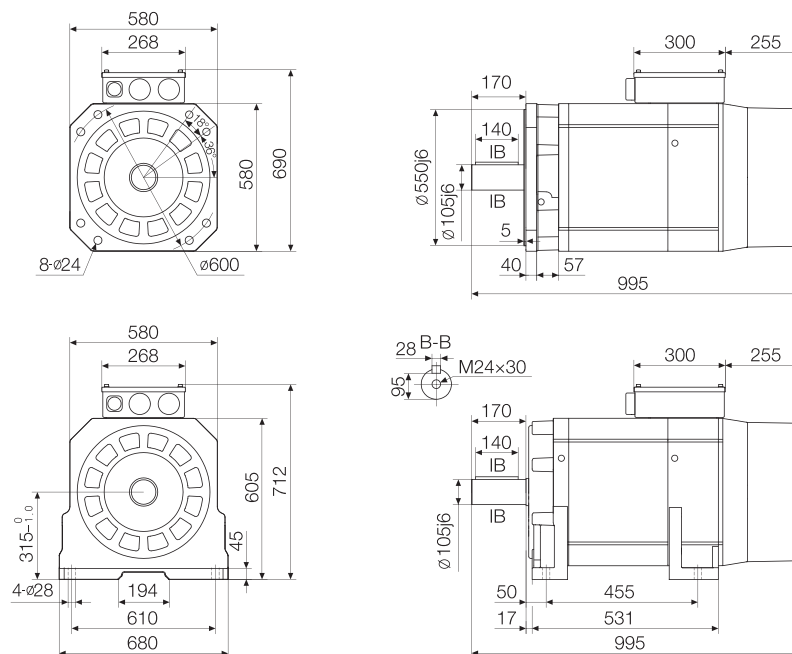
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (Hz) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m <sup>2</sup> ) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|----------------------|---------------------|----------------------------------|-------------------|-----------------------------------------|
| Z18-4065XH05-XXXX | 65               | 124/141/164       | 1242               | 380/335/285       | 8               | 33.7                 | 500                 | 1000/1500/2000                   | 2500              | 5.206                                   |
| Z18-4090XH07-XXXX | 90               | 168/191/224       | 1146               | 380/340/290       | 8               | 50.4                 | 750                 | 1500/2200/3000                   | 3000              | 5.206                                   |
| Z18-4132XH10-XXXX | 132              | 245/295           | 1261               | 380/320           | 8               | 67.1                 | 1000                | 2000/3000                        | 3000              | 5.206                                   |
| Z18-4200XH15-XXXX | 200              | 378               | 1273               | 380               | 8               | 100.5                | 1500                | 3000                             | 3000              | 5.206                                   |

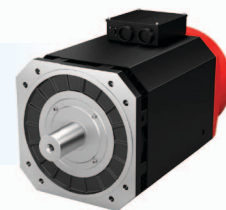
### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                       |
|------------------------|-----------------------------|
| Encoder (optional)     | MG-256(Magnetic)            |
|                        | CE30-2500(Incremental)      |
|                        | CE30-8192(Incremental)      |
|                        | RZ30-1024(Resolver)         |
| Shaft Type             | G : Without Keyslot         |
|                        | J : With Keyslot            |
| Mounting Type          | B3 B5 B35                   |
| Weight / Gross         | 942 (967) kg                |
| Protection Class       | IP55                        |
| Insulation Class       | F Class                     |
| Rated Temperature Rise | 90K                         |
| Vibration Class        | A                           |
| Noise                  | $\leq 70\text{dB(A)}$       |
| Environment            | $-15 \sim 45^\circ\text{C}$ |
| Environment            | $\leq 95\%\text{RH}$        |



