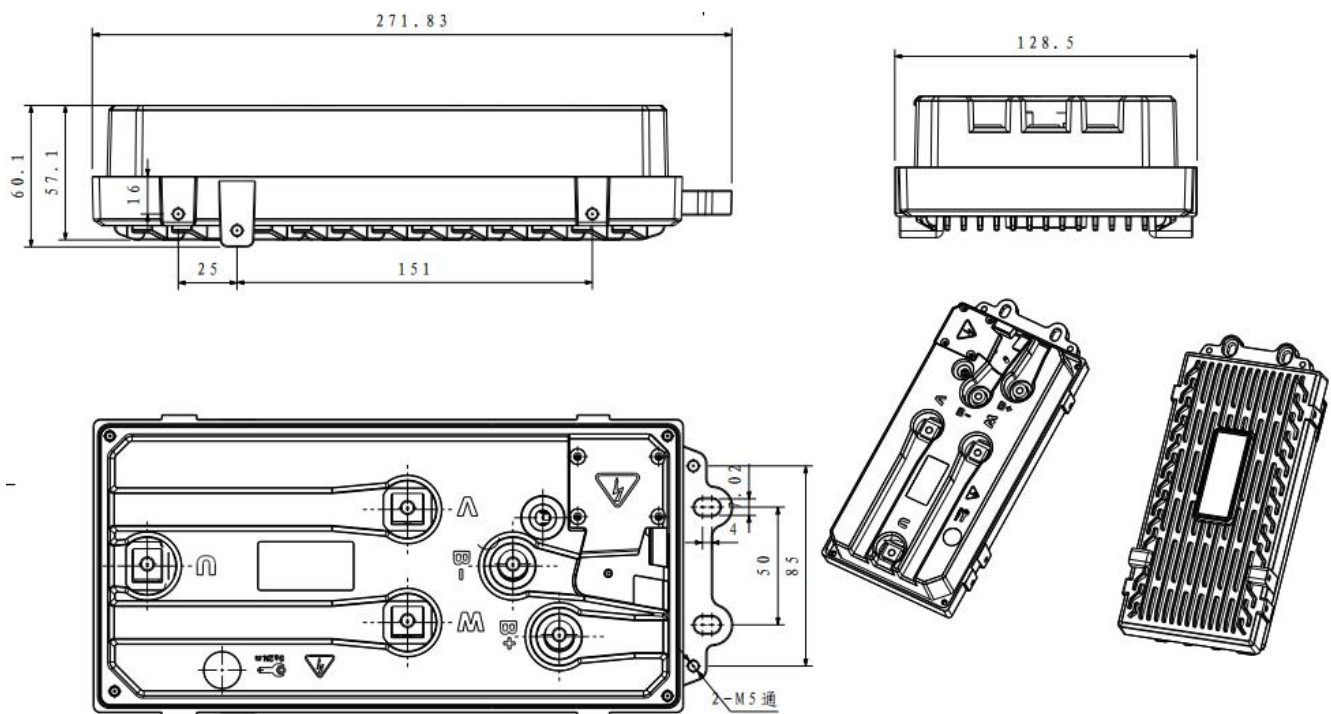




- Isolated Type
- IP67
- Built-in Bluetooth
- Built-in 6-Axis Gyroscope

■ Dimensions & Installation Instructions

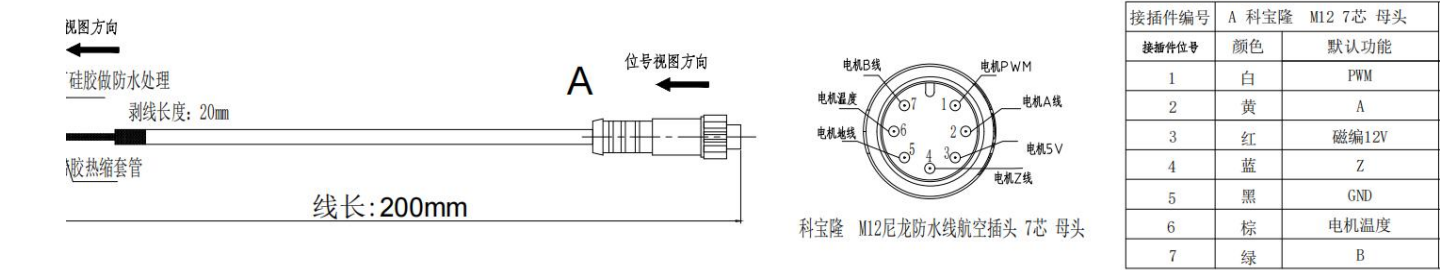


Terminal screws: M6×14 (tightening torque 8~10 N・m)

