

# PCK series

## Slim 16 Amp 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**

- · Slim outline to save board space.
- 1 Form A contact arrangement.
- · Quick connect terminal type.
- Meet 5,000V dielectric voltage between coil and contacts.
- Meet 10,000V surge voltage between coil and contacts.

#### Contact Data @ 20°C

Arrangements: 1 Form A (SPST-NO).

Material: AgSnO.

Max. Switching Rate: 300ops./ min. (no load). 20ops./ min. (rated load). Expected Mechanical Life: 2 million ops (no load). Expected Electrical Life: 100,000 ops (rated load).

Minimum Load: 100mA @ 5VDC.

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

#### **Contact Ratings**

Ratings: 16A @ 250VAC resistive. 16A @ 24VDC resistive.

Max. Switched Voltage: AC: 277V. DC: 24V. Max. Switched Current: 16A.

Max. Switched Power: 4,000VA, 385W.

#### **Initial Dielectric Strength**

Between Open Contacts: 1,000VAC, 50/60 Hz. (1 min.). Between Contacts and Coil: 5,000VAC, 50/60 Hz. (1 min.). Surge Voltage Between Coil and Contacts: 10,000V (1.2/50μs)

#### **Initial Insulation Resistance**

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

## Coil Data

Voltage: 5 to 24VDC. Duty Cycle: Continuous. Nominal Power: 500mW.

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

#### Coil Data @ 20°C

PCK				
Rated Coil	Nominal	Coil	Must Operate	Must Release
Voltage	Current	Resistance	Voltage	Voltage
(VDC)	(mA)	(ohms) ± 10%	(VDC)	(VDC)
5	100.0	50.0	3.75	0.25
6	83.3	72.0	4.50	0.30
9	55.6	162.0	6.75	0.45
12	41.7	288.0	9.00	0.60
18	27.8	648.0	13.50	0.90
24	20.9	1,150.0	18.00	1.20

#### Operate Data @ 20°C

Must Operate Voltage: 75% of nominal voltage or less. Must Release Voltage: 5% of nominal voltage or more.

Operate Time: 20ms max. Release Time: 10ms max.

#### **Environmental Data**

Temperature Range: Operating: -30°C to +70°C

Vibration, Mechanical: 10 to 55Hz., 1.5mm double amplitude.

Operational: 10 to 55Hz., 1.5mm double amplitude.

Shock, Mechanical: 1000m/s² (100G approximately).

Operational: 100m/s² (10G approximately).

Operating Humidity: 20 to 85% RH. (Non-condensing).

### **Mechanical Data**

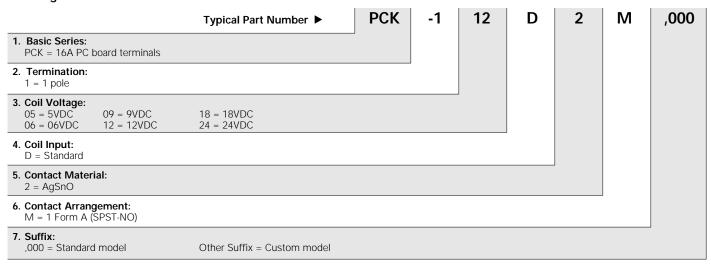
Termination: Printed circuit terminals with quick connect terminals.

**Enclosure:** Vented (Flux-tight) plastic cover. **Weight:** 0.46 oz (13g) approximately.

tyco Electronics

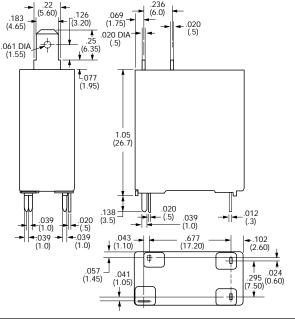
Catalog 1308242 Issued 3-03

## **Ordering Information**

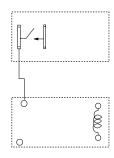


Our authorized distributors are more likely to maintain the following items in stock for immediate delivery. None at present.

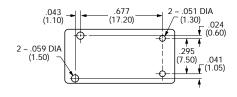




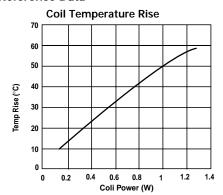
## Wiring Diagram (Bottom View)

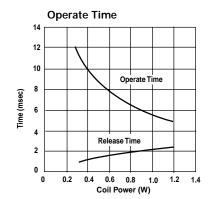


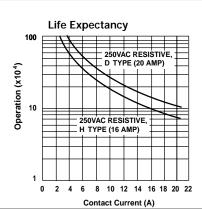
## PC Board Layout (Bottom View)



#### Reference Data







**OEG**