Voltage protector RM-MV



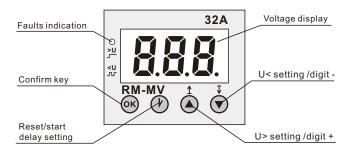
□ Technical data

Rated supply voltage	AC 220V				
Operation voltage range	AC 50V~400V				
Rated frequency	50/60Hz				
Overvoltage(>U) setting range	210~300V				
Undervoltage(<u) range<="" setting="" td=""><td colspan="5">120~210V</td></u)>	120~210V				
Hysteresis	2%				
>U trip delay	0.5s				
<u delay<="" td="" trip=""><td colspan="4">≥120V: 0.5s ,<120V: <0.1s</td></u>	≥120V: 0.5s ,<120V: <0.1s				
Reset/start delay	5s~600s				
Voltage measurement accuracy	≤1%(over the whole range)				
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				

Technical parameter	Setting range	Step	Factory setting
Overvoltage trip value	210V~300V	1V	250V
Undervoltage trip value	120V~210V	1V	170V
Reset/start delay	5s~600s	1s	15s

Current specification	25A	32A	40A	50A	63A
Rated operating current(In,A)	25	32	40	50	63
Maximum operating current Imax (A, within 10min)	30	40	50	60	80
Max. power of load(kW)	5.5	7	8.8	11	13.9
Maximum wire size(mm²)	6	8	10	16	16

☐ Front panel



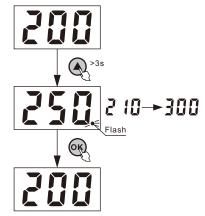
□ Features

- Microcontroller based
- 3 digit display for operating voltage value
- Protect electrical device against overvoltage and undervoltage
- Reset/start delay adjustable(5~600s)
- Voltage measurement accuracy ≤1%
- Parameters setting by keys
- LEDs indication for overvoltage and undervoltage faults
- 3 Module, DIN Rail mounting

□ Example of operation

● Overvoltage(U>) setting

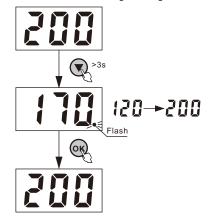
Long press (a) for 3s to enter overvoltage setting menu



- The rightmost dot flashes after entered U> setting menu.
- Change the setting value by pressing keys, long press can increase or decrease rapidly.
- The protector will automatically exit from the menu and not save the modified value if not pressing the keys for continuous 60s during setting

● Undervoltage(U<) setting

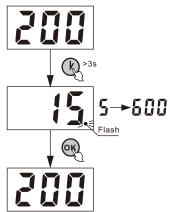
Long press () for 3s to enter undervoltage setting menu



- The rightmost dot flashes after entered U< setting menu.
- Change the setting value by pressing ()
 can increase or decrease repidly.
- The protector will automatically exit from the menu and not save the modified value if not pressing the keys for continuous 60s during setting.

• Reset/start delay setting

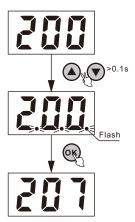
Long press (f) for 3s to enter reset/start delay setting menu.



- The rightmost dot flashes after entered reset/start delay setting
 menu
- Change the setting value by pressing (keys, long press can increase or decrease repidly.
- The protector will automatically exit from the menu and not save the modified value if not pressing the keys for continuous 60s during setting.

Voltage values calibration

Long press () (a) simultaneously for 0.1s to enter voltage value calibration menu after the relay is energized.



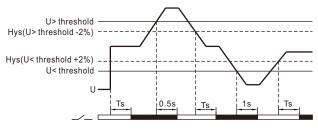
- The three dots flash after entered voltage value calibration menu.
- Change the setting value by pressing keys, long press can increase or decrease repidly.
- The protector will automatically exit from the menu and not save the modified value if not pressing the keys for continuous 60s during setting.

● Reset/start delay display



 Operating voltage value flashes on screen during reset/start delay is the counting; it will be normally ON after the delay is over and the output relay closes.

☐ Function digram

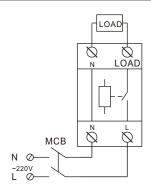


Ts: reset/start delay

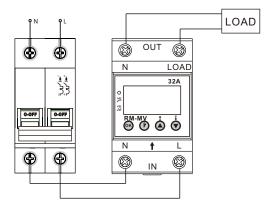
□ Operating instructions

- If a voltage fault was detected when the reset/start delay is counting, the output relay opens and faults indication LEDs light up.
- The operating voltage value will be displayed on screen when the relay is operating normally. If a voltage fault was detected, the output relay opens and faults indication LEDs light up.
- 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 value flashes on screen.

\square Symbol



□ Wiring diagram



 Rated operating current of circuit breaker is 75% maximum current of the relay le=0.75x lmax

$\hfill\Box$ Dimensions

