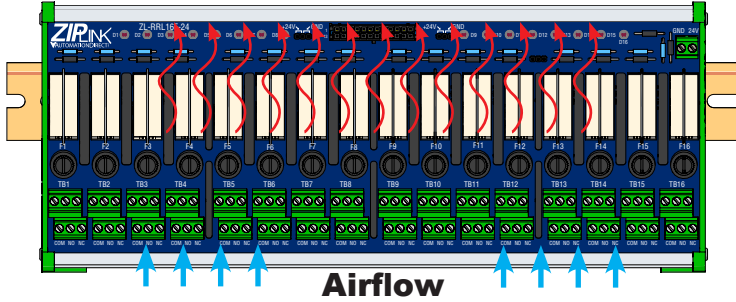
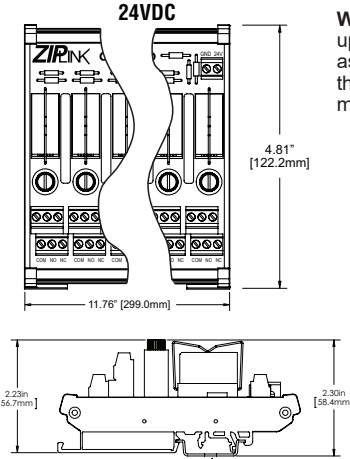


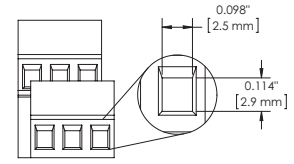
Heat Dissipation Mounting Requirements



IMPORTANT! Mount Module horizontally to provide proper ventilation.

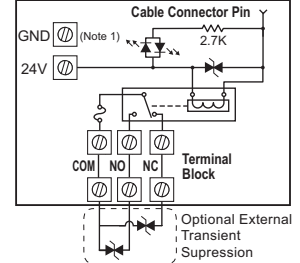


WARNING: We recommend installing up to a 0.75 Amp fast-blow fuse such as AGC-75 or similar in series with the power supply as an extra safety measure.

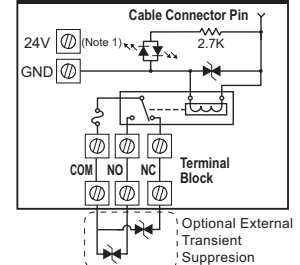


Terminal Block Insertion Point Opening Dimension

ZL-RRL16F-24-1 Sinking Typical Internal Circuit



ZL-RRL16F-24-2 Sourcing Typical Internal Circuit



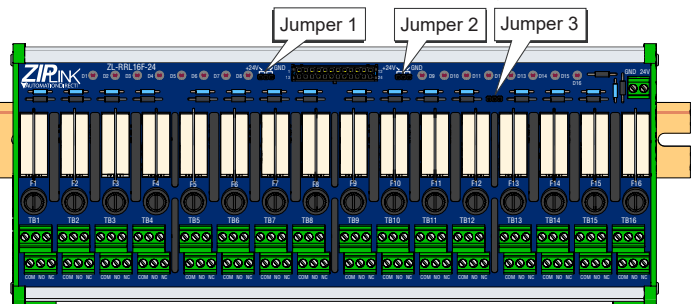
Note 1: See jumper notes.

Connector Pin	Relay
3	Relay 1 (TB1)
4	Relay 2 (TB2)
5	Relay 3 (TB3)
6	Relay 4 (TB4)
9	Relay 9 (TB9)
10	Relay 10 (TB10)
11	Relay 11 (TB11)
12	Relay 12 (TB12)
15	Relay 5 (TB5)
16	Relay 6 (TB6)
17	Relay 7 (TB7)
18	Relay 8 (TB8)
21	Relay 13 (TB13)
22	Relay 14 (TB14)
23	Relay 15 (TB15)
24	Relay 16 (TB16)

ZL-RRL16F-24-1 Sinking				
DirectLOGIC	Productivity3000	CLICK	Productivity2000	BRX
J1 +24V	J1 +24V	J1 +24V	J1 +24V	J1 +24V
J2 GND	J2 GND	J2 GND	J2 GND	J2 GND
J3 +24V	J3 +24V	J3 +24V	J3 +24V	J3 +24V

ZL-RRL16F-24-2 Sourcing				
DirectLOGIC	Productivity3000	CLICK	Productivity2000	BRX
J1 GND	J1 GND	J1 +24V	J1 GND	J1 +24V
J2 +24V	J2 +24V	J2 GND	J2 +24V	J2 +24V
J3 GND	J3 GND	J3 GND	J3 GND	J3 GND

Jumper Position	Description
J1, J2, and J3	+24V GND Jumpers referenced above and below have this silkscreen on the PCB
J1 +24V	Connects +24VDC to Connector Pins 1,7,13, & 19
J1 GND	Connects GND to Connector Pins 1,7,13, & 19
J2 +24V	Connects +24VDC to Connector Pins 2, 8,14, & 20
J2 GND	Connects GND to Connector Pins 2, 8,14, & 20
J3 +24V	Factory set On ZL-RRL16F-24-1 Connects +24VDC to Relay Coil Commons
J3 GND	Factory set On ZL-RRL16F-24-2 Connects GND to Relay Coil Common



