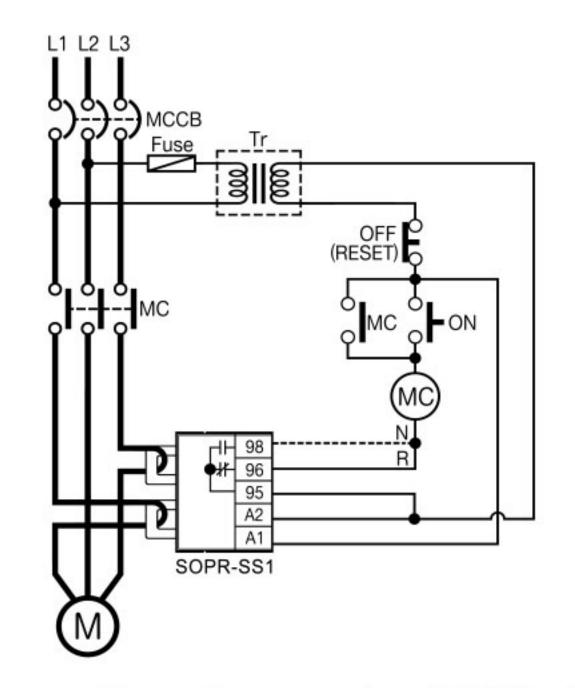
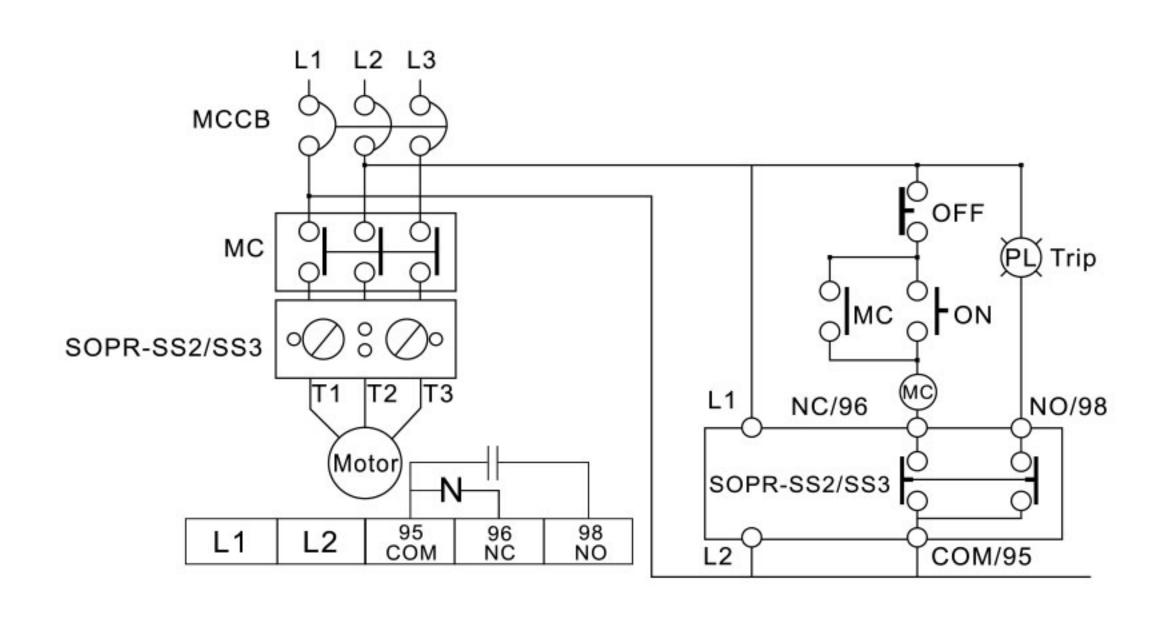
### General

