

Features

• Low cost, small size, 3A, 5A, 10A and 15A switching capacity.

- Meets UL and CSA requirements.
- 1 pole, 2 poles and 4 poles contact arrangements.
- · AC and DC coils.
- Plug-in terminals or PCB terminals.

Contact Data @ 20°C

Arrangements: 1 Form A (SPST-NO), 1 Form C (SPDT), 2 Form A (DPST-NO), 2 Form C (DPDT), 4 Form A (4PST-NO), 4 Form C (4PDT). Material: Ag, Ag Alloy. Max.Switching Rate: 300ops./min.(Mechanical). 30ops./min.(Electrical).

Expected Mechanical Life: 100 million operations (no load). Expected Electrical Life: 100,000 operations (rated load). Minimum Load: 100mA @ 5VDC. Initial Contact Resistance: 50milliohms @ DC6V,1A.

Contact Ratings

Ratings:	PCL-4 PCL-2 PCLH-2	3A @ AC250V/DC24V resistive. 5A @ AC250V/DC24V resistive. 15A@AC240V resistive. 10A @ AC250V/DC24V resistive.				
	PCLH-1	15A (@ AC250V/D	C24V resistive.		
Max. Switched Current:			PCL-4	3A.		
			PCL-2	5A.		
			PCLH-2	15A.		
			PCLH-1	15A.		
Max. Switched Power:			PCL-4	660VA, 72W.		
			PCL-2	1,100VA, 120W.		
			PCLH-2	3,168VA, 240W.		
			PCLH-1	3,300VA, 360W.		

Initial Dielectric Strength

Between Open Contacts: 1,000VAC 1minute. Between Adjacent Contact Terminals: 1,500VAC 1minute. Between Contacts and Coil: 2,000VAC 1minute. Surge Voltage (Coil-Contact): 3,000V(1.2/50µs).

Initial Insulation Resistance

Between Open Contacts: 1,000Mohms @ 500VDC. Between Adjacent Contact Terminals: 1,000Mohms @ 500VDC. Between Contacts and Coil: 1,000Mohms @ 500VDC.

Coil Data

Voltage: AC 6 - 240V. DC 6 - 110V. Nominal Power: AC abt. 1.4VA/1.2VA (50Hz/60Hz). DC abt. 0.9W. Coil Temperature Rise: AC 60°C max. DC 50°C max. Max. Coil Power: 110% of nominal voltage.

Dimensions are shown for reference purposes only.

Dimensions are in inches over (millimeters) unless otherwise specified.

PCL series

3A, 5A, 10A, 15A General Purpose Miniature Relay

Factory Automation, Process Controls, Electrical Panels, etc.

91 UL File No. E58304 (CSA File No. LR48471

Coil Data@ 20°C

PCL AC Coil							
Rated Coil Voltage (VAC)	Coil Resistance (ohms)±10%	Must Operate Voltage (VAC)	Must Release Voltage (VAC)	Nominal Coil Power (VA)			
6 12 24 48 100 110/120 200 220/240	10 40 160 2,800 3,400 11,000 13,600	80% max.	30% min.	abt. 1.4			
		PCL DC Co	il				
Rated Coil Voltage (VAC)	Itage Resistance		Must Release Voltage (VDC)	Nominal Coil Power (W)			
6 12 24 48 100/110	40 160 650 2,600 11,000	80% max.	10% min.	abt. 0.9			

Operate Data @ 20°C Must Operate Voltage: AC 80% of nominal voltage or less. DC 80% of nominal voltage or less. Must Release Voltage: AC 30% of nominal voltage or more. DC 10% of nominal voltage or more. Operate Time: AC 20ms max. DC 15ms max. Release Time: AC 20ms max. DC 8ms max.

Environmental Data

Temperature Range: Operating: -10°C to +55°C. Humidity: 45 to 85%. (Non-condensing). Vibration, Operational: 10 to 55Hz 1.0mm double amplitude. Mechanical: 10 to 55Hz 1.0mm double amplitude. Shock, Operational: 100m/s² (abt. 10G). Mechanical: 1,000m/s² (abt. 100G).

