

50 Amp Power PCB Relay

PTRE



FEATURES

- Most Popular Power PCB Relay Footprint T90
- 50 Amp 240 VAC General Purpose UL Rating
- 2 HP 250 VAC Rating
- UL Class F Insulation Standard
- Meets UL 508 and UL 873 Spacing with Pin 6 Omitted
- Epoxy Sealed, Immersion Cleanable
- RoHS Compliant

FACTORY RATINGS

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Load Type	Voltage	1 Form A	1 Form B	1 Form C (SPDT)			
Load Type	vollage	(SPST-NO)	(SPST-NC)	NO	NC		
Resistive 6,000 Cycles	240 VAC 30 VDC	50 A	35 A	50 A	35 A		
Lamp 3,000 Cycles	240 VAC	TV-5	_	TV-5	_		
Electric Ballast 6,000 Cycles	280 VAC	5 A	_	5 A	_		
Motor Load 3,000 Cycles	250 VAC	2 HP	1.5 HP	2 HP	1.5 HP		

CHARACTERISTIC

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Operate Time	15 ms Max.
Release Time	10 ms Max
Insulation Resistance	1,000 MΩ min, at 500 VDC
Dielectric Strength	50 Hz 2,500 V 1 Min Between Coil and Contacts 4,000 V without Pin 6 50 Hz 1,500 V 1 min. Between Contacts
Shock Resistance	200 m/s², 11 ms
Vibration Resistance	10 - 55 Hz Double Amplitude
Terminal Strength	10N
Power Consumption	1.5 W

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C	T	ш	US	E16	0644	at	40°	C

Load Type	Cvcles	Voltage	1 Form C (SPDT)		
Load Type	Oycles	Voltage	NO	NC	
General Purpose (Resistive)	10,000 50.000	240 VAC/30 VDC 240 VAC/30 VDC	50 A 40 A	35 A 30 A	

With Pin 6 Omitted (-1) Meets UL 508 and UL 873 Spacing - 3.18 mm Through Air, 6.36 mm Over Surface. With Pin 6 Meets UL508

CONTACT DATA

Material		$AgSnO_2$		
Initial Contact Resistance		30 mΩ Max. @ 1 A, 6 VDC		
Maximum Switching Voltage		110 VDC, 300 VAC		
Maximum Switching Current		50 A		
Maximum Switching Power		1,500 W, 12,000 VA		
Service Life	Mechanical	1 X 10 ⁷ Operations		
	Electrical	5 X 10 ⁴ Operations		

CHARACTERISTIC Continued

Solderability	235°C ± 2°C 3 ± 0.5 s
Operating Temperature Range	- 55°C to 100°C
Storage Temperature Range	- 40°C to 155°C
Relative Humidity	85% (at 40°C)
Weight	30 g, 27 g Open Type
Material Compliant To	EU RoHS V2, EU REACH V3

ORDERING INFORMATION

Example:	PTRE	-1C	-12	S	T	F		-X
Model: PTRE								
Contact Form: 1A or 1C								
Coil Voltage: 3, 5, 6, 9, 12, 15, 18, 24, 48, 110								
Configuration: Nil: Open Frame; S: Sealed; C: Covered								
E: Epoxy Sealed not Water Washable								
Contact Material: T: AgSnO2								
Insulation Material: F: UL Class F								
Spacing: Nil: UL 508; -1: UL 508 and 873 (Pin # 6 omitted)								
ROHS Compliant: -X								

Box Quantity: 600; Inner Box 300

COMPONENTS

3220 Commander Drive, Suite 102 Carrollton, TX 75006

Sales: (972) 713-6272 (888) 997-3933 Fax: (972)735-0964

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COIL DATA

Coil V	oltage	Resistance (Ohms ± 10%)	(a) Voltage Max Voltage Min.		Coil Power
Rated	Max	(0111113 ± 1070)	(VDC)	(VDC)	(W)
3	3.9	6.0	2.25	0.3	
5	6.5	16.7	3.75	0.5	
6	7.8	24.0	4.50	0.6	
9	11.7	54.0	6.75	0.9	
12	15.6	96.0	9.00	1.2	1.5
15	19.5	150	10.25	1.5	1.5
18	23.4	216	13.50	1.8	
24	31.2	384	18.00	2.4	
48	62.4	1,536	36.00	4.8	
110	143	8,067	82.50	11.0	

NOTES:

The use of any coil voltage less that the rated voltage will compromise the operation of the relays. Must Operate Voltage is listed for test purposes only and is not to be used as design criteria. Pickup and release voltages are for test purposes only and are not to be used as design criteria. Dimensions are in mm, Inches are listed for reference only.

DIMENSIONS (mm/inches)

Knock off, on top corner, nib for ventilation after soldering and water wash.

