

Brushless DC Motor

24 VDC Built-In Driver



General Specifications

| | |
|---|---------------------|
| Winding Type | Star |
| Insulation Class | B |
| Ambient Temperature Range | -20°C ~ +50°C |
| Insulation Resistance | 100 MΩ Min. 500 VDC |
| Dielectric Strength | 500 VAC 1 minute |
| Customized solutions on request. | |

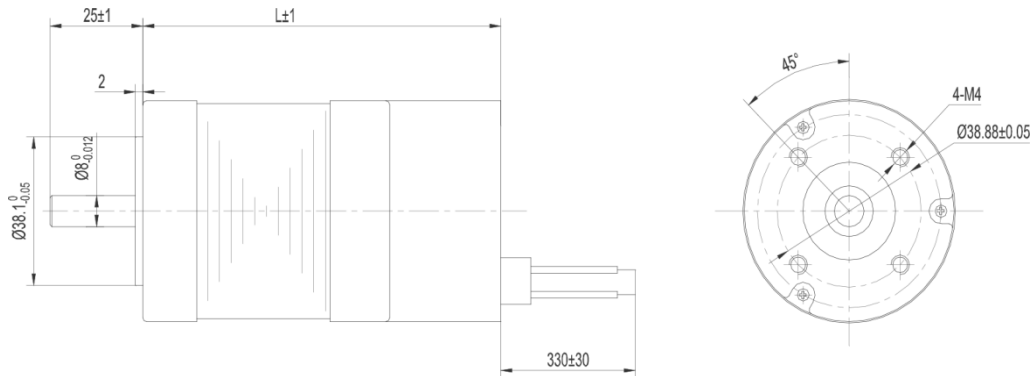


Electrical Specifications

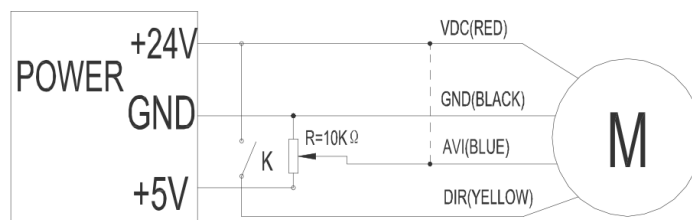
| Model | | 57BID01-24 | 57BID02-24 | 57BID03-24 | 57BID04-24 | 57BID05-24 | 57BID06-24 |
|------------------|------------------|------------|------------|------------|------------|------------|------------|
| Number of Poles | | 4 | 4 | 4 | 4 | 4 | 4 |
| Number of Phases | | 3 | 3 | 3 | 3 | 3 | 3 |
| Rated Voltage | VDC | 24±10% | 24±10% | 24±10% | 24±10% | 24±10% | 24±10% |
| Rated Speed | RPM | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 |
| Rated Torque | Nm | 0.057 | 0.11 | 0.165 | 0.22 | 0.33 | 0.44 |
| Rated Current | A | 1.2 | 2.3 | 3 | 4.4 | 6.1 | 8.5 |
| Output Power | W | 15 | 34 | 52 | 69 | 103 | 138 |
| Peak Torque | Nm | 0.18 | 0.38 | 0.58 | 0.8 | 1.2 | 1.6 |
| Peak Current | A | 3.6 | 6.9 | 9 | 13 | 19.8 | 25.8 |
| Torque Constant | Nm/A | 0.062 | 0.06 | 0.06 | 0.062 | 0.06 | 0.062 |
| Back EMF | V/KRPM | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 |
| Rotor inertia | gcm ² | 32 | 42 | 58 | 72 | 106 | 140 |
| Body Length | mm | 71 | 76 | 86 | 96 | 116 | 136 |
| Mass | kg | 0.6 | 0.7 | 0.85 | 0.95 | 1.25 | 1.6 |

Caution: Peak Torque is provided for the purpose of performance calculations only. Operating near, or at this condition can result in motor damage.

Mechanical Dimensions



Connection diagram



Specifications

Switching power supply output current shall be not less than the motor peak current; through AVI terminals can be governor does not need, it can short VDC and then motor running at rated speed; DIR terminals can be controlled the motor rotation direction, when switch off, the motor anti-clockwise rotation, when linking-up, the motor rotating clockwise.