

40/30 Amp Automotive Plug-In / PCB Mini ISO Relay - Ignition Protected

PC792A



FEATURES

- Ignition Protected* | SAE J1171 | UL 1500 | ISO 8846
- Most Popular Automotive Relay Footprint
- Contact Switching Capacity up to 120 Amps
- 40 Amps Continuous Carrying Current
- 125°C Operating Temperature
- Internal Diodes or Resistors Available
- Sockets Available
- Lead Free and RoHS Compliant
- Fully Automated Assembly

CONTACT RATINGS 14 VDC at 25°C

Contact Form	1 Form A (SPST-NO) 1 Form AA (SPST-NO, 1 Form A with 2 #87 Terminals) 1 Form C (SPDT)	
	Normally Open	Normally Closed
Max Switching Current	Make 120 A ⁽¹⁾	Make 90 A ⁽¹⁾
	Break 40 A	Break 30 A
Max Continuous Current	40 A @ 25°C	30 A @ 25°C
	30 A @ 85°C	22.5 A @ 85°C
Max Continuous Current 1 Form U and 1 Form AA	2 X 20 Amps (at 85°C)	
Max Switching Voltage	75 VDC	
Max. Switching Power	630 W	
Minimum Load	0.1A @ 12 VDC	

CONTACT RATINGS 28 VDC at 25°C

Contact Form	1 Form A (SPST-NO) 1 Form AA (SPST-NO, 1 Form A with 2 #87 Terminals) 1 Form C (SPDT)	
	Normally Open	Normally Closed
Max Switching Current	Make 60 A ⁽¹⁾	Make 45 A ⁽¹⁾
	Break 20 A	Break 15 A
Max Continuous Current	20 A @ 25°C	15 A @ 20°C
	15 A @ 85°C	11.25 @ 20°C
Max Continuous Current 1 Form U and 1 Form AA	2 X 15 Amps (at 85°C)	
Max Switching Voltage	75 VDC	
Max Switching Power	630 W	
Minimum Load	0.1A @ 24 VDC	

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

⁽¹⁾ With current load applied for a maximum of 3 seconds at a maximum duty cycle of 10%.

ORDERING INFORMATION

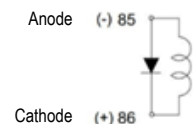
Example: Model: PC792A	PC792A	-1C	-C	-12	S	1.9	-D	N	-X
Contact Form: 1A: 1 Form A (SPST-NO) 1AA: 1 Form AA (SPST-NO, 1 Form A with 2 # 87 Terminals) 1C: 1 Form C (SPDT)									
Case Style: C: Plug-In; C1: Plastic Bracket; C2: Metal Bracket C3: (S only) Weatherproof Case with Metal Brackets; P: PC Pins									
Coil Voltage: 6: 6 VDC; 9: 9 VDC; 12: 12 VDC; 24: 24 VDC; 48: 48 VDC									
Enclosure: C: Dust Cover; S: Sealed; S1: Flux Tight ⁽²⁾									
Coil Power: Nil: 1.6 W ⁽³⁾ ; 1.9: 1.9 W; 2.3: 2.3 W; 2.6: 2.6 W									
Parallel Component: Nil: None; D: Diode; R: Resistor									
Terminal Plating: Nil: PC Pin Version; N: Nickel Plated Terminals Standard on all Plug In Models									
RoHS Compliant: -X									

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

⁽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 cleaning.
⁽³⁾ 1.6 W Industry Standard Coil

Box Quantity: 400; Inner Box: 100

CONTACT DATA

Material		AgSnO ₂
Initial Contact Resistance		100 MΩ Max @ 0.1 A 6 VDC
Service Life	Electrical	1 x 10 ⁵ Operations
	Mechanical	1 x 10 ⁷ Operations

