

Digital Monitoring Devices

PVMD-G/PVIMD-G / PVMR-A / PVIMR-A

Features

- Monitors and trips the circuit after the set trip delay time when ever power Un healthiness (phase failure, phase sequence, phase unbalance under voltage or over voltage) occurs.
- Displays all the 3 phase voltages in a scrolling fashion during healthy condition.
- User can program nominal current. Under current and over current limits can be set in percentage with reference to nominal current.
- User can set the in-rush time delay.
- CT primary user settable in steps of 5 where as CTsecondary is factory set for 5.



Ordering Information

Models	Function	Source Voltage	Output
PVMD-G	Phase Voltage Monitoring Device	415V AC 3 phase, 4 wire, Self powered	1 c/o, 10A resistive
PVMR-A		415V AC 3 phase, 4 wire & auxiliary supply 100-270 V AC	
PVIMD-G	Phase Voltage Current Monitoring Device	415V AC 3 phase, 4 wire, Self powered	
PVIMR-A		415V AC 3 phase, 4 wire & auxiliary supply 100-270 V AC	

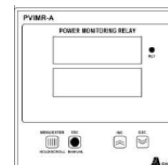
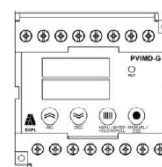
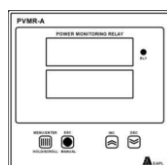
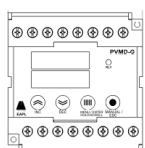
Front View

PVMD-G

PVMR-A

PVIMD-G

PVIMR-A



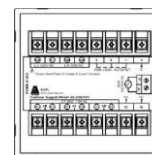
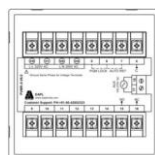
Rear View

PVMD-G

PVMR-A

PVIMD-G

PVIMR-A



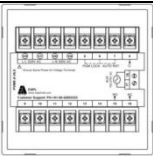
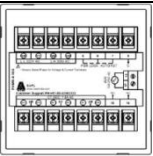
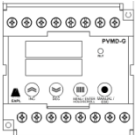
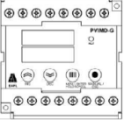
Over-all Dimension

Models	Dimension Details in mm			Cutout Dimension in mm	
	W	H	D	W	H
PVMR-A/PVIMR-A	96	96	95.5	92	92
PVMD-G/PVIMD-G	76	78	115	-	

■ Specifications

Parameters		Models	PVMD-G	PVMR-A	PVIMD-G	PVIMR-A
Function			Phase Unbalance, Phase Reversal, Phase Failure, Under and Over Voltage Monitor and Control.		Phase Unbalance, Phase Reversal, Phase Failure, Under and Over Voltage, Under and Over Current Monitor and Control	
System Input	Aux Supply	100 to 270V AC,50Hz				
	Input Voltage	415V AC(3Ph-4W)				
	Input Current					Current input (AR,AY,AB), Basic upto 5A (Ib)
	Input Frequency	50 Hz ±10%				
	Control output	1c/o rated for 10A @ 250VAC/28VDC resistive load				
Accuracy	Voltage	±4V of display value				
	Current					±5% of Ib ±1 digit (Ib = 5A
	Trip Time	±1% of set delay ±2 sec				
	Power Consumption	5VA/ 1W				
General	Nominal Current					0.5A to 500A (External CT's shall be used above 5A, CT setting max 2500/5 in steps of 5)
	Trip setting	Phase Unbalance-----1-20 % (Adj.) Under Voltage -----5 to 100V AC Over Voltage -----5 to 100V AC				Phase Unbalance -----1-20 %(Adj.), Under Voltage -----5 to 100V AC, Over Voltage -----5 to 100V AC, Over Current -----105% to 800%, Under Current -----20% to 95%
	Trip time delay	1 to 250secs settable for UB, OV, UV				
	Phase Failure trip time delay	< 5 sec				
	Phase reverse trip time delay	Instantaneous				
	Recovery Time	2 sec Min				
	Power On Delay	10 sec Max				
	Inrush current Delay					1 to 60 sec settable
	Mode of Operation	Auto/ Manual				
Climatic	Ambient Temperature	Operation: -10°C to +55°C Storage : -25°C to +80°C				
	Humidity	MAX 85% RH @ 40°C				
Mechanical Endurance	Service life (under no load)	10 ⁶ operation minimum				
	Rated frequency of operation	1800 ±5%operations per hour max				
Electrical Endurance:	Electrical life (under full load)	10 ⁵ operation minimum				
Electrical Safety:	Insulation resistance	>100M ohm @500V DC				
	Dielectric strength	a)2.5KV AC, 50 Hz for 1 minute.(Between current carrying & non-current carrying parts) b)1.5KV AC, 50Hz for 1 min.(Between contacts & control circuit) c)750V AC, 50Hz for 1 min.(Between non-continuous relay contacts)				
	Electrical connection	Screw type terminals with self lifting				
Dimension(W X H X D)			76X 78X 115 mm	96X 96 X 95.5 mm	76X 78X 115 mm	96X 96 X 95.5 mm

Connection and Terminal Details

Model	Connection Details		Terminal Details	
PVMR-A/ PVIMR-A	PVMR-A	PVIMR-A	PVMR-A	PVIMR-A
			1,2,3,4 : R, Y, B, N 5, 6 : Program Lock 6, 7 : Auto Reset 8 : Com (Relay) 15, 16 : NO, NC (Relay) 17,18 : 100 to 270V AC	1,2,3,4 : R, Y, B, N 5, 6 : Program Lock 6, 7 : Auto Reset 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
PVMD-G/ PVIMD-G	PVMD-G	PVIMD-G	PVMD-G	PVIMD-G
			1,2,3,4 : R, Y, B, N 5, 6 : Program Lock 6,7 : Auto Reset 8 : Com 15,16 : NO, NC	1,2,3,4 : R, Y, B, N 5,6 : Program Lock 6,7 : Auto Reset 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)