130 Amp Screw Terminal Automotive Relay — PC776

FEATURES

- 130 Amp at 14VDC Continuous Carry
- Max Switching Current of 300 Amps
- 12VDC or 24VDC Coil Voltages
- Class F Insulation Standard
- Standard Bifurcated Contacts

RoHS COMPLIANT

CONTACT RATINGS 14VDC at 25°C

Contact Form	1 Form X SPST, N.O. Crossbar
Maximum Switching Current	Make : 300 A(1) Break : 130 A
Maximum Continuous Current	180 A @ 25°C 130 A @ 85°C 70 A @ 105°C
Max Switching Voltage	32 VDC
Max Switching Power	4050 W

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

CONTACT RATINGS 28VDC at 25°C

Contact Form	1 Form X SPST, N.O. Crossbar
Maximum Switching Current	Make : 150 A(1) Break : 65 A
Maximum Continuous Current	65 A @ 25°C 40 A @ 85°C 35 A @ 105°C
Max Switching Voltage	32 VDC
Max Switching Power	4050 W

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

CONTACT DATA

Material		$AgSnO_2$
Initial Contact Resistance		30 mΩ max @ 0.1 A, 6 VDC
Service Life	Mechanical	1 x 10^7 operations
	Electrical	5 x 10^4 operations

NOTE

1 Form X contact refers to two sets of contacts in series; commonly called a crossbar configuration. With the contacts in series, they each conduct approximately half the voltage drop and half the power of the load on the relay, thus the relay runs cooler and the reliability is increased.

CHARACTERISTICS

Operate Time	10 ms typical
Release Time	10 ms typical
Insulation Resistance	100 MΩ min. at 500 VDC
Dielectric Strength	50 Hz 1000 V, between coil and contact 50 Hz 500 V, between contacts
Shock Resistance	6 m/s² 20 ms

Vibration Resistance	10 - 200 Hz double amplitude 1.5 mm
Terminal Strength	150 N
Power Consumption	12V: 3.9 W; 24V: 4.1 W
Operating Temperature	-40ºC to 125ºC
Storage Temperature	-40ºC to 155ºC
Weight	220g

ORDERING INFORMATION

Example	PC776	-1X	-24	C	-R	-X
Model:	PC776					
Contact Form:	1X = 1X SPST Crossbar					
Coil Voltage:	12 = 12VDC 24 = 24VDC					
Enclosure:	C = Dust Cover, IP54 rated S = Sealed					
Coil Suppression:	Nil = None R = Resistor D = Diode	12V = 680 ohm 24V = 2700 ohm Diode = 1N4005				
RoHS Compliant	X = RoHS Compliant					

20550 Commerce Blvd, Rogers, MN 55374 USA
Sales (763) 535-2339
www.PickerComponents.com
email: sales@PickerComponents.com

Dimensions are shown for reference purposes only.
PC776 Rev C 09/2023

Specifications and availability subject to change without notice.

