

2X20 Amp Automotive Twin PCB Relay

PC617



Features

- 2X20 Amp continuous current capacity
- Up to 60 amps switching capacity
- Six different contact forms
- Two different contact materials available
- Designed for high inrush applications
- UL Class F insulation standard
- Dust cover or sealed version available
- RoHS Compliant
- **See PC517 For Single Version**

CONTACT RATINGS @ 14 VDC For Each of the Two Relays

| Form | | 1 Form A | 1 Form C (DPDT) | | 1 Form U | 1 Form W (SPDT-DB-DM) | |
|-----------------------------|-------|-------------------------|-------------------|---------|-----------------------------|-----------------------|-------------|
| | | (SPST NO) | NO | NC | (SPST-NO-DM) | NO | NC |
| Max Switching Current | Make | 40 Amps | 40 Amps | 20 Amps | 2 x 40 Amps | 2 x 40 Amps | 2 x 20 Amps |
| | Motor | 20 Amps | 20 Amps | 10 Amps | 2 x 20 Amps | 2 x 20 Amps | 2 x 10 Amps |
| Max Continuous Current | | 20 Amps | 20 Amps | 10 Amps | 2 x 20 Amps | 2 x 20 Amps | 2 x 10 Amps |
| Minimum Load | | 100 mA @ 6 VDC | | | | | |
| Max Switching Power/Voltage | | 1A, 1C: 280 W, 1,200 VA | | | 1U, 1W: 2x280 W, 2x1,200 VA | | |

Note: At 28 VDC (24 V Coil) Ratings Are All 50% of 14 VDC Ratings

CHARACTERISTICS

| | |
|---------------------------|---|
| Operate Time | 10 ms. Max; 3 ms. Typical |
| Release Time | 5 ms Max; 1.5 ms. Typical |
| Insulation Resistance | 100 megohms min, at 500VDC , 50% RH |
| Dielectric Strength | 1,500 Vrms, 1 min. between coil and contacts 750 Vrms, 1 min. Between Contacts |
| Shock Resistance | 10 g, 11ms, functional; 100 g, destructive |
| Vibration Resistance | DA 1.27mm, 10-40 Hz functional |
| Drop Resistance | 1 Meter height drop on concrete in final enclosure |
| Power Consumption | 1.0 W, 1.2W |
| Solderability | 255°C ± 2°C 3 ± .5 s |
| Ambient Temperature Range | -40°C to 105°C operating, -40°C to 155°C storage |
| Relative Humidity | 85% @ 40°C |
| Weight | Open: 9 grams, Enclosed: 12 grams approx |

CONTACT DATA

| | | |
|----------------------------|---------------------------------------|--------------------------------|
| Material | AgSnO ₂ (Silver Tin Oxide) | |
| Initial Contact Resistance | 50 milliohms max @ 0.1A, 6VDC | |
| Service Life | Mechanical | 1 X 10 ⁷ Operations |
| | Electrical | 1 x 10 ⁶ Operations |

ORDERING INFORMATION

| | | | | | | |
|----------------------|--|-----|----|---|---|----|
| Example: | PC617 | -1C | -6 | S | H | -X |
| Model: | PC617 | | | | | |
| Contact Form: | 1A: 2 x 1A (SPST-NO), 1C: 2 x 1C (SPDT), 1U: 2 x 1U, or 1W: 2 x 1W, | | | | | |
| Coil Voltage:* | 6, 12, 24 | | | | | |
| Enclosure: | Nil: Open Frame; S: Sealed; C: Dust Cover | | | | | |
| Contact material: | Nil: AgSnO ₂ | | | | | |
| Coil Power: | Nil: 1.0 W; H: 1.2 W (H option for 12 VDC only) | | | | | |
| Insulation Material: | Nil: Class F | | | | | |
| RoHS Compliant: | -X | | | | | |

