



# PCKWK series

## Latching, Slim 16Amp Miniature Power PC Board Relay

Appliances, HVAC, Office Machines.

Users should thoroughly review the technical data before selecting a product part number. It is recommended that user also seek out the pertinent approvals files of the agencies/laboratories and review them to ensure the product meets the requirements for a given application.

### Features

- Efficient, latching operation.
- Slim outline to save board space.
- 1 Form A contact arrangement.

### Contact Data @ 20°C

**Arrangements:** 1 Form A (SPST-NO).

**Material:** Ag Alloy.

**Max. Switching Rate:** 300 ops./ min. (no load),  
20 ops./ min. (rated load).

**Expected Mechanical Life:** 5 million ops (no load).

**Expected Electrical Life:** 100,000 ops (16A @ 250VAC).

**Minimum Load:** 100mA @ 5VDC.

**Initial Contact Resistance:** 100 milliohms @ 1A, 6VDC.

### Contact Ratings

**Ratings:** 16A @ 277VAC resistive.

**Max. Switched Voltage:** AC: 277V.

**Max. Switched Current:** 16A.

**Max. Switched Power:** 4,432VA.

### Initial Dielectric Strength

**Between Open Contacts:** 1,000VAC, 50/60 Hz. (1 min.);

1,200VAC, 50/60 Hz. (1 sec.).

**Between Contacts and Coil:** 4,000VAC, 50/60 Hz. (1 min.);

4,800VAC, 50/60 Hz. (1 sec.).

**Surge Voltage Between Coil and Contacts:** 10,000V (1.2/50µs).

### Initial Insulation Resistance

**Between Mutually Insulated Conductors:** 1,000Mohm @ 500VDC.

### Coil Data

**Voltage:** 12VDC (Consult factory for other coil voltage).

**Nominal Power:** 1.8W (SET).

800mW (RESET).

**Max. Coil Power:** 130% of nominal at 20°C.

### Coil Data @ 20°C

PCKWK				
Rated Coil Voltage (VDC)	SET Coil Resistance (ohms) ± 10%	RESET Coil Resistance (ohms) ± 10%	SET Coil Voltage Range (VDC)	RESET Coil Voltage Range (VDC)
12	80	180	6.0 - 9.0	2.0 - 7.0

### Operate Data @ 20°C

**SET Time:** 10 ms max. (including bounce) at rated voltage.

8 ms max. (including bounce) at 130% rated voltage.

**RESET Time:** 10 ms max. at rated voltage.

8 ms max. at 130% rated voltage.

The pulse to either the set or reset coil of the PCKWK relay should be no less than 30 milliseconds duration, and no more than 1 second duration.

Observe coil polarity.

Do not apply voltage to both SET and RESET coils simultaneously.

External magnetic fields may affect the operation of the relay.

### Environmental Data

**Temperature Range:**

**Operating:** -30°C to +70°C.

**Vibration, Mechanical:** 10 to 55Hz., 1.5mm double amplitude for 2 hr.

**Operational:** 10 to 55Hz., 1.5mm double amplitude for 5 min.

**Shock, Mechanical:** 980m/s<sup>2</sup>.

**Operational (when SET):** 98m/s<sup>2</sup>.

**Operational (when RESET):** 980m/s<sup>2</sup>.

**Operating Humidity:** 20 to 65% RH. (Non-condensing).

### Mechanical Data

**Termination:** Printed circuit terminals.

**Enclosure:** Vented (Flux-tight) plastic cover.

**Weight:** 0.49 oz (14g) approximately.

**Ordering Information**

Typical Part Number ▶

**PCKWK -1 12 D 2 M ,000**

**1. Basic Series:**  
PCKW = 16A double coil relay

**2. Termination:**  
1 = 1 pole

**3. Coil Voltage:**  
12 = 12VDC Consult factory for other voltages.

**4. Coil Input:**  
D = Standard

**5. Contact Material:**  
2 = AgSnO

**6. Contact Arrangement:**  
M = 1 Form A (SPST-NO)

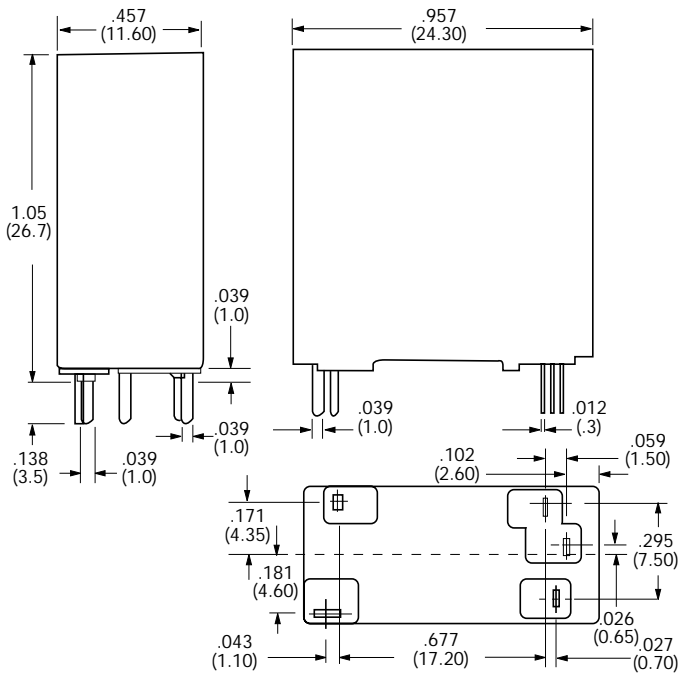
**7. Suffix:**  
,000 = Standard model Other Suffix = Custom model

\* Not suitable for immersion cleaning processes.

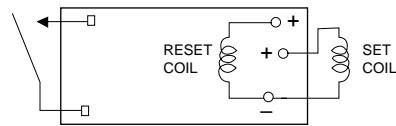
**Our authorized distributors are more likely to maintain the following items in stock for immediate delivery.**

None at present.

**Outline Dimensions**



**Wiring Diagram (Bottom View)**



**PC Board Layout (Bottom View)**

