80/60 Amp Automotive Plug-In / PCB Maxi ISO Relay — PC796

FEATURES

- Designed for H Bridge Motor Drive Applications Utilizing the NC Contact for Dynamic Braking
- Contact Material, Coil Power and Contact Gaps Optimized
- NC Contact Bounce Significantly Reduced
- Contact Switching Capacity up to 240 Amps
- 80 Amps @ 14VDC Continuous Carrying Current
- Plain Case, Bracket or PCB Options
- Compatible with Socket SC795
- RoHS Compliant

CONTACT RATINGS 14 VDC at 25°C

Contact Form	1 Form C	
	Normally Open	Normally Closed
Max Switching Current	Make 240 A(1)	Make 180 A(1)
	Break 80 A	Break 60 A
Max Switching Power	1,120 W	
Max Switching Voltage	75 VDC	
Max Continuous Current	80 A @ 25°C	60 A @ 25°C
	60 A @ 85°C	45 A @ 85°C
Minimum Load	0.5A @ 12VDC	

CONTACT RATINGS 24 VDC at 25°C

Contact Form	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 Switching Power	1,120 W	
Max Switching Voltage	75 VDC	
Max Continuous Current	40 A @ 25°C	30 A @ 25°C
	30 A @ 85°C	22.5 A @ 85°C
Minimum Load	0.5A @ 12VDC	

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

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/s² 11 msec
Vibration Resistance	10-40 Hz Double Amplitude 1.5mm
Terminal Strength	8 N, 4N (PC Type)
Solderability	235°C ± 2°C 3 sec ± 0.5 sec
Power Consumption	2.3 W

CONTACT DATA

Material		$AgSnO_2$, $AgSnO_2$ (HV=125)(2)
Initial Contact Resistance		≤ 30mΩ initial
Service Life	Electrical	1 x 10^5 Operations
	Mechanical	1 x 10^7 Operations

(2)Standard $AgSnO_2$ contacts have a hardness value (HV) of 95-100

CHARACTERISTICS Continued

Operating Temperature	-40°C to +125°C
Storage Temperature	-40°C to +155°C
Relative Humidity	85% at 40°C
Weight	47 grams

ORDERING INFORMATION

Example: PC796 -1C -C -12 S -N -X

Model: **PC796**

Contact Form: **1C**

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**

Contact Material: **Nil**: $AgSnO_2$; **H**: $AgSnO_2$ (HV=125)*

Enclosure: **C**: Dust Cover; **S**: Sealed

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

RoHS Compliant: **-X**

See SC795 for availably sockets

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

Box Quantity: 400; Inner Box: 100

*Standard $AgSnO_2$ contacts have a hardness value (HV) of 95-100

3220 Commander Drive, Suite 102 Carrollton, TX 75006
Sales: (972) 713-6272 (888) 997-3933 Fax: (972)735-0964
www.PickerComponents.com
e-mail: sales@pickercomponents.com

Dimensions are listed for reference purposes only.
Specifications and Availability subject to change without notice.

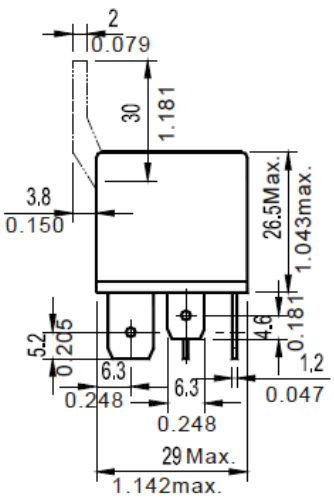
COIL DATA

Coil Voltage (VDC)		Resistance (Ohms ± 10%)	Must Operate Voltage Max (VDC)	Must Release Voltage Min. (VDC)	Power Consumption (W)
Rated	Max				
6	7.8	15.6	3.9	0.6	2.3
12	15.6	62.6	7.8	1.2	
24	31.2	250.4	15.6	2.4	

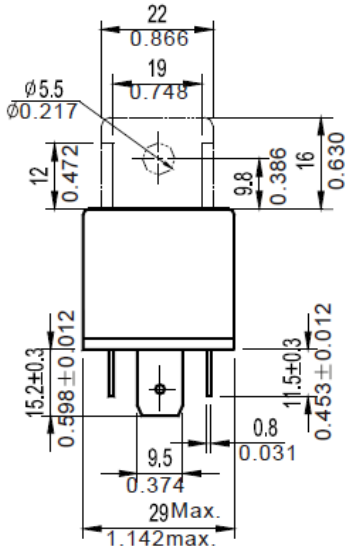
NOTES:

The use of any coil voltage less that 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.