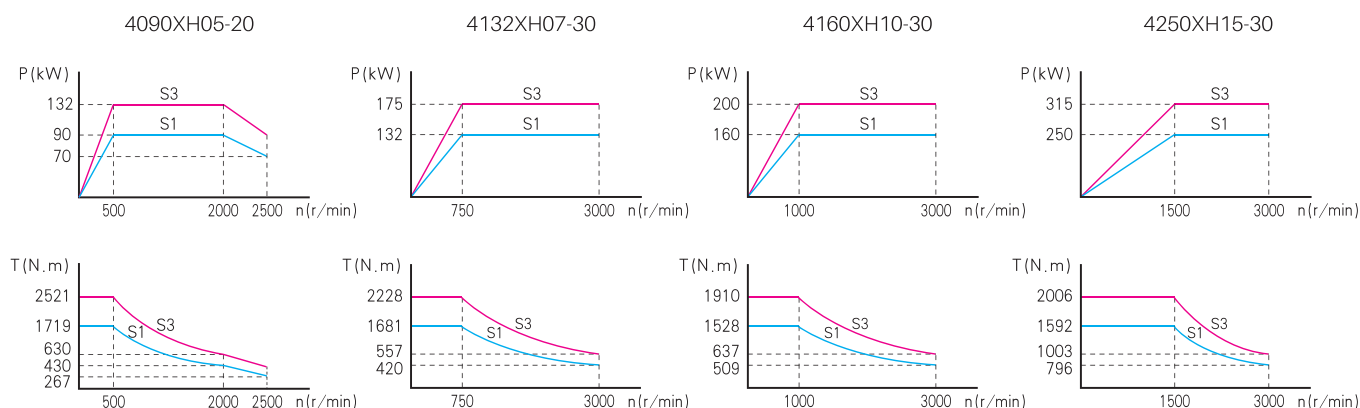


### Electrical Parameter

Voltage Class : 400V Connection :  $\Delta$  Fan Power : 1.5kW Fan Voltage : 380V

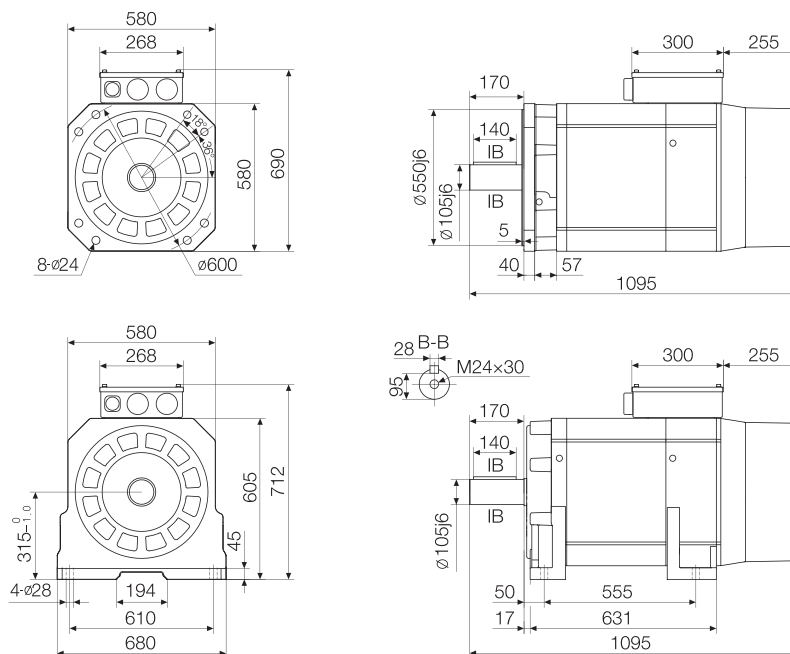
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (H) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m2) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|---------------------|---------------------|----------------------------------|-------------------|----------------------------|
| Z18-4090XH05-XXXX | 90               | 170/202/223       | 1719               | 380/320/290       | 8               | 33.7                | 500                 | 1000/1500/2000                   | 2500              | 6.804                      |
| Z18-4132XH07-XXXX | 132              | 246/295/344       | 1681               | 380/320/275       | 8               | 50.4                | 750                 | 1500/2200/3000                   | 3000              | 6.804                      |
| Z18-4160XH10-XXXX | 160              | 298/346           | 1528               | 380/335           | 8               | 67.1                | 1000                | 2000/3000                        | 3000              | 6.804                      |
| Z18-4250XH15-XXXX | 250              | 455               | 1592               | 380               | 8               | 100.5               | 1500                | 3000                             | 3000              | 6.804                      |

### Characteristic Curve

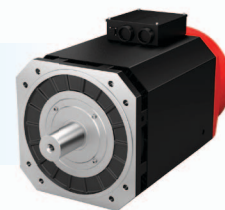


### Performance Index

| ITEM                   | INDEX                         |
|------------------------|-------------------------------|
| Encoder (optional)     | MG-256(Magnetic)              |
|                        | CE30-2500(Incremental)        |
|                        | CE30-8192(Incremental)        |
|                        | RZ30-1024(Resolver)           |
| Shaft Type             | G : Without Keyslot           |
|                        | J : With Keyslot              |
| Mounting Type          | B3 B5 B35                     |
| Weight / Gross         | 1119 (1144) kg                |
| Protection Class       | IP55                          |
| Insulation Class       | F Class                       |
| Rated Temperature Rise | 90K                           |
| Vibration Class        | A                             |
| Noise                  | $\leq 70\text{dB(A)}$         |
| Environment            | $-15 \sim 45^{\circ}\text{C}$ |
| Environment            | $\leq 95\%\text{RH}$          |





