## 24V DC-Powered Relay Module

### Installation Instructions

#### Jumper 1
- Connects +24VDC to Connector Pins 1, 7, 13, & 19
- Connects GND to Connector Pins 1, 7, 13, & 19

#### Jumper 2
- Connects GND to Relay Coil Common

#### Jumper 3
- Connects GND to Connector Pins 2, 8, 14, & 20

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### Sinking ZL-RRL16W-24-1

#### ZL-RLL16W-24-1 Sinking Specifications

- **Typical Internal Circuit**:
  - Jumper 1
  - Jumper 2
  - Jumper 3
  - Relay 1 (TB1)
  - Relay 2 (TB2)
  - Relay 3 (TB3)
  - Relay 4 (TB4)
  - Relay 5 (TB5)
  - Relay 6 (TB6)
  - Relay 7 (TB7)
  - Relay 8 (TB8)
  - Relay 9 (TB9)
  - Relay 10 (TB10)
  - Relay 11 (TB11)
  - Relay 12 (TB12)
  - Relay 13 (TB13)
  - Relay 14 (TB14)
  - Relay 15 (TB15)
  - Relay 16 (TB16)

#### ZL-RLL16W-24-2 Sourcing Specifications

- **Typical Internal Circuit**:
  - Jumper 1
  - Jumper 2
  - Jumper 3
  - Relay 1 (TB1)
  - Relay 2 (TB2)
  - Relay 3 (TB3)
  - Relay 4 (TB4)
  - Relay 5 (TB5)
  - Relay 6 (TB6)
  - Relay 7 (TB7)
  - Relay 8 (TB8)
  - Relay 9 (TB9)
  - Relay 10 (TB10)
  - Relay 11 (TB11)
  - Relay 12 (TB12)
  - Relay 13 (TB13)
  - Relay 14 (TB14)
  - Relay 15 (TB15)
  - Relay 16 (TB16)

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### Approvals

- **File #** E157382 UL, cUL 508, CE, EN 61131-2:2007
- **Weight** 0.61g (21.5 oz)
- **Cable/Wire Clearance** 0.5 in (12.7 mm)
- **Mounting Restriction** None
- **Approvals** File # E157382 UL, cUL 508, CE, EN 61131-2:2007

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### General Module Specifications

- **Operating Frequency**: 20 cycles per minute electrical
- **Isolation Coil to Contact**: 2500VAC for 1 minute
- **Isolation NC Contact to NO Contact Same Relay**: 1000VAC for 1 minute
- **Red LED Indicator State Relay**: ON = relay energized, OFF = relay de-energized
- **Operating Temperature Range**: 32 to 140°F (0 to 60°C)

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### Relay Contact Specifications

- **Contact Material**: AgNi (Silver Nickel Alloy)
- **Contact Voltage (per point)**:
  - 1 Form C (SPDT)
  - 1 Form A (NO)
  - 1 Form A (NC)
  - 1 Form A (COM)

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### Coil Specifications

- **Maximum Continuous Coil Voltage**: 31.2 VDC
- **Maximum Switching Voltage**: 250VAC, 110VDC
- **Contact Resistor**: 100Ω @ 5VDC
- **Minimum Load**: 10mA @ 5VDC
- **Maximum Power Resistive**: 0.4 W
- **Maximum Power Inductive**: 1440 W
- **Maximum Power Resistive**: 12mS/8mS
- **Pick-Up Voltage Max.**: 19.2 VDC
- **Drop-Out Voltage Min.**: 15mV

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**WARNING**: We recommend installing up to a 0.5 Amp fast-blow fuse such as AGC-5 or similar in series with the power supply as an extra safety measure.

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**Note 1**: See Jumper Notes.
### DIN Rail Installation and Removal

**To install ZIPLink module, insert upper tab into DIN rail.**

**To remove ZIPLink module, insert screwdriver between Tab 1 and module.**

- **Pry up to release clip from DIN rail.**
- **Rotate until firmly seated and locked on DIN rail.**
- **Repeat for Tab 2.**

### ZIPLink Cable Removal

**1** Push tab on raised tip and hold.

**2** Pull connector from socket.

### WARNING:

To minimize the risk of potential safety problems, you should follow all applicable local and national codes that regulate the installation and operation of your equipment. These codes vary from area to area and it is your responsibility to determine which codes should be followed, and to verify that the equipment, installation, and operation are in compliance with the latest revision of these codes.

Equipment damage or serious injury to personnel can result from the failure to follow all applicable codes and standards. We do not guarantee the products described in this publication are suitable for your particular application, nor do we assume any responsibility for your product design, installation, or operation.

If you have any questions concerning the installation or operation of this equipment, or if you need additional information, please call Technical Support at 770-844-4200.

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