

40/30 Amp Automotive Plug-In / PCB Power Relay

PC792A



CONTACT RATINGS 14 VDC at 25°C

Contact Form	1 Form A, 1 Form AA or 1 Form C	
	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	

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
Vibration Resistance	10 Hz—40 Hz Double Amplitude 1.5 mm
Terminal Strength	8N 4N (PC type)
Power Consumption	1.6 W

ORDERING INFORMATION

Example:	PC792A	-1C	-C	-12	S	-N	-X
Model:	PC792A						
Contact Form:	1A, 1AA (1 Form with 2 #87 Terminals)						
	1C or 1U (2 X 1A, 87 & 87b Isolated)						
Case Style:	C: Plug-In; C1: Plastic Bracket; C2: Metal Bracket						
	C3 Weatherproof Case with Metal Brackets; P: PC Pins						
Coil Voltage:	6, 12, 24, 48						
Enclosure:	C: Dust Cover; S: Sealed						
Coil Power*:	Nil: 1.6 W; 1.9: 1.9 W; 2.3: 2.3 W; 2.6: 2.6 W						
Parallel Component:	Nil: None; D: Diode; R: Resistor; N: Nickel Plated Terminals						
RoHS Compliant:	-X						

Box Quantity: 400; Inner Box: 100

FEATURES

- 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

CONTACT RATINGS 24 VDC at 25°C

Contact Form	1 Form A, 1 Form AA or 1 Form C	
	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 A @ 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	

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

Solderability	235°C ± 2°C 3 s ± 0.5 s
Operating Temperature Range	- 40 to 125°C
Storage Temperature Range	- 40 to 155°C
Weight	31 grams

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

Resistor Values (1/4 Watt):
6V - 180 ohm
12V - 680 ohm
24V - 2,700 ohm
Diode: 1N4005

COIL DATA

Coil Voltage (VDC)		Resistance (Ohms ± 10%)	Must Operate Voltage Max (VDC)	Must Release Voltage Min. (VDC)	Power Consumption (W)
Rated	Max				
6	7.8	22.5	3.9	0.6	1.6
9	11.7	50.6	5.9	0.9	
12	15.6	90	7.8	1.8	
24	31.2	360	15.6	2.4	
48	62.4	1440	31.2	4.8	

*Contact Pickler Components for Coil Resistance Specification, 1.6 W is industry standard.

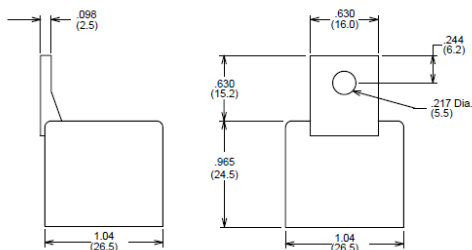
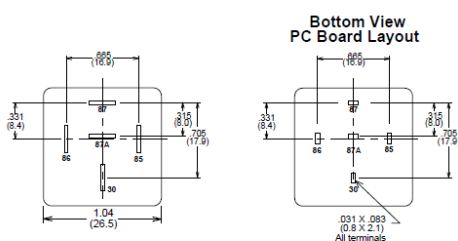
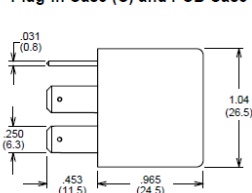
NOTES:

The use of any coil voltage less than the rated voltage will compromise the operation of the relays. Must Operate Voltage is listed for test purposes only and is not to be used as design criteria. Pickup and release voltages are for test purposes only and are not to be used as design criteria.

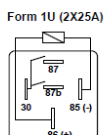
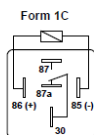
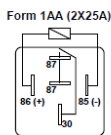
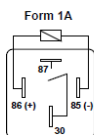
Dimensions are in mm, Inches are listed for reference only.

DIMENSIONS in Inches (mm)

Plug-In Type Plug-In Case (C) and PCB Case (P)



Molded Plastic Bracket (C1)



Wiring Diagrams

Notes:
Contact Forms 1A, 1AA, 1C & 1U shown
On Contact Form A Pin 87a is Omitted
Tolerances + .010 unless otherwise noted

CAUTION on Form 1U
Terminals 30 & 86 Reversed

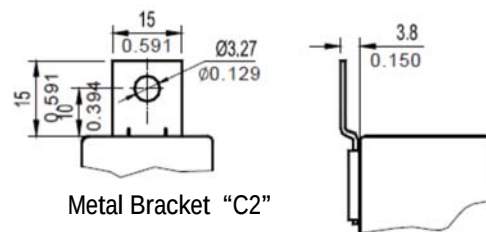
Wiring Diagrams

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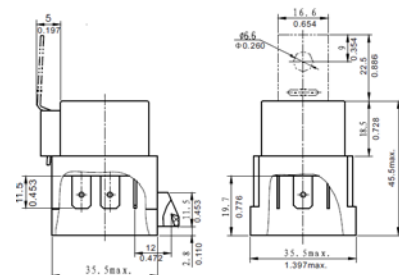
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Metal Bracket "C2"



C3 Weatherproof Case

