# D002 Octal SPST Relay Module 8 Channels, 250 VAC, 3 A per Channel, Fast Switching

## **Product Description**

The D002 device is a versatile and easy-to-use octal high-current high-voltage SPST (single pole single throw) relay module. Every of the eight channels can individually be opened or closed.

Electrical or electro-pneumatic valves, heaters or AC / DC motors and other high-power devices of up to  $120\,W$  /  $250\,VA$  can be controlled with the D002 device.

The versatility and the straightforward usability make the device ideal for industrial applications as well as for scientific experiments.

#### **Features**

- ► Connected to 10/100BASE-TX Ethernet over RJ45 jack
- ► Eight independent SPST relay channels
- ► Switching voltage of 250 VAC or 220 VDC
- ► Continuous current of up to 3 A per channel
- ► Switching capacity of 120 W / 250 VA
- ► 250 VAC channel-to-channel isolation
- ► Fast switching times of typically 2 ms
- ► No external power supply required
- ► Surveillance of all voltages and board temperature
- ► Powered via PoE (Power over Ethernet)
- ▶ Idle power consumption of less than 1.0 W, max. 2.1 W
- ► Compatible with all modern Ethernet standards
- Drivers for Microsoft® Visual C++™, MathWorks® MATLAB™, Python and National Instruments® LabVIEW™ programming environment

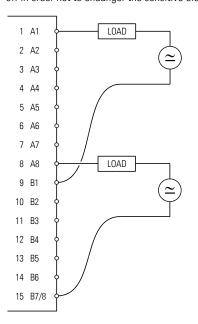
### **Electrical Connection**

The following figure shows the recommended pin configuration of the D002 device. For the sake of clarity, only two channels are being utilized. Each channel consists of contacts A and B numbered from 1 to 8. If the channel is set to logic high, the contacts A and B are shorted. Contacts B7 and B8 are shared and tied to pin 15.

The output current per channel should not exceed 3 A, any overrating

can endanger the D002 device and leads to excessive heating. The initial contact resistance is less than  $40\,\text{m}\Omega$  and is subject to increase during operation.

Do not connect or disconnect wires unless power has been switched off in order not to endanger the sensitive electronics.



## **Physical Specifications**

Dimensions:  $100 \, \text{mm} \times 54 \, \text{mm} \times 18 \, \text{mm}$  (3.94 in x 2.13 in x 0.71 in) Mounting: 4 holes Ø 2.2 mm (0.087 in) at a distance of 94 mm x 48 mm (3.70 in x 1.89 in), intended for the use with metric M2 screws PCB operating temperature: 0 °C to 70 °C (32 °F to 158 °F), ambient operating temperature depends on the case and its thermal isolation Weight:  $56 \, \text{g}$  (1.97 oz)

This product is not authorized for use as a critical component in life support devices or systems without the express written approval.