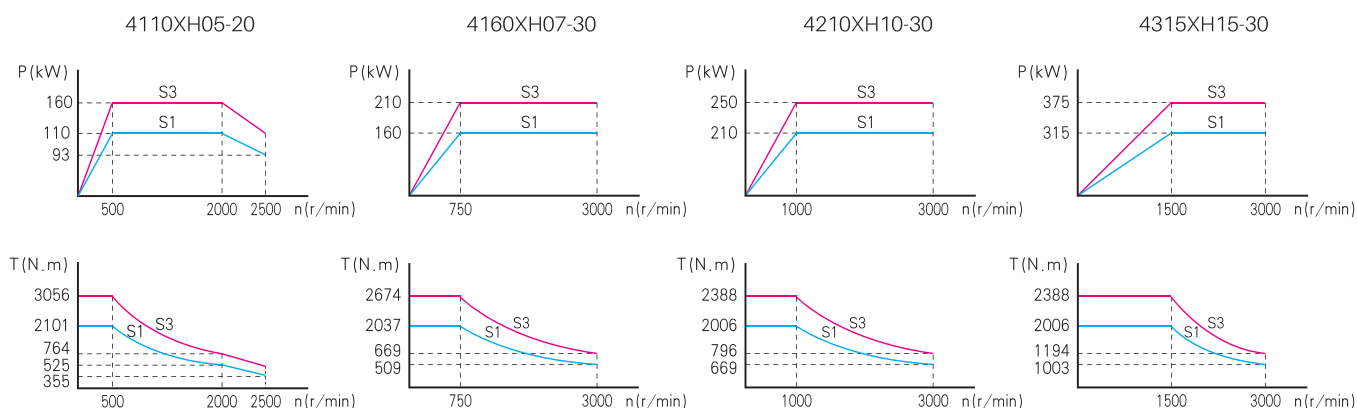


### Electrical Parameter

Voltage Class : 400V Connection :  $\Delta$  Fan Power : 1.5kW Fan Voltage : 380V

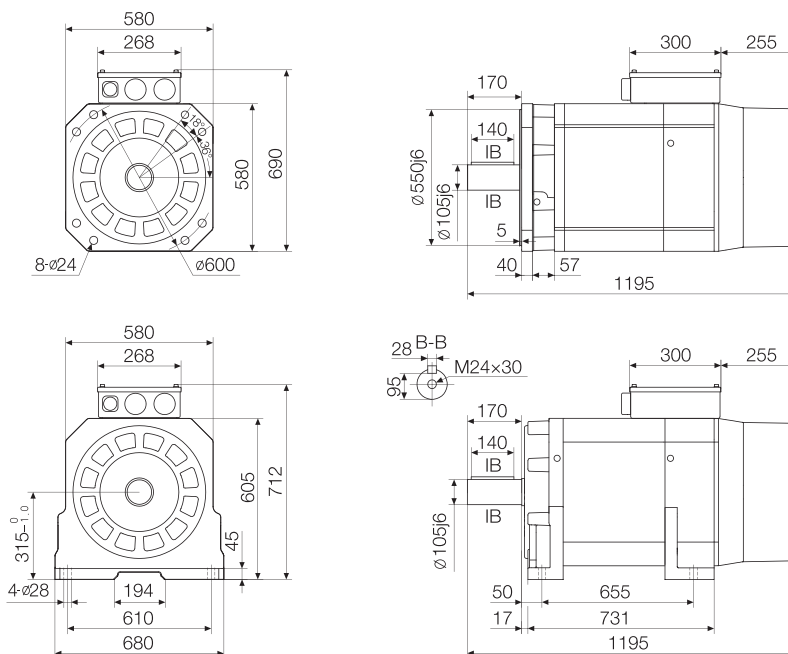
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (Hz) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m <sup>2</sup> ) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|----------------------|---------------------|----------------------------------|-------------------|-----------------------------------------|
| Z18-4110XH05-XXXX | 110              | 208/245/277       | 2101               | 380/320/285       | 8               | 33.7                 | 500                 | 1000/1500/2000                   | 2500              | 8.402                                   |
| Z18-4160XH07-XXXX | 160              | 295/336/405       | 2037               | 380/340/280       | 8               | 50.4                 | 750                 | 1500/2200/3000                   | 3000              | 8.402                                   |
| Z18-4210XH10-XXXX | 210              | 397/442           | 2006               | 380/340           | 8               | 67.1                 | 1000                | 2000/3000                        | 3000              | 8.402                                   |
| Z18-4315XH15-XXXX | 315              | 579               | 2006               | 380               | 8               | 100.5                | 1500                | 3000                             | 3000              | 8.402                                   |

