

# 80 Amp Double Pole/100 Amp Single Pole UL Power Relay PC728



### FEATURES

- 100 Amp 240 VAC Single Pole Version
- 80 Amp 240 VAC Dual Pole Version
- UL Rated 30 Amp NO, 20 Amp NC 250 VAC / 24 VDC
- DC and AC Coils
- Finger Safe, Translucent Cover
- Class B Material
- RoHS Compliant

### UL / CUL Ratings



Load Type	Voltage	Contacts	
		NO	NC
Resistive	250 VAC	30 A	20 A
	24 VDC	30 A	30 A

### Factory Ratings

Load Type	Voltage	Contacts	
		1A, 1B, 1C	2A, 2B, 2C
Resistive	600 VAC	10 A	10 A
	240 VAC	100 A	80 A
	28 VDC	100 A	80 A
HP	120 VAC	1.5 HP	
	250VAC	2 HP	
Max. Current	125 VDC	5 A	

### CHARACTERISTICS

Operate Time	25 ms Max
Release Time	15 ms Max
Insulation Resistance	200 mΩ min. at 500 VDC, 50% RH
Dielectric Strength	2,500 VAC 1 min. Between Coil and Contacts
	1,500 VAC 1 min. Between Opposite Contacts
	1,500 VAC 1 min. Between Open Contacts
Shock Resistance	10 g, Sinusoidal Half-Wave Pulse (11 ms)
Power Consumption	DC Coil 2.0 W, AC Coil 17.5 VA

### CROSS REFERENCES

TE: PRD
Example: PRD-7AG0-120 Crosses to PC728-2A-110A
Example: PRD-11DG0-110 Crosses to PC728-2C-110D
Weidmuller: Square D/ Schneider
Example: 8501CO15V20 Crosses to PC728-1C-110A
Example: 8501CDO22V53 Crosses to PC728-2C-24D

### CONTACT DATA

Material	AgSnO <sub>2</sub> (Movable), AgCdO (Stationary)	
Initial Contact Resistance	100 mΩ max. @ 6 V, 1A	
Max. Switching Voltage	240 VAC / 28 VDC	
Max. Switching Power	100 A	24,000 VA (240 VAC), 2,800 Watts (28 VDC)
	80 A	19,200 VA (240 VAC), 2,240 (28 VDC)
Service Life	Mechanical	1 X 10 <sup>7</sup> Operations
	Electrical	1 X 10 <sup>5</sup> Operations

### CHARACTERISTICS CONT.

Vibration Resistance	10 Hz - 55 Hz 1.5 mm DA
Solderability	260°C for 5 seconds
Operating Temperature	-25°C to 55 °C (Class B)
Relative Humidity	75% (at 30°C)
Weight	210 grams (1A, 1C), 330 grams(2A, 2C)

### ORDERING INFORMATION

Example:	PC728	-2C	- 120A
Model:	PC728		
Contact Form:	<b>1A:</b> 1 Pole SPST-NO; <b>2A:</b> 2 Pole DPST-NO; <b>1B:</b> 1 Pole SPST-NC; <b>2B:</b> 2 Pole DPST-NC; <b>1C:</b> 1 Pole SPDT-NO; <b>2C:</b> 2 Pole DPST-NO		
Coil Voltage*:	<b>6D:</b> 6 VDC, <b>9D:</b> 9 VDC, <b>12D:</b> 12 VDC, <b>24D:</b> 24 VDC, <b>48D:</b> 48 VDC, <b>110D:</b> 110 VDC, <b>220D:</b> 220 VDC, <b>6A:</b> 6 VAC, <b>9A:</b> 9 VAC, <b>12A:</b> 12 VAC, <b>24A:</b> 24 VAC, <b>48A:</b> 48 VAC, <b>110A:</b> 100-120 VAC, <b>220A:</b> 200-240 VAC, <b>380A:</b> 380 VAC		

