

Dual Solid State Relay

PCS28



FEATURES

- Dual Solid State
- Two Separate SCR Output Relays
- Panel Mount
- Built in Snubber
- Opto-Isolation Between Input and Output
- RoHS Compliant

US E93379

INPUT PARAMETERS (Ta = 25°C)

Control Voltage Range	12D	4 - 15 VDC
	24D	15 - 32 VDC
Must Turn-On Voltage	12D	4 VAC
	24D	15 VAC
Control Current	12D	8 - 50 mA
	24D	6 - 30 mA
Input Resistance	12D	330 Ω
	24D	1.5 kΩ
Must Turn-Off Voltage		1 VDC

OUTPUT PARAMETERS (Ta = 25°C)

Load Current Ordering	25A		40A		50A	
	240A	380A	240A	380A	240A	380A
Load Voltage Ordering	240A	380A	240A	380A	240A	380A
Load Voltage Range (VAC)	48-280	48-440	48-280	48-440	48-280	48-440
Max. Transient Voltage (Vpk)	600	800	600	800	600	800
Load Current Range	0.1 - 25 A		0.1 - 40 A		0.1 - 50 A	
Max. Surge Current (10 ms)	300		400		500	
Max. I ² t (10 ms, A ² s)	450		800		1250	
Max. On-State Voltage	1.5 VRMS					
Max. Off-State Leakage Current	10 mA					
Min. Off-State dv/dt	500 V/us					
Max. Turn-On Time	Zero-Cross: 1/2 Cycles + 1 ms; Random: 1 ms					
Max. Turn-Off Time	1/2 Cycles + 1 ms					
Frequency Range	47 - 63 Hz					
Min. Power Factor	0.5					

CHARACTERISTICS

Dielectric Strength	4000 VAC, 50 Hz/60 Hz, 1 min. (Input to Output)
	2500 VAC, 50 Hz/60 Hz, 1 min. (Input, Output to Output)
Insulation Resistance	1000 MΩ at 500 VDC
Operating Temperature	- 30°C to 80°C
Storage Temperature	- 30°C to 100°C
Weight	Approximately 83 g

ORDERING INFORMATION

Example:	PCS28	-12D	-240A	-25	Z
Model:	PCS28				
Control Voltage:	12D: 4 - 15 VDC; 24D: 15 - 32 VDC				
Load Voltage:	240A: 48 - 280 VAC; 380A: 48 - 440 VAC				
Load Current:	25: 25 A; 40: 40 A; 50: 50 A				
Switching Type:	Z: Zero Crossing; R: Random Turn-On				

Box Quantity: 80; Inner Box 2

For Accessories and Heat Sinks see page 2

PRECAUTIONS

- 1) When choosing a Solid State Relay (SSR), note the actual load current and ambient temperature and reference the Characteristic Curves below.
- 2) SSRs require a adequate heat sinking or other effective cooling measures.
- 3) With ambient temperature above 25°C refer to the curve of Max. Load Current vs Ambient Temperature for load current derating.
- 4) Apply heat-conducting silicon grease or a thermal transfer pad on the space between SSR and heatsink and screw the SCR firmly in to the heat sink to avoid damage from overheating.
- 5) Tighten the SSR terminal screws properly. We recommended screw installation torque as follows :
 M4 screw mounting torque range is (0.98-1.37)N • m,
 M3 screw mounting torque range is (0.56-0.98)N • m.
 Lose screws will damage the SSR with heat generated from connections. Also, excessive screw torque may damage relays internal components.
- 6) It is recommended to use a heat sink matched to the Current Load. With any heat sink test that the SSR base temperature does not exceed 65°C.
- 7) When using the PCS15 relay with an inductive load, it is suggested to select random tum-on (i.e., a model with "R" letter).
- 8) The PCS15 is not suitable for capacitive loads; if you must then do not choose products with varistor protection (i.e., a model with "Y" letter).
- 9) Listed parameters are based on resistive loads. Do not use the relay beyond the described current, temperature, load or voltage limits as described in this data sheet.

