

Single Phase Preventer (SPP)



Introduction:

More than 90% of burn out of motors are caused by unbalanced voltage supply or phase failure. These faults are mostly undetected by conventional overload relays and due to which normal overload protection doesn't trip on time. Thus, there is a need for a Single Phase Preventer which senses true negative phase sequence and trips the motors.

Technic Single Phase Preventer (SPP) is specifically designed to protect motors from working in unfavourable conditions such as single phasing and unbalanced voltage. When wrong phase sequence is detected by Technic SPP, the motor is automatically switched off and thus prevents rotation of the motor in reverse direction. Technic SPP also provides a time delay feature of 2.5 sec \pm 0.5 sec to avoid false tripping. Technic SPP can be used in any HP rated motor.



Features :

- True negative phase sequence voltage detection
- Definite time delay to avoid tripping miss
- Fully Static
- Low power consumption
- Professionally designed and tested
- A quality product of Technic
- LED for relay operation indication
- Self powered electronic circuitry
- Wide range of operating temperatures
- DIN rail or panel mounting
- Small size and aesthetic appearance

Technical Specifications :

System Voltage	415 V \pm 25%
Frequency Range	50 Hz \pm 5% (47.5 Hz to 52.5Hz)
Under Voltage operation	Yes at 75% (machine incoming voltage)
Unbalanced Voltage	10% or 20%
Setting	Factory Default
Output Contact	IC/O Contact
Trip Time Delay	Fixed delay 2.5 sec \pm 0.5sec.
Recommend Wiring	1.0 Sq. mm
Power Consumption	Less than 2 watts
Enclosure	High impact polystyrene moulded with nylon moduled connection strip
Relay Operation	Relay is energized in healthy supply conditions and trips on single phasing, reverse sequence, unbalanced supply voltage, under voltage or interruptions in Power Supply
Indication	MAINS ON: On during relay non-operated condition (output relay is energized) and is extinguished on operation when output relay resets PH. SEQ. OK: On when correct three phase supply is given to SPP and when output relay is energized
Weight	300 gms (approx.)
Operating Temperature	-20°C to +60°C
Dimension W x H x D	45mm x 71mm x 114mm