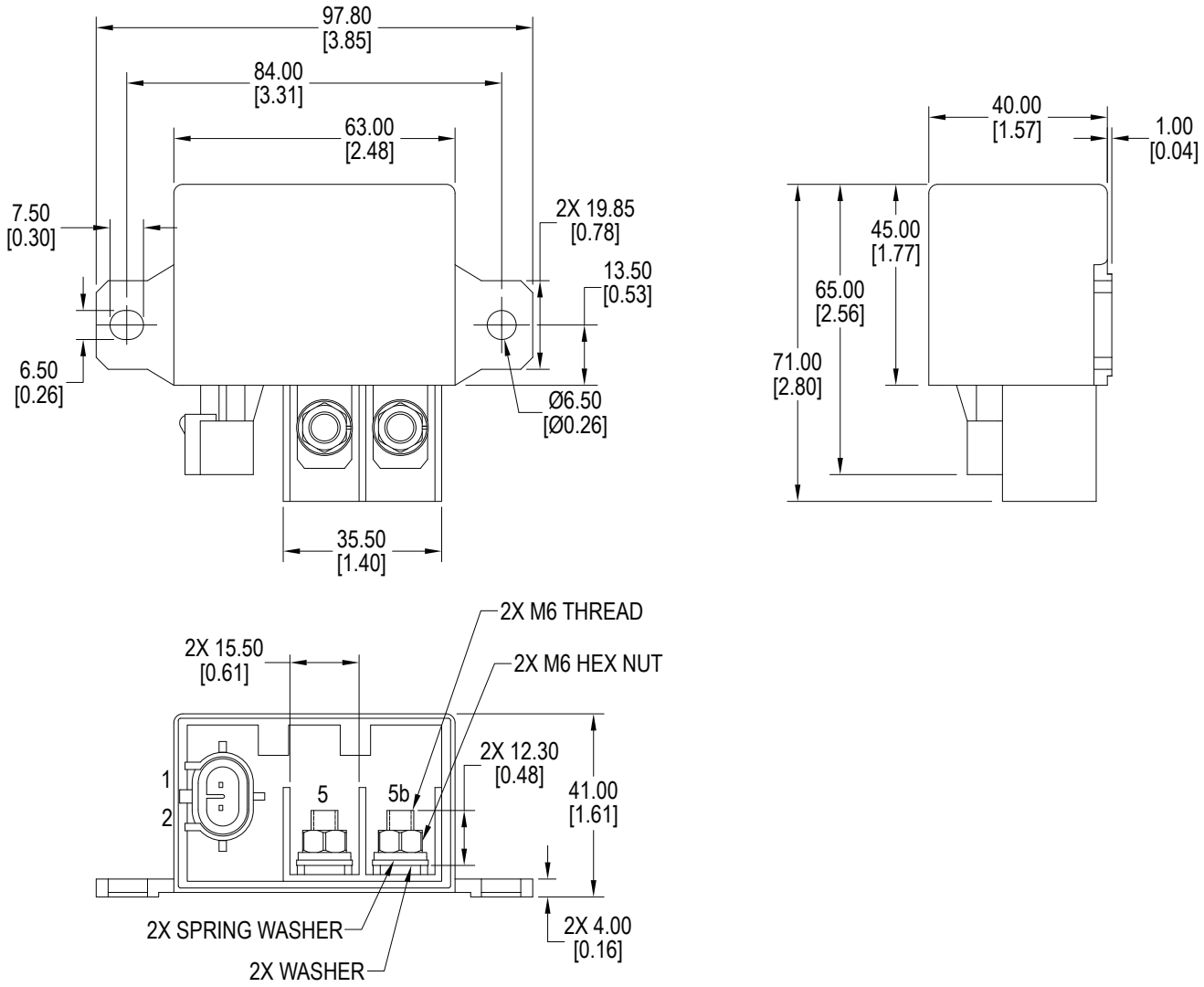
COIL DATA

Coil Voltage		Coil Resistance (Ohms ± 10%)	Must Operate Voltage Max. (VDC)	Must Release Voltage Max. (VDC)	Coil Power (W)
Rated	Maximum				
12	15.6	37	7.2	1.2	3.9
24	31.2	141	14.4	2.4	4.1

PRECAUTIONS

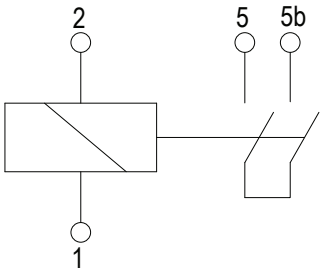
The use of any coil voltage less than the rated voltage will compromise the operation of the relays. Must Operate Voltage is listed for test purposes only and is not to be used as design criteria. Pickup and release voltages are for test purposes only and are not to be used as design criteria.

DIMENSIONS *Inches (mm)*

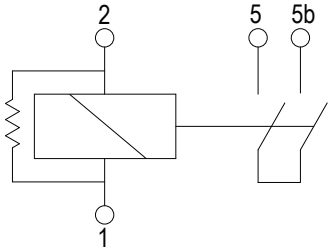


WIRING DIAGRAMS

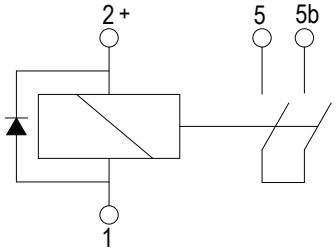
None



Resistor



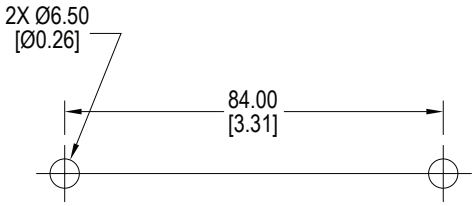
Diode



PRECAUTIONS

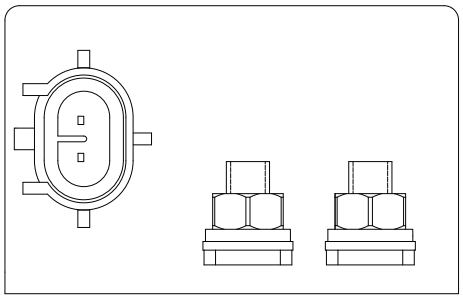
When a diode coil suppression is selected, the positive voltage must be applied to terminal 2.

MOUNTING LAYOUT



SCREWS

2X M6 X 10mm
Maximum torque on each M6 screw ≤ 5Nm.



COIL TERMINAL CONNECTORS

- Receptacle connector 282080-1
- Single wire seal 281934-2
- Contact 282110-1