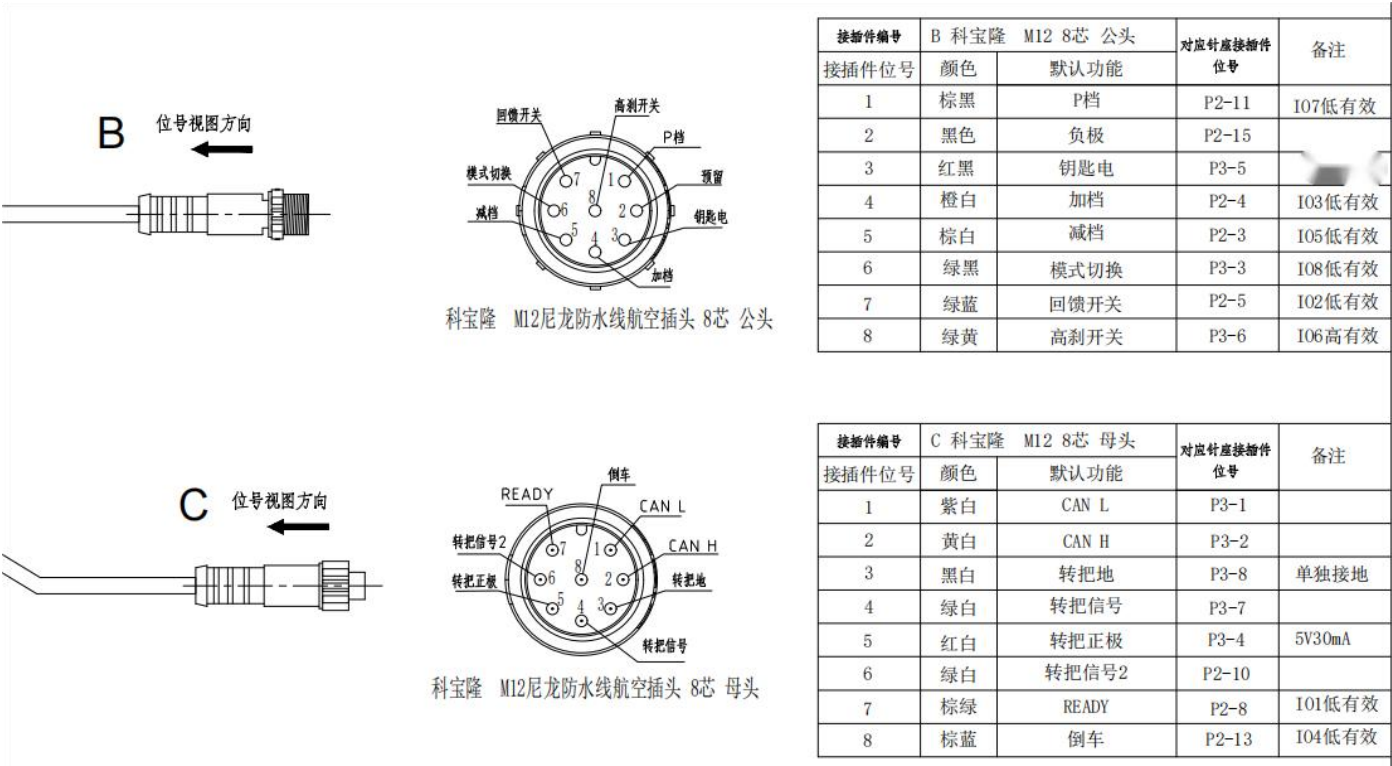


■ Wiring Definitions

Motor Terminals



Vehicle Signal Terminals



- Default external cable length is 15cm; default magnetic encoder supply voltage is 12V. Please specify in advance if 5V is required.
- Throttle GND can be used as signal reference ground but not for power wiring (e.g. lights).
- External supply capability 30mA; consult the factory for higher current.
- Isolated system: key power supply guarantees 12V 0.5A supply capability

■ **Technical Specifications**

Model	DEMCT48I00	DEMCT48I01
Rated Input Voltage (DC-V)	72	96
Rated Input Current (DC-A)	180	150
Rated Output Current (AC-PEAK@30min)	220	180
Input Voltage Range (DC-V)	36~88	60~125
Maximum Input Current (DC-A, 60s)	350	350
Maximum Output Current (AC-A peak@10s)	800	750
Operating Ambient Temperature (°C)	-20~+65	
Motor Type	PMSM / SynRM / Induction Motor	
Motor Control Method	FOC/MTPA/SVPWM/Flux Weakening	
Motor Sensor Type	ABZ+PWM	
Efficiency	98%	
Protection	OverCurrent / OverVoltage / OverTemperature / Stall	
Dimensions (mm)	278*129*56	
Weight (kg)	<2.3	
Communication	CAN2.0 / 1-Wire	
Cooling Method	Forced Air Cooling	
Protection Rating	IP67	

■ Product Features

T48 is a motor controller for electric off-road vehicles, featuring compact size, low heat loss and strong overload capability.

- High-power MOSFETs with high current rating, low internal resistance and fast switching speed are used as the power devices.
- An advanced vector control algorithm provides precise control of motor torque and speed.
- Energy regenerative control extends vehicle driving range and meets the needs of different customers.
- Optional anti-rollback function on slopes improves driving safety.
- Built-in 6-axis gyroscope enables wheelie control.
- Built-in Bluetooth enables commissioning and upgrades via mobile phone.
- Software can be customized to meet the different requirements of individual customers.
- OBD function included.

■ Important Notes

- Always tighten the terminal screws to the required torque.
- The vehicle must be equipped with reliable short-circuit protection such as circuit breakers and fuses.
- Use connectors of the same brand to ensure male/female mating compatibility.
- The controller assumes the throttle signal drops to zero when the ground line is disconnected. If not, please confirm suitability in advance.
- When the controller is controlled via instrument communication, if instrument communication is lost after power-on, the vehicle is allowed to run normally.
- The controller defaults to derated power operation when battery communication is lost.