

80/60 Amp Automotive Plug-In / PCB Maxi ISO Relay - Ignition Protected

PC795



FEATURES

- Ignition Protected* | SAE J1171 | UL 1500 | ISO 8846
- Most Popular Automotive Relay
- 1A, 1C and 1U Contact Forms Available
- Contact Switching Capacity up to 240 Amps
- 80 Amps @ 14VDC Continuous Carrying Current
- Plain Case, Bracket or PCB Options
- Compatible with Socket SC795
- Lead Free and RoHS Compliant

CONTACT RATINGS 14 VDC at 25°C

Contact Form	1 Form A or 1 Form C	
	Normally Open	Normally Closed
Max Switching Current	Make 240 A	Make 180 A
	Break 80 A	Break 60 A
Max Switching Power	1,120 W	
Max Switching Voltage	75 VDC	
Max Continuous Current	80 A	60 A
Minimum Load	0.5A @ 12VDC	
Form 1U	2 x 25 A @ 14VDC	

CHARACTERISTICS

Operate Time	7 msec Typical
Release Time	2 msec Typical
Insulation Resistance	100 MΩ min @ 500VDC
Dielectric Strength	50 Hz 500V _{RMS} 1 min. Between Contact and Coil
	50 Hz 500V _{RMS} 1 min. Between Contacts
Shock Resistance	147 m/s ² 11 msec
Vibration Resistance	10 - 40 Hz Double Amplitude, 1.5mm
Terminal Strength	8 N, 4N (PC Type)
Solderability	260°C for 5 seconds
Power Consumption	1.8 W, 2.3 W, 2.6 W
Relative Humidity	85% at 40°C

* Sealed with 6,9,12 or 24 VDC, 1.8 and 2.3 Watt Coil Versions.

ORDERING INFORMATION

Example:

Model: **PC795**

Contact Form: **1A, 1C or 1U** (1 Form A with 2 #87 Terminals)

Case Style: **C:** Plug-In; **C1:** Plastic Bracket; **C2:** Metal Bracket

P: PCB; **P1:** PCB w/Plastic Bracket; **P2:** PCB w/Metal Bracket

Coil Voltage: **6, 12, 24, 24W** (Form 1A Only, >.8mm Contact Gap)

Enclosure: **C:** Dust Cover, **S:** Sealed, **S1:** Flux Tight⁽²⁾

Coil Power: **Nil:** 1.8W, **2.3:** 2.3W, **2.6:** 2.6W (1.8W is standard)

Parallel Component: **Nil:** None; **D:** Diode; **R:** Resistor

Terminal Plating **N:** Nickel Plated Terminals Standard on all Plug in Models; **Nil:** PC Pin Version

RoHS Compliant: **-X**

PC795 -1C C -12 S -X

See SC795 for available sockets

Resistor Values:
6V - 180 ohm
12V - 680 ohm
24V - 2,700 ohm
Diode: 1N4005

CONTACT RATINGS 28 VDC at 25°C

Contact Form	1 Form A or 1 Form C	
	Normally Open	Normally Closed
Max Switching Current	Make 120 A	Make 90 A
	Break 40 A	Break 30 A
Max Switching Power	1,120 W	
Max Switching Voltage	75 VDC	
Max Continuous Current	30 A	25 A
Max Continuous Current 24W ⁽¹⁾	45 A	35 A
Minimum Load	0.5A @ 12VDC	
Form 1U	2 x 15 A @ 24VDC	

(1) Maximum Continuous Current utilizing the High Performance >0.8 mm Contact Gap and 2.6 W Coil for greater contact pressure

CONTACT DATA

Material	AgSnO ₂	
Initial Contact Resistance	≤ 20mΩ initial	
Service Life	Electrical	1 x 10 ⁵ Operations
	Mechanical	1 x 10 ⁷ Operations

CHARACTERISTICS CONTINUED

Operating Temperature	-40°C to +125°C
Storage Temperature	-40°C to +155°C
Weight	47 grams

