

Product Features



- Micro controller based motor protection relay.
- Bypass of unwanted parameter can be programmed.
- Trip delay time programmable for each parameter separately.
- Relay can be programmed for relay to get energized during healthy or unhealthy condition.
- Program lock facility available.
- Instant values of parameter displayed during healthy status. Reason for tripping displayed during unhealthy status.
- Auto / Manual
- Parameters: Phase- Phase missing (failure), phase reversal (sequence) and phase unbalance, Voltage - under voltage, over voltage based on 415V AC, Current - Under current, Over current based on nominal current set, Frequency - Under frequency, Over frequency
- CT primary can be programmed up to 2500 in steps of 5. CT secondary will be factory set for 5.
- MPR-E1- Panel / Flush mounting, MPR-G1- Din rail mounting

Specifications

Model	MPR-E1	MPR-G1
Function	Monitoring and controlling of phase missing, negative phase sequence, phase unbalance, under voltage, over voltage, under current, over current, under frequency, over frequency and earth current leakages	
Rated supply voltage	440V AC, 3 phase, 3 wire	415V AC, 3 phase, 4 wire
Operating voltage range	-30% to 20% of rated voltage	
Rated frequency	50Hz \pm 5%	
Power consumption	AC approx. 34VA / 7W	
Control relay output	1c/o rated for 5A@250V AC / 28V DC resistive load	
Under voltage response	60% to 70% of rated supply @ ambient temperature coefficient of 0.5V / °C	
Recovery time	100msec minimum	
Ambient temperature	Operation: -10°C to +55°C, Storage: -25°C to 80°C	
Humidity	Max. 85% RH @ 40°C	
Service life (under no load)	10 ⁶ operations minimum	
Electrical life (under full load)	10 ⁵ operations minimum	
Rated frequency of operation	1800 \pm 5% operations per hour maximum	
Insulation resistance	>100Mohms @ 500V DC	
Di-electrical strength	1. 2.5KV AC, 50Hz for 1minute. (Between current carrying and non-current carrying parts). nn 2. 1.5KV AC, 50Hz for 1minute. (Between contacts and control circuit). nn 3. 750VAC, 50Hz for 1minute. (Between non-continuous contacts of the relay). n	
Electrical connection	Screw type terminals with self lifting clamps	
Mode of operation	Manual / Auto	
Dimension (over-all)	45 x 75 x 116mm (W x H x D)	

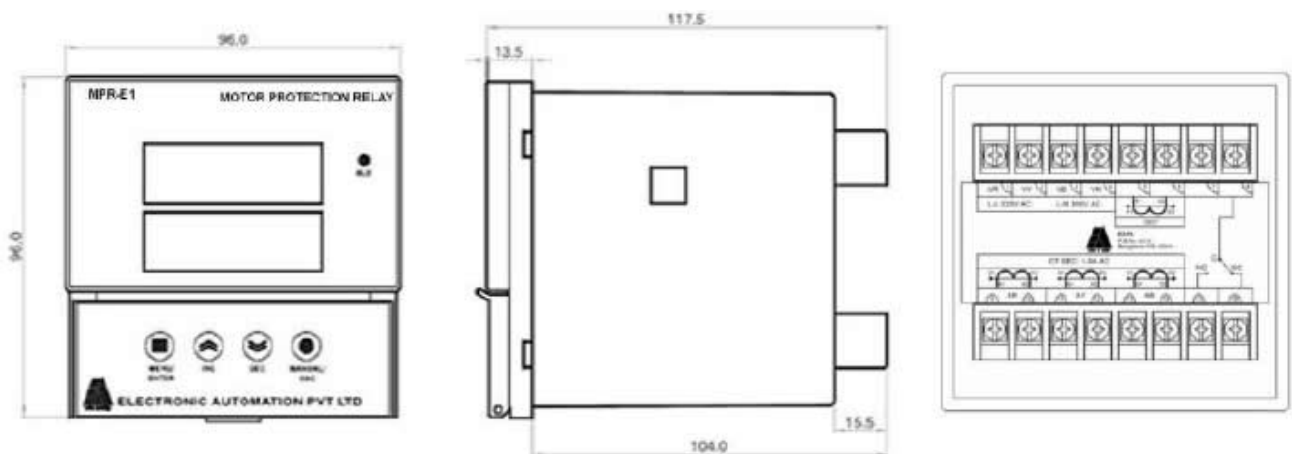
Connections

MPR-E1

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16

1, 2, 3, 4 : R, Y, B, N
 5, 6 : S1 & S2 Earth leakage
 8 : Relay common
 9, 10 : S1, S2 (R Phase)
 11, 12 : S1, S2 (Y Phase)
 13, 14 : S1, S2 (B Phase)
 15, 16 : NO, NC
 7 : Dummy

Dimensions



Accessories

- Panel locking clamps 2 Nos.
- RC filter (snubber)

Caution

- If the input voltage shoots beyond specified voltage range the unit will be damaged beyond repairs. Suitable protection for incoming voltage is recommended.
- Program lock and auto reset terminals are potential free (zero volt). Any voltage given across these terminals will damage the unit permanently.
- Use 2.5mm² U-type lugs with sleeve to make proper & even contacts.