



50/40 Amp Automotive Plug-In / PCB Mini ISO Relay - Ignition Protected

PC792E



FEATURES

- Ignition Protected* | SAE J1171 | UL 1500 | ISO 8846
- Most Popular Automotive Relay Footprint
- Contact Switching Capacity up to 150 Amps
- 50 Amps Continuous Carrying Current
- 125°C Operating Temperature
- Internal Diodes or Resistors Available
- >0.8 mm Contact Gap with 24 VDC
- Sockets Available

CONTACT RATINGS 14 VDC and 28 VDC AT 25° C

Contact Form		1 Form A	1 Form AA	1 Form B	1 Form C	
		SPST-NO	2-SPST-NO	SPST-NC	SPDT-NO	SPDT-NC
Max Switching Current	14 VDC	Make 150 A ⁽¹⁾	Make 2 x 150 A ⁽¹⁾	Make 120 A ⁽¹⁾	Make 150 A ⁽¹⁾	Make 120 A ⁽¹⁾
		Break 50 A	Break 2 x 50 A	Break 40 A	Break 50 A	Break 40 A
	28 VDC	Make 75 A ⁽¹⁾	Make 2 x 75 A ⁽¹⁾	Make 60 A ⁽¹⁾	Make 75 A ⁽¹⁾	Make 60 A ⁽¹⁾
		Break 25 A	Break 2 x 25 A	Break 20 A	Break 25 A	Break 20 A
Max Continuous Current	14 VDC	50 A	2 x 50 A	40 A	50 A	40 A
	28 VDC	25 A	2 x 25 A	20 A	25 A	20 A

CONTACT RATINGS Continued

Max Switching Voltage	75 VDC
Max. Switching Power	700 W
Minimum Load	0.1A @ 12 VDC

CROSS REFERENCES

Song Chuan: 896H
896H-1AH-S-12VDC Crosses to PC795E-1C-C-12S-X
896H-1CH-S1-R1-12VDC Crosses to PC792E-1C-C1-12S-RN-X

⁽¹⁾With current load applied for a maximum of 10 milliseconds at a maximum duty cycle of 10%.

*Sealed with 6,9,12 or 24 VDC, 1.6 Watt Coil

ORDERING INFORMATION

Example:	PC792E	-1C	-C	-12	S		-R	N	-X
Model:	PC792E								
Contact Form:	1A, 1AA (1 Form 1 A with 2 #87 Terminals), 1B, 1C								
Case Style:	C: Plug-In; C1: Plastic Bracket; P: PC Pins ⁽⁴⁾								
Coil Voltage:	6, 12, 24, 48								
Enclosure:	C: Dust Cover; S: Sealed; S1: Flux Tight ⁽²⁾								
Coil Power:	Nil: 1.6W ⁽³⁾ ; 1.9: 1.9W; 2.3: 2.3W; 2.6: 2.6W								
Parallel Component:	Nil: None; D: Diode; R: Resistor; DR: Diode and Resistor								
Terminal Plating:	Nil: PC Pin Version; N: Nickel Plated Terminals Standard on all Plug-In Models								
RoHS Compliant:	-X								

⁽²⁾ Flux Tight relays are constructed such that Flux will not enter the relay in an automated soldering process, they are NOT Suitable for water wash

⁽³⁾ 1.6W Industry Standard Coil

⁽⁴⁾ Minimum Quantities Apply

See SC792 for available sockets

Coil Options

Resistor Values (1/4 Watt):

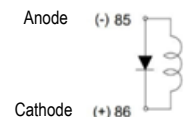
6V - 180 ohm

12V - 680 ohm

24V - 2,700 ohm

Diode: 1N4005

Orientation of Optional Diode



*Contact Picker if You Require the Opposite Polarity or a Dual Diode

Box Quantity 400; Inner Box 100

COIL DATA

Coil Voltage (VDC)		Coil Power (W)				Must Operate Voltage Max (VDC)	Must Release Voltage Min. (VDC)
		Coil Resistance (Ohms ± 10%)					
Rated	Max	1.6 W**	1.9 W	2.3 W	2.6 W		
6	7.8	22.5	19.0	15.6	13.8	3.9	0.6
9	11.7	50.6	NA	NA	NA	5.9	0.9
12	15.6	90.0	75.8	62.6	55.4	7.8	1.8
24	31.2	360.0	303.2	250.4	221.5	15.6	2.4
48	62.4	1,440.0	NA	NA	NA	31.2	4.8

**1.6 W Industry Standard Coil

NOTES:

The use of any coil voltage less than the rated voltage will compromise the operation of the relays.