CHARACTERISTICS

Operate Time	7 msec Typical
Release Time	2 msec Typical
Insulation Resistance	100 MΩ Min at 500VDC, 50% RH
Dielectric Strength	500 Hz 500 V Between Contacts
	500 Hz 750 V Between Coil and Contact
Shock Resistance	147 m/s ² 11ms
Power Consumption	1.6 W(2), 1.9 W, 2.3 W, 2.6 W

CHARACTERISTICS Continued

Vibration Resistance	10 Hz - 40 Hz Double Amplitude
Terminal Strength	8N 4N (PC type)
Solderability	260°C for 5 seconds
Operating Temperature Range	- 40 to 125°C
Storage Temperature Range	- 40 to 155°C
Weight	31 grams

COIL DATA

Coil Voltage (VDC)(3)		Coil Resistance 7 (Ohms ± 10%)				Must Operate Voltage Max (VDC)(4)	Must Release Voltage Min. (VDC)(4)
Rated	Max	1.6 W(2)	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	1440.0	NA	NA	NA	31.2	4.8

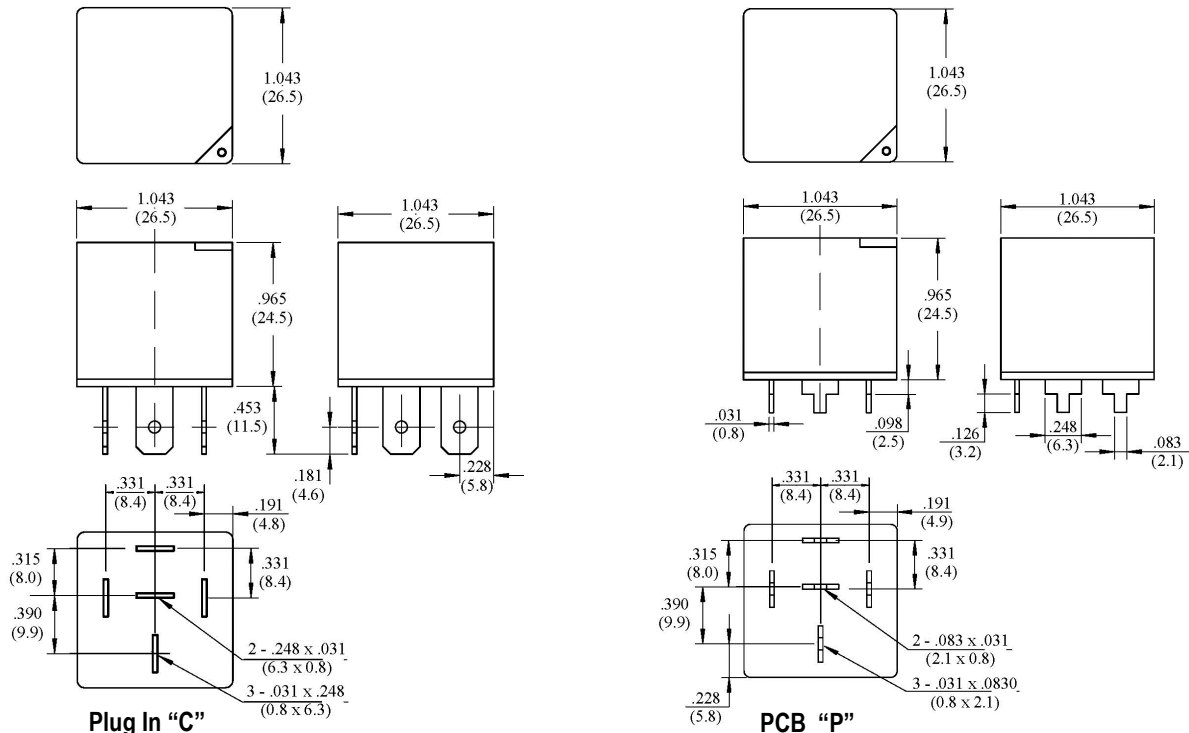
(2)1.6 W Industry Standard Coil

