

Thermal Overload Relays

Single Phase Preventor

multicomp PRO

**RoHS
Compliant**

Features

- Thermistor Relay combined with Protection against Phase Sequence, Phase Loss & Phase Asymmetry Faults
- Monitors and Protects Motors with Integrated PTC Resistor sensors
- Protection against Over heating for Heavy Duty Load, High Switching Frequency, High operating temperature & Insufficient cooling conditions
- LED indications for Healthy, Unhealthy, Sensor Open/Short and Phase Sequence fault conditions

Specification

Part Number		MP008410	MP008411
Parameters			
Supply Voltage		230V AC (3 Phase 3 Wire)	400V AC (3 Phase 3 Wire)
Supply Variation		-15% to + 15%	
Frequency		50/60 Hz	
Power Consumption		15 VA Max.	24 VA Max.
Trip Settings	Trip Level	2.7k Ω (\pm 5%)	
	Reset Level	1.71k Ω (\pm 5%)	
	Sensor Short	<20 Ω , (\pm 4 Ω)	
	Hysterisis	40 Ω (\pm 4 Ω)	
	Sensor Open	> 20k Ω (\pm 5%)	
Max Cold Res(Ω) of Sensor Chain		<1.5k Ω	
Cable Resistance		20 Ω	
Phase Asymmetry		70V AC (\pm 10V AC)	104V AC (\pm 10V AC)
Asymmetrical Phase Loss		110V AC (\pm 10V AC)	220V AC (\pm 10V AC)
Symmetrical Phase Loss		130V AC (\pm 10V AC)	240V AC (\pm 10V AC)
Restart Voltage		145V AC (\pm 10V AC)	265V AC (\pm 10V AC)
Reset Mode		Auto	
Repeat Accuracy		1%	
Time Delay	Operate Time	< 350 ms	
	Release Time	360 - 550ms for Asymmetrical or Symmetrical Phase Fault & 100ms (max.) for Phase Sequence, Thermistor Trip	
	Reset Time	100 - 750 ms	
Output	Relay Output	1 NO (SPP) + 1 NO (PTC Thermistor)	1 NO (SPP) + 1 NC (PTC Thermistor)
	Contact Rating	5A 'NO' & 3A 'NC' @ 240 VAC / 28V DC (Resistive)	
	Electrical Life	1 x 10 ⁵	
	Mechanical Life	3 x 10 ⁷	

Newark.com/multicomp-pro
Farnell.com/multicomp-pro
sg.element14.com/b/multicomp-pro

