

# SINGLE PHASING PREVENTOR "SPP"

- Suitable for any H.P. of Motor
- Standard 230V or 380/415V Aux. Supply.
- Provision to minimise Nuisance strips.
- Automatic Reset.
- Low Power Consumption.
- Suitable for any D.O.L. or Star-Delta Starter.
- High class Engineering Plastic enclosure.
- Compact, Light weight and easy to Install.
- DIN Rail (35 mm) Wall mounting facility.
- Voltage sensing upto Motor terminals.



## ABOUT SPP-P

SPP-P is a Single Phase Preventor or Voltage Sensing Phase failure relay. SPP-P energises its relay only under healthy conditions.

## WHY SPP-P IS REQUIRED?

In a three phase Network if one of the phase fails (which Normally goes undetected by conventional Bimetallic overload Relays) the corresponding motor winding loses its voltage. The motor continues to run with the remaining two phases. The voltageless winding acts as a Generator through its rotation in the Magnetic Field. Depending on size, Load and type of the motor, the voltage is thus fed back to the failed phase. If this condition goes undetected the motor current increases in the remaining two phases to dangerous levels leading to burn out.

SPP-P - Single Phase Preventor is especially designed to recognise such a phase failure condition and trip the motor, avoiding the burnout.

## PRINCIPLE OF SPP-P OPERATION

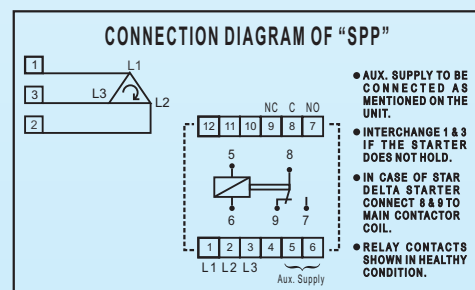
SPP-P senses negative sequence voltage condition of all the three phases continuously. While Monitoring the Negative Voltage Sequence, if it detects a change or when it reaches a preset danger limit, SPP-P thus trips the Starter with time delay and protects the motor from burnout.

## WHERE SPP-P CAN BE USED?

For any Three Phase Motor of any H.P., Power distribution Panel, Machine tools, Irrigation Pumps, Control Panel, Monitor main input supply for monitoring/control, etc.

## TECHNICAL SPECIFICATIONS :

- System Supply Voltage : 230/380/415/440 VAC  $\pm$  20 % @ 50Hz
- Auxiliary Supply Voltage : 230/380/415 VAC  $\pm$  20 % @ 50Hz
- Output : 1 c/o, 6A @ 230VAC (resistive)
- Unbalance Voltage : 40V  $\pm$  6V (fixed)
- Trip time delay : 2 to 5 Sec.
- Resetting mode : Auto reset
- Indications : Power ON, Trip ON
- Mounting : 35 mm Rail, Base/Wall Mounting
- Dimensions in mm : 60(W) x 70(H) x 110(D)
- Weight : 440 gms
- Enclosure : Virgin Plastic ABS



Manufactured by :

**Cogent Controls**

205, Vinay Industrial. Estate., Chincholi Bunder Link Road,  
 Malad-W, Mumbai - 400 064 Tel: 28750421/20  
 Email: [cogentcontrols@gmail.com](mailto:cogentcontrols@gmail.com) / [info.cogentcont@gmail.com](mailto:info.cogentcont@gmail.com)  
 Website : [www.cogentcontrols.com](http://www.cogentcontrols.com)