Frequency Monitoring Series PD 225

- Wide Auxiliary Supply voltage Range: 110 - 240 VAC, 220 - 440 VAC
- Models for Over Frequency and Under/Over Frequency Monitoring
- Monitors Frequency of Three signals - Sine, Square & Triangular
- Model for Frequency Limit Control: 5 Hz to 135 Hz
- Wide Signal Input Voltage: 15 to 500 VAC
- Adjustable Relay status in Healthy or Unhealthy condition using DIP switch "ET" (Energize to Trip) or "DT" (De-energize to trip.)
- Ease of Frequency setting with simple Addition & Subtraction
- LED Indications for Healthy, Unhealthy & No signal conditions



Cat. No.			MI81BJ	MI91BL
Parameters				
Supply Voltage (⏚)			110 - 240 VAC	220 - 440 VAC
Supply Variation			-15% to +15% (of ⏚)	
Frequency			50/60 Hz	
Power Consumption (Max.)			3 VA	
Signal Type			Sinusoidal, Square, Triangular	
Signal Input Voltage Range			(15 to 500) V	
Overall Frequency Range			(5 to 135) Hz	(40 to 70) Hz
Trip Settings	Over Frequency		0.33 to 1 of Full Scale	(+1 to +10) Hz above Selected Value
	Under Frequency		N A	(-1 to -10) Hz below Selected Value
	Reset Hysteresis		1.5 % of Full Scale selected	
Setting Accuracy			± 5%	
Repeat Accuracy			± 0.02%	
Time Delay	ON Delay		500 ms	500 ms to 5 s
	OFF Delay		100 ms	
	Reset Time		150 ms	
Output	Relay Output		1 C/O	
	Contact Rating		6A (Resistive) @ 250 VAC / 28 VDC	
	Electrical Life		1 x 10^5	
	Mechanical Life		3 x 10^6	
Utilization Category		AC - 15	Rated Voltage (Ue): 120/240 V, Rated Current (Ie): 3.0/1.5 A	
		DC - 13	Rated Voltage (Ue): 24/125/250 V, Rated Current (Ie): 2.0/0.22/0.1 A	
LED Indications	Relay		Red LED Flashing if No Signal	N A
	UF / OF		N A	Separate for UF & OF
Operating Temperature			- 15° C to +60° C	
Storage Temperature			- 25° C to +80° C	
Enclosure			Flame Retardant UL94-V0	
Dimension (W x H x D) (in mm)			22.5 X 75 X 100.5	
Weight (unpacked)			120 g	
Mounting			Base / DIN rail	
Certification			CE cULus LISTED RoHS Compliant	
Degree of Protection			IP 20 for Terminals, IP 40 for Enclosure	

EMI / EMC		
Harmonic Current Emissions	IEC 61000-3-2	Ed. 3.0 (2005-11) Class A
ESD	IEC 61000-4-2	Ed. 1.2 (2001-04) Level II
Radiated Susceptibilty	IEC 61000-4-3	Ed. 3.0 (2006-02) Level III
Electrical Fast Transients	IEC 61000-4-4	Ed. 2.0 (2004-07) Level IV
Surges	IEC 61000-4-5	Ed. 2.0 (2005-11) Level IV
Conducted Susceptibilty	IEC 61000-4-6	Ed. 2.2 (2006-05) Level III
Voltage Dips & Interruptions (AC)	IEC 61000-4-11	Ed. 2.0 (2004-03) All 7 Levels
Conducted Emission	CISPR 14-1	Ed. 5.0 (2005-11) Class A
Radiated Emission	CISPR 14-1	Ed. 5.0 (2005-11) Class B
Environmental		
Cold Heat	IEC 60068-2-1	Ed. 6.0 (2007-03)
Dry Heat	IEC 60068-2-2	Ed. 5.0 (2007-07)
Vibration	IEC 60068-2-6	Ed. 7.0 (2007-12) 5g
Repetitive Shock	IEC 60068-2-27	Ed. 4.0 (2008-02) 40g, 6ms
Non-Repetitive Shock	IEC 60068-2-27	Ed. 4.0 (2008-02) 30g, 15ms

ORDERING INFORMATION

Cat. No.	Description
MI81BJ	110 - 240 VAC, Over Frequency Relay, 1 C/O
MI91BJ	220 - 440 VAC, Over Frequency Relay, 1 C/O
MI81BL	110 - 240 VAC, Over Frequency & Under Frequency Relay, 1 C/O
MI91BL	220 - 440 VAC, Over Frequency & Under Frequency Relay, 1 C/O

UL Approval for Cat Nos. MI81BL & MI91BL only.