

30, 40 or 50 Amp Latching Spade/PC Pins Relay PCT91CL, PCT91DL, PCT91EL



FEATURES

- Energy Saving **Latching Operation**
- Most Popular Power PCB Relay
- 30, 40 or 50 Amp Switching Capacity
- Single Coil Latching
- UL Class F Insulation Standard
- Epoxy Sealed, Immersion Cleanable
- Lead Free and RoHS Compliant



Factory and cULus* Ratings at 25°C

| PCT91EL 50 Amp Version | Voltage | 1 Form A (SPST-NO) | 1 Form B (SPST-NC) | 1 Form C (SPDT) | |
|---------------------------------|---------|--------------------|--------------------|-----------------|------|
| | | | | NO | NC |
| Load Type | | | | | |
| Resistive 6,000 Cycles | 277 VAC | 50 A | 50 A | 40 A | 40 A |
| Incandescent Lamp 3,000 Cycles | 240 VAC | 5,000 W | 5,000 W | | |
| Electronic Ballast 6,000 Cycles | 280 VAC | 16 A | 16 A | | |
| Motor Load 3,000 Cycles | 277 VAC | 5 HP | 5 HP | | |

| PCT91DL 40 Amp Version | Voltage | 1 Form A (SPST-NO) | 1 Form B (SPST-NC) | 1 Form C (SPDT) | |
|---------------------------------|----------------|--------------------|--------------------|-----------------|------|
| | | | | NO | NC |
| Load Type | | | | | |
| Resistive 6,000 Cycles | 277 VAC, 28VDC | 40 A | 40 A | 30 A | 30 A |
| Incandescent Lamp 3,000 Cycles | 240 VAC | 5,000 W | 5,000 W | | |
| Electronic Ballast 6,000 Cycles | 280 VAC | 5 A | 5 A | | |
| Motor Load 3,000 Cycles | 277 VAC | 2 HP | 2 HP | | |

| PCT91CL 30 Amp Version | Voltage | 1 Form A (SPST-NO) | 1 Form B (SPST-NC) | 1 Form C (SPDT) | |
|---------------------------------|----------------|--------------------|--------------------|-----------------|------|
| | | | | NO | NC |
| Load Type | | | | | |
| Resistive 6,000 Cycles | 277 VAC, 28VDC | 30 A | 30 A | 25 A | 25 A |
| Incandescent Lamp 3,000 Cycles | 240 VAC | 5,000 W | 5,000 W | | |
| Electronic Ballast 6,000 Cycles | 280 VAC | 5 A | 5 A | | |
| Motor Load 3,000 Cycles | 277 VAC | 2 HP | 2 HP | | |

CONTACT DATA

| | | | |
|----------------------------|-------------------|--------------------------------|----------------|
| Material | AgSnO2 | | |
| Initial Contact Resistance | ≤ 20mΩ initial | | |
| Service Life | Mechanical | 1 x 10 ⁶ Operations | |
| | Electrical | | |
| Maximum Switching Voltage | 110VDC 300VAC | | |
| Maximum Switching Power | 15,850 VA 1,500 W | 11,080 VA 1,200 W | 8,310 VA 900 W |
| Maximum Switching Current | 50 A | 40 A | 30 A |

PCT91CL, PCT91DL, PCT91EL PCT91CL, PCT91DL PCT91EL

CHARACTERISTICS

| | |
|-----------------------|--|
| Operate Time | ≤ 15 msec |
| Release Time | ≤ 15 msec |
| Insulation Resistance | 1,000 MΩ min @ 500VDC |
| Dielectric Strength | 50 Hz 2,500V 1 minute, Between Contact and Coil 50 Hz 1,500V 1 minute, Between Contacts |
| Shock Resistance | 200 m/s ² 11msec |
| Vibration Resistance | 10-55 Hz Double Amplitude 1.5mm |
| Operating Temperature | -55°C to +125°C |
| Storage Temperature | -55°C to +155°C |
| Weight | 28 grams |

ORDERING INFORMATION

| | | | | | | | | | |
|-------------------|--|-----|-----|---|---|--|--|--|----|
| Example: | PCT91EL | -1C | -12 | S | L | | | | -X |
| Model: | PCT91EL (50 Amp) PCT91DL (40 Amp) PCT91CL (30 Amp) | | | | | | | | |
| Contact Form: | 1A (SPST-NO) 1B (SPST-NC) C (SPDT BBM) | | | | | | | | |
| Coil Voltage: | 5, 12, 24, 48 | | | | | | | | |
| Enclosure: | S : Sealed, E : Covered | | | | | | | | |
| Package Height: | Nil : Standard, L : Low Profile | | | | | | | | |
| Coil Sensitivity: | Nil : PCT91EL (50 Amp) 1.5 Watt Nil : PCT91DL (40 Amp) 0.9 Watt Nil : PCT91CL (30 Amp) 0.9 Watt | | | | | | | | |
| Coil: | Nil : Single Coil Latching, Double Coil not available at this time | | | | | | | | |
| RoHS Compliant: | -X | | | | | | | | |