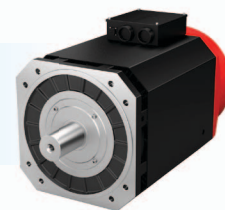
### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                       |
|------------------------|-----------------------------|
| Encoder (optional)     | MG-256(Magnetic)            |
|                        | CE30-2500(Incremental)      |
|                        | CE30-8192(Incremental)      |
|                        | RZ30-1024(Resolver)         |
| Shaft Type             | G : Without Keyslot         |
|                        | J : With Keyslot            |
| Mounting Type          | B3 B5 B35                   |
| Weight / Gross         | 1300 (1330) kg              |
| Protection Class       | IP55                        |
| Insulation Class       | F Class                     |
| Rated Temperature Rise | 90K                         |
| Vibration Class        | A                           |
| Noise                  | $\leq 70\text{dB(A)}$       |
| Environment            | $-15 \sim 45^\circ\text{C}$ |
| Environment            | $\leq 95\%\text{RH}$        |



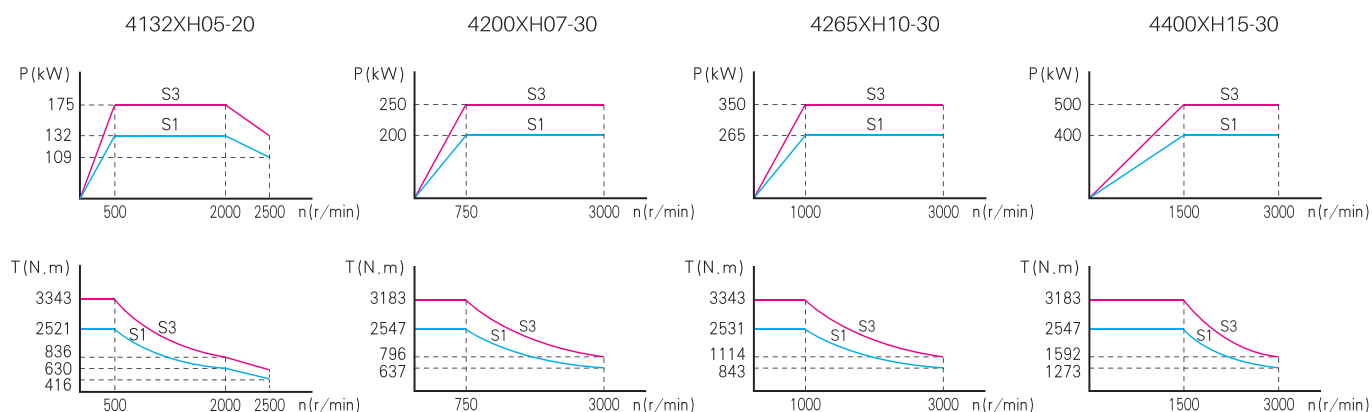


### Electrical Parameter

Voltage Class : 400V Connection :  $\Delta$  Fan Power : 1.5kW Fan Voltage : 380V

