

20 Amp Low Profile PCB Power Relay

PC375H



FEATURES

- 20 Amp Continuous Contact Capacity
- 5 KV Dielectric Strength Between Coil and Contacts
- 1 Form A and 1 Form C Contact Forms Available
- Low Profile Design, 0.64 in. (16.1mm) Tall
- Meets UL 873 Spacing
- Class F Material Standard
- 85°C Operating Temperature
- RoHS Compliant
- See PC375 for 16 A Version and Additional Pinouts

UL / CUL Ratings

| Contact Form | | 1 Form A (SPST) or 1 Form C (SPDT) | | | |
|-----------------|---------------|--|----------------------|--|--|
| | | Normally Open | Normally Closed | | |
| | | 20 A 250 VAC @ 85°C | 12 4 250 1/40 @ 95°0 | | |
| Rated Load | | 16A 250 VAC 105°C | 12 A 250 VAC @ 65 C | | |
| | | 1 HP 120 VAC | IV-5 | | |
| Max Switching C | Current | 20A / 277 VAC | 16A / 277 VAC | | |
| Minimum Load | Au Plated | 100 mA at 6 VDC | | | |
| | Non-Au plated | 50 mA at 6 VDC | | | |

CHARACTERISTICS

| Operate Time | <15 ms | | |
|-----------------------|---|------------------------|--|
| Release Time | <8 mS | | |
| Insulation Resistance | 1,000 MΩ min at 500 VDC | | |
| Diala atria Ctranath | 5,000 V, 50 Hz between contact and coil | | |
| Dielectric Strength | 1,000 V, 50 Hz between open contacts | | |
| Shock Posistanco | Functional: | 10 m/sec ² | |
| SHUCK RESISTANCE | Destructive: | 100 m/sec ² | |

CONTACT DATA

| Max Switchin | ng Power | 5,000 VA |
|----------------|--------------------|---------------------------------------|
| Max. Switchi | ng Voltage 440 VAC | |
| Max Switchir | ng Current | 20 A |
| Material | | AgSnO ₂ (Silver Tin Oxide) |
| Initial Contac | t Resistance | 100 mΩ max @ 1 A, 6 VDC |
| Service Life | Mechanical | 1 X 107 Operations |
| | Electrical | 1 X 10 ⁵ Operations |

CHARACTERISTICS (CONTINUED)

| Creepage Distance | 8.4 mm |
|---------------------------|------------------------|
| Vibration Resistance | 10 - 55 Hz, DA 1.5 mm, |
| Terminal Strength | 10N |
| Solderability | 260°C for 5 seconds |
| Ambient Temperature Range | - 40°C to 85°C |
| Relative Humidity | 85% (at 40°C) |
| Weight | 13 grams |

ORDERING INFORMATION

| Example: | PC375H | -1C | -12 | S | G | N | -X |
|-------------------|--------------------------------------|--------------------------|-----------|---|---|---|----|
| Model: | PC375H | | | | | | |
| Contact Form: | 1A or 1C | | | | | | |
| Coil Voltage: | 5, 6, 9, 12, 24, 48 | | - | | | | |
| Enclosure: | S: Sealed; C: Dust Cover | | | - | | | |
| Contact Plating: | Nil: Standard, G: Gold | | | | - | | |
| Contact Material: | Nil: AgSnO ₂ ; N: AgNi; G | : AgSnO ₂ + . | Au (Clad) | | | - | |
| Coil Power: | Nil: 450 mW; 0.25: 250 m | W | | | | | |
| RoHS Compliant | -X | | | | | | |

Box Quantity: 1,000; Inner Box: 500

PC375H

COIL DATA

| Coil V | oltage | Coil Power Resistance ± 10% | Must Operate Voltage MAX | Must Release Voltage MIN | Coil Power | Operate Time | Release Time |
|--------|--------|-----------------------------------|--------------------------------|--------------------------------|---------------|--------------|--------------|
| Rated | Max | 0.41W | (VDC) | (VDC) | (mW) | (mSec) | (mSec) |
| 5 | 6.5 | 61 | 3.5 | 0.5 | | | |
| 6 | 7.8 | 88 | 4.2 | 0.6 | | | |
| 9 | 11.7 | 198 | 6.3 | 0.9 | 410 | <15 <8 | <8 |
| 12 | 15.6 | 351 | 8.4 | 1.2 | | | |
| 24 | 31.2 | 1,405 | 16.8 | 2.4 | | | |
| 48 | 62.4 | 5,620 | 33.6 | 4.8 | | | |
| 5 | 6.5 | 100 | 3.5 | 0.5 | | | |
| 6 | 7.8 | 144 | 4.2 | 0.6 | | | |
| 9 | 11.7 | 324 | 6.3 | 0.9 | 250 | | |
| 12 | 15.6 | 576 | 8.4 | 1.2 | | | |
| 24 | 31.2 | 2304 | 16.8 | 2.4 | | | |
| 48 | 62.4 | 9216 | 33.6 | 4.8 | | | |
| 60 | 78 | 12857 | 42 | 6.0 | 280 | | |

NOTES:

The use of any coil voltage less than 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.