**SOPR** series overload and phase lost relays are designed to prevent the failures originated from motor heat...





## Connection diagram for SOPR-SS1 Usage of Relay and working principle

## Description diagram for SOPR-SS2/SS3

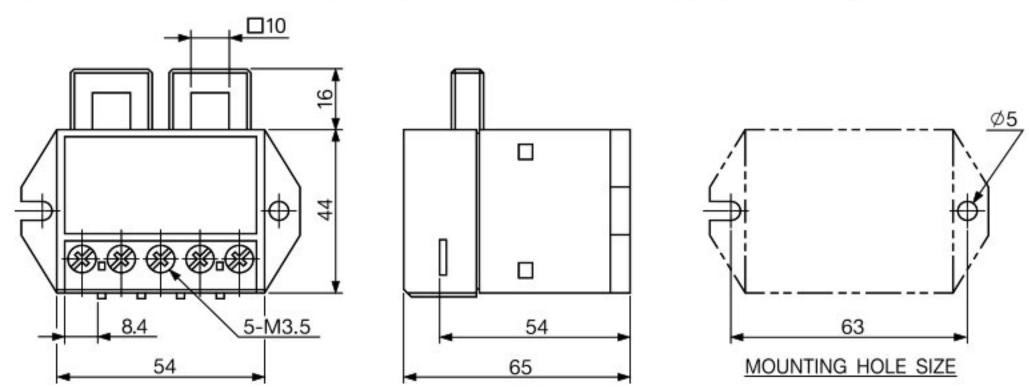
- 1) When commissioning, set start delay time (D-Time knob) to know motor run-up time, or to the maximum, if not known.
- 2) Set trip delay time (O-Time knob) to desired trip time.
- Set load currents (LOAD knob) at the rated full load or desired currents.
- 4) With connections made and control power on, depress TEST button and hold. Verify the red LED illuminates and the internal relay should switch contacts after the sum of D-Time and O-Time. Depress RESET button.
- 5) Start the motor and notice run-up time. Then, slowly turn the LOAD knob counter clockwise, until the LED flashes, where the 100% of the actual load currents is indicated. Set the LOAD knob to the desired trip currents. 110% 125% setting of running current is recommended.
- 6) Reset D-Time knob setting to normal run-up time.

#### Maintenance

Periodic testing of TEST button is recommended to ensure the full protection and regularly as a preventive maintenance

#### Warnings

Authorized technical engineers only for installation, maintenance or repair. Adjust the settings according to the electric characteristics of a motor, an inappropriate setting may cause permanent damage on the motor. External filter should be installed to reduce harmonics in an environment where the AC power contains excessive harmonic than IEC standard. No installation in the site may result in accuracy problem, abnormal operation and mal-function.



**Dimensions for SOPR-SS1** 

# Technical Specifications:

Current Range: .....: TYPE05) 0. 5-6.5A, TYPE30) 3-35A, TYPE60) 5-70A

for SOPR-SS1

TYPE06) 1-6A, TYPE30) 5-30A, TYPE60) 5-60A,

TYPE120) 10-120A for SOPR-SS2/SS3

Operating Voltage (Un) .....:90–260VAC, or 180–480VAC

Operating Frequency·····:50/60Hz

Operating Power·····:<2W

Operating Temperature·····:-20°C·····+55°C

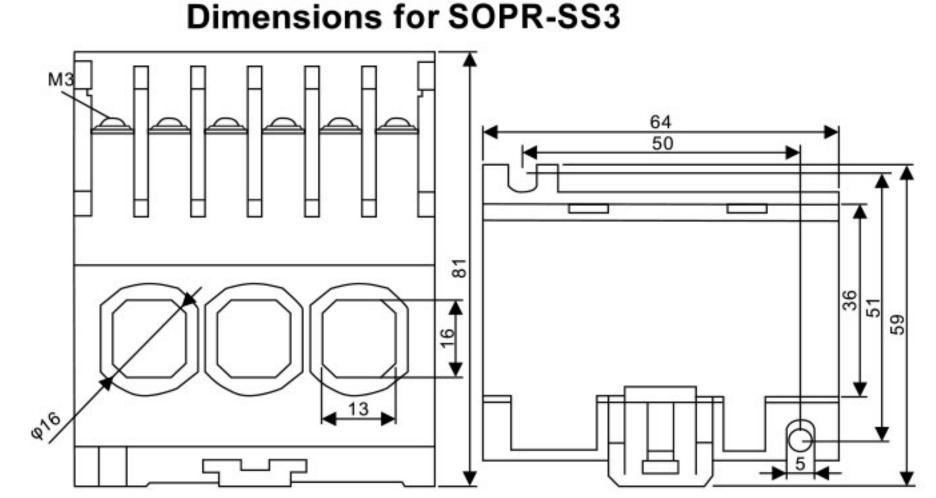
D-Time 0.2-60s, O-Time 0.2-12s for SOPR-SS2/SS3

Asymmetry Set·····::%±10

Contact·····: 5A 250V AC Resistive Load

Connection Diagrams······:35mm Din Rail(D) or Pane(P)

Contact: www.samwha-dsp.com info@samwha-dsp.com MADE IN CHINA



**Dimensions for SOPR-SS2** 

