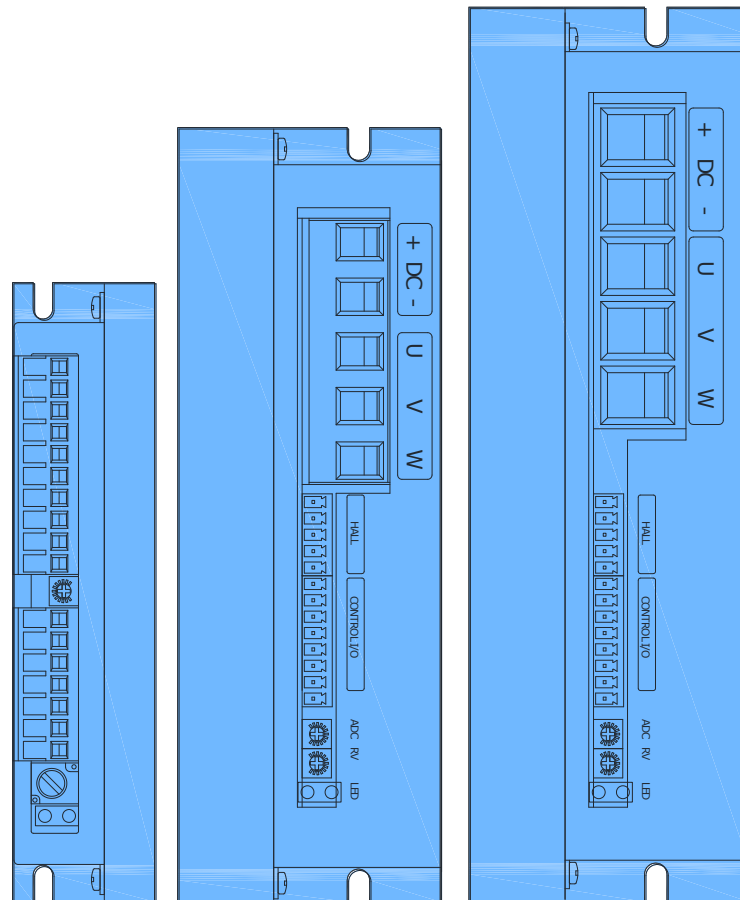

Brushless Direct Current (BLDC)
Brushless dc motor controller
Single channel multiple control modes
Hall square wave control, encoder positive mystery, wave control
RS-485 communication design
APP application Software CloudView
Meet the requirements of national standards

- ※ Please install, connect and debug the equipment with industry technicians.
- ※ It is not allowed to install, remove or replace the circuit of the equipment when it is live.
- ※ Be sure to install necessary protective devices between the power input and the power supply (battery) to avoid dangerous accidents or fatal injuries.
- ※ Need to install: overcurrent protector, insurance, emergency switch.
- ※ Please do the isolation and insulation protection between the product and the ground and equipment.
- ※ If there is a real need for live debugging of this product, please choose a non-metallic well insulated screwdriver or special debugging tool.
- ※ This product shall be installed in a well-ventilated environment.
- ※ This product can not be directly used in high humidity, dust, corrosive gas, strong vibration of the abnormal environment.



Brushless dc motor, Abbreviation:BLDC

Brushless dc motor (BLDC) is an abbreviation of the Brushless Direct Current. The function of the control system corresponding to this motor is to control the precise operation of the motor through software algorithm. Series Bis a single channel low voltage motor controller with display.

The design is based on automotive ARM 32-bit MCU. It can also adapt to brushless motor control based on hall sensor, magnetic coding sensor and photoelectric coding sensor.

The hall sensor motor can be controlled by square wave or positive wave algorithm.

For magnetic hall sensor or optical sensor motor, FOC positive algorithm can be used to achieve low speed, high torque and precise positioning control. Can realize different mode control, PWM open loop, speed closed loop, position loop, torque mode... Custom pattern control can be implemented with algorithm. The controller is equipped with a variety of communication interfaces, and the upper computer can realize various working purposes of the system through communication protocol instructions.

The controller is equipped with the basic control interface, and the upper computer can realize the main functions of the whole system.

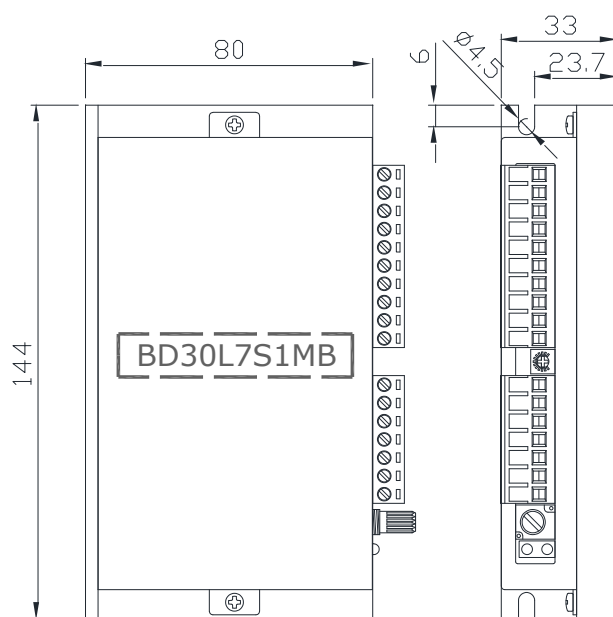
The controller has the related failure light indication and special control port output.