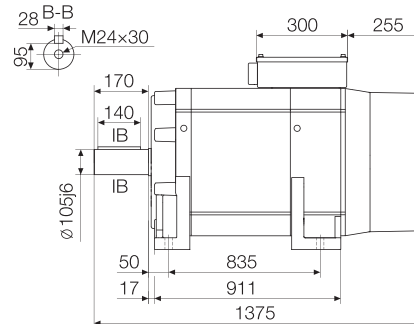
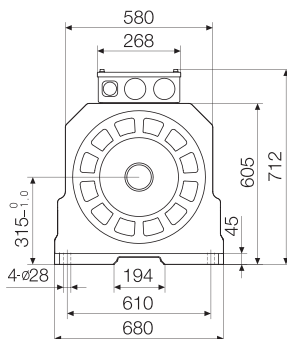
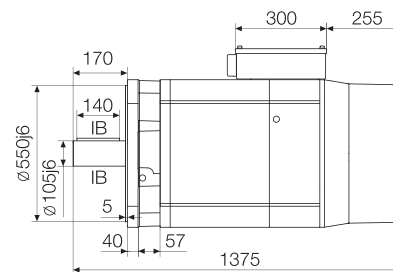
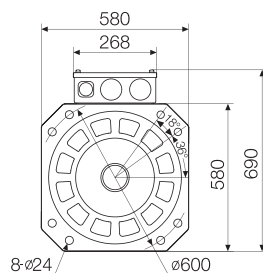
| Motor Model       | Rated Power (KW) | Rated Current (A) | Rated Torque (N.m) | Rated Voltage (V) | Pole Number (P) | Rated Frequency (Hz) | Rated Speed (r/min) | Constant Power Max Speed (r/min) | Max Speed (r/min) | Rotational Inertia (KG.m <sup>2</sup> ) |
|-------------------|------------------|-------------------|--------------------|-------------------|-----------------|----------------------|---------------------|----------------------------------|-------------------|-----------------------------------------|
| Z18-4132XH05-XXXX | 132              | 250/267/312       | 2521               | 380/360/305       | 8               | 33.7                 | 500                 | 1000/1500/2000                   | 2500              | 11.278                                  |
| Z18-4200XH07-XXXX | 200              | 378/421/472       | 2547               | 380/340/305       | 8               | 50.3                 | 750                 | 1500/2200/3000                   | 3000              | 11.278                                  |
| Z18-4265XH10-XXXX | 265              | 485/539           | 2531               | 380/350           | 8               | 67.1                 | 1000                | 2000/3000                        | 3000              | 11.278                                  |
| Z18-4400XH15-XXXX | 400              | 754               | 2547               | 380               | 8               | 100.4                | 1500                | 3000                             | 3000              | 11.278                                  |

### Characteristic Curve



### Performance Index

| ITEM                   | INDEX                  |
|------------------------|------------------------|
| Encoder (optional)     | MG-256(Magnetic)       |
|                        | CE30-2500(Incremental) |
|                        | CE30-8192(Incremental) |
|                        | RZ30-1024(Resolver)    |
| Shaft Type             | G : Without Keyslot    |
|                        | J : With Keyslot       |
| Mounting Type          | B3 B5 B35              |
| Weight / Gross         | 1622 (1652) kg         |
| Protection Class       | IP55                   |
| Insulation Class       | F Class                |
| Rated Temperature Rise | 90K                    |
| Vibration Class        | A                      |
| Noise                  | ≤70dB(A)               |
| Environment            | -15~45°C               |
| Environment            | ≤95%RH                 |

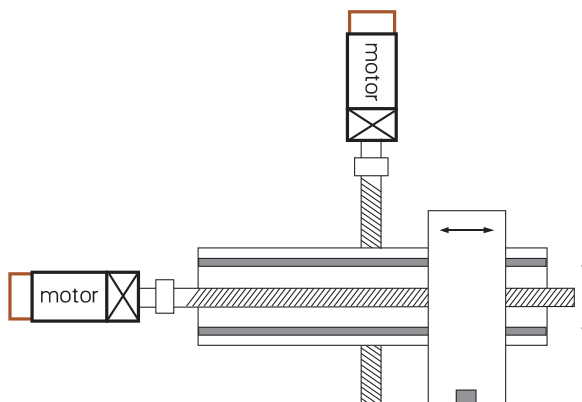


## Servo motor applying solutions

### ◆ Vertical lathe's coordinate axis servo drive solution

CTB high power servo motor can supply power for coordinate axis drive of heavy duty machine tools such as single column vertical lathe, double column vertical lathe, heavy duty horizontal lathe, gantry machine tool, floor type boring and milling machine.etc, which can make the coordinate axis drive of heavy duty machine tools to realize their servo and automation control.

