PTC Thermistor Relay Series PD 225

- Monitors and Protects Motors with Integrated PTC Resistor sensors
- Protection against Over heating for Heavy Duty Load, High Switching Frequency, High operating temperature & Insufficient cooling conditions
- Wide Auxiliary Supply Voltage: 24 VAC/DC, 110 - 240 VAC & 220 - 415 VAC
- LED Indications for Healthy, Unhealthy, Sensor Open/Short conditions
- 1 C/O & 2 C/O Configuration
- Reset Options: Auto, Manual and Remote



Cat. No.			MJ83BK	MJ93BK	MJA3BK
Parameters					
Supply Voltage (⏚)			110 - 240 VAC	220 - 440 VAC	24 VAC/DC
Supply Variation			-20% to + 10% (of ⏚)		
Frequency			50/60 Hz		
Power Consumption (Max.)			2VA		
Trip Settings	Trip Level		3.6 kΩ, (± 5%)		
	Reset Level		1.6 kΩ, (± 5%)		
	Sensor Short		< 20Ω, (± 4Ω)		
	Hysterisis		20Ω, (± 4Ω)		
	Sensor Open		> 10 kΩ, (± 5%)		
Max Cold Res(Ω) of Sensor Chain			< 1.5 kΩ		
Reset Mode			Auto, Manual, Remote		
Repeat Accuracy			1%		
Time Delay	ON Delay		500 ms		
	OFF Delay		100 ms		
	Reset Time		150 ms		
Output	Relay Output		2 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	Green LED		Continuous ON → Healthy Flashing → Sensor Open		
	Red LED		Continuous ON → Relay ON Flashing → Sensor Short		
	All LEDs OFF		Power Supply Fail		
Operating Temperature Storage Temperature			- 15° C to +60° C - 25° C to +80° C		
Humidity (Non Condensing)			95% (Rh)		
Enclosure			Flame Retardant UL94-V0		
Dimension (W x H x D) (in mm)			22.5 X 83 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	
Voltage Dips & Interruptions (DC)			IEC 61000-4-29	Ed. 2.0 (2004-03) All 5 Levels	
Conducted Emission			CISPR 14-1	Ed. 5.0 (2005-11) Class B	
Radiated Emission			CISPR 14-1	Ed. 5.0 (2005-11) Class B	
Envir onmental					
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
MJ83BK	110 - 240 VAC, PTC Thermistor Relay, 2 C/O
MJ93BK	220 - 440 VAC, PTC Thermistor Relay, 2 C/O
MJA3BK	24 VAC/DC, PTC Thermistor Relay, 2 C/O

UL Approval not applicable for Cat Nos. MJ83BK & MJ93BK.