

Power Systems & Controls

Series PMD -- Programmable Multi-Detector



The unique design of the detector is the capability of two Three-phase voltages bring monitored simultaneously for a total of thirteen different voltage functions. Coupled

with a built-in phase band monitor makes the PMD unbeatable. Each function is independently enabled and configured to activate one of eight (8) user-selectable outputs. Multiple functions can activate a single output allowing

for one or even all of the functions activating a single output. Detector configuration is as easy as point and click using the provided configuration software. There are four (4) form-C relay outputs and four (npn current sinking type) digital outputs provided for convenience in interfacing to different types of control circuitry. An additional module is available to convert the four digital outputs to relay. An internal +12VDC power supply is provided for ease-of-use when using the digital outputs for relay operation. If desired an external +12VDC or +24VDC can be used.

Standard Equipment Features

- Setup performed on a computer and downloaded into the detector.
- Four relay outputs on the top of the detector for quick connection to existing wiring schemes.
- Four digital outputs and one digital input (12VDC or 24VDC) for connection to PLCs or relay ladder logic.
- Expanded functionality with 2 sets of three phase voltages applied to the detector.
- "Heartbeat" A 1 Hz 50% duty cycle pulse output used to indicate proper detector operation.

- 4 MHz processor speed
- Stand alone operation
- RS232 serial communications

Functions:

High Voltage
 Low Voltage
 Under Frequency
 Over Frequency
 Phase Rotation
 Phase Loss
 Phase Band Monitor

Source:

VS1 & VS2
 VS1 & VS2
 VS1 & VS2
 VS1 & VS2
 VS1 & VS2
 VS1 & VS2
 VS1 Vs VS2

Additional Features

The microprocessor based detector uses the latest technology in high speed micro-controllers and non-volatile flash memory for signal measurement. Depending on the way the user sets-up the detector, this device will perform any one, or all, of the functions listed within. With one digital input and eight digital outputs the user has the ultimate control over what and how this detector does its job.

Software Included

Dual Voltage Detector						
File	Comm	Transfer	Help			
Volt Source	Function	Enabled		Output	Value	
1	Over V	<input checked="" type="checkbox"/> Enabled		1	523	
	Under V	<input checked="" type="checkbox"/> Enabled		2	432	
	Under F	<input checked="" type="checkbox"/> Enabled		3	57	
	Over F	<input checked="" type="checkbox"/> Enabled		3	63	
	Phase Rot	<input checked="" type="checkbox"/> Enabled		4		
	Phase Loss	<input checked="" type="checkbox"/> Enabled		2		
	Over V	<input checked="" type="checkbox"/> Enabled		5	523	
2	Under V	<input checked="" type="checkbox"/> Enabled		5	432	
	Under F	<input checked="" type="checkbox"/> Enabled		6	57	
	Over F	<input checked="" type="checkbox"/> Enabled		6	63	
	Phase Rot	<input checked="" type="checkbox"/> Enabled		4		Serial
	Phase Loss	<input checked="" type="checkbox"/> Enabled		5		
	Heart Beat	<input checked="" type="checkbox"/> Enabled		7		
Both	Heart Beat	<input checked="" type="checkbox"/> Enabled		7		
	PBM	<input checked="" type="checkbox"/> Enabled		8		

System Specifications

*Note: System performance shown is typical and is dependent upon M-G sizing, options desired, and loading of the system.

Specifications

Control power: 120VAC
 Power requirements: 10VA
 Internal Power Supply: + 12VDC @ 100MA
 Dimensions: 7 13/16" x 5 3/8" x 2"
 Weight: 2 lbs.

Input

3 phase 4 wire: 200-250VAC or 380-480VAC
 System Frequency: 45-65 Hz
 Voltage Withstand: 1.2 time continuously
 1200VAC max

Digital I/O

1 Digital Input to enable the Phase Band Monitor
 4 (Current Sinking) Digital outputs.
 Optional Module Available to convert Digital I/O
 to form C contact.

Output Relays:

4 Form C type – SPDT outputs
 Rating AC: 125VAC @ .4A
 Rating DC: 24VDC @ 1A
 Operations: 1 billion mechanical
 3 million @ 24VDC

Set Point:

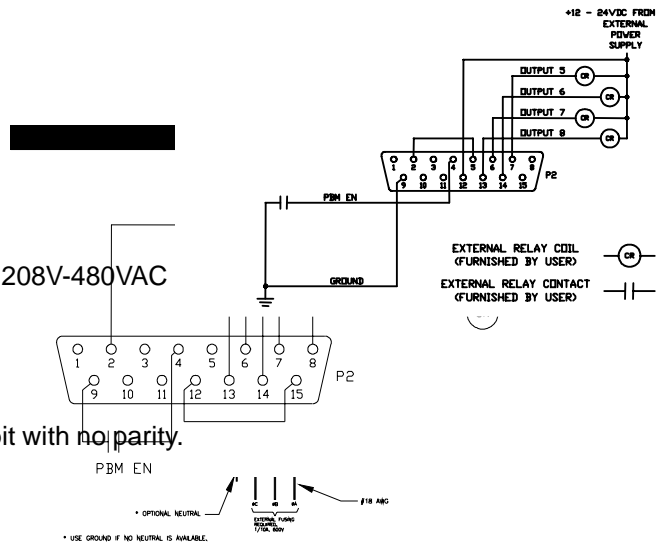
Repeatability: Better than .5%
 Range: Adjustable with included software

Nominal Input voltage sensing (For both voltage sets): 208V-480VAC
 Delta or Wye, three phase
 Frequency range: Up to 400Hz
 Digital outputs: 12VDC or 24VDC sinking type driver

Serial communications: RS232, 9600 Baud, eight bit with no parity.
 Software provided for detector setup.

USING INTERNAL POWER SUPPLY

USING EXTERNAL POWER SUPPLY



Power Systems & Controls reserves the right to improve, enhance and modify the features and specifications of its products and services without prior notification.

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