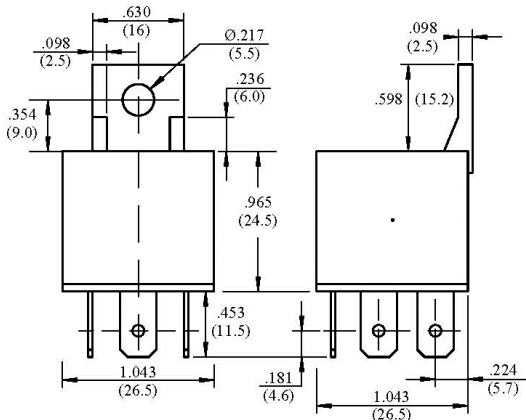
NOTES:

(3)The use of any coil voltage less that the rated voltage will compromise the operation of the relays.

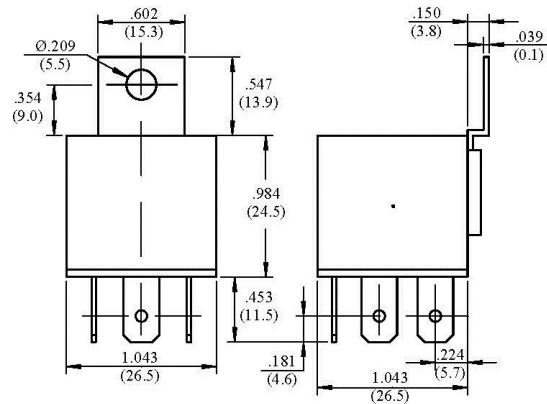
(4)Must Operate Voltage and Must Release Voltages are for test purposes only and are not to be used as design criteria.

DIMENSIONS in Inches (mm)

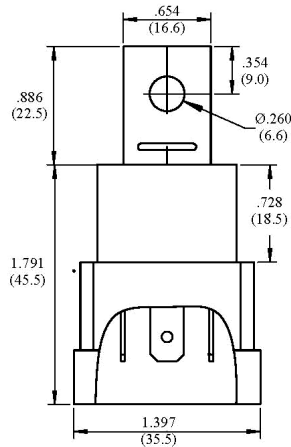




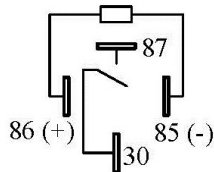
Plastic Bracket "C1"



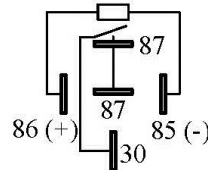
Metal Bracket "C2"



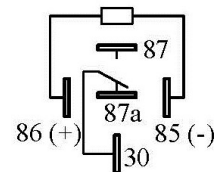
Weatherproof Case "C3"



1A



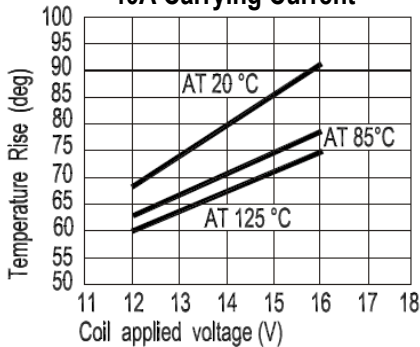
1AA



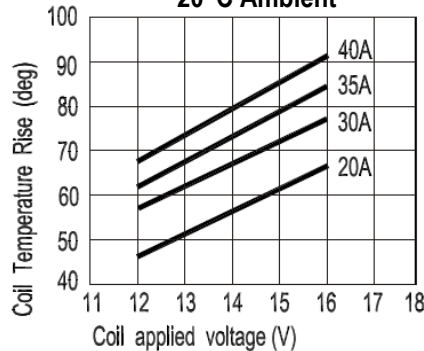
1C

Wiring Diagrams

Coil Temperature Rise @ 40A Carrying Current



Coil Temperature Rise 20°C Ambient



Max Value for Switching Capacity

