

## Digital Monitoring Device PMR-01A

### Features

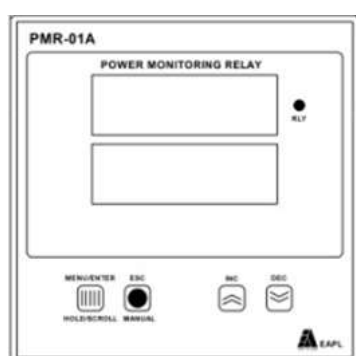
- Monitors and trips the circuit after the set trip delay time when ever power Unhealthiness (phase failure, phase sequence, phase unbalance under voltage, over voltage, under frequency, over frequency or earth leakage current, under current, over current) occurs.
- User can set the in-rush time depending on his system during which over Current feature will be in disabled condition.
- User can program earth leakage current limits.
- Displays all the 3 phase voltages (Line to Line and Line to neutral) 3phase currents, average frequency in a scrolling fashion during healthy condition.
- CT primary can be programmed up to 2500 in steps of 5.
- CT secondary will be factory set for 5.
- PMR-01– Panel / Flush mounting.
- Unit will retain fault till accepted in manual mode.



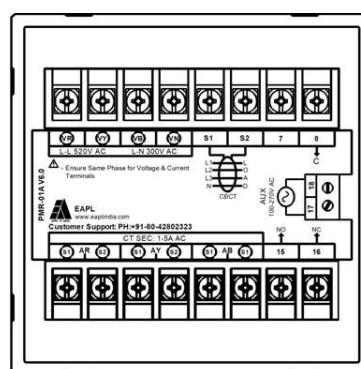
### Ordering Information

Models	Function	Source Voltage	Output
PMR-01A	Power Monitoring Relay	415V AC 3 phase, 4 wire & Auxiliary supply 100-270 V AC	1 c/o, 10A resistive

### Front View



### Rear View



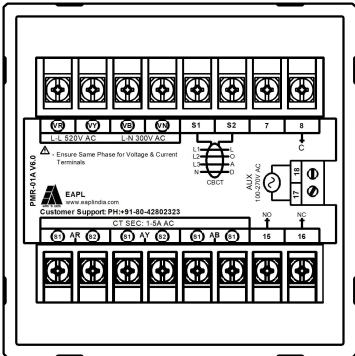
### Over-all Dimension

Models	Dimension Details in mm			Cutout Dimension in mm	
	W	H	D	W	H
PMR-01A	96	96	95.5	92	92

## ■ Specifications

<b>Model</b>	<b>PVMR-01A</b>
<b>Function</b>	Phase Unbalance, Phase Reversal, Phase Failure, Under and Over Voltage, Under and Over Current, Under and Over Frequency, Earth Leakage Monitor and Control.
<b>Auxiliary supply</b>	100 to 270V AC, 50Hz
<b>System Input</b>	
<b>Input Voltage</b>	415V AC(3Ph-4W)
<b>Input Current</b>	Current input (AR,AY,AB) Ib=5A
<b>Input Frequency</b>	50 Hz, $\pm 10\%$
<b>Control output</b>	1 c/o rated for 10A @ 250VAC /28VDC resistive load(NO) 5A @ 250VAC /28VDC resistive load(NC)
<b>Power Consumption</b>	AC approx. 5VA, DC approx. 1W
<b>Accuracy</b>	
<b>Voltage</b>	$\pm 4V$ of display value
<b>Current</b>	$\pm 5\%$ of Ib $\pm 1$ digit (Ib = 5A)
<b>Frequency</b>	$\pm 2\%$ of FS $\pm 1$ digit
<b>Trip Time</b>	$\pm 1\%$ of set delay $\pm 2$ sec
<b>Earth leakage current</b>	$\pm 500mA$ of setting accuracy
<b>General</b>	
<b>Nominal current</b>	0.5A to 500A (External CT's shall be used above 5A, CT setting max 2500/5 in steps of 5)
<b>Trip time delay</b>	1to 250secs settable for UB,OV,UV,OC,UC
<b>Earth leakage Trip time delay</b>	5 sec Earth leakage
<b>Phase Failure trip time delay</b>	< 5 sec
<b>Phase reverse trip time delay</b>	Instantaneous
<b>Frequency trip time delay</b>	Instantaneous
<b>Recovery Time</b>	2 sec Min
<b>Power On Delay</b>	10 sec Max
<b>Inrush current delay</b>	1 to 60sec settable
<b>Mode of Operation</b>	Auto/ Manual
<b>Core Balance Current Transformer type</b>	Toroidal core
<b>CBCT Size Internal Diameter</b>	100mm
<b>Climatic</b>	
<b>Ambient Temperature</b>	Operation: $-10^{\circ}C$ to $+55^{\circ}C$ Storage : $-25^{\circ}C$ to $+80^{\circ}C$
<b>Humidity</b>	
<b>Mechanical Endurance</b>	
<b>Service life (under no load)</b>	$10^6$ operations minimum
<b>Rated frequency of operation</b>	$1800 \pm 5\%$ operation per hour max
<b>Electrical Endurance</b>	
<b>Electrical life (under full load)</b>	$10^5$ operations minimum
<b>Electrical Safety</b>	
<b>Insulation resistance</b>	>100M ohms @ 500V DC
<b>Dielectric</b>	1) 2.5KV AC, 50Hz for 1 minute.(Between current carrying & non-current carrying parts) 2) 1.5KV AC, 50Hz for 1 minute.(Between contacts & control circuit) 3) 750V AC, 50Hz for 1 minute.(Between non-continuous relay contacts )
<b>Electrical connection</b>	Screw type terminals with self lifting clamps.
<b>Dimension</b>	96 X 96 X 95.5 mm (W X H X D)

## Connection and Terminal Details

	PMR-01A
Connection Details	
	PMR-01A
Terminal Details	<p>1,2,3,4 - R ,Y,B,N  5 , 6 - CBCT  8 - Com (Relay)  9,10 - S1,S2 (R phase)  11, 12 - S1, S2 (Y phase)  13, 14 - S1, S2 (B phase)  15, 16 - NO, NC (Relay)  17, 18 - 100 to 270V AC</p>