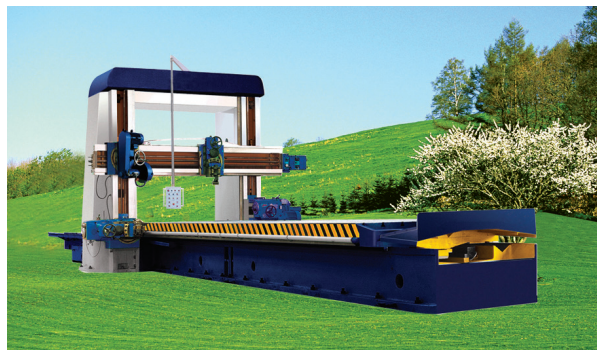
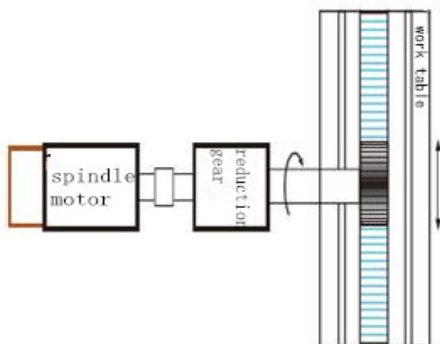
- ◇ Manual independent operation coordinated with CTB servo drive can achieve hand wheel control, single shaft locating, operation monitoring ;
- ◇ Interface with various CNC control system to complete interpolation control and make machine tool numerical controlled ;
- ◇ Ultra-low speed feed, operate smoothly, strong overload capacity ;
- ◇ Rapid traverse with high speed,utilize constant power feature of the motor to achieve high-speed rapid traverse.



### ◆ Planer milling machine working table drive solutions

CTB high power servo motor with high control performance applied to working table drive of planer milling machine, which has greatly improved work efficiency and performance of planer milling machine, can completely replace DC motor, switch reluctance motor, variable-frequency and speed motor.

- ◇ Simple and reliable settings of work table travel via parameter to minimize idle stroke and improve working efficiency of planer milling machine ;
- ◇ Smooth start and reversing, avoid mechanical shock, reduce equipment failure rate ;
- ◇ Easy to interface with different CNC control system and realize the functions of planer milling machine.

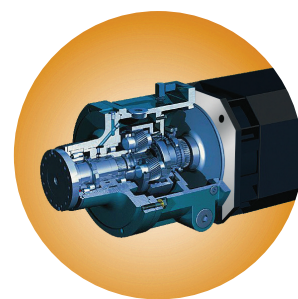
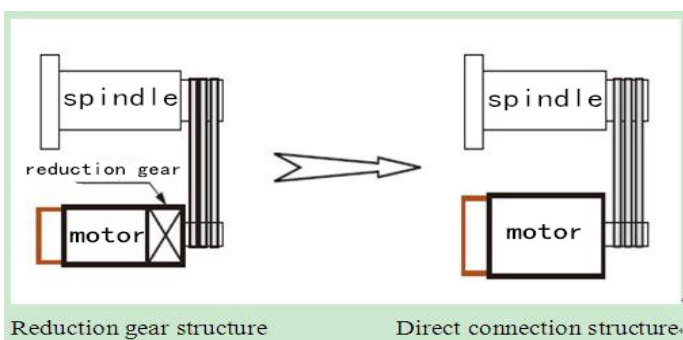


## Spindle motor applying solutions

### ◆ Using the low speed motor without reduction gear

As CTB's low speed motor can drive machine tool spindle directly, so the reduction gear with the speed ratio within 1:10 can no longer be needed, as a result, the spindle mechanical drive can easily be achieved and has low noise; meanwhile, production cost and machinery failure rate go down.

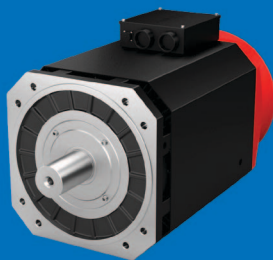
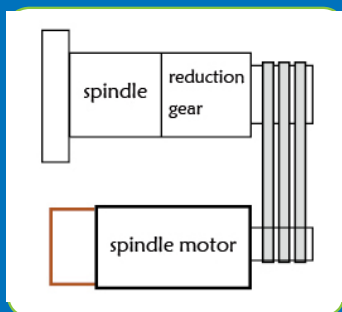
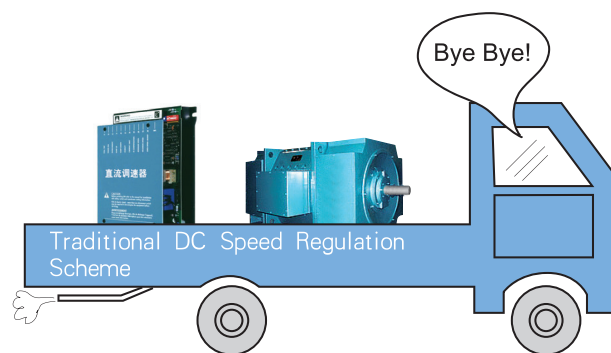
Can be widely used in spindle drive of floor type boring and milling machine, heavy duty horizontal lathe, vertical lathe, planer milling machine etc.