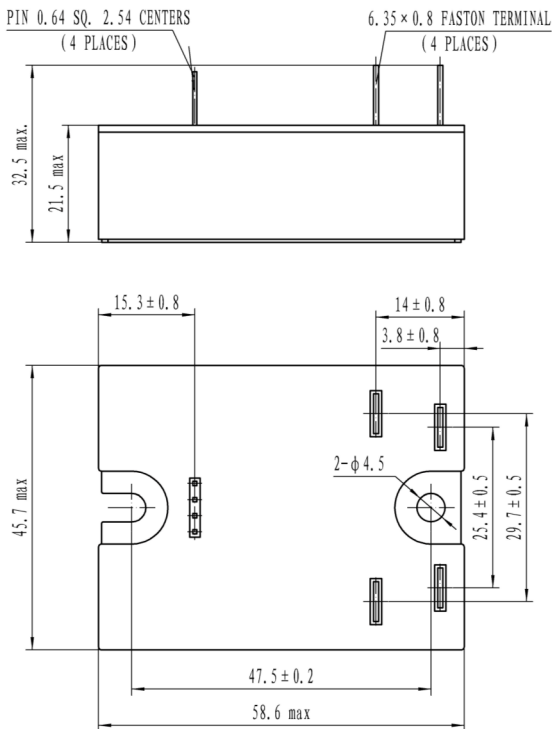
ACCESSORIES

Heat Transfer Pad	HTP100
Heat Sinks	PCH-I-50 for applications up to 20 Amps @ 25°C Ambient Temperature
	PCH-H-110 for applications up to 35 Amps @ 25°C Ambient Temperature
	PCH-H-150 for applications up to 50 Amps @ 25°C Ambient Temperature

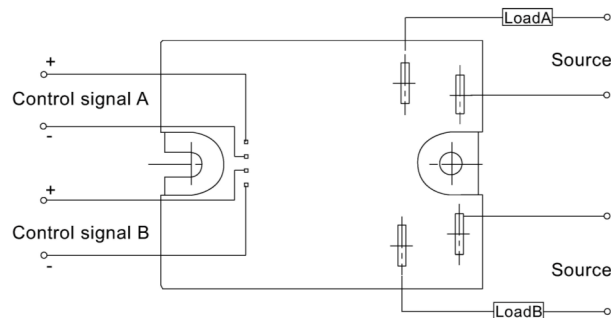
ACCESSORIES SOLD SEPERATELY

DIMENSIONS (mm)

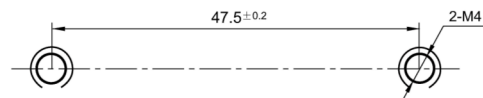
Outline Dimensions



Wiring Diagram

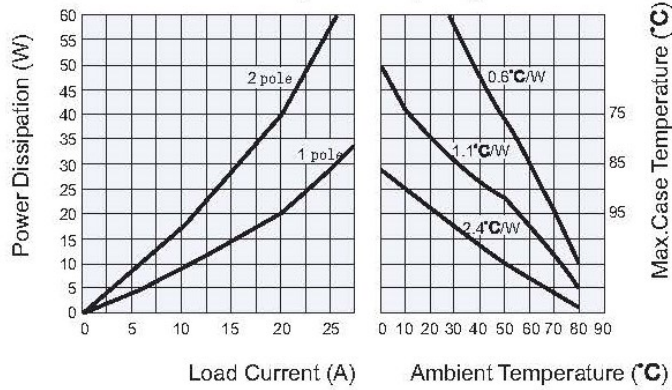


Mounting Holes

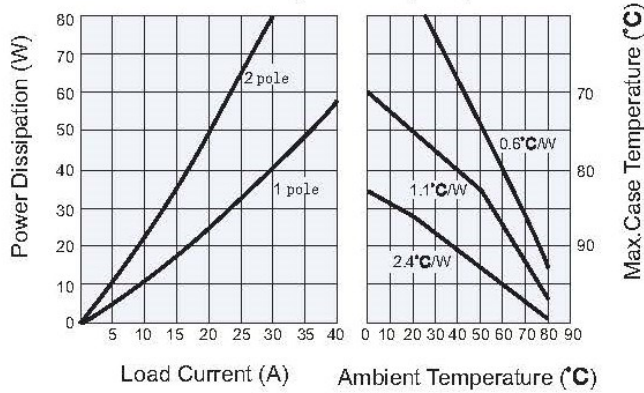


CHARACTERISTIC CURVES

Max. Load Current vs. Ambient Temperature(25A)



Max. Load Current vs. Ambient Temperature(40A)



Max. Load Current vs. Ambient Temperature(50A)