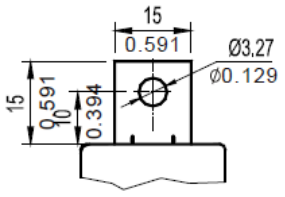
DIMENSIONS (mm / inches)



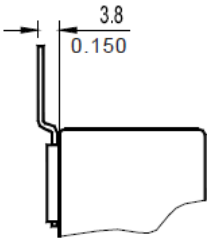
Plug In "C"

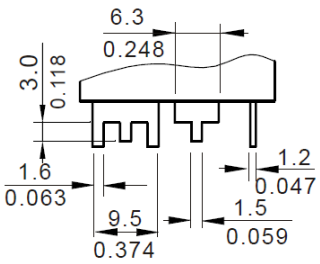


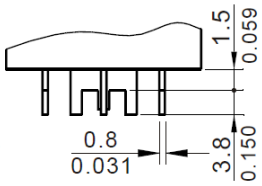
Plastic Bracket "C1"



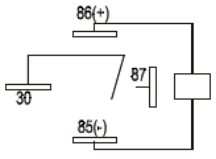
Metal Bracket "C2"



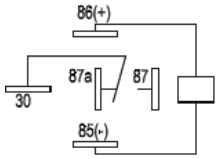




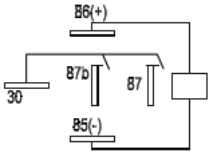
PC Pins P"



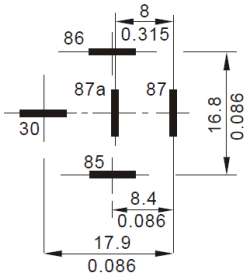
1A

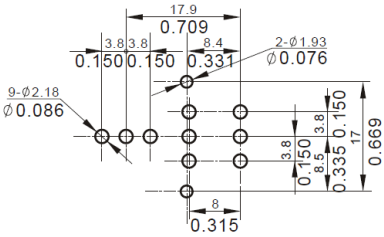


1C

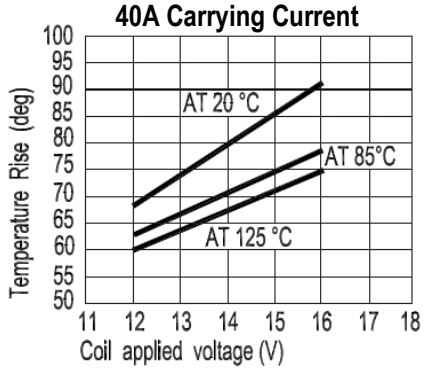


1U

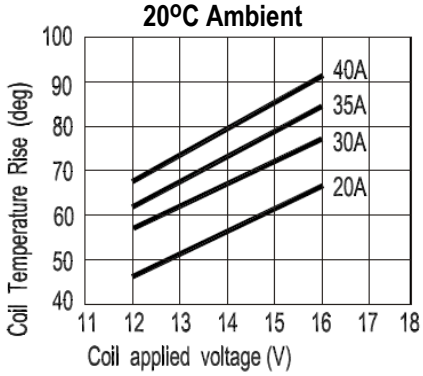




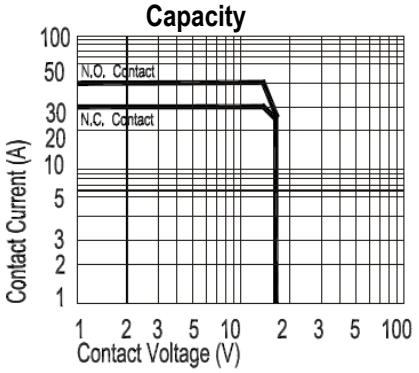
Coil Temperature Rise @ 40A Carrying Current



Coil Temperature Rise 20ºC Ambient



Max Value for Switching Capacity



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