

PMSM SPECIFICATION

MODEL:130TM-16015C5-CB

| Basic Parameters | | | |
|--|--|----------------------------------|-----------------------------|
| Rated Output (kW) | 2.5 | Number of Poles | 10 |
| Rated Voltage (V) | DC48 | Vibration Class | F |
| Rated Speed (rpm) | 1500 | Max. Speed (rpm) | 2000 |
| Rated Current (Arms) | 61.5±10% | Instantaneous Max.Current (Arms) | 123±10% |
| Rated Torque (N.m) | 16 | Instantaneous Peak Torque (N.m) | 32 |
| Line Resistance (Ω) | ±10%(25℃) | Line Inductance (mH) | ±10% |
| Line Back EMF.(V/krpm) | 15.8±10% | Torque Coefficient (N.m/A) | 0.26±10% |
| Rotor Moment of Inertia (Kg.m ² ×10 ⁻⁴) | 18.2±10% | Feedback Component | Incremental Encoder,2500PPR |
| Static Torque (N.m) | > 19 | Rated Voltage (V) | DC24V±10% 2.4A |
| Insulation Resistance (MΩ) | DC500V, >20MΩ | Noise (dB) | ≤60dB, None Special Noise |
| Time rating | Continuous | Vibration Class | V 15 |
| Ambient Temperature | -20~+40℃ | Ambient Humidity | 20~80% No Condensation |
| Excitation | Permanent Magnet | Mounting | Flange Method |
| Drive Method | Direct Drive | Weight (Kg) | 12.8 |
| Enclosure | Totally Enclosed, Self-cooled, IP54(IP65 optional)(except for shaft opening). | | |
| Rotation Direction | Counterclockwise (CCW) | | |

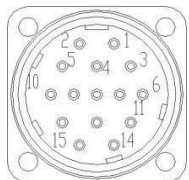
※ Rated torque is the continuous allowable torque at 40℃ with an Fe heat sink of 550×550×30.

Connectors

Power line socket

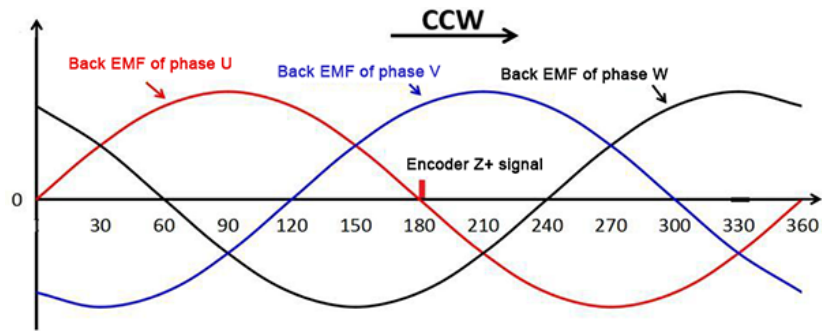
| Colour | Yellow-green | Red | Blue | Black | Thin Red | Thin Black |
|--------------|--------------|-----|------|-------|----------|------------|
| Signal Leads | PE | U | V | W | 24V | BRK |

Encoder socket((Aviation connector model: YD18-15)

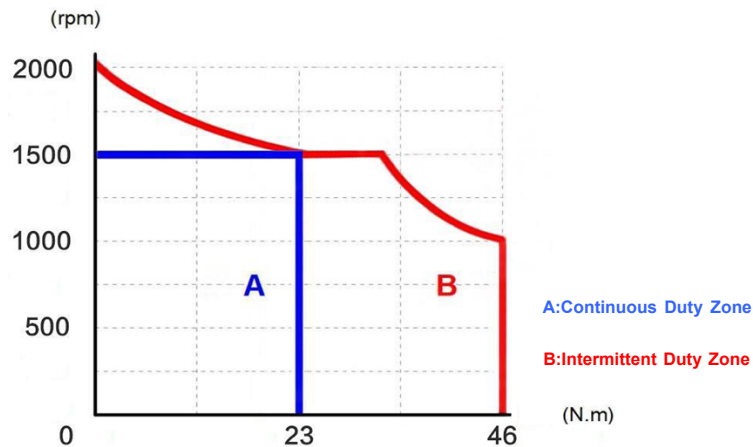


| Socket Numbers | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|----------------|----|-----|-------|------|-------|--------|----------------|-----------------|------------------|-------|------|-------|----|----|----|
| Colour | | Red | Black | Blue | Green | Yellow | Blue and Black | Green and Black | Yellow and Black | Brown | Grey | White | | | |
| Signal leads | PE | 5V | 0V | A+ | B+ | Z+ | A- | B- | Z- | U+ | V+ | W+ | | | |

Encoder zero point and phase relationship of the motor

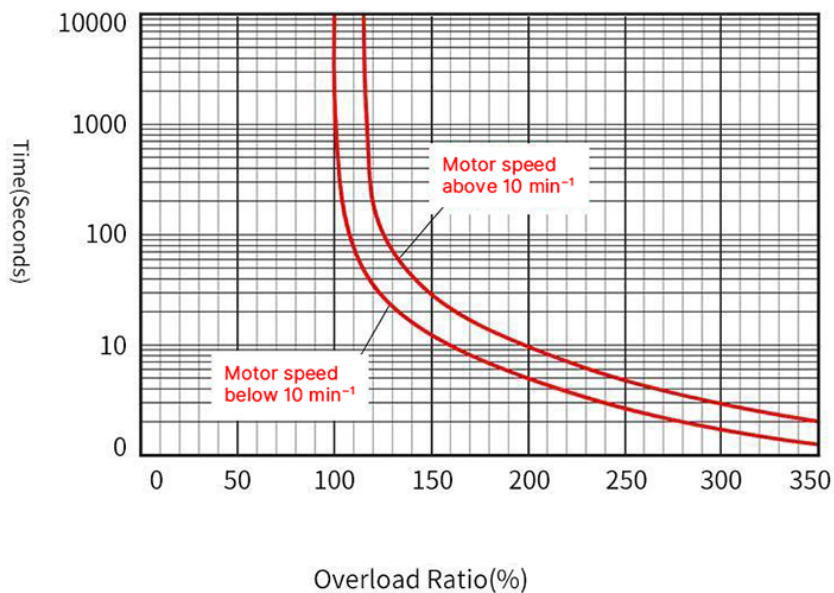


Torque-speed Characteristics



Overload Characteristics

The characteristics is measured in the warm-boot conditions at 40°C :



- ※1: The above characteristics do not supply 100% output for continuous running;
- ※2: Please make sure that the effective torque is in the range of T-N characteristics' continuous duty zone.
- ※3: Specification are subject to change without notice for ongoing product modification and improvement, please pay more attentions to the related information.

Motor Outline Reference Drawing