Box Quantity: 40; Inner Box: 4

\*60 Hz Standard, 50 Hz upon Request

**COIL DATA**

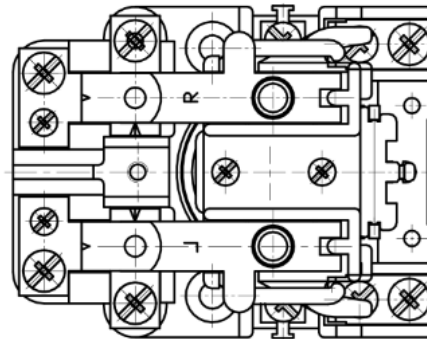
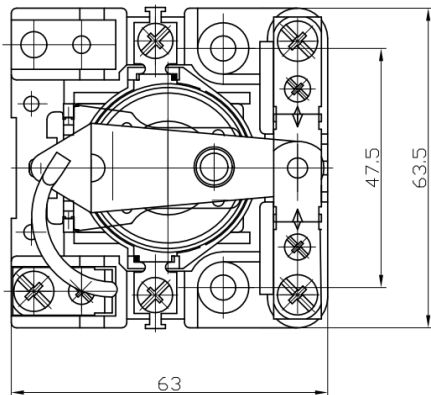
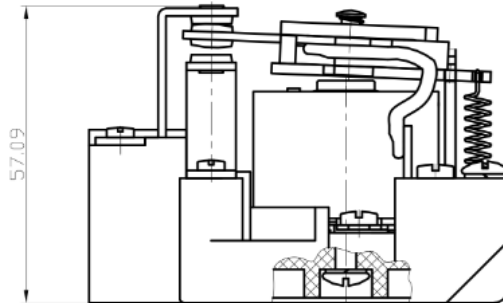
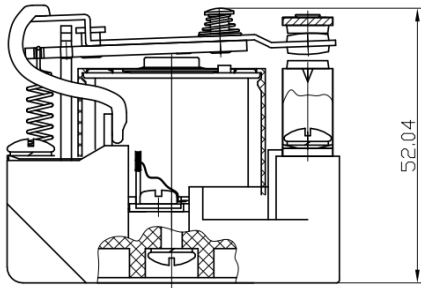
Voltage Type	Coil Voltage		Resistance Ohms $\pm 10\%$		Must Operate Voltage Max.	Must Release Voltage Min.
	Rated	Max	50 Hz	60 Hz*		
DC 2.0 W	12	13.2	72	72	9	1.2
	24	26.4	288	288	18	2.4
	48	52.8	1,152	1,152	36	4.8
	110	121	6,050	6,050	82.5	11
AC 10 VA	12	13.2	5	4.8	9.6	3.6
	24	26.4	20	19.3	19.2	7.2
	48	52.8	80	77.2	38.4	14.4
	110	121	424	405.4	88	33
	220	242	1700	1621.4	176	66
	380	418	5054	4837.4	304	114

\*Custom coil voltages available. 60 Hz standard—50 Hz winding upon request.

**NOTES:**

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 are in mm, Inches are listed for reference only.

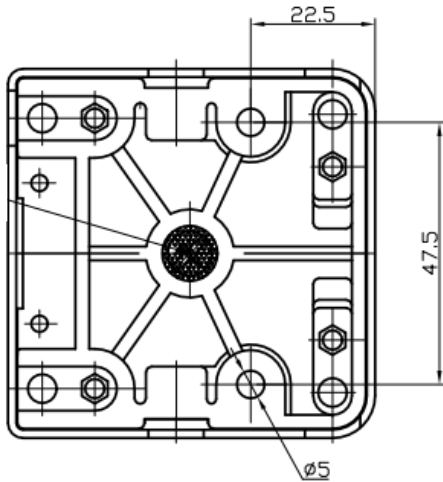
**CASE TYPE (mm)**



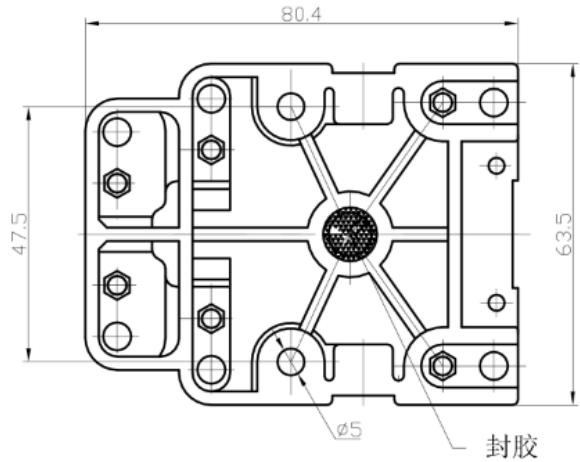
**Single Pole**

**Double Pole**

CASE TYPE Cont. (mm)

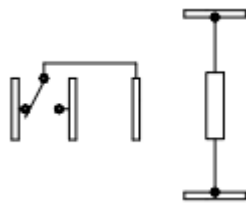


Single Pole

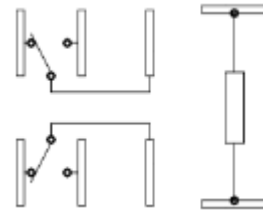


Double Pole

WIRE DIAGRAMS



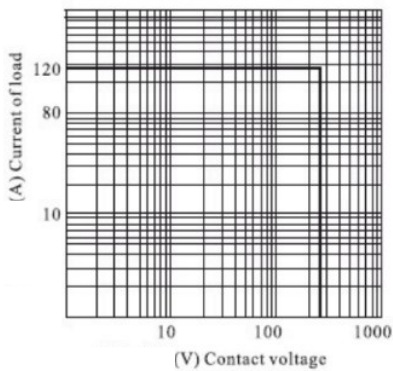
1C Form



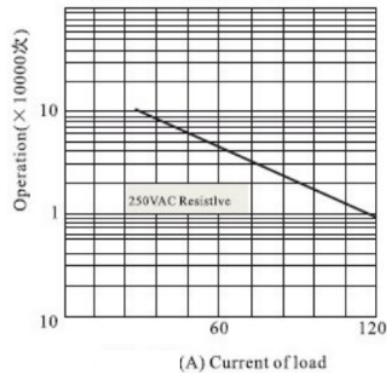
2C Form

Reference Data

Max. Operating Power



Life Expectancy



Coil Temperature Rise

