

220QDM10

BRUSHLESS DC MOTOR DRIVER

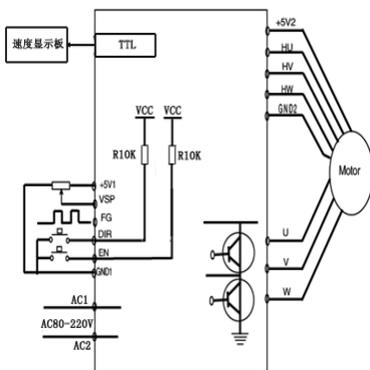
| Features | | |
|--|---|--|
| Change parameters via the debug software PC through USB interface | | |
| Current and speed double closed loop design, high torque at low speed, smooth operation | | |
| High torque high speed output, the maximum speed reaches 10000rpm/min(depend on speed of motor) | | |
| Speed control: 0-5V analog and 10Hz-300Hz PWM speed control, user-friendly | | |
| Speed pulse output(optoelectronic isolation, gate output) | | |
| With protection function of over current, over voltage, under voltage, over heat and motor block | | |
| Electrical Characteristics | | |
| Power supply | AC80V~220V (capacity according to motor power selection) | |
| Rated current | ≤10A(depend on motor and rated load) | |
| Rated power | Max 2200W | |
| Insulation resistance | >500M Ω at normal temperature | |
| Insulation strength | 0.5KV, 1min at normal temperatures and pressures | |
| Working Environment | | |
| Cooling | natural cooling or forced air cooling | |
| Working environment | Situation | avoid dust, oil mist and corrosive gases |
| | Temperature | 0℃ ~ +50℃ |
| | Humidity | < 80% RH, no condensation, no frost |
| | Vibration | <0.5G(4.9m/s ²) 10Hz-60Hz (non-continuous operation) |
| Storage temperature | -20℃ ~ +65℃ | |
| Dimension | 198x104x86mm | |
| Weight | ≈1.2kg | |



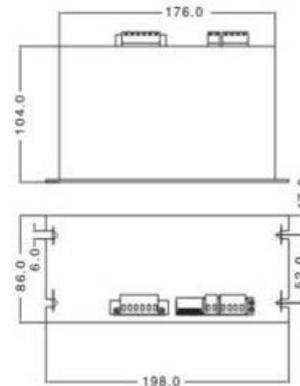
Instructions for the wiring port and indicator light

| Function | Mark | Description |
|--------------------------|--------|---|
| Indicator light | POWER | Green indicator light, power on indicates normal power supply |
| | ALARM | Red light, slow flash-waiting, quick flash-operating and changing with motor speed, constant light-error |
| RS232 communication port | TTL | Display speed by connecting speed display board. Set drive parameters by connecting computer. See the debugging software instructions |
| Control | +5V1 | Control signal power supply positive(Built-in power output) |
| | VSP | External speed control signal, 0-100% of the motor speed adjustment through external potentiometer |
| | FG | Motor speed pulse output, motor actual speed can be converted by measuring the frequency of this signal |
| | DIR | Motor CW/ CCW rotation control ,CW when not connecting GND1 and CCW connecting GND1, cut off the power when CW and CCW switching |
| | EN | Enable control, motor running (on-line) connecting GND1 and stops(off-line) when not connecting GND1 |
| | GND1 | Control signal power ground |
| Hall | +5V2 | Hall power supply positive |
| | HU | Hall sensor signal U phase input |
| | HV | Hall sensor signal V phase input |
| | HW | Hall sensor signal W phase input |
| | GND2 | HALL power ground |
| Motor and power | U,V,W | motor three-phase output signals, connect the motor windings |
| | GND,V+ | DC24V~48V power supply input |

Wiring and dimension(unit: mm)



Wiring



Dimension