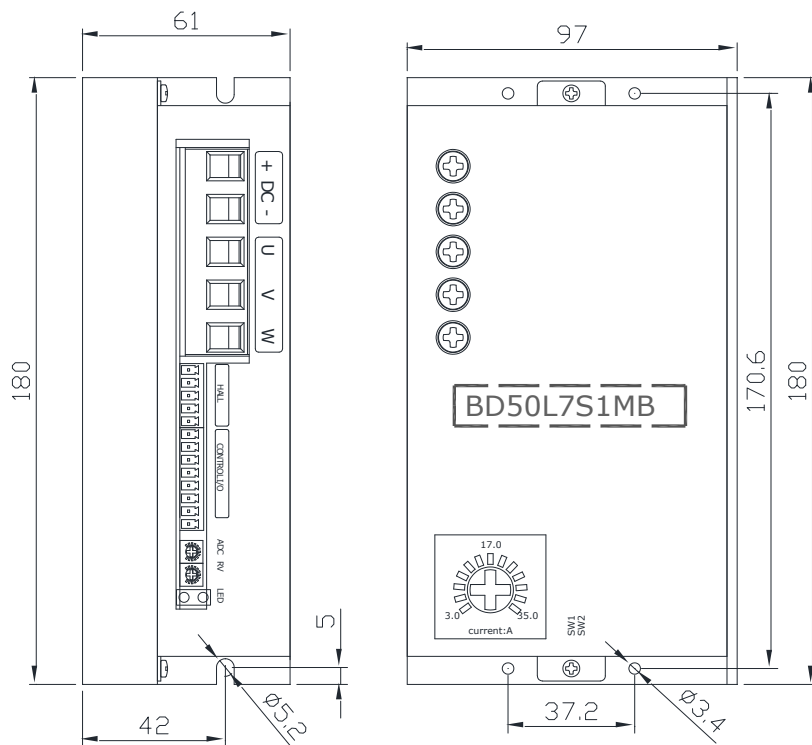
The controller is equipped with human-machine interface, through which users can set the parameters of the controller.

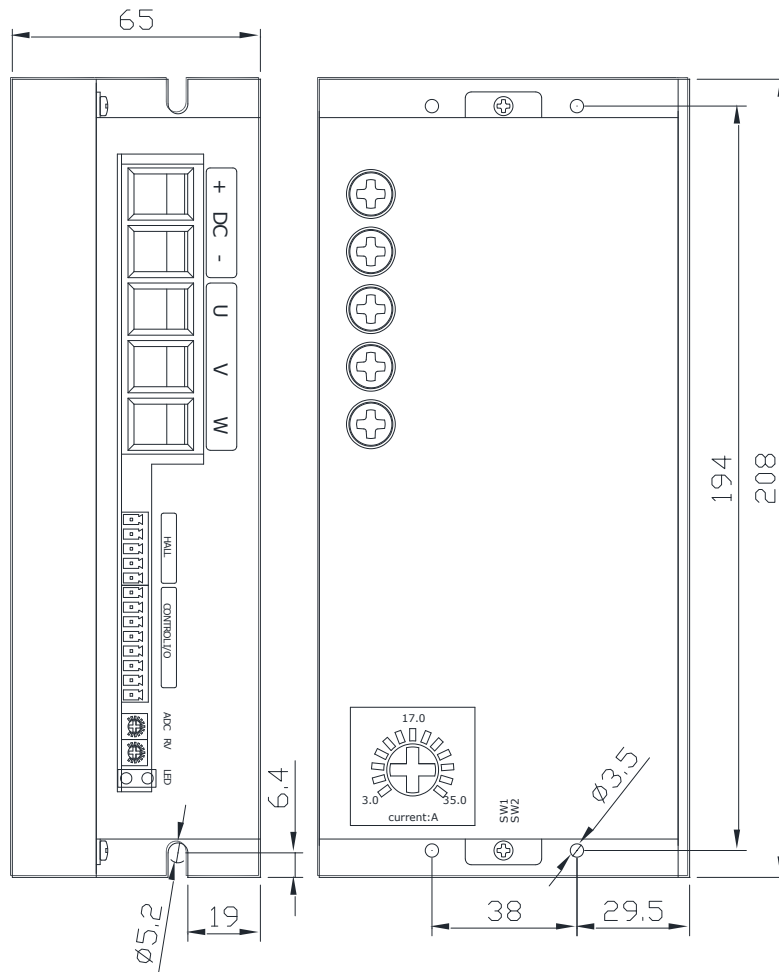
2. Parameters

- Power supply range: DC 12~60 V
- Work current range: 6~75A
- Minimum RPM: 50 RPM (hall sensor motor) , 1 RPM (Encoder sensor)
- 5 V DC Power output: 20 mA ability
- VRM Input: 0~5 V DC
- PWM Input: 4Hz~10KHz
- Work temperature: -20~+70°C
- Work Humidity: ≤ 80 RH
- Size: See installation drawings
- Weight: BD30L7S1MB—320g, BD50L7S1MB—850g, BD100L7S1MB—1050g

3. Installation







Note :

Multiple controllers are installed at the same time. Please keep the controller > 20mm interval.

Keep the controller away from dust, high humidity environment and avoid accidental contact. Keep enough space around the controller for ventilation and adjustment.

Keep the controller away from heat sources. Ensures that the controller operates within the specified ambient temperature range.

Avoid installing on equipment that vibrates excessively. If installation is required, take good anti-vibration measures.

4. Electrical Connection

- ① Donot work with live wires.
- ② Select insulated lead that matches the voltage and current of the controller, please follow the following table to select the specification of the controller power input line and motor connection line.
- ③ Wiring harness specification

IXD	Interface Name	Specification and definition
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