

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
- Double 3 digit display for operating voltage and current value
- Protect electrical device against over/under voltage and overcurrent
- Reset/start delay adjustable(5~600s)
- Parameters setting by keys
- LEDs indication for over/under voltage and over current faults
- 2 Module, DIN Rail mounting

TECHNICAL DATA

Rated supply voltage	AC 220V
Operation voltage range	AC 100V~400V
Rated frequency	50/60Hz
Overvoltage(U>) setting range	220~280V
Undervoltage(U<) setting range	140~210V
Hysteresis	>U: 5V; <U: 3V
Reset/start delay	Ton: 5s~600s
Overcurrent faults trip delay range	Ta: 5s~600s
Overvoltage(U>) trip delay	0.5s
Undervoltage(U<) trip delay	≥120V: 0.5s ,<120V: 0.1s
Overcurrent(I>) trip delay	In<I _r *<I _{max} : Ta; I _r *≥I _{max} : ≤0. 1s
Voltage measurement accuracy	2%
Rated insulation voltage	400V
Output contact	1NO
Electrical life	10 ⁵
Mechanical life	10 ⁶
Protection degree	IP20
Pollution degree	3
Altitude	≤2000m
Operating temperature	-5°C~40°C
Humidity	≤50% at 40°C (without condensation)
Storage temperature	-25°C~55°C

* Operating current value

Technical parameter	Setting range	Step	Factory setting
Overvoltage trip value	220V~280V	1V	250V
Undervoltage trip value	140V~210V	1V	170V
Reset/start delay	5s~600s	1s	5s
Overcurrent faults trip delay	5s~600s	1s	90s

Current specification	32A	63A
Rated operation current(A)	1A-32A	1A-63A
Maximum operating current I _{max} (A, within 10min)	40	80
Max. power of load(kW)	7	13.9

FRONT-FACE PANEL

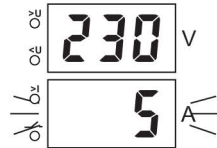


RD-MVA

VOLTAGE AND CURRENT PROTECTOR

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

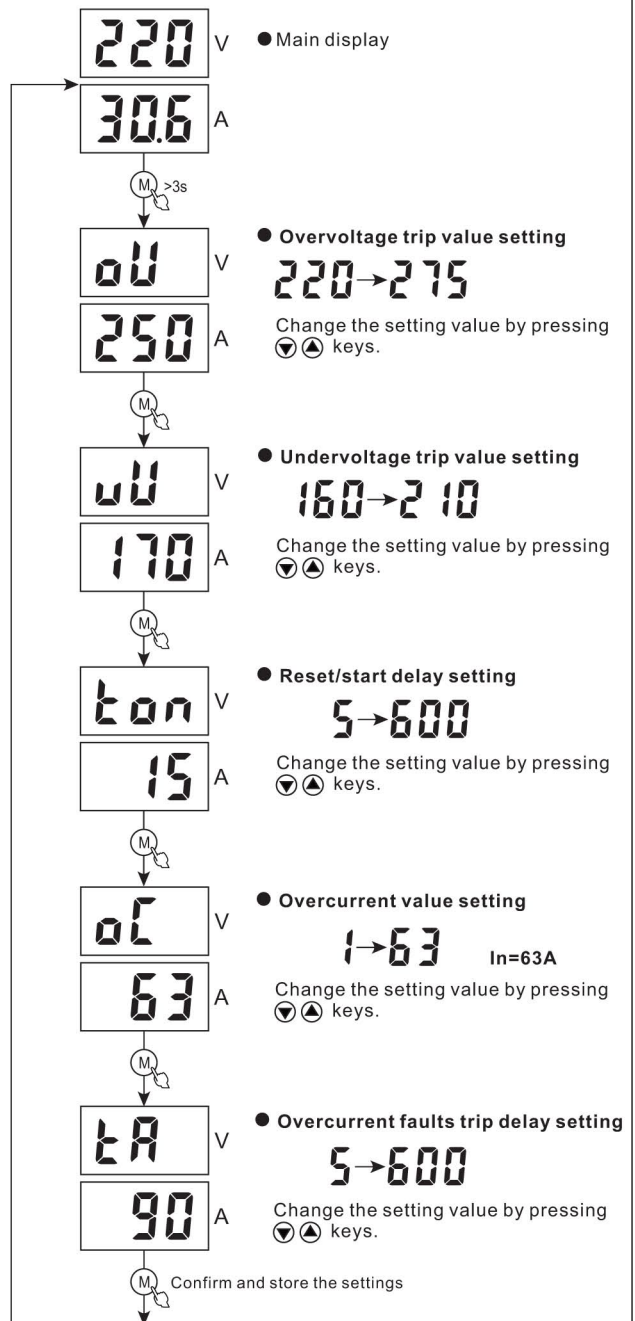
● Reset/start delay display



- Operating voltage will be displayed on display 1 and delay time on display 2 during the counting of start delay; they will be normally ON after the delay is over and the output relay closes.

