# Voltage Monitoring Relays



RoHS Compliant

### **Features**

- · Protects against Phase Loss, Phase Reversal & Phase Asymmetry
- · No Auxiliary Supply needed
- · Voltage Sensing principle
- 1 C/O & 2 C/O Configurations
- Designed to meet Industrial and Agricultural segment applications

# **Specification**

Part Number	er	MP008400	MP008401					
Parameters	;							
Supply Voltage		415V AC						
Frequency		50Hz to 60Hz						
Power Cons	umption	5 VA Max.						
Trip	Phase Loss	Yes						
Settings	Phase Sequence	Yes						
	Phase Asymmetry	65 V ( 10V)	40 V ( 10 V)					
	Hysterisis	10 to 18 V						
Time	ON Delay	2 s ( 2 s)						
Delay	Trip Time (OFF Delay)	7 s ( 2 s)						
Output	Relay Output	1 C/O						
	Contact Rating	5A (For 'NO') & 3A (For 'NC') @ 250 VAC / 28V DC (Resistive)						
	Electrical Life	1 × 10 <sup>5</sup>						
	Mechanical Life	3 × 10 <sup>6</sup>						
Utilization	AC - 15	Rated Voltage (Ue): 120/240 V, Rated Current (Ie): 3.0/1.5 A						
Category	DC - 13	Rated Voltage (Ue): 24/125/250 V, Rated Current (Ie): 2.0/0.22/0.1 A						
LED Indicati	on	Red—Relay ON (Healthy), See Note 1						
Operating Temperature Storage Temperature		-15°C to +50°C -20°C to +65°C						
Humidity (Non Condensing)		95% (Rh)						
Enclosure		Flame Retardant UL94-VO						
Dimension (W x H x D)		36mm × 90mm × 60mm						
Weight (unpacked)		120 g						
Mounting		Base / DIN rail						
Degree of Protection		IP 20 for Terminal, IP 40 for Enclosure						



# Voltage Monitoring Relays multicomp PRO



#### **Features**

- · Phase loss (failure) detection
- · Neutral loss detection
- Phase reverse detection
- Phase asymmetry
- Adjustable Over & Under voltage trip level
- · LED indication for all failure conditions
- · Automatic recovery on fault removal

## Specification

Part Number			MP008404							
Parameters		•								
Supply Voltage		415V AC (Ph-	415V AC (Ph-Ph); 3 Phase, 4 Wire							
Frequency		47Hz to 53Hz	47Hz to 53Hz							
Power Consumption		10 VA Max.								
	Phase Loss	Yes	Yes							
	Phase Sequence	Yes	Yes							
Trip	Phase Asymmetry	94V ± 4V (Ph-	-Ph)							
Levels	Under Voltage	55% to 95%								
	Over Voltage	105% to 125%	6							
	Hysterisis	7 V ( 2 V)								
	ON Delay	5 s ±1 s	'							
Time Delay	Trip Time (OFF Delay)		ure phase Imbalance / Over Voltage	5 s ±1 s (Fixed)						
		For Neutral Fa	ail	500 ms -1s						
	Relay Output	2 C/O								
Output	Contact Rating	5A @ 250V A	C / 28V DC (Resistive)							
Output	Electrical Life	1 × 10 <sup>5</sup>	'							
	Mechanical Life	1 × 10 <sup>7</sup>								
Utilization	AC - 15	Rated Voltage	e (Ue): 120/240 V, Rate	d Current (le):	3.0/1.5 A					
Category	DC - 13	ted Current (le): 2.0/0.22/0.1 A								
	Power ON	Respective fault condition will be indicated by LED immediately & Rel be tripped after specified trip time only.								
		Green	UV	OV	Blink: ASY, ON: REV					
		ON	OFF	OFF	OFF					
	Phase reverse	ON	OFF	OFF	ON					
	Asymmetry	ON	OFF	OFF	BLINK					
LED Indication	UV	ON	ON	OFF	OFF					
	OV	ON	OFF	ON	OFF					
	Phase Fail	BLINK	OFF	OFF	OFF					
	Phase Fail *	BLINK	ON	OFF	BLINK					
	Neutral Fail	ON	BLINK	BLINK BLINK						
	* Phase fail indication	s when I/P voltag	es are below UV set po	oint and below	asymmetry					

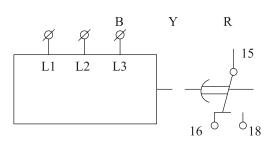


# Voltage Monitoring Relays multicomp PRO



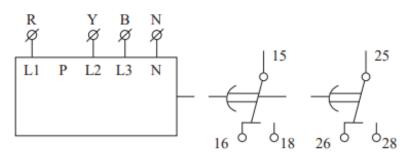
Operating Temperature Storage Temperature	-10°C to +60°C -10°C to +70°C
Humidity (Non Condensing)	95% (Rh)
Enclosure	Flame Retardant UL94-VO
Dimension (W x H x D)	36mm × 90mm × 60mm
Weight (unpacked)	120 g
Mounting	Base / DIN rail
Degree of Protection	IP 20 for Terminal, IP 40 for Enclosure

# **Connection Diagram**

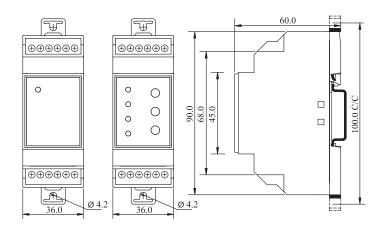


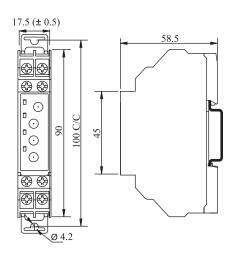
MP008400 / MP008401

### **Three Phase**



MP008404





Dimensions: Millimetres



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# **Terminal Torque & Capacity**

Ø 3.5 mm	Torque - 0.54 N.m (5 Lb.in) Terminal screw - M2.6					
	Solid Wire - 1 X 0.23.3 mm <sup>2</sup>					
AWG	1 X 24 to 12					

Ø 3.55.0 mm	Torque - 1.1 N.m (10 Lb.in) Terminal screw - M3.5
	Solid Wire - 2 X 0.22.5 mm <sup>2</sup>
AWG	1 X 24 to 10

# **Product Selection Chart: Voltage Monitoring**

Part Number	3-Phase 3-Wire	3-Phase 4-Wire	1 -Phase	Under Voltage Protection	Over Voltage Protection	Phase Loss Protection	Phase Sequence Protection	Phase Asymmetry Monitoring	Setta- blew ON Delay	Settable OFF Delay	1 C/O Relay Output	2 C/O Relay Output	Neutral Loss Protection	115V AC	208 to 480V AC	240V AC	415V AC
MP008400						•	•	•			•						•
MP008401						•	•	•			•						•
MP008404				•	•	•	•	•				•	•				

### **Part Number Table**

Description	Part Number
Single Phasing Preventor with 65V AC Asymmetry	MP008400
Single Phasing Preventor with 40V AC Asymmetry	MP008401
Neutral Loss Protection with Phase and Voltage Control	MP008404

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