Box Quantity: 600; Inner Box: 300

COIL DATA

| Coil Voltage (VDC) | | Resistance (Ohms ± 10%) | Must Operate Voltage Max (VDC) | Pulse Magnitude (msec) | Coil Power (msec) | Operate Time (msec) | Reset Time (msec) |
|------------------------|---------|-------------------------|--------------------------------|------------------------|-------------------|---------------------|-------------------|
| Rated | Maximum | | | | | | |
| 5 | 6 | 16.7 | 4 | ≥ 100 | 1.5 | ≤ 15 | ≤ 15 |
| 12 | 14.4 | 96 | 9.6 | | | | |
| 24 | 28.8 | 384 | 19.2 | | | | |
| 48 | 57.6 | 1,536 | 38.4 | | | | |
| PCT91CL/DL (30/40 Amp) | | Resistance (Ohms ± 10%) | Must Operate Voltage Max (VDC) | Pulse Magnitude (msec) | Coil Power (msec) | Operate Time (msec) | Reset Time (msec) |
| Rated | Maximum | | | | | | |
| 5 | 6 | 28 | 4 | ≥ 50 | 0.9 | ≤ 15 | ≤ 15 |
| 12 | 14.4 | 160 | 9.6 | | | | |
| 24 | 28.8 | 960 | 19.2 | | | | |
| 48 | 57.6 | 2,560 | 38.4 | | | | |

NOTES:

Coil should not be pulsed with less than the rated coil voltage and the pulse width should be a minimum of three times the specified operate time. If not, it is possible for the relay to settle in a magnetically neutral position.

Must Operate Voltage is listed for test purposes only and is not to be used as design criteria.

PICKER 3220 Commander Drive, Suite 102 Carrollton, TX 75006
Sales: (972) 713-6272 (888) 997-3933 Fax: (972) 735-0964

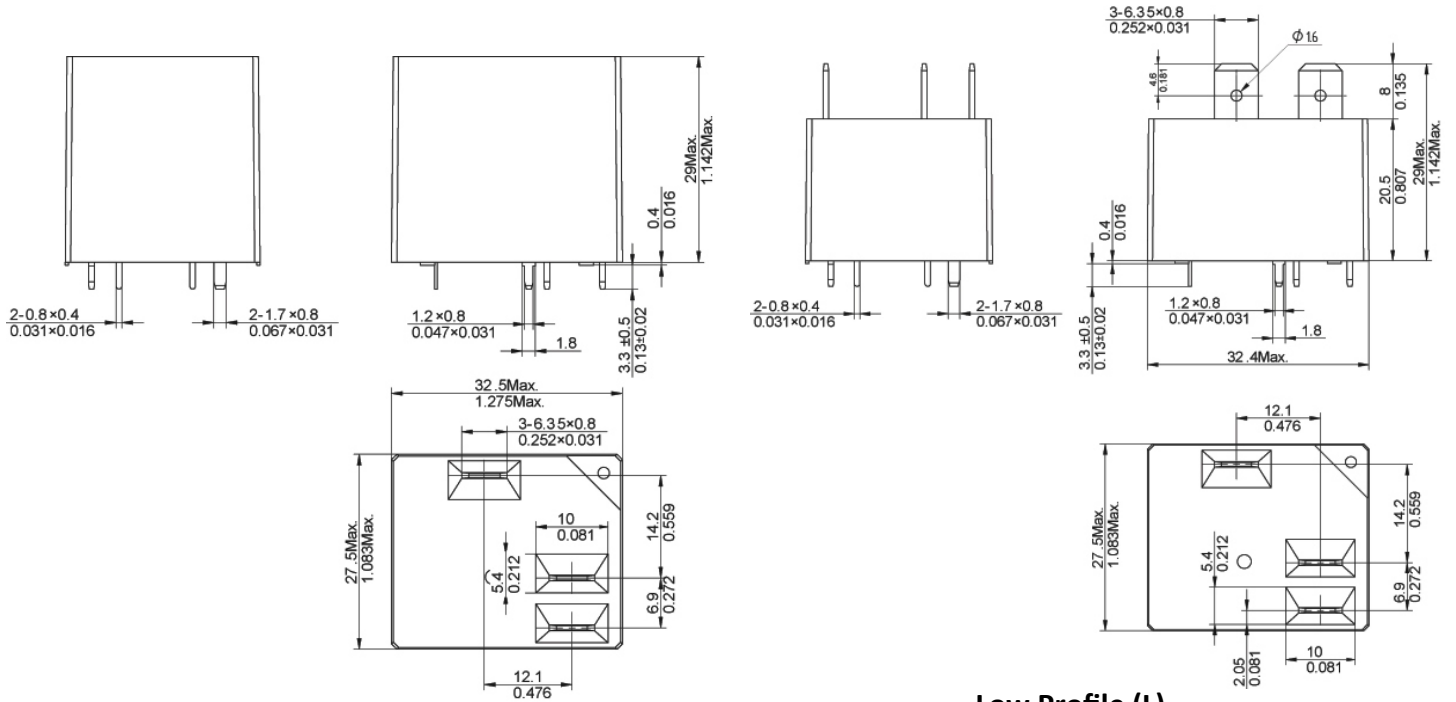
www.PickerComponents.com

e-mail: sales@pickercomponents.com

Dimensions are listed for reference purposes only.

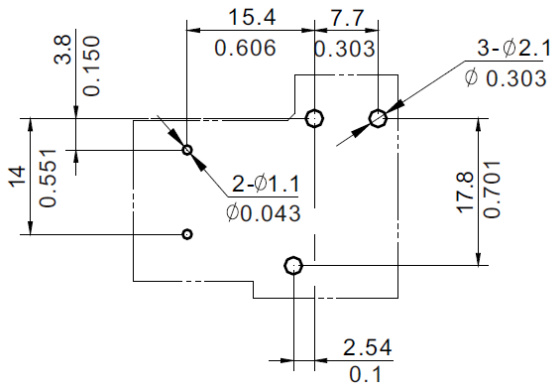
Specifications and Availability subject to change without notice.

DIMENSIONS (mm / inches)



PIN LAYOUT (mm / inches)

Low Profile (L)



1A

1B

1C

