

30 AMP Power PCB Relay

PTRH



FEATURES

- Most popular power PCB relay
- Up to 30 amp switching capacity
- Up to 2 horsepower rating
- Gold flashed contacts available
- UL Class B insulation standard
- UL Class F insulation available
- Available with UL 873 spacing
- Epoxy sealed, immersion cleanable
- Lead Free & RoHS Compliant



File # E93379

UL/CSA RATINGS

Load Type	Voltage	1 Form A (SPST-NO)	1 Form B (SPST-NC)	1 Form C (SPDT)	
				NO	NC
General Purpose	120 VAC	30 A	20 A	30 A	20 A
	250 VAC	30 A	20 A	30 A	20 A
	30 VDC	30 A	20 A	30 A	20 A
Resistive (100,000 cycles)	120 VAC	30 A	20 A	30 A	20 A
	250 VAC	30 A	20 A	30 A	20 A
Motor (30,000 cycles)	240 VAC	2 HP	—	2 HP	—
	120 VAC	1 HP	—	1 HP	—
LRA/FLA (locked rotor amps/full load amps)	240 VAC	80 A/30 A	—	80 A/30 A	—
	120 VAC	96 A/30 A	—	96 A/30 A	—

CONTACT DATA

Material		AgCdO (Silver Cadmium Oxide), AgSnOInO (Silver Tin Oxide Indium Oxide)
Initial Contact Resistance		50 milliohms max @ 0.1A, 6VDC
Service Life	Mechanical	1 X 10 ⁷ Operations
	Electrical	1 X 10 ⁵ Operations

CHARACTERISTICS

Operate Time	Less than 15 ms.
Release Time	Less than 10 ms.
Insulation Resistance	1,000 megohms min, at 500VDC, 50%RH
Dielectric Strength	1500 Vrms, 1 min. between open contacts 1500 Vrms, 1 min. between coil and contacts (2500 Vrms for -1)
Shock Resistance	10 g, 11ms, functional; 100 g, destructive
Vibration Resistance	DA 1.5mm, 10-55 Hz
Power Consumption	0.9W, approx.
Ambient Temperature Range	-55 degrees C to 100 degrees C operating for class B, -55 to 130 degrees C storage
Weight	30 grams approx.

PTRH Rev F 4-17-08

ORDERING INFORMATION

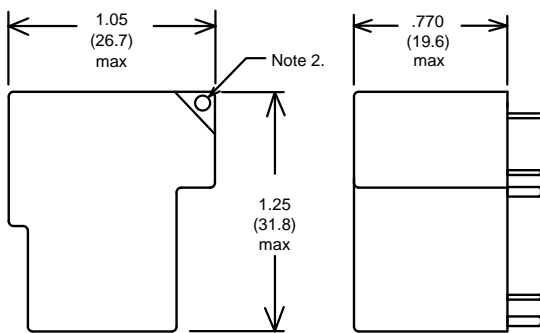
Example:	PTRH	-1C	-12	S	F	T	-1	-X
Model								
Contact Form								
1A, 1B, or 1C								
Coil Voltage								
Configuration								
Nil: Open Frame; S: Sealed plastic case; C: Dust Cover								
Insulation Material								
Nil: UL Class B; F: UL Class F								
Contact Material								
Nil: AgCdO; T: AgSnOInO; G: AgCdO+Au								
Spacing								
Nil: UL 508; -1: UL 873 (Pin # 6 omitted)								
Nil: Standard; -X ROHS Compliant								

COIL DATA

Coil Voltage	Resistance ohms \pm 10%	Must Operate Voltage Max. (VDC)	Must Release Voltage Min. (VDC)	Continuous Voltage Max. (VDC)
5	27	3.75	0.5	6.5
6	40	4.50	0.6	7.8
9	97	6.75	0.9	11.7
12	155	9.00	1.2	15.6
24	660	18.00	2.4	31.2
48	2560	36.00	4.8	62.4
110	10330	82.50	11.0	143.0

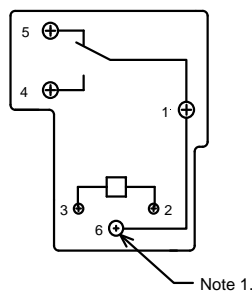
Note: Custom coil voltages within the ranges shown are available on special order.

Overall Dimensions
Inches (millimeters)

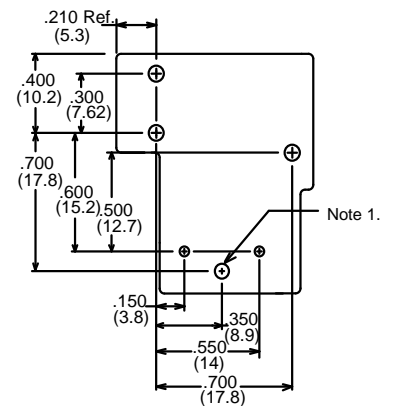


- Notes:**
 1. This pin omitted for UL 873 version.
 2. Breakable nib may be removed after flux removal.

Schematic



Pin Layout
Bottom View



Tolerances \pm .010 unless otherwise noted
 Holes for load term. .081 \pm .005 Dia. (2.06 \pm .13)
 Holes for Coil term. .043 \pm .003 Dia. (1.09 \pm .08)



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