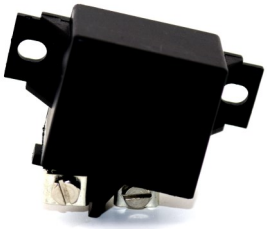
Preliminary

75 Amp Screw Clamp Automotive Relay PC775



FEATURES

- 75 Amp at 14 VDC Continuous Carry Current at 250°C
- Max Switching Current of 150 Amps
- Bifurcated Contacts Standard
  - Tungsten Contacts Connect First Switching the Load
  - Oversized Silver Tin Contacts Carry the Load
- 12 and 24 VDC Versions
- Up to 125°C Operating Temperature
- Copper Stud Construction for Efficient Heat Dissipation
- Class H Insulation System

CONTACT RATINGS 14 VDC at 25°C

Contact Form	1 Form A SPST/NO
	Normally Open
Max Switching Current	Make 150 A(1)
	Break 75 A
Max Continuous Current	75 A @ 25°C
	50 A @ 85°C
	20 A @ 105°C
Max Switching Voltage	32 VDC
Max. Switching Power	1,200 W
Minimum Load	1 A @ 12 VDC

CONTACT RATINGS 28 VDC at 25°C

Contact Form	1 Form A SPST/NO
	Normally Open
Max Switching Current	Make 75 A(1)
	Break 37.5 A
Max Continuous Current	50 A @ 25°C
	30 A @ 85° C
	10 A @ 105°C
Max Switching Voltage	32 VDC
Max. Switching Power	1,200 W
Minimum Load	1 A @ 24 VDC

CONTACT DATA

Material		W, AgSnO2
Initial Contact Resistance		50 mΩ Max @ 0.1 A, 6 VDC
Service Life	Electrical	1 x 10^5 Operations
	Mechanical	1 x 10^6 Operations

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

CROSS REFERENCES

TE: V23232
Example: V23232-D0001-X001 crosses to PC775-1A-12C-X
Example: V23232-D0002-X008 crosses to PC775-1A-24C-X
Example: V23232-D0002-X014 crosses to PC775-1A-24C-R-X
BOSCH: 0 332 002 255/168/150/155
Example: 0332002255 crosses to PC775-1A-24C-X
Example: 0332002168 crosses to PC775-1A-12C-R-X
Example: 0332002150 crosses to PC775-1A-12C-X
Example: 0332002155 crosses to PC775-1A-12C-X

CHARACTERISTICS

Operate Time	7 msec Typical
Release Time	5 msec Typical
Insulation Resistance	100 MΩ Min @ 500VDC
Dielectric Strength	50 Hz 750 V, 1 Min Between Contact and Coil
	50 Hz 500 V, 1 Min Between Contacts
Shock Resistance	147 m/s² 11 msec
Vibration Resistance	10-40 Hz Double Amplitude 1.5mm
Terminal Strength	100 N
Power Consumption	2.88 W
Operating Temperature	-40°C to 125°C
Storage Temperature	-40°C to 155°C
Weight	50 grams

ORDERING INFORMATION

	PC775	-1A	-24	C		-R	-X
Model:	PC775						
Contact Form:		1A: 1A SPST Bifurcated					
Coil:			6: 6 VDC, 12: 12 VDC, 24: 24 VDC				
Enclosure:				C: Dust Cover IP54 Rated			
Coil Power:					Nil: 2.9 Watts		
Snubber Components:						R: Resistor, D: Diode, D2: Double Diode	
RoHS Compliant:							X: RoHS Compliant

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

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Dimensions are listed for reference purposes only.

Specifications and Availability subject to change without notice.

