



CONTACT RATINGS 14VDC at 25°C

Contact Form	1 Form A SPST, N.O. Bifurcated
Maximum Switching Current	Make : 150 A ⁽¹⁾ Break : 75 A
Maximum Continuous Current	75 A @ 25°C 50 A @ 85°C 20 A @ 105°C
Max Switching Voltage	32 VDC
Max Switching Power	1200 W
Minimum Load	1 A @ 12 VDC

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

CONTACT DATA

Material		W, AgSnO ₂	
Initial Contact Resistance		50 mΩ max @ 0.1 A, 6 VDC	
Service Life	Mechanical	1 x 10 ⁶ operations	
	Electrical	1 x 10 ⁵ operations	

CHARACTERISTICS

Operate Time	7 ms typical
Release Time	5 ms typical
Insulation Resistance	100 MΩ min. at 500 VDC
Dielectric Strength	50 Hz 750 V, between coil and contact
	50 Hz 500 V, between contacts
Shock Resistance	147 m/s ² 11 ms

FEATURES

- 75 Amp at 14VDC Continuous Carry
- Max Switching Current of 150 Amps
- 12VDC or 24VDC
- Copper Stud Construction for Efficient Heat Dissipation
- Standard Bifurcated Contacts
 - Tungsten contacts connect first, switching the load
 - Oversized Silver Tin Oxide contacts carry the load

CONTACT RATINGS 28VDC at 25°C

Contact Form	1 Form A SPST, N.O. Bifurcated
Maximum Switching Current	Make : 75 A ⁽¹⁾ Break : 50 A
Maximum Continuous Current	50 A @ 25°C 30 A @ 85°C 10 A @ 105°C
Max Switching Voltage	32 VDC
Max Switching Power	1200 W
Minimum Load	1 A @ 24 VDC
(4)	

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

Vibration Resistance	10 - 40 Hz double amplitude 1.5 mm
Terminal Strength	100 N
Power Consumption	2.88 W
Operating Temperature	-40°C to 125°C
Storage Temperature	-40°C to 155°C
Weight	50g



PC775

Example	PC775	-1A	-24	С		-R	-X
Model:	PC775						
Contact Form:	1A = 1A SPDT bifurcated						
Coil Voltage:	6 = 6VDC 12 = 12VDC 24 = 24VDC						
Enclosure:	C = Dust Cover, IP54 rated			_			
Coil Power:	Nil = 2.9 W				-		
Coil Suppression	Nil = None R = Resistor D = Diode D2 = Double Diode	6V = 180 ohm 12V = 680 ohm 24V = 2700 ohm Diode = 1N4005				-	
RoHS Compliant	X = RoHS Compliant						-

COIL DATA

Coil V	/oltage	Coil Resistance	Coil Resistance Must Operate Must Release		Coil Power
Rated	Maximum	(Ohms ± 10%)	Voltage Max. (VDC)	Voltage Max. (VDC)	(W)
6	7.8	12.5	3.9	1.2	
12	15.6	50	7.8	2.4	2.9
24	31.2	200	15.6	4.8	

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



PRECAUTIONS

When a single or double diode coil suppression is selected, the positive voltage must be applied to terminal 86.



PC775

Specifications and availability subject to change without notice.

MOUNTING LAYOUT



SCREWS

2X M5 X 10mm Maximum torgue on each M5 screw \leq 2.8Nm.



COIL TERMINAL CONNECTORS

- Delphi 2973781 Metri-Pack 2-Way Female Connector, Black, 56 Series
- TE 180907 .250" Receptical, Nylon

BIFURCATED CONTACTS

- The goal is to keep the primary over-sized AgSnO2 contacts clean and free from pitting, which can result from the high currents generated by inductive loads, both during closing and opening of the contacts.
- Tungsten contacts have an extremely low vapor pressure, even at high temperatures as found during the arcing conditions that exist when relay contacts open and close. Specifically, tungsten has excellent arc resistance, good electrical conductivity, low thermal expansion and superior thermal conductivity while being a hard metal.
- The bifurcated (dual) contacts are designed such that the tungsten contacts close first and open last a split second ahead of the silver tin oxide contact, absorbing the high inrush and surge currents.
- The over-sized silver tin oxide contacts, which are superior in terms of electrical conductivity and have lower contact resistance, carry the non-arcing load, generating less steady state heat.





20550 Commerce Blvd, Rogers, MN 55374 USA Sales (763) 535-2339