Must Operate Voltage and Must Release Voltages are for test purposes only and are not to be used as design criteria.

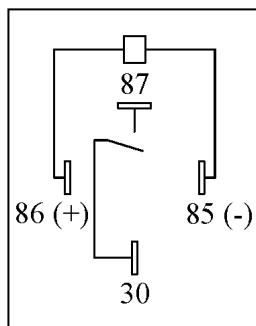
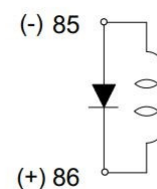
CHARACTERISTICS

Operate Time	7 msec Typical
Release Time	5 msec Typical
Insulation Resistance	100 M Ω Min at 500VDC
Dielectric Strength	500 V 50 Hz Between Contacts 750 V 50 Hz Between Coil and Contact
Terminal Strength	8N 4N (PC type)
Shock Resistance	147 m/s ² 11ms
Vibration Resistance	10 Hz—40 Hz Double Amplitude 1.5 mm
Solderability	260°C for 5 seconds
Operating Temperature	- 40°C to 125°C
Storage Temperature	- 40°C to 155°C
Weight	31 grams, C1 36 grams
Power Consumption	1.6 W, 1.9 W, 2.3 W, 2.6 W

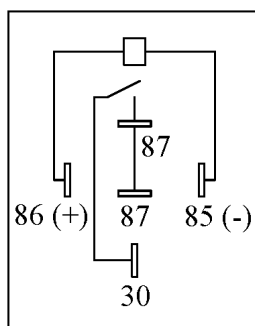
CONTACT DATA

Material		AgSnO ₂
Initial Contact Resistance		30 m Ω Max
Service Life	Electrical	1 x 10 ⁵ Operations
	Mechanical	1 x 10 ⁷ Operations

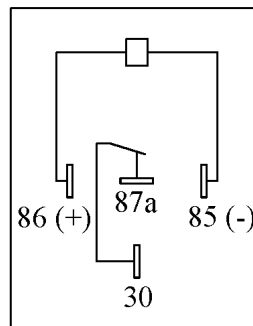
Orientation of Optional Diode



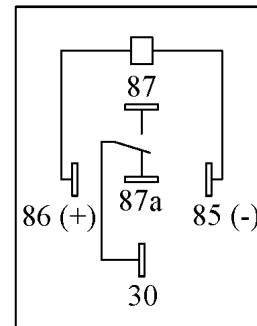
1A



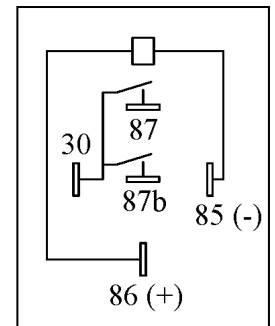
1AA



1B



1C



1U

Wire Diagrams



409 International Parkway, Suite 200 Richardson, TX 75081
Sales: (972) 713-6272 (888) 997-3933

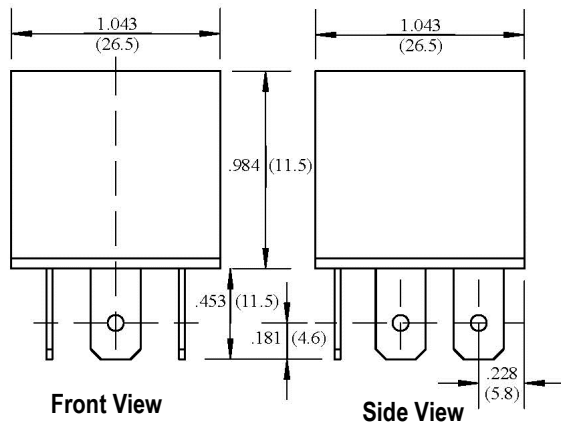
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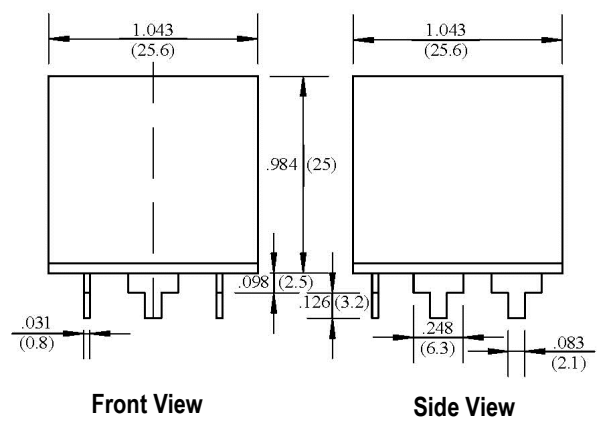
Dimensions are listed for reference purposes only.