COIL DATA

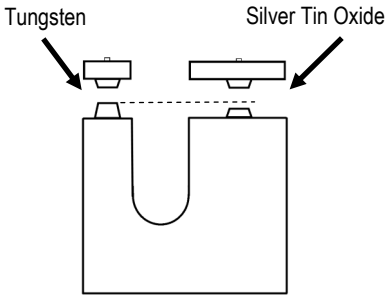
Coil Voltage (VDC)		Resistance (Ohms ± 10%)	Must Operate Voltage Max (VDC)	Must Release Voltage Min. (VDC)	Coil Power (W)
Rated	Max				
6	7.8	12.5	3.9	1.2	2.9
12	15.6	50	7.8	2.4	
24	31.2	200	15.6	4.8	

NOTES:

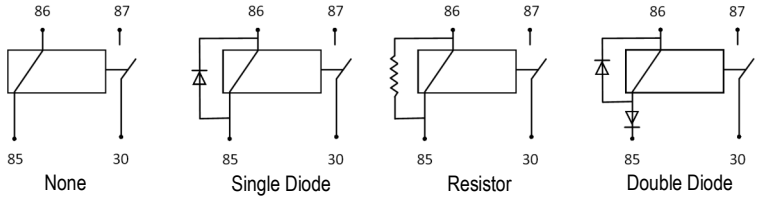
The use of any coil voltage less that the rated voltage will compromise the operation of the relays. Must Operate Voltage is listed for test purposes only and is not to be used as design criteria. Pickup and release voltages are for test purposes only and are not to be used as design criteria.
Dimensions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

Bifurcated Contacts

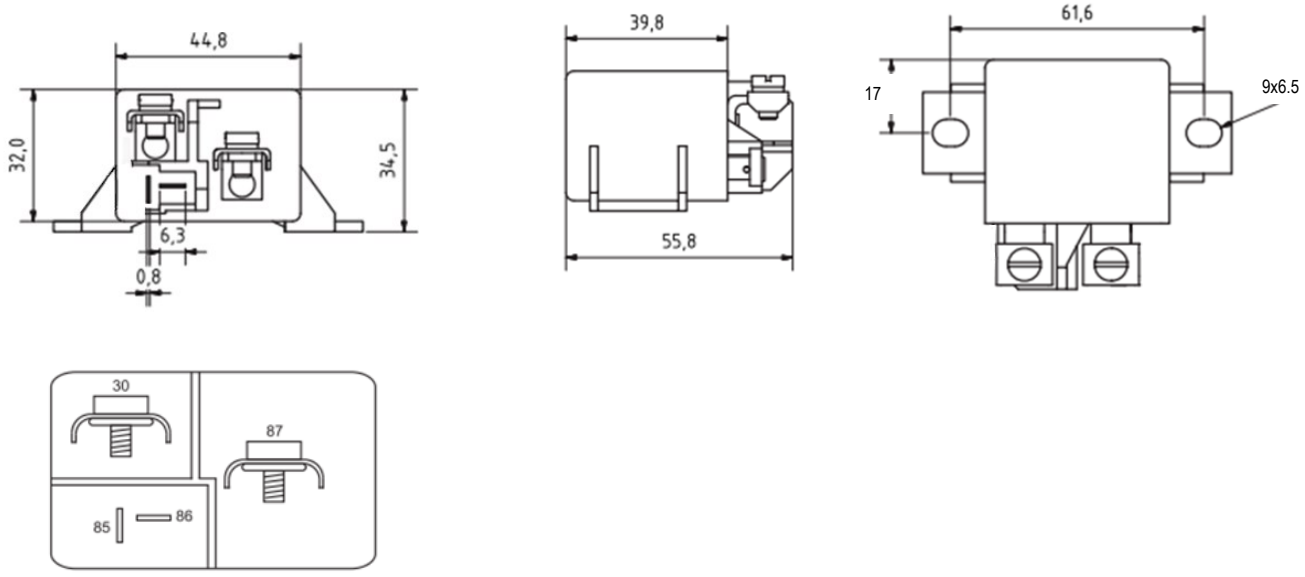
- The goal is to keep the primary over-sized AgSnO2 contacts clean and free from pitting which can result from the high currents generated by inductive loads both during closing and opening of the contacts.
- Tungsten contacts have an extremely low vapor pressure even at high temperatures as are found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



WIRING DIAGRAMS



DIMENSIONS (mm)



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