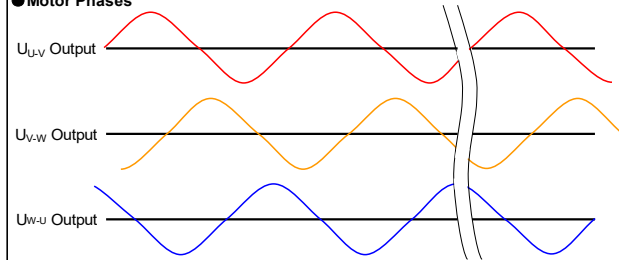


**Motor Specifications**

|    |                                   |  |                |
|----|-----------------------------------|--|----------------|
| 1  | Drive Input power supply          |  | 208~240VAC     |
| 2  | Basic DC Bus Voltage              | V (DC)   | 320V           |
| 3  | Rated Output Power                | Watts  | 1500           |
| 4  | Rated Speed                       | rpm  | 2000           |
| 5  | Max. Mechanical Speed             | rpm  | 3000           |
| 6  | Rated Torque                      | Nm   | 7.16           |
| 7  | Continuous Stall Torque           | Nm   | 9.1            |
| 8  | Peak Torque                       | Nm   | 21.5           |
| 9  | Rated Current                     | A (rms)  | 8.5            |
| 10 | Continuous Stall Current          | A (rms)  | 9.6            |
| 11 | Peak Current                      | A (rms)  | 26             |
| 12 | Voltage Constant ±10%             | V(rms)/K rpm   | 54.2           |
| 13 | Torque Constant ±10%              | Nm/A(rms)  | 0.842          |
| 14 | Winding Resistance(Line-Line)±10% | Ohm @20°C  | 0.66           |
| 15 | Winding Inductance(Line-Line)±20% | mH   | 5.4            |
| 16 | Inertia                           | kg m <sup>2</sup>  | 0.00205        |
| 17 | Thermal Resistance(mounted)       | °C / W   | 0.66           |
| 18 | Thermal Time Constant             | Minutes  | 24 Min         |
| 19 | Heat Sink Size(Iron)              | mm   | 400×400×20     |
| 20 | Shaft Load - Axial                | N (max.)   | 343N / 77 Lbf  |
| 21 | Shaft Load - Radial(End of Shaft) | N (max.)   | 686 N /154 Lbf |
| 22 | Weight                            | kg   | 9.5kg /20.9 Lb |
| 23 | Approvals                         | CE,eULus,RoHS  |                |
| 24 | Encoder Resolution & Protocol     | 23bit Absolute Multi-turn Nikon Protocol                           |                |
| 25 | Encoder Type                      | Optical  |                |
| 26 | Insulation Class                  | F (155°C)  |                |
| 27 | IP rating                         | IP65(except shaft through hole and cable end connector)            |                |
| 28 | Installation Location             | Indoors, free from direct sunlight, corrosive gas, inflammable gas |                |
| 29 | Ambient Temperature               | Operating 0 to 40°C, Storage -20 to 80°C                           |                |
| 30 | Ambient Humidity (max.)           | 85% (free from condensing)   |                |
| 31 | Altitude (max.)                   | 1000 m   |                |
| 32 | Vibration Resistance              | 10-150Hz 49 m/s <sup>2</sup>                                       |                |
| 33 | Rotor Poles                       | 10   |                |

Shaft Load: (L<sub>10</sub> life, 20,000 hours, 2,000 RPM)