(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

Box Quantity: 400; Inner Box: 100

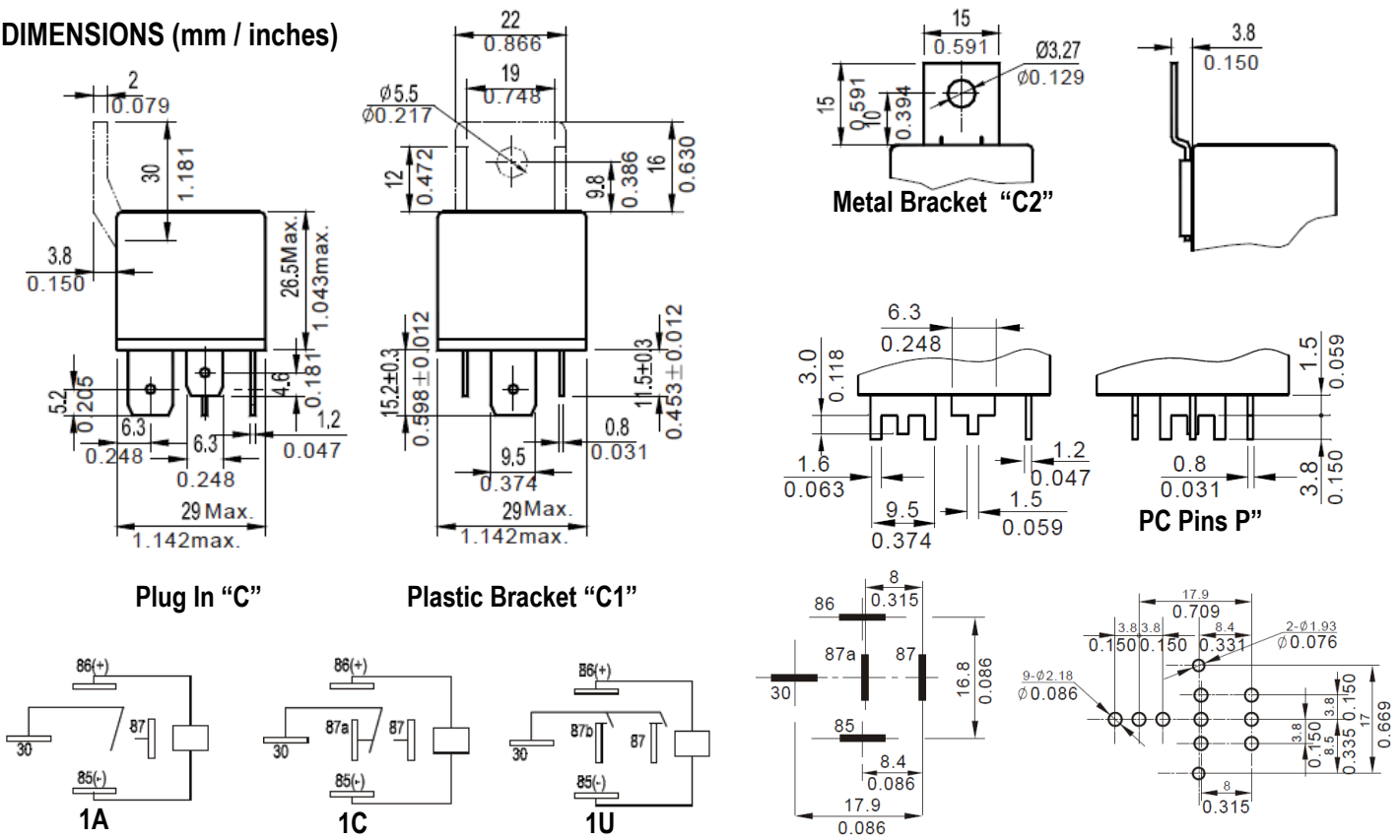
COIL DATA

Coil Voltage (VDC)		Coil Power Resistance (Ohms ± 10%)			Must Operate Voltage Max (VDC)	Must Release Voltage Min. (VDC)
Rated	Max	1.8W	2.3W	2.6W		
6	7.8	20	15.6	13.8	3.9	0.6
12	15.6	80	62.6	55.4	7.8	1.2
24	31.2	320	250.4	221.5	15.6	2.4
48	62.4	1280	1001.6	886.0	31.2	4.8

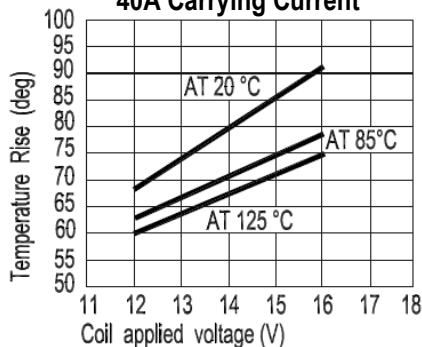
NOTES:

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

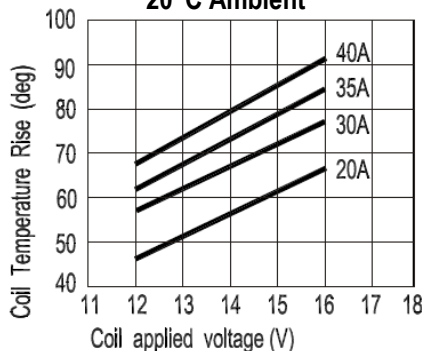
DIMENSIONS (mm / inches)



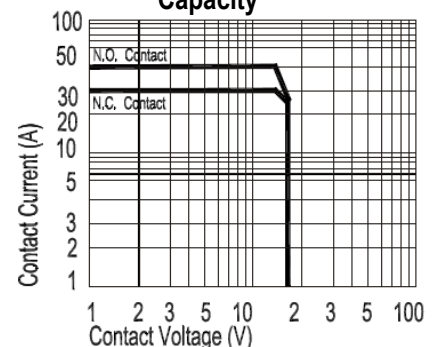
Coil Temperature Rise @ 40A Carrying Current



Coil Temperature Rise 20°C Ambient



Max Value for Switching Capacity



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Dimensions are listed for reference purposes only.

Specifications and Availability subject to change without notice.