Specifications and Availability subject to change without notice.

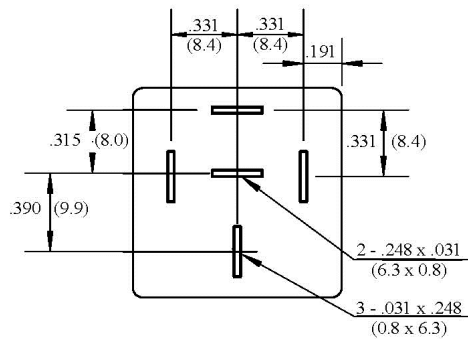
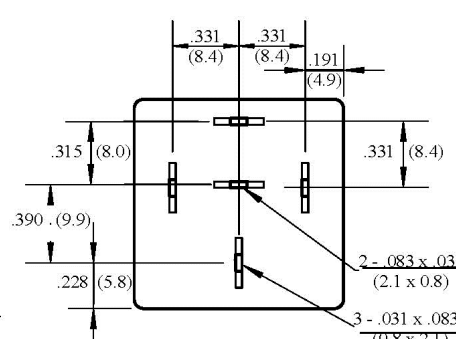
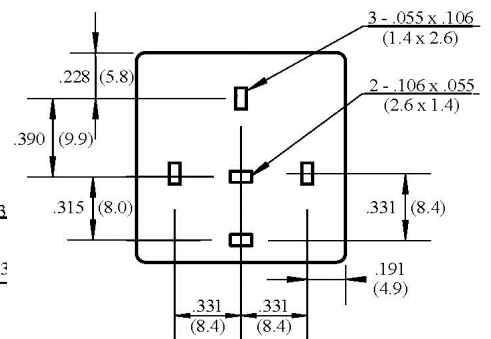
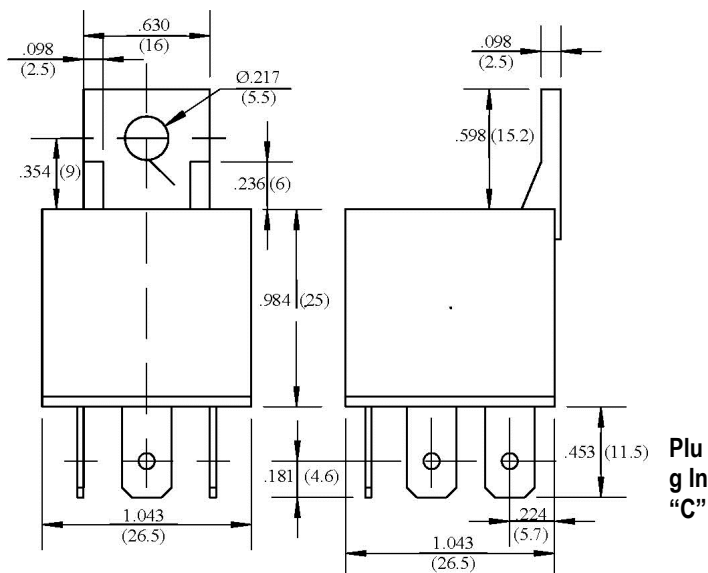
DIMENSIONS in Inches/mm



Relay (QC)



Relay (Pins)

Plug-In "C"
(Bottom View)PC Pins "P"
(Bottom View)PCB Board Layout
(Top View)

Plastic Bracket "C1"

Plu
g In
"C"