# 60/40 Amp Automotive Plug-In / PCB Mini ISO Relay — PC792H


## FEATURES

- Most Popular Automotive Relay Footprint
- 1A, 1C and 1U Contact Forms Available
- Contact Switching Capacity up to 180 Amps
- 60 Amps Continuous Carrying Current
- Up to 125˚C Operating Temperature
- Internal Diodes or Resistors Available
- Compatible with Socket SC792
- Lead Free and RoHS Compliant

## CONTACT RATINGS 14 VDC at 25°C

| Contact Form | 1 Form A, 1 Form C or 1 Form U | |
|---|---|---|
| | Normally Open | Normally Closed |
| Max Switching Current | Make 180 A(1) | Make 120 A(1) |
| | Break 60 A | Break 40 A |
| Max Continuous Current | 60 A @ 25°C | 40 A @ 25°C |
| | 45 A @ 85°C | 30 A @ 85°C |
| Max Switching Voltage | 75 VDC | |
| Max. Switching Power | 1,120 W | |
| Minimum Load | 0.5A @ 12VDC | |

## CONTACT RATINGS 28 VDC at 25°C

| Contact Form | 1 Form A, 1 Form C or 1 Form U | |
|---|---|---|
| | Normally Open | Normally Closed |
| Max Switching Current | Make 90 A(1) | Make 60 A(1) |
| | Break 30 A | Break 20 A |
| Max Continuous Current | 30 A @ 25°C | 20 A @ 25°C |
| | 22.5 A @ 25°C | 15 A @ 85°C |
| Max Switching Voltage | 75 VDC | |
| Max. Switching Power | 1,120 W | |
| Minimum Load | 0.5A @ 24 VDC | |

## CHARACTERISTICS

| | |
|---|---|
| Operate Time | 7 msec Typical |
| Release Time | 5 msec Typical |
| Insulation Resistance | 100 MΩ Min @ 500VDC |
| Dielectric Strength | 50 Hz 500 $V_{RMS}$ 1 min. Between Contact and Coil |
| | 50 Hz 500 $V_{RMS}$ 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 | 260°C for 5 seconds |
| Power Consumption | 1.8 W |

## CONTACT DATA

| | | |
|---|---|---|
| Material | | AgSnO2 |
| 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 Continued

| | |
|---|---|
| Operating Temperature | -40°C to 125°C |
| Storage Temperature | -40°C to 155°C |
| Relative Humidity | 85% at 40°C |
| Weight | 46 grams, 48 grams w/Metal Bracket |

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

## ORDERING INFORMATION

| Example: | PC792H | -1C | -C1 | -12 | C | -R | N | -X |
|---|---|---|---|---|---|---|---|---|

Model: **PC792H**

Contact Form: **1A, 1C, 1U**

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

Coil Voltage: **6, 12, 24**

Enclosure: **C**: Dust Cover

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

Terminal Plating: **N**: Nickel Plated Terminals **Nil:** PC Pin Version

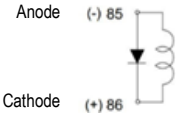
RoHS Compliant: **-X**

Box Quantity: 400; Inner Box:100

See SC792 for available sockets

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

Orientation of Optional Diode



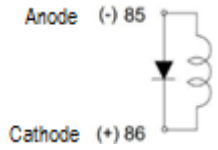

*Contact Picker if You Require the Opposite Polarity or a Dual Diode

409 International Parkway, #200 Richardson, TX 75081
Sales: (972) 713-6272 (888) 997-3933
www.PickerComponents.com
e-mail: sales@pickercomponents.com

Dimensions are listed for reference purposes only.

