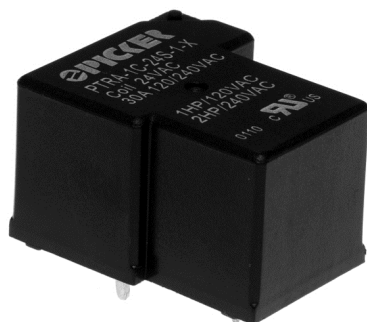


30, 40 or 50 Amp Latching PCB Relay

PCT90xL



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



UL/CSA Ratings at 25C

PCT90EL 50 Amp Version	Voltage	1 Form A (SPST-NO)	1 Form B (SPST-NC)	1 Form C (SPDT)	
Load Type				NO	NC
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		

PCT90D 40 Amp Version	Voltage	1 Form A (SPST-NO)	1 Form B (SPST-NC)	1 Form C (SPDT)	
Load Type				NO	NC
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		

PCT90C 30 Amp Version	Voltage	1 Form A (SPST-NO)	1 Form B (SPST-NC)	1 Form C (SPDT)	
Load Type				NO	NC
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	Service Life	
Initial Contact Resistance	≤ 20mΩ initial	Electrical	See Contact Data
Maximum Switching Voltage	110VDC 300VAC	Mechanical	1 x 10 ⁶ Operations
	50 A	40 A	30 A
Maximum Switching Power	13,850 VA 1,500 W	11,080 VA 1,200 W	8,310 VA 1,200 W
Maximum Switching Current	50 A	40 A	30 A

CHARACTERISTICS

Operate Time	≤ 15 msec
Release Time	≤ 15 msec
Insulation Resistance	1,000 MΩ min @ 500VDC
Dielectric Strength	
Between Contact and Coil	50 Hz 2,500V 1 minute
Between Contacts	50 Hz 1,500V 1 minute
Shock Resistance	200m/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:	PCT90EL	-1C	-12	S		-X
Model:	PCT90EL (50 Amp)					
	PCT90DL (40 Amp)					
	PCT90CL (30 Amp)					
Contact Form:	1A (SPST-NO)					
	1B (SPST-NC)					
	1C (SPDT BBM)					
Coil Voltage:	5, 12, 24, 48					
Enclosure:	S: Sealed, E: Covered					
Coil Sensitivity:	Nil: PCT90EL (50 Amp) 1.5 Watt					
	Nil: PCT90DL (40 Amp) 0.9 Watt					
	Nil: PCT90CL (30 Amp) 0.9 Watt					
Coil:						
	Nil: Single Coil Latching, Double Coil not available at this time					
RoHS Compliant:	-X					

COIL DATA

PCT90E (50 Amp)		Resistance (Ohms ± 10%)	Must Operate Voltage Max (VDC)	Pulse Magnitude (msec)	Coil Power (msec)	Operate Time (msec)	Reset Time (msec)
Coil Voltage							
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				

PCT90C/D (30/40 Amp)		Resistance (Ohms ± 10%)	Must Operate Voltage Max (VDC)	Pulse Magnitude (msec)	Coil Power (msec)	Operate Time (msec)	Reset Time (msec)
Coil Voltage							
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				