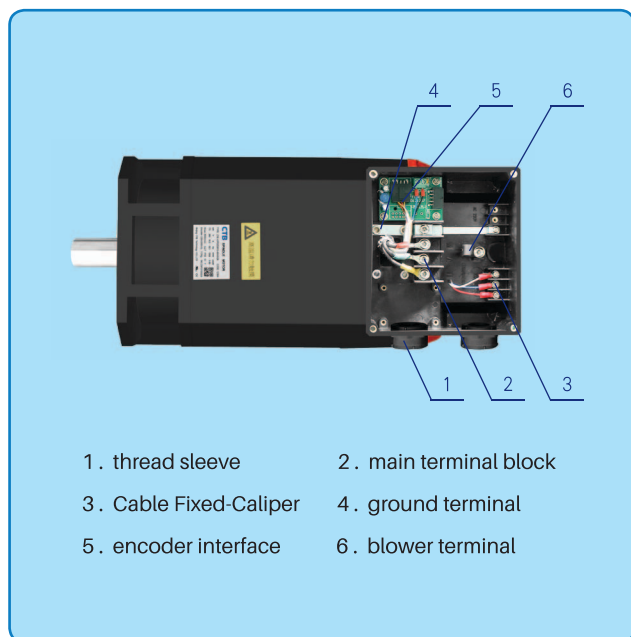
### ◆ Using the AC spindle motor for the substitute of DC motor

CTB's high-power AC spindle motor can replace traditional DC motor and can be widely used in spindle drive of floor type boring and milling machine, heavy duty horizontal lathe, vertical lathe, planer milling machine, etc.

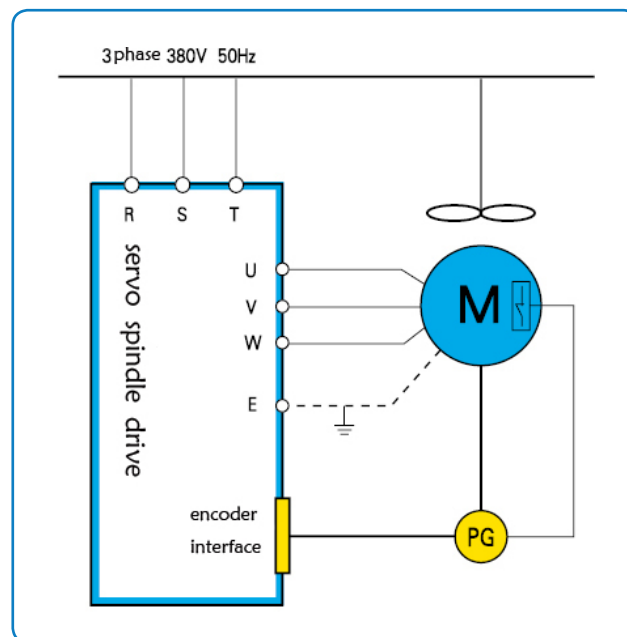
- ◇ Smaller volume compared with same power DC motor, easy installation;
- ◇ Wide range of speed and constant power speed;
- ◇ Low running noise, free maintenance.