## COIL DATA

| Coil Voltage (VDC) | | Resistance (Ohms ± 10%) | Must Operate Voltage Max (VDC) | Must Release Voltage Min. (VDC) | Coil Power (W) |
|---|---|---|---|---|---|
| Rated | Max | | | | |
| 6 | 7.8 | 20 | 3.9 | 0.6 | 1.8 |
| 12 | 15.6 | 80 | 7.8 | 1.2 | |
| 24 | 31.2 | 320 | 15.6 | 2.4 | |

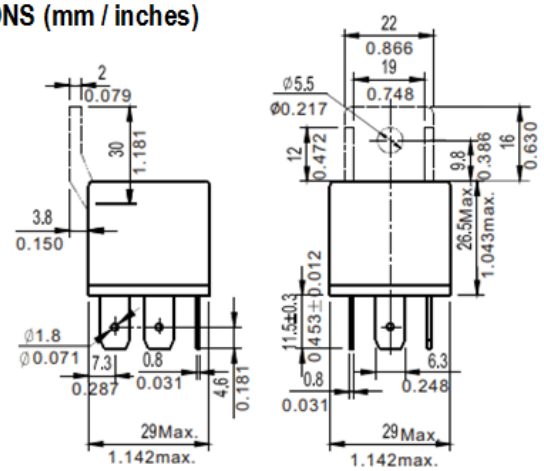


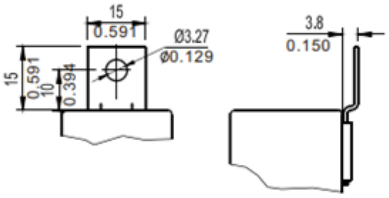

Orientation of Optional Diode, Contact Picker if You Require the Opposite Polarity

## NOTES:

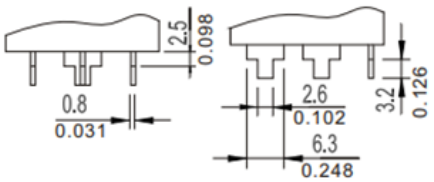
The use of any coil voltage less that the rated voltage will compromise the operation of the relays. Must Operate Voltage is listed for test purposes only and is not to be used as design criteria. Pickup and release voltages are for test purposes only and are not to be used as design criteria.
Dimensions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

## DIMENSIONS (mm / inches)

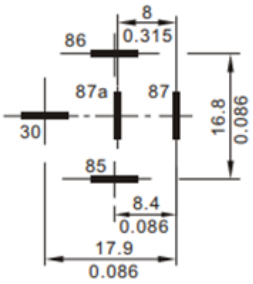


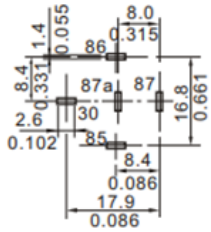

"C2" Metal Bracket



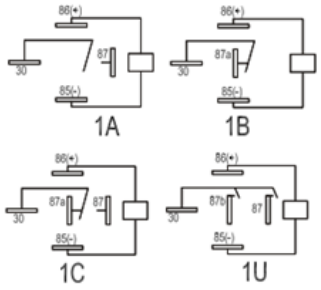

PC Pins




Plug in type

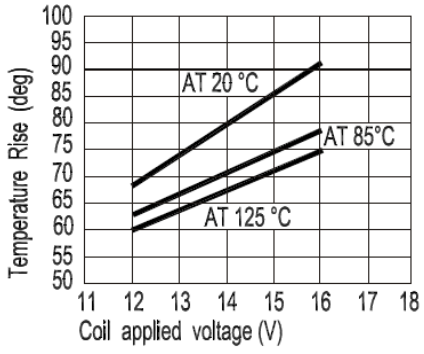



PC Pins

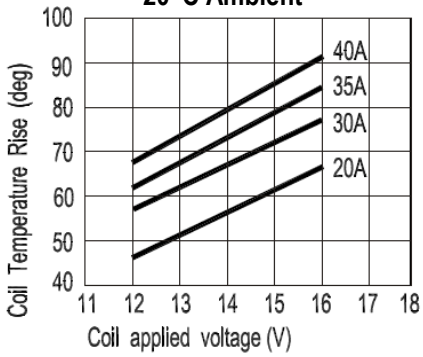



Wiring diagram

### Coil Temperature Rise @ 40A Carrying Current




### Coil Temperature Rise 20°C Ambient




### Max Value for Switching Capacity