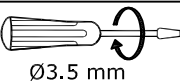



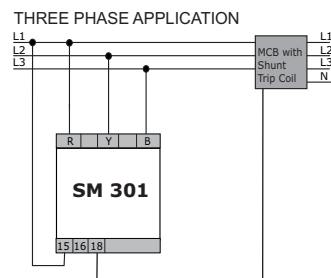
TECHNICAL SPECIFICATION:

Cat. No.:		MA59B5	
Functions		Phase and Voltage Control	
Supply Voltage (☞)		3-Phase 3-Wire, 415 VAC	
Supply Tolerance		- 25% to + 10% of ☞	
Frequency		50 / 60 Hz	
Power Consumption		4 VA (Max.)	
Trip Conditions	Asymmetry/Phase Fail	30% (+/- 4.4%)	
	Hysteresis	7 % (+/- 4.4 %)	
	Phase Reverse	NA	
	Under Voltage	NA	
	Over Voltage	NA	
Time Delay	Recovery Delay	2 sec	
	Trip Delay	≤ 500 msec	
LED Indication	RED LED	Condition/Faults	Indication or Status of LED
		Healthy Power ON	Continuous ON
		Phase Asymmetry	Blink (200 msec ON, 200 msec OFF)
		Phase Reverse	NA
		Under Voltage	NA
		Over Voltage	NA
Relay Output	Contact Arrangement	1 C/O	
	Contact Rating	5A (Res.) @ 240VAC / 30 VDC	
	Contact Material	Ag Alloy	
Mechanical Life Expectancy		1 x 10 ⁶ Operations	
Electrical Life Expectancy		1 x 10 ⁵ Operations	
Operating Temperature		-10°Cto+55°C	
Storage Temperature		-20°Cto+70°C	
Humidity (Non-Condensing limits)		Max. 95%	
Max. Operating Altitude		2000 m	
Degree of Protection		IP-20 for Terminals; IP-40 for Housing	
Pollution Degree		Type II	
Housing		Flame Retardant UL 94-V0	
Mounting		Base / Din-Rail (35 mm symmetrical)	
Dimensions in mm (WxHxD)		30 x 60 x 90	
Weight (Unpacked)		120 g Approx.	
Certifications		CE, RoHS	

Terminal Details :

 Ø3.5 mm	0.54 N.m (5 Lb.in) Terminal screw - M2.6
	1 x 0.2...3.3 mm ² Solid Wire
AWG	1 x 24 to 12

CONNECTION DIAGRAM :



CERTIFICATION :

EMI/EMC :

Product	IEC 60255	
Harmonic Current Emission	IEC 61000-3-2	Class A
ESD Immunity	IEC 61000-4-2	Level II
Radiated Susceptibility	IEC 61000-4-3	Level III
Electrical Fast Transients	IEC 61000-4-4	Level IV
Surge Immunity	IEC 61000-4-5	Level IV
Conducted Susceptibility	IEC 61000-4-6	Level III
Voltage Dips, & Interruptions (AC)	IEC 61000-4-11	
Conducted Emission	CISPR 14-1	Class A
Radiated Emission	CISPR 14-1	Class A

Safety :

Test Voltage between I/P and O/P	IEC 60947-5 / UL 508	2kV
Test Voltage between all terminals and enclosure	IEC 60947-5 / UL 508	2.5kV
Impulse Voltage between I/P and O/P	IEC 60947-5-1	Level III
Single Fault	IEC 61010-1	
Insulation Resistance	UL 508	>50 kΩ
Leakage Current	UL 508	<3.5 mA

Environmental :

Cold Heat	IEC 60068-2-1	
Dry Heat	IEC 60068-2-2	
Repetitive Shock	IEC 60068-2-27	40 g, 6 ms
Non-Repetitive Shock	IEC 60068-2-27	30 g, 15 ms

Caution :

- Do not touch the terminals while power is being supplied.
- Tighten terminal screws with the specified torque.
- Always follow instructions stated in product leaflet.
- Before installation, check to ensure that specifications agree with intended application.
- Installation to be done by skilled electrician.
- Suitable dampers should be provided in the event of excessive vibrations.

SUPPLY MONITORING DEVICE 3-Phase 3-Wire

Cat. No.:

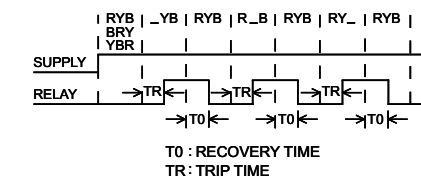


MA59B5

MAIN FEATURES :

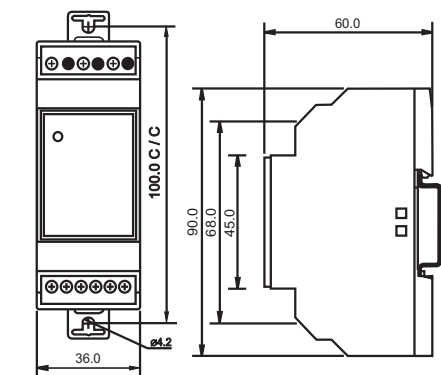
- Phase Loss detection.
- Failure due to Asymmetry 30%.
- Fixed Recover & Trip Time Delay.
- SPDT Relay output (5A, Resistive).
- Din rail & base mounting.
- Energies to trip relay (Non-Fail safe).

WAVEFORM:



Note: Shunt trip coil needs manual reset.

OVERALL & MOUNTING DIMENSIONS (in mm)



Note :

The technical information provided in this document is correct at the time of going to the press. Product innovation being a continuous process, we reserve the right to alter specifications without any prior notice.