

US-02 Series Panel-Type Speed Regulator User Manual



Characteristic

- Same model as the US series, but in different variants
- Manufactured using SMT technology, offering high reliability.
- Simple wiring and easy to use
- Built-in operating capacitor
- Combining with a speed-regulating motor to achieve wide-range stepless speed regulation

Dear User:

Thank you for purchasing and using this product. To ensure safety and proper operation, please carefully read this instruction manual before use.

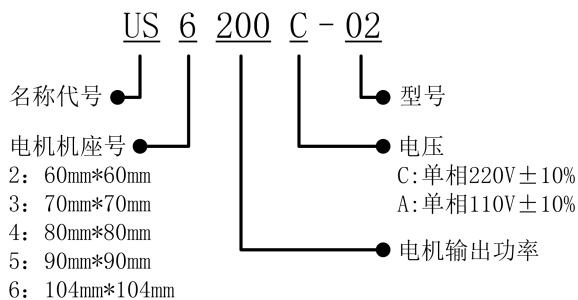
Instructions for Use

- Before use, please inspect whether the packaging is intact, whether the nameplate matches the purchased model, and whether all accessories are complete.
- Accessories: M4×10 screws – 2 pcs;
Terminal cover – 1;
Connection cable — 1 piece.
- Installation, connection, inspection, and other related operations must be performed by qualified technical personnel.
- All wiring operations shall be performed with the power supply disconnected, and wiring shall be carried out in accordance with this manual or the markings on the speed regulator.
- Be sure to connect the grounding terminal to ground.
- For first-time use, please perform a no-load trial run to verify that all functions operate correctly.
- Do not use in explosive atmospheres, environments containing flammable gases, corrosive environments, areas prone to moisture accumulation, or in the vicinity of combustible materials.
- Avoid continuous vibration and excessive impact.
- The motor shall not be operated continuously under prolonged low-speed overload conditions.
- Under normal operating conditions, the surface temperature of the motor housing may occasionally exceed 70 °C. Therefore, in environments where the motor may be touched, users are advised to affix the warning label shown in the figure below!



Model Definition Rules

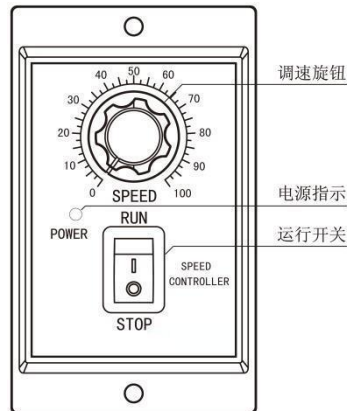
Panel type:



Model Performance Parameters Table:

Model	US206C-02	US315C-02	US425C-02	US540C-02	US560C-02
	US590C-02	US120C-02	US6120C-02	US6140C-02	US6200C-02
Suitable motor	Speed-regulating motor (its rated power must match the rated power of the speed regulator)				
Way to install	Panel-mounted installation				
Mode of speed regulation	Panel potentiometer				
Operating capacitor	Integrated into the speed regulator				
Power input	Single-phase, 220 V ± 10%; 50 Hz/60 Hz				
Speed regulation range	50 Hz: 90–1,350 rpm; 60 Hz: 90–1,550 rpm (50 Hz and 60 Hz refer to two different product models)				
Service environment	-20 °C to +40 °C (no freezing); humidity below 85% (no condensation); Below 1,000 meters above sea level				