Box Quantity: 2,000; Inner Box 1,000

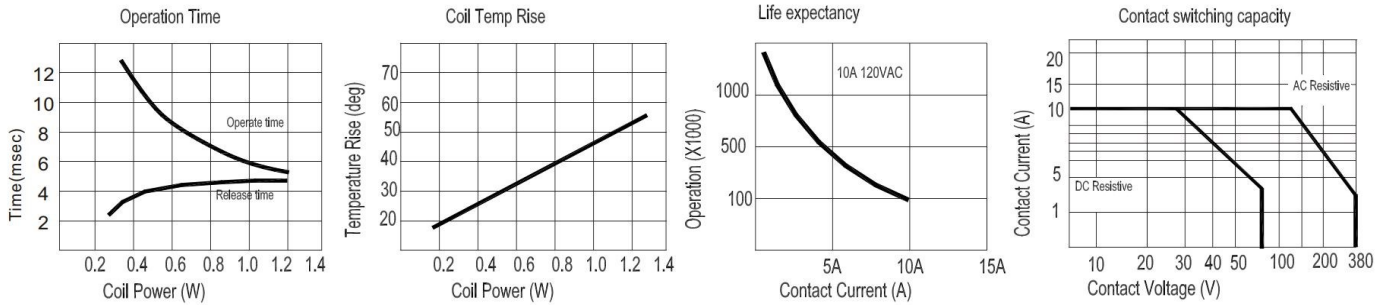
*For additional coil voltages – contact factory

COIL DATA

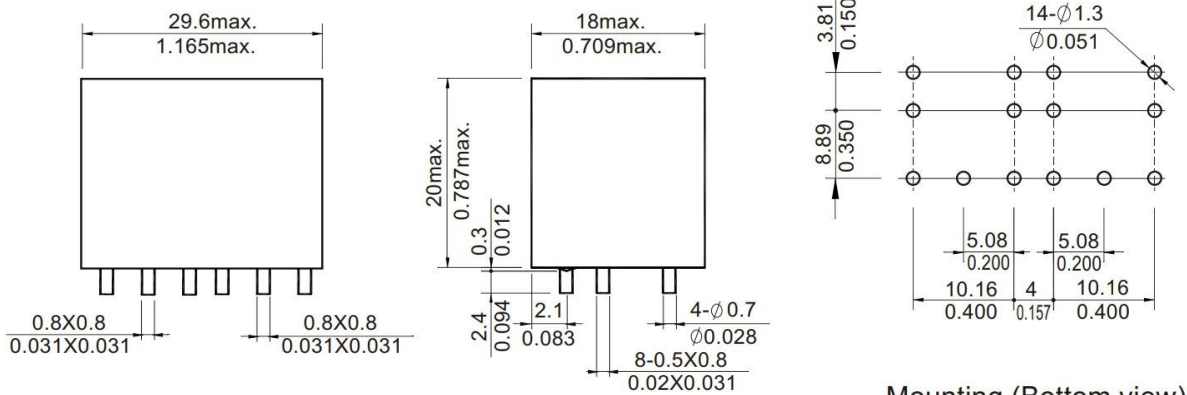
| Coil Voltage (VDC) | | Coil Resistance $\Omega \pm 10\%$ | Must Operate Voltage Max. (VDC) | | Must Release Voltage Min. (VDC) | Coil Power (W) |
|--------------------|------|-----------------------------------|---------------------------------|------|---------------------------------|----------------|
| Rated | Max. | | A, C, U | W | | |
| 6 | 7.8 | 36 X 2 | 3.75 | 4.5 | 0.7 | 2 X 1.0 |
| 12 | 15.6 | 145 X 2 | 7.50 | 9.0 | 1.4 | |
| 24 | 31.2 | 576 X 2 | 15.0 | 18.0 | 2.8 | |

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.

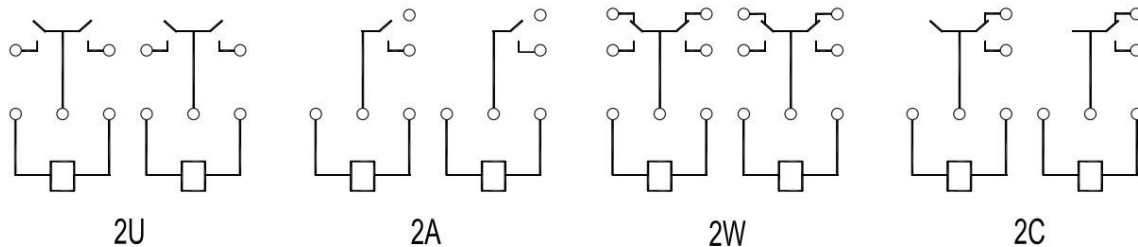
Reference Data



Dimensions



Mounting (Bottom view)



Wiring diagram(Bottom view)

- NOTES 1).Dimensions are in millimeters.
 2).Inch equivalents are given for general information only.