EXAMPLE OF OPERATION

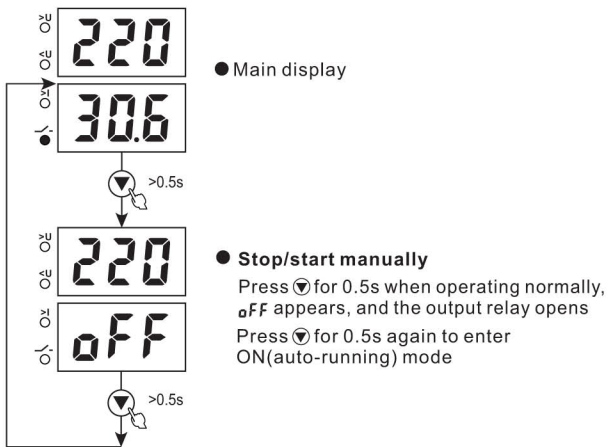
● Main menu setting



- Long press \downarrow \uparrow can increase or decrease rapidly.

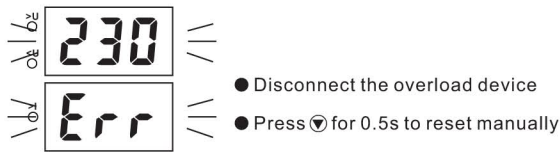
- The relay will automatically exit from the menu and not save the modified value if not pressing the keys for continuous 60s during setting.

● Stop/start manually

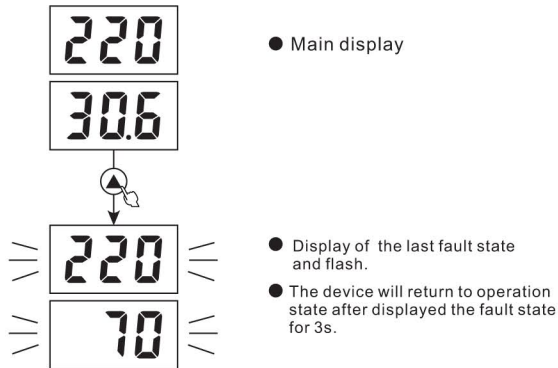


● Display for three continuous I> faults

Display for three continuous overcurrent faults after reset/start delay is over

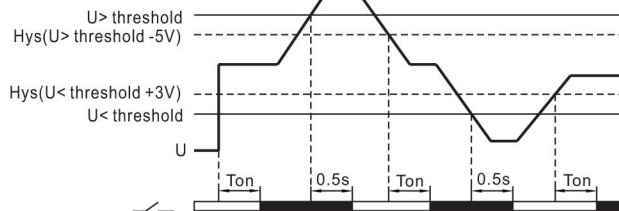


● Inquiry of faults

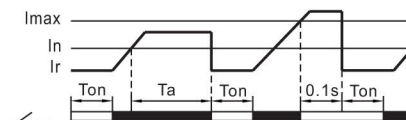


FUNCTION DIAGRAMS

● Overvoltage and undervoltage



● Overcurrent

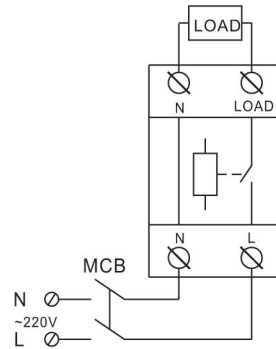


T_{on} : Reset/start delay
 T_a : Overcurrent faults trip delay

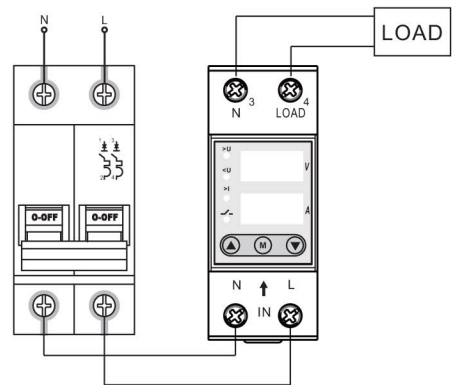
OPERATING INSTRUCTIONS

- If a voltage fault was detected when the reset/start delay of relay is counting, the output relay opens and faults indication LED light up.
- The operating voltage and current values will be displayed on screen when the relay is operating normally. If a voltage or current fault was detected, the output relay opens and fault indication LEDs light up.
- Voltage faults: if input voltage was detected to have returned to Hys after tripped for voltage faults, the relay will reset automatically. During the counting of reset/start delay, faults indication LEDs go out and the operating voltage and current values flash on screen.
Current faults: After the relay tripped for current faults, it will reset automatically. During the counting of reset/start delay, fault indication LED goes out, the operating voltage and current values flash on screen.

SYMBOL



WIRING DIAGRAM



- Rated operating current of circuit breaker is 75% maximum current of the relay
 $I_e = 0.75 \times I_{max}$

DIMENSIONS