3220 Commander Drive, Suite 102 Carrollton, TX 75006

Sales: (972) 713-6272 (888) 997-3933

Fax: (972) 735-0964

www.PickerComponents.com

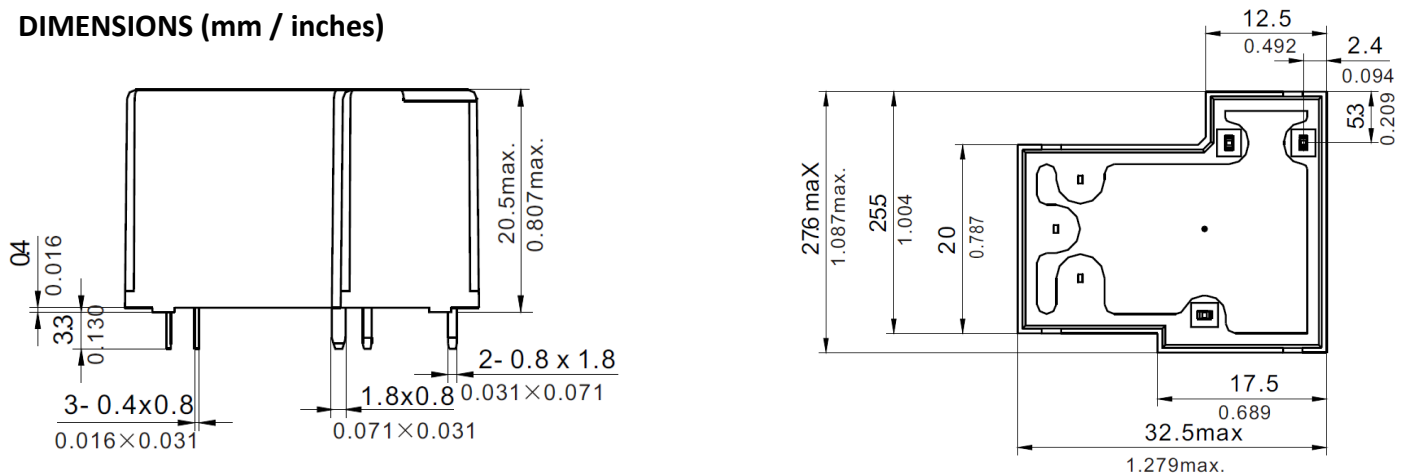
e-mail: sales@pickercomponents.com

PCTxL Rev A 7/30/14

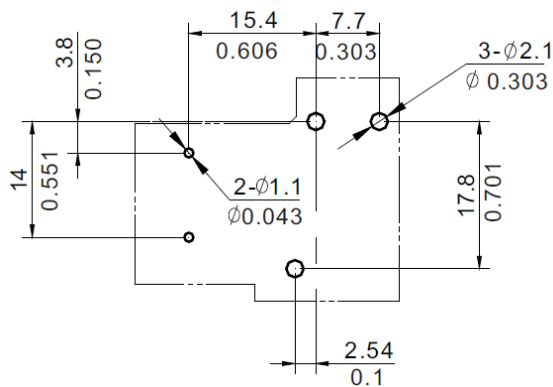
Dimensions are listed for reference purposes only.

Specifications and Availability subject to change without notice.

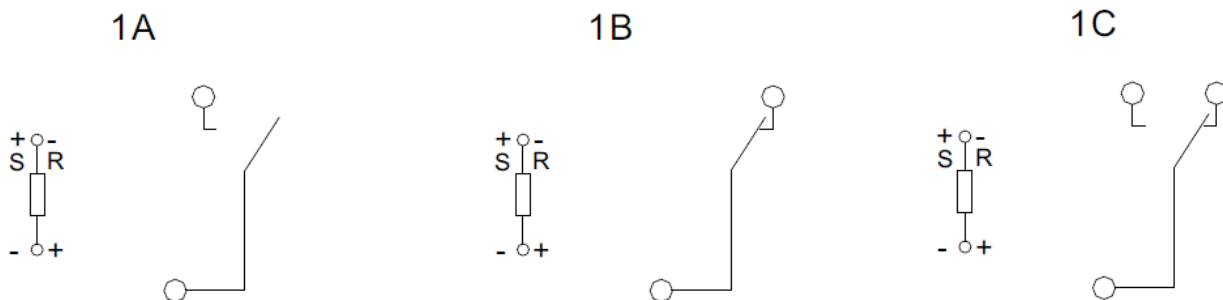
DIMENSIONS (mm / inches)



PIN LAYOUT (mm / inches)



SCHEMATIC



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.