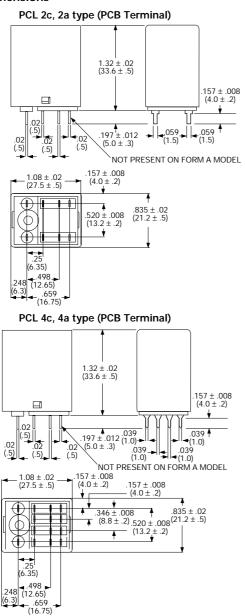
Mechanical Data

Termination: Plug-in, PCB. Enclosure: Snap-on cover. Weight: 1.26 oz (32g) approximately.

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DEG	PCL/PCLH Series Relays								Catalog 1308961 Issued 6-01		
Ordering Info	ormation	Ту	pical Part Number	PCL	-1	02A	1		s		
1. Basic Series: PCL = 3A, 5A typ		уре									
2. Number of P 1 = 1 pole (PCLH		ole 4 =	4 pole (PCL only)		1						
3. Coil Voltage: 01A=6VAC 05A=100VAC 01D=6VDC	02A=12VAC 06A=110/120VAC 02D=12VDC	03A=24VAC 07A=200VAC 03D=24VDC	04A=48VAC 08A=220/240VAC 04D=48VDC	05D=100/110VD	С						
4. Contact Mate Blank = Ag (only a	erial: available on 4 pole mode	l) 1 =	Ag Alloy (available wit	h all versions)			I				
5. Contact Arra Blank = Form C	ngement: M = Form A							-			
6. Case Type: S = Standard (Sm	noke case)										
7. Terminal Typ Blank = Plug-in	P = PCB										
8. Additional D Blank = Standard		version								,	

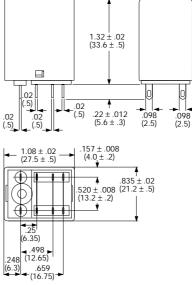
Outline Dimensions

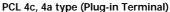


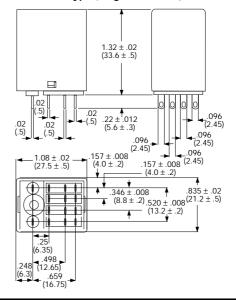
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PCL 2c, 2a type (Plug-in Terminal)



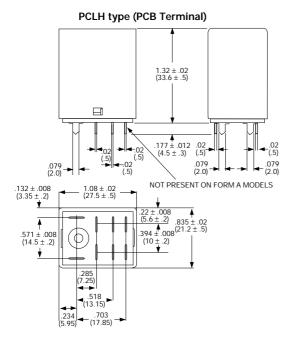




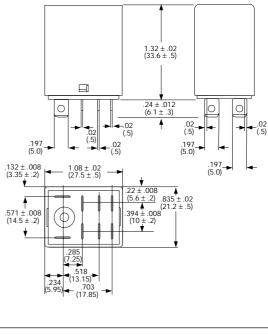
Specifications subject to change.

Technical Support: 1-800-522-6752 http://relays.tycoelectronics.com

Outline Dimensions (continued)

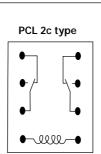


PCLH type (Plug-in Terminal)

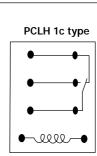


Wiring Diagrams (Bottom Views)

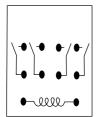
PCL 4c type



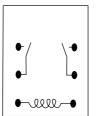
PCLH 2c type



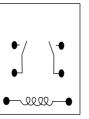
PCL 4a type

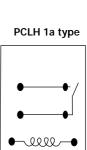


PCL 2a type

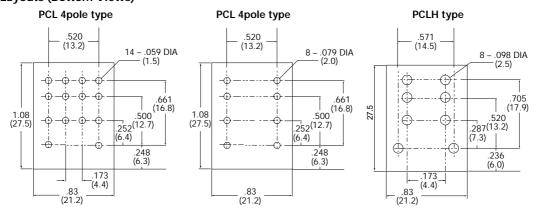


PCLH 2a type





PC Board Layouts (Bottom Views)



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Reference Data

