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.
- Protection parameters setting by knobs
- 10 rated voltage selectable: 208-220-230-240-380-400-415-440-460-480V(3phase 3wire) 120-127-132-138-220-230-240-254-265-277V(3phase 4wire)
- LED indication for supply and output state
- 1 module Din-rail mounting

TECHNICAL DATA

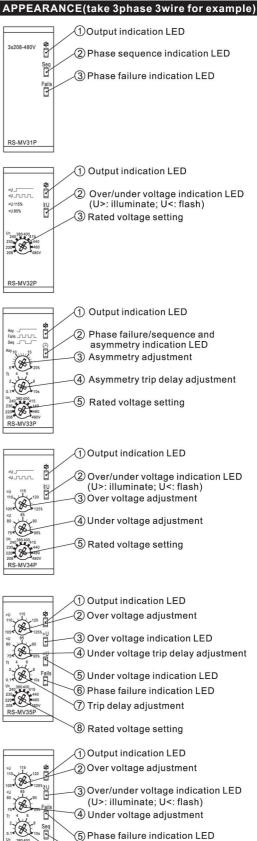
Parameters	3phase 3wire	3phase 4wire			
Supply terminals	L1,L2,L3	L1,L2,L3,N			
Rated voltage(Un)	208-480V	120-277V			
Operation voltage range	165-528V	50-380V			
Measurement range	150-552V	45-400V			
Frequency	50/60Hz				
U> setting value	Adjustable:(105%-125%)xUn; Fixed:115%xUr				
U< setting value	Adjustable:(75%-95%)xUn; Fixed:85%xUn				
Asymmetry setting	Adjustable: 5%~20%; fixed: 8%				
U> trip delay	Adjustable: 0.1~10s; fixed: 2s				
U< trip delay	Adjustable: 0.1~10s; fixed: 2s				
Asymmetry trip delay	adjustable: 0.1~10s; fixed: 2s				
Hysteresis	2%				
Phase failure trip valeue	70%xUn				
Trip time for incorrect phase sequence and phase failure	<0.5s				
Measurement limit	<156V	<50V			
Delay error	±10%+0.1s				
Knob setting error	1% x scale value				
Rated insulation voltage	480V				
Output contacts	1C/O				
Current rating	8A/250V AC1				
Mechanical life	10 ⁶				
Electrical life	10 ⁵				
Protection degree	IP20				
Pollution degree	3				
Altitude	≤2000m				
Operating temperature	-20°C~55°C				
Permissable relative humidity	≤50% at 40°C(without condensation)				
Storage temperature	-30°C~70°C				
Wire size/Torque	0.5mm ~2.5mm /0.5Nm				
Mounting	TH-35 Rail(EN60715)				

Models	U>	U<	Phase failure	Phase sequence	Asymmetry	Operation voltage selectable
RS-MV31P(N)			•	•		
RS-MV32P(N)	•	•	•			•
RS-MV33P(N)			•	•	•	•
RS-MV34P(N)	•	•	•			•
RS-MV35P(N)	•	•	•			•
RS-MV36P(N)	•	•	•	•		•
RS-MV37P(N)	•	•	•	•	•	•

RS-MVP(N) SERIES

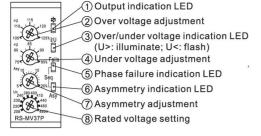
VOLTAGE MONITORING RELAY

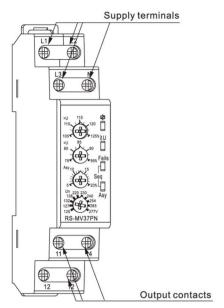
Please read complete instructions prior to installation and operation of the device.



(6) Phase sequence indication LED

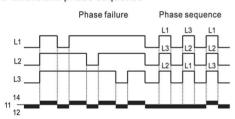
Trip delay adjustment 8 Rated voltage setting



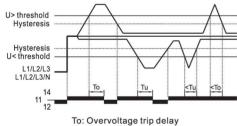


FUNCTION DIAGRAMS

Phase failure and phase sequence

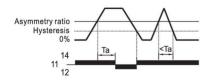


Overvoltage and undervoltage



Tu: Undervoltage trip delay

Asymmetry



Ta: Asymmetry trip delay

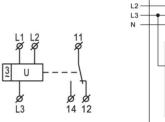
INSTALLATION

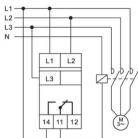
- 1.Set rated voltage by knob. If change the rated voltage setting after energized, four indication LEDs will flash and setting will not come into effect. It need to re-set after disconnected supply.
- 2.If faults detected after relay energized, the output relay stays open
- 3. In the event of a voltage fault, the relay opens at the end of the delay set
- 4. Measured voltage value ≤70%* Un, phase failure protective function activates. Min phase failure voltage for 3phase 3wire is 165V.
- 5. When L1 and L2(3phase 3wire; L1 and N for 3phase 4wire) are disconnected from supply, indication LEDs don't light up.
- 6. RS-MV31P: if supply voltage is lower than 165V, output relay opens and indicate phase failure fault. When supply voltage is higher than 175V, the relay will return to normal state.

Umin: Min phase voltage

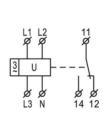
WIRING DIAGRAMS

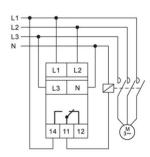
3phase 3wire





3phase 4wire





DIMENSIONS