multicomp PRO

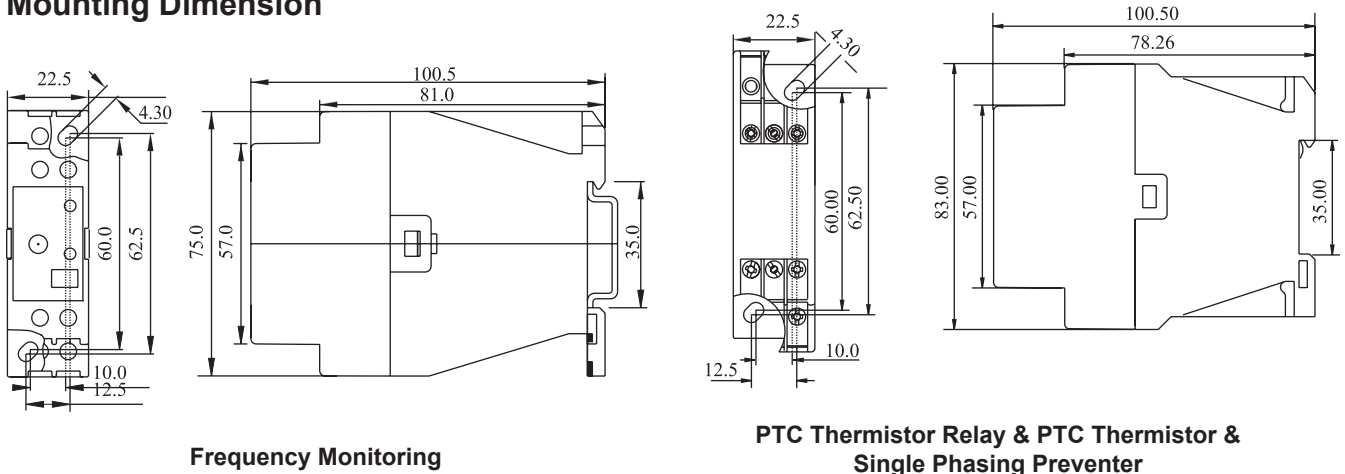
Thermal Overload Relays

Single Phase Preventor

multicomp PRO

Utilization Category	AC - 15	Rated Voltage (Ue): 120/240 V, Rated Current (Ie): 3.0/1.5 A	
	DC - 13	Rated Voltage (Ue): 24/125/250 V, Rated Current (Ie): 2.0/0.22/0.1 A	
LED Indications	Green LED	Continuous ON—Healthy Flashing—Sensor Open	
	Red LED	Continuous ON—Relay ON Flashing—Sensor Short	
	All LEDs OFF	Power Supply Fail	
LED Indications	Green	Continuous ON	Power Supply Healthy
		Continuous OFF	Power Fail
		Flashing	Sensor Open
	Amber	Continuous ON	Over Temperature Trip
		Continuous OFF	Thermistor Relay ON
		Flashing	Sensor Short or Cable Short
	Red	Continuous ON	SPP Relay Trip (For Supply Above Restart Voltage)
		Continuous OFF	SPP Relay ON (After ensuring the input Voltage of 5V above the Restart Voltage)
		Flashing	Supply & SPP Fault below restart voltage
Operating Temperature		- 15°C to +60°C	
Storage Temperature		- 15°C to +70°C	
Humidity (Non Condensing)		95% (Rh)	
Enclosure		Flame Retardant UL94-V0	
Dimension (W x H x D)		22.5mm x 83mm x 100.5mm	
Weight (unpacked)		120 g	
Mounting		Base / DIN rail	
Degree of Protection		IP 20 for Terminals, IP 40 for Enclosure	

Mounting Dimension



Dimensions : Millimetres

Newark.com/multicomp-pro
 Farnell.com/multicomp-pro
 sg.element14.com/b/multicomp-pro

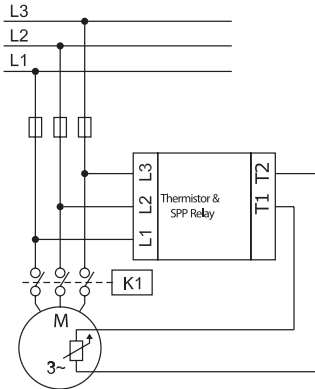
multicomp PRO

Thermal Overload Relays

Single Phase Preventor

multicomp PRO

Connection Diagram



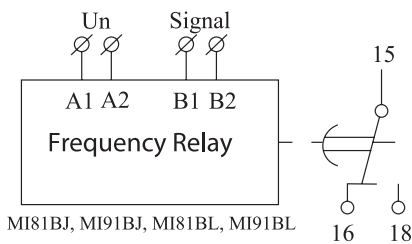
PTC Thermistor & Single Phasing Preventor

Contact Arrangement

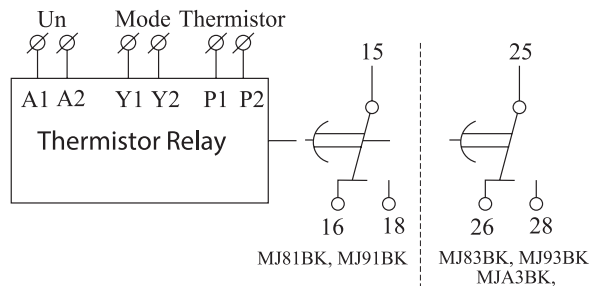
For 1 NO + 1 NO PRODUCT:
ML64BS, MLD4BS



For 1 NO + 1 NC PRODUCT:
ML67BS, MLD7BS

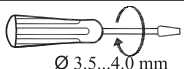



Frequency Monitoring



PTC Thermistor Relay

Terminal Torque & Capacity

 Ø 3.5...4.0 mm	Torque - 0.6 N.m (6 Lb.in) Terminal screw - M3
	Solid Wire - 1 X 1...6 mm ²
AWG	1 X 20 to 12

Frequency Monitoring
PTC Thermistor Relay
PTC Thermistor & Single Phasing Preventor

Part Number Table

Description	Part Number
PTC Thermistor Relay, 400V AC, 1NO + 1NC	MP008411
PTC Thermistor Relay, 400V AC, 2 x 1NO	MP008410

Important Notice : This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.

Newark.com/multicomp-pro
Farnell.com/multicomp-pro
sg.element14.com/b/multicomp-pro

multicomp PRO