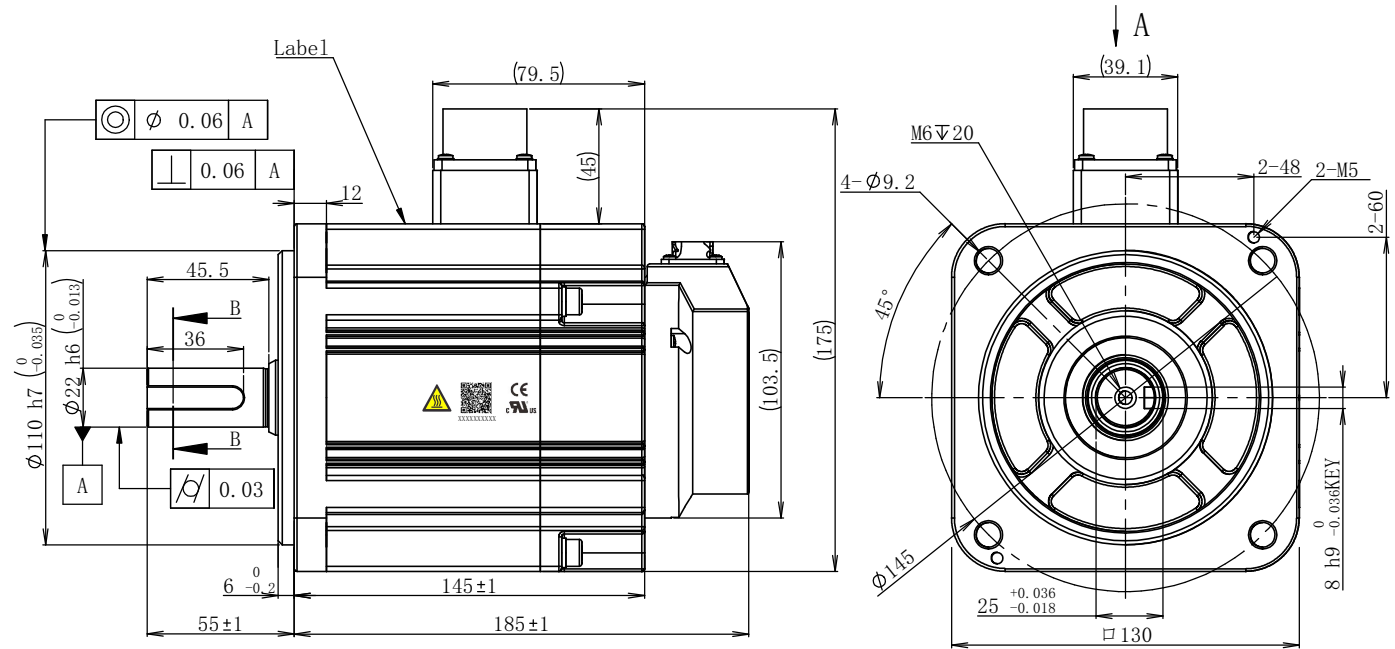
**Motor Phases**



All the timing logics are obtained in CCW rotation as viewed from front shaft.

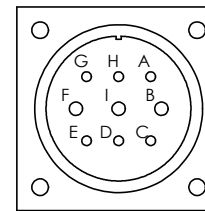
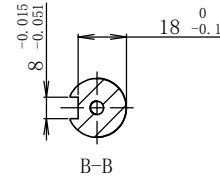
**Notes:**

1. A shaft seal is shipped with motor, but not installed.
2. A KEY is shipped with motor, but not installed.

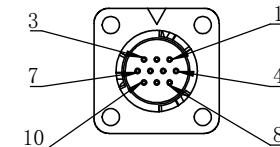


Motor Power Connector:  
 Brake Connector:  
 XMS3102A20-18S(EUMACX)

Encoder Connector:  
 XM10-S10S-C(EUMACX)



View A



View A

|        |     |     |      |   |     |
|--------|-----|-----|------|---|-----|
| Pin#   | A   | B   | C    | D | E   |
| Signal | GND | W   | +24V | 0 | N/C |
| Pin#   | F   | G   | H    | I |     |
| Signal | U   | N/C | N/C  | V |     |

Static Friction Torque: 14.3N.m

|        |          |     |     |     |          |
|--------|----------|-----|-----|-----|----------|
| Pin#   | 1        | 2   | 3   | 4   | 5        |
| Signal | 5V       | GND | SD- | SD+ | Battery+ |
| Pin#   | 6        | 7   | 8   | 9   | 10       |
| Signal | Battery- | N/C | N/C | N/C | Shield   |

Item Number  
S0034

|   |                |                          |          |             |            |
|---|----------------|--------------------------|----------|-------------|------------|
| Unit: mm  |                |                          |          |             |            |
| First Angle Method  |                |                          |          |             |            |
| Tolerances for linear and angular dimensions without individual tolerance indications | AI             | △                        | I        |             | 2023.11.30 |
| GB/T 1804-m eqv ISO 2768-1:m  | AO             |                          |          | Preliminary | 2023.09.08 |
| Geometrical tolerance for features without individual tolerance indications           | REV            | Sign                     | Quantity | ECN NO.     | Date       |
| GB/T 1184-K eqv ISO 2768-2:K  | Design         |                          |          | Technology  |            |
| UNLESS OTHERWISE SPECIFIED  | Standard       |                          |          | Audit       |            |
|   | Check          |                          |          | Approve     |            |
|   | Marketing Dept | <input type="checkbox"/> |          | Date        |            |



|               |         |        |
|---------------|---------|--------|
| SM3M-133ATBUV |         |        |
| 4611170001586 |         |        |
| Stage         | Quality | Scale  |
| D             |         | 1:2    |
| Sheet         |         | 1 of 1 |

Shanghai AMP & MOONS' Automation Co.,Ltd