Panel Functions

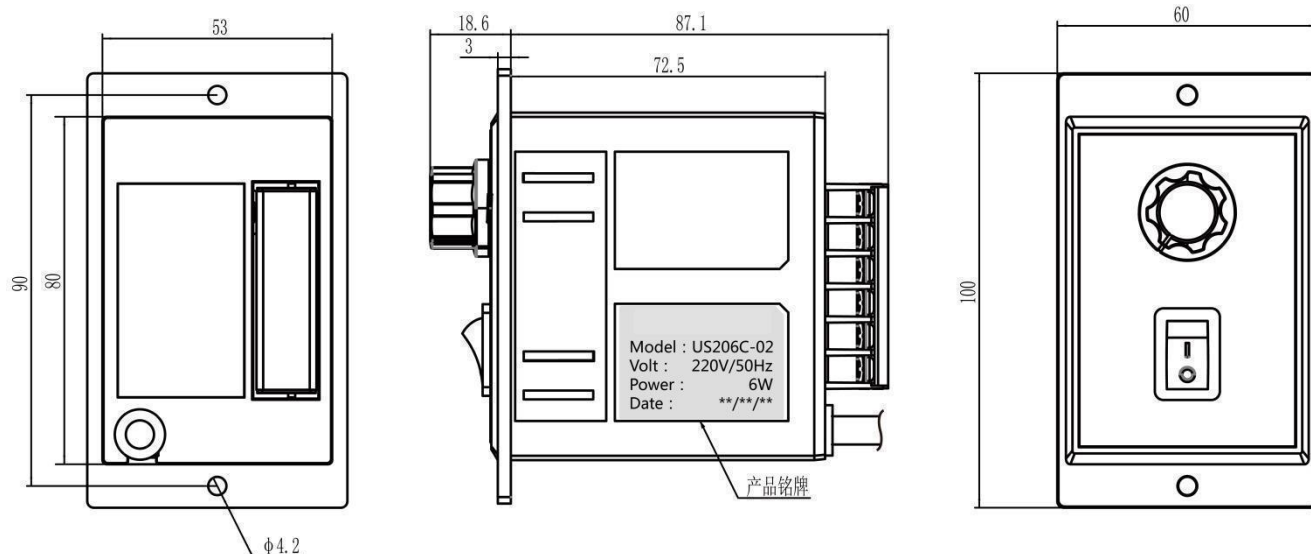


Speed control knob:
Adjust the motor speed.

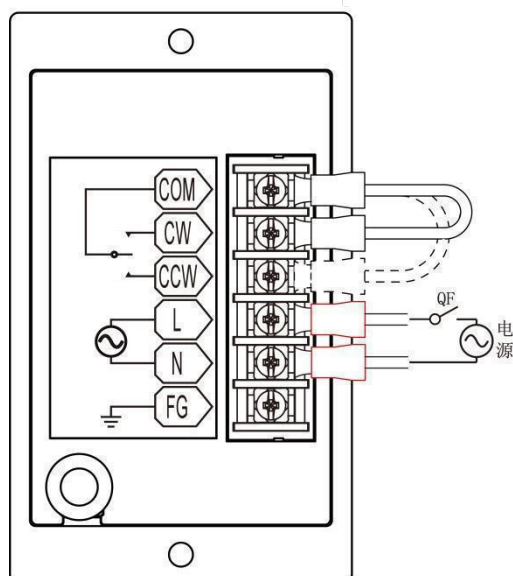
Power light:
The green light indicates that the speed regulator is in
Power-on state.

Running switch:
Control the motor's start and stop.

Dimensions and Installation (Unit: mm)



Regulator wiring diagram



Rotation Direction Setting

To enable forward rotation of the motor: connect "COM" to "CW";

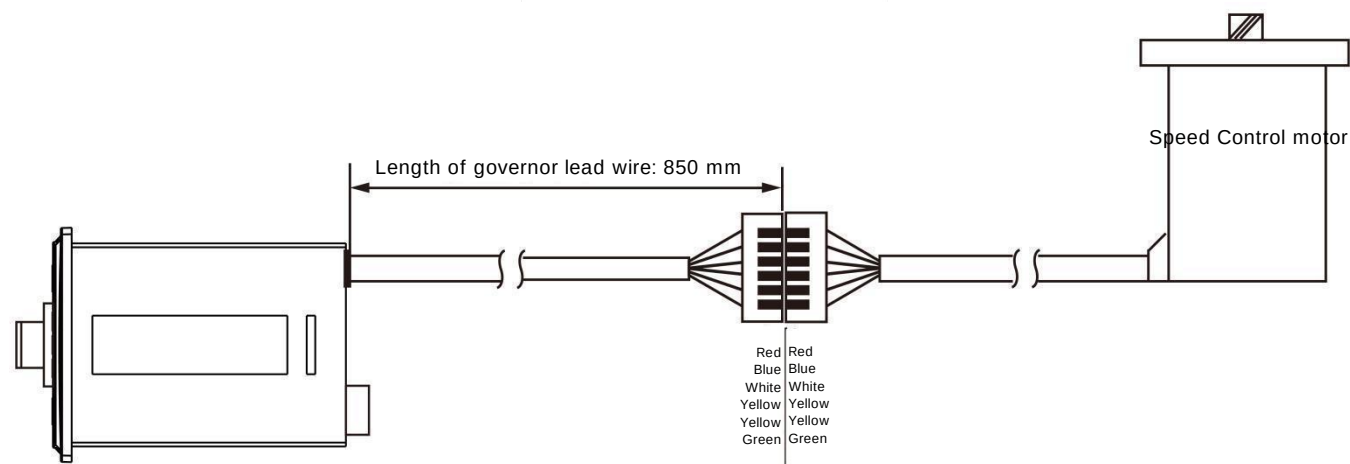
To reverse the motor direction: connect "COM" to "CCW";

Forward/Reverse Switching: Connect the forward and reverse control switches to "COM", "CW", and "CCW", respectively, ensuring that the switch contact rating is not less than 230V/10A. The switching interval shall be greater than 1s.

(High voltage hazard! Live wiring is strictly prohibited !)

The power supply voltage must comply with the voltage specifications of the speed regulator. QF is a circuit breaker that protects the speed regulator and the speed-regulated motor in the event of a short circuit.

Supply voltage	Power of motor	QF Current Rating
220V	6-90W	1A
220V	120-200W	2A
110V	6-90W	2A
110V	120-200W	4A



The pin-out sequence of the terminal wires must correspond one-to-one. Otherwise, it may cause damage to the driver and the motor!