

SAFETY PRECAUTIONS

1. The device must be installed by a qualified person,
2. Disconnect all power before working on the device. Don't touch any terminal when the power is ON.
3. Verify correct terminal connection when wiring.
4. Don't dismantle or repair the device whether it operates normally, otherwise no responsibility is assumed by producer and seller.
5. Never use the device at the site which can be invaded by corrode gas, strong sunshine light and rain.
6. Clean the device with a dry cloth.
7. Fail to follow these instructions will result in serious injury or death.

FEATURES

- Microcontroller based
- LED display for operating voltage value and faults state.
- Protect electrical device against over/under voltage.
- Wide operating voltage 100~400V.
- Parameters setting by keys

APPLICATION

The voltage relay **KD230S** is used to turn off single phase load at unallowable voltage fluctuation with automatic reset after the circuit parameter recovery.

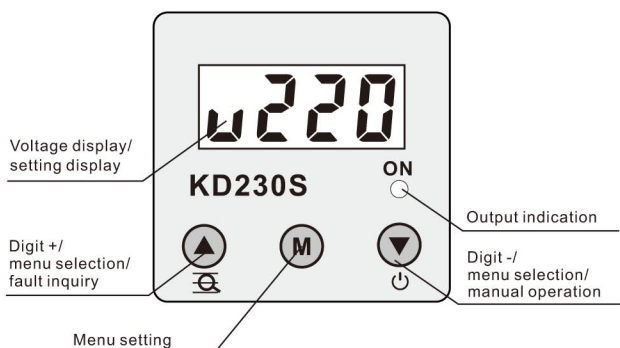
Users can inquire the last fault state with a key too.

TECHNICAL DATA

Rated supply voltage	AC 230V
Operation voltage range	AC 100V~400V
Rated frequency	50Hz
Overvoltage(U>) setting range	220~280V
Undervoltage(U<) setting range	160~210V
U> Hysteresis	5V
U< Hysteresis	3V
Reset/start delay	Ts: 5s~600s
Overvoltage(U>) trip delay	<285V:0.5s; ≥285V:0.1s; ≥380V:0.02s
Undervoltage trip delay	0.5s
Rated insulation voltage	250V
Maximum switching current	16A
Electrical life	10 ⁵
Mechanical life	10 ⁶
Protection degree	IP20
Pollution degree	3
Altitude	≤2000m
Operating temperature	-20°C~55°C
Humidity	≤50% at 40°C (without condensation)
Storage temperature	-30°C~70°C

Technical parameter	Setting range	Step	Factory setting
Overvoltage trip value	220V~280V	1V	250V
Undervoltage trip value	160V~210V	1V	170V
Reset/start delay	5s~600s	1s	10s

FRONT-FACE PANEL



KD230S

HOUSEHOLD SOCKET

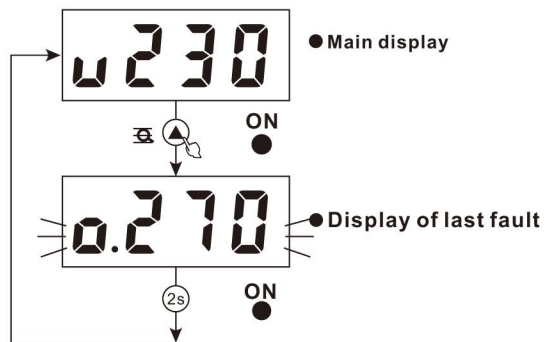
Please read complete instructions prior to installation and operation of the device.

● Reset/start delay display



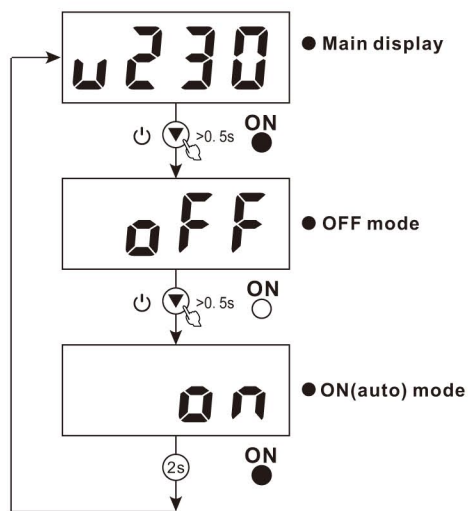
- After applied the supply voltage(no fault), the relay begin the counting of reset/start delay and display the delay time. The ON light glows after the delay is over.

● Inquiry of last fault state



- The relay will exit from the display of fault after 2s delay.

● Switch on/off manually



● Display of overvoltage fault



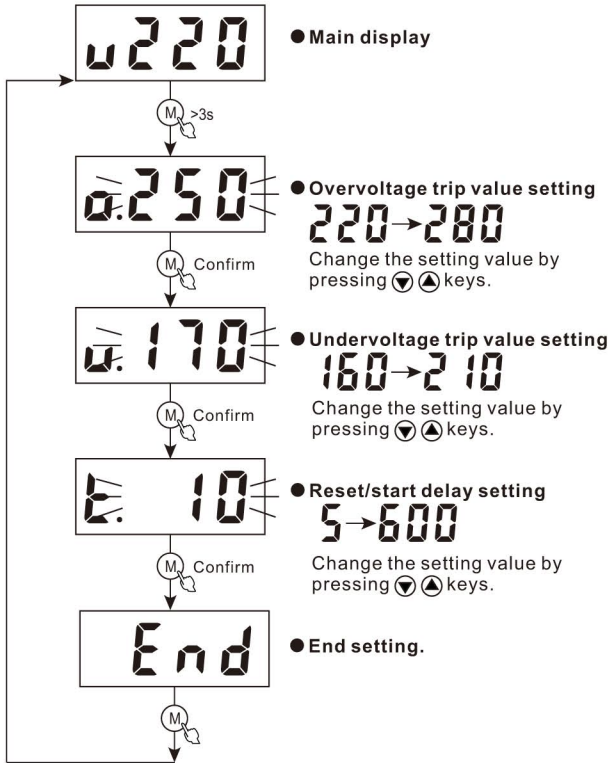
- Overvoltage fault symbol flashes, the ON light goes out.

● Display of undervoltage fault



- Undervoltage fault symbol **u.** flashes, the **ON** light goes out.

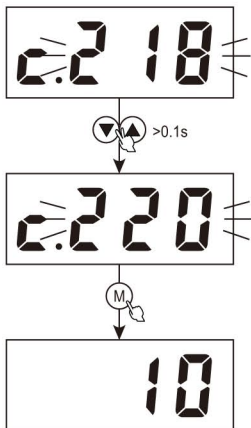
● Main menu setting



- Long press **▼▲** can increase or decrease rapidly.
- The relay will automatically exit from the menu and not save the modified value if not press the keys for continuous 60s during setting.

● Voltage values calibration

Long press **▼▲** simultaneously for 0.1s and then energise the relay.



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- The protector will automatically exit from the menu and not save the modified value if not press the keys for continuous 60s during setting.

OPERATING INSTRUCTIONS

- Set overvoltage, undervoltage trip values and reset/start delay of the relay after connected KD230S to the electric circuit.
- If the controlled voltage exceeds the limit which was preset by the user, the load will be disconnected from the circuit and LED displays the corresponding faults and voltage value. the **ON** light goes out.
- The relay will return to normal state after reset/start delay which was preset by the user if parameters recovers.

DIMENSIONS