### ◆ Connection wire and interface



### ◆ Connection wire figure

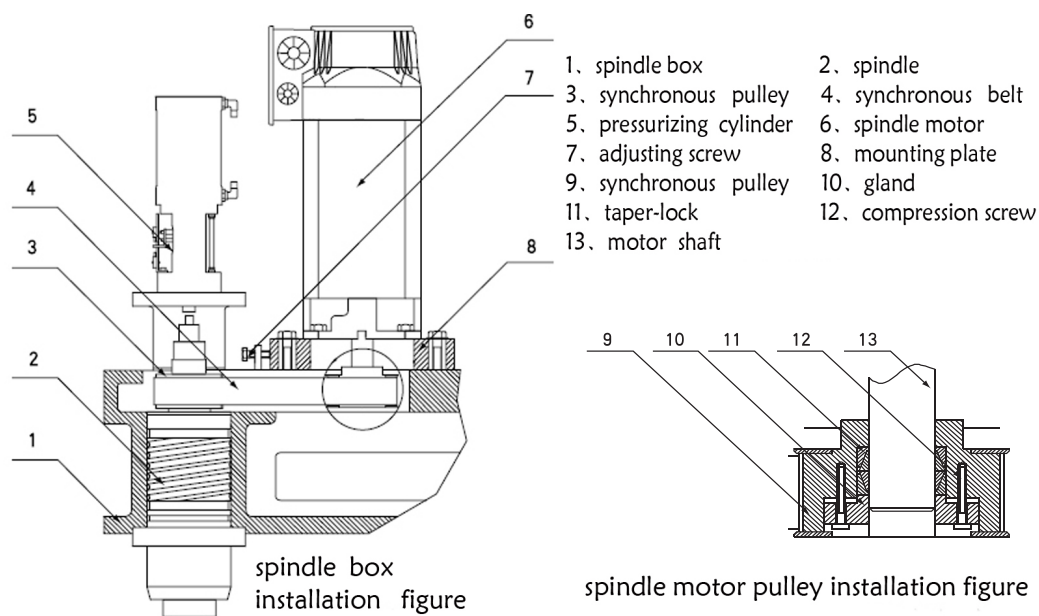


### ◆ Terminal description

| Interface                                                                      | Terminal code | Electric function               | Electric index                                                | Remark                               |
|--------------------------------------------------------------------------------|---------------|---------------------------------|---------------------------------------------------------------|--------------------------------------|
| Main terminal block                                                            | U             | U phase lead wire               | Withstand voltage 1200V, 3 times rated current                | Connected to U/V/W (drive)           |
|                                                                                | V             | V phase lead wire               |                                                               |                                      |
|                                                                                | W             | W phase lead wire               |                                                               |                                      |
| Encoder interface<br>(no such interface with variable frequency spindle motor) | 1             | Input power                     | DC5V, 100mA                                                   | Red                                  |
|                                                                                | 2             | Power supply                    | 0V                                                            | Black                                |
|                                                                                | 3             | A+ output                       | Wire drive output, RS422 standard<br>Output current: max 30mA | White                                |
|                                                                                | 4             | A- output                       |                                                               | Gray                                 |
|                                                                                | 5             | B+ output                       |                                                               | Green                                |
|                                                                                | 6             | B- output                       |                                                               | Blue                                 |
|                                                                                | 7             | Z+ output                       |                                                               | Yellow                               |
|                                                                                | 8             | Z- output                       |                                                               | Orange                               |
|                                                                                | 9             | E                               | Shielded wire, connected with ground interface                | olive                                |
|                                                                                | 10            | T1 thermal protection           | 24V, 20mA                                                     | Purple                               |
| Blower interface                                                               | R             | R phase lead wire (blower)      | 3phase, 380V, 50Hz                                            | Wind direction, blow to shaft end    |
|                                                                                | S             | S phase lead wire (blower)      |                                                               |                                      |
|                                                                                | T             | T phase lead wire (blower)      |                                                               |                                      |
| Thermal protection terminal                                                    | T1            | Motor thermal protection output | Normal closed output: AC 380V.1A                              | Normal: closed<br>Overheating: break |
|                                                                                | T2            |                                 | DC 110V.1A                                                    |                                      |
| Ground terminal                                                                | E             | Ground terminal                 | ground resistance < 4Ω                                        |                                      |



## ◆ Installation figure(suitable for vertical machining center)



The formulas below describe the relationship between power, torque and speed of spindle motor:

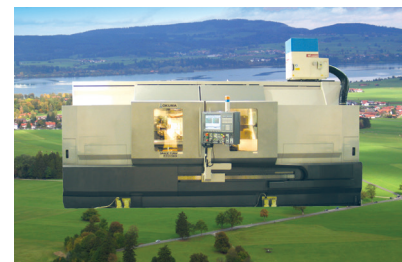
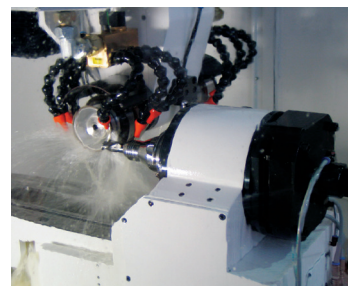
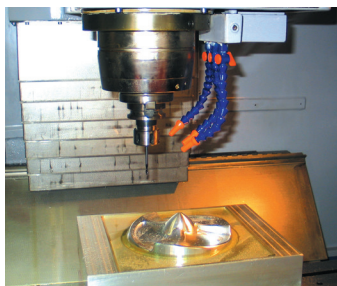
$$P = n \times T / 9550 (\text{kW})$$

$$T = P \times 9550 / n (\text{N}\cdot\text{m})$$

$$n = P \times 9550 / T (\text{r/min})$$

## ◆ Application area

Widely used in digit control machine tool. Woodworking machine, textile machinery, printing equipment, dyeing and finishing equipment. Papermaking equipment...





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keep pace with the world



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