

# Voltage Monitoring Series SM 501

- Protects against Phase Loss, Phase Reversal & Phase Asymmetry
- Suitable for 3 Phase 3 Wire system
- Selectable Under Voltage / Over Voltage Trip level
- Selectable Time Delay
- Models for Selectable Phase Asymmetry
- LED Indications for Power and Fault conditions
- Voltage Sensing Principle
- 2 C/O Configuration





## Ordering Information

Cat. No.	Description
MG53BH	415 VAC, UV / OV & Single Phasing Preventor (SPP) with Selectable ON Delay (0.5 to 15 sec), 2 C/O
MG53BF	415 VAC, UV / OV & SPP with Selectable OFF Delay (0.5 to 15 sec), 2 C/O
MG63BH	220 VAC, UV / OV & SPP with Selectable ON Delay (0.5 to 15 sec), 2 C/O
MG63BF	220 VAC, UV / OV & SPP with Selectable OFF Delay (0.5 to 15 sec), 2 C/O

# Voltage Monitoring Series SM 501



Cat. No.		MG53BH	MG53BF	MG63BH	MG63BF
<b>Parameters</b>					
Supply Voltage (φ)		415 VAC (3 Phase, 3 Wire)		220 VAC (3 Phase, 3 Wire)	
Frequency		50/60 Hz			
Power Consumption (Max.)		10 VA		5 VA	
Trip Settings	Phase Loss	Yes			
	Phase Sequence	Yes			
	Phase Asymmetry	10% (of φ)			
	Under Voltage	55% to 95% (of φ)			
	Over Voltage	105% to 125% (of φ)			
	Hysteresis	7 V (± 2 V) of Trip Voltage			
Time Delay	ON Delay	0.5 to 15 s (Selectable)	5 s	0.5 to 15 s (Selectable)	5 s
	Trip Time (OFF Delay)	5 s	0.5 to 15 s (Selectable)	5 s	0.5 to 15 s (Selectable)
Output	Relay Output	2 C/O			
	Contact Rating	5A @ 250 VAC / 28 VDC (Resistive)			
	Electrical Life	1X10 <sup>5</sup>			
	Mechanical Life	3X10 <sup>6</sup>			
Utilization Category	AC - 15	Rated Voltage (U <sub>e</sub> ): 120/240 V, Rated Current (I <sub>e</sub> ): 3.0/1.5 A			
	DC - 13	Rated Voltage (U <sub>e</sub> ): 24/125/250 V, Rated Current (I <sub>e</sub> ): 2.0/0.22/0.1 A			
LED Indication		Separate indications for Power ON, UV and OV; ON: Phase Reverse; BLINK: Phase Asymmetry			
Operating Temperature		-15° C To + 55° C			
Storage Temperature		-25° C To + 70° C			
Humidity (Non Condensing)		95% (Rh)			
Enclosure		Flame Retardant UL 94-V0			
Dimension (W x H x D) (in mm)		36 X 90 X 60			
Weight (unpacked)		120 g			
Mounting		Base / DIN rail			
Degree of Protection		IP 20 for Terminals, IP 40 for Enclosure			
Certification		 			

## EMI / EMC

Harmonic Current Emissions	IEC 61000-3-2
ESD	IEC 61000-4-2
Radiated Susceptibility	IEC 61000-4-3
Electrical Fast Transients	IEC 61000-4-4
Surges	IEC 61000-4-5
Conducted Susceptibility	IEC 61000-4-6
Voltage Dips & Interruptions (AC)	IEC 61000-4-11
Conducted Emission	CISPR 14-1
Radiated Emission	CISPR 14-1

## Environmental

Cold Heat	IEC 60068-2-1
Dry Heat	IEC 60068-2-2
Vibration	IEC 60068-2-6
Repetitive Shock	IEC 60068-2-27
Non-Repetitive Shock	IEC 60068-2-27

Note: 1) Voltage Setting Accuracy: ± 5 % of Full Scale; Time Setting Accuracy: ± 10 % of Full Scale

2) In the event of Phase Sequence or Phase Loss, OFF Delay is 100 ms