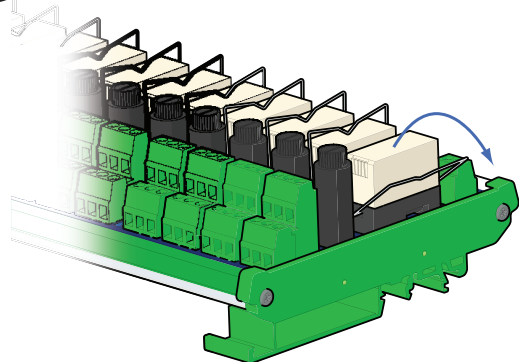
General Module Specifications		Relay Contact Specifications	
Description	16 Fused Output Relay module with LEDs, 24 VDC Coil	Current Rating	30VDC @ 8A General Use 250VAC @ 8A General Use
Mechanical Life	100,000,000 Operations no load condition	Contact Type	1 Form C (SPDT)
Electrical Life	1,000,000 Operations at rated resistive load	Contact Voltage*	250VAC/30VDC
Operating Frequency	6 cycles per minute electrical 300 cycles per minute mechanical	Maximum Power Inductive	2000VA General Use
Isolation Coil to Contact	2500VAC for 1 minute	Maximum Power Resistive	AC 2000VA, DC 240W
Isolation NC Contact to NO Contact	1000VAC for 1 minute	Maximum Switching Voltage	250VAC, 300VDC
Isolation Between Relays	1000VAC for 1 minute	Minimum Load	10mA @ 5VDC
Red LED Indicator State Relay	ON = relay energized, OFF = relay de-energized	Contact Resistance	100mΩ Max @ 1A, 6VDC 5FLA/30LRA, 250VAC
Operating Temperature Range	32 to 140°F (0 to 60°C)	Contact Capacity	1/2 HP, 250VAC Pilot Duty B300-C300
Shock Resistance	1000m/s ² endurance, 100m/s ² operation	Contact Material	AgNi (Silver Nickel Alloy)
Terminal Block Contacts	Copper alloy, tin-lead plated	Coil Specifications	
Wire Range*	12-24 AWG Solid or Stranded Conductor	Input Voltage Rating**	24VDC (-20/+30%)
Wire Strip Length	0.24-0.27 in (6-7 mm)	Maximum Continuous Coil Voltage	31.2VDC
Screw Torque	4.4 in-lbs (0.5 Nm)	Rated Current Per Coil	16.7 mA (±10%) @ 24VDC
Connector Type	Molex Micro-Fit 3.0, 24 pin connector, example receptacle 43020-2400, Pins 43031 Series, Male	Coil Resistance	1440Ω (±10%)
Replacement Relays	ZL-RELAY-F24X4, Qty. 4/pkg	Power Consumption Per Coil	0.4 W
Fuses (Sold Separately)	Sixteen 5X20mm, 250V	Total Coil Supply Current Max.	400mA (Total 16 relays)
Replacement Fuses	See Edison 5X20mm Glass Fuse section range up to Max. 10	Pick Up Current Max. Per Coil	15mA
Cable/Wire Clearance	0.5in (12.7mm)	Drop-Out Voltage Min.	1.2 VDC
Weight	930g (32.8 oz)	Pick-Up Voltage Max.	19.2 VDC
Approvals	File # E139594 UL, cUL 508, CE, EN 61131-2:2007	Off to On/On to Off Response Time	12ms/8ms

*Use conductors rated 60°/75°C for relay outputs.

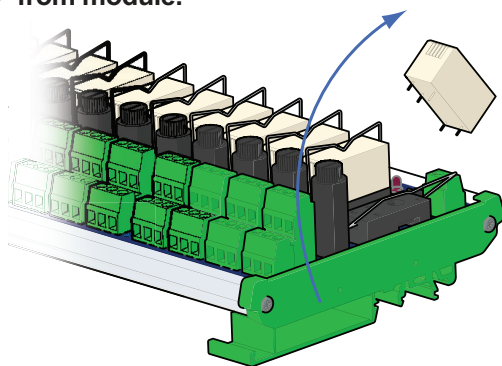
**Relay modules are reverse polarity protected and will not operate if reverse voltage is connected.

Remove or Install Relay

1 Rotate retaining clip away from relay.



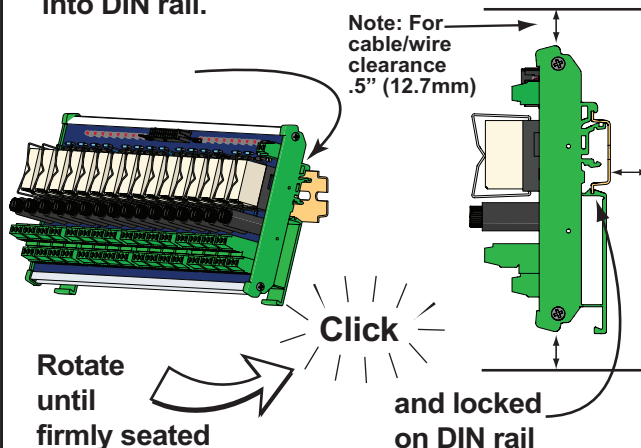
2 Remove relay from module.



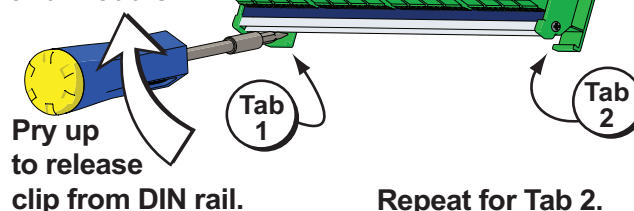
Reverse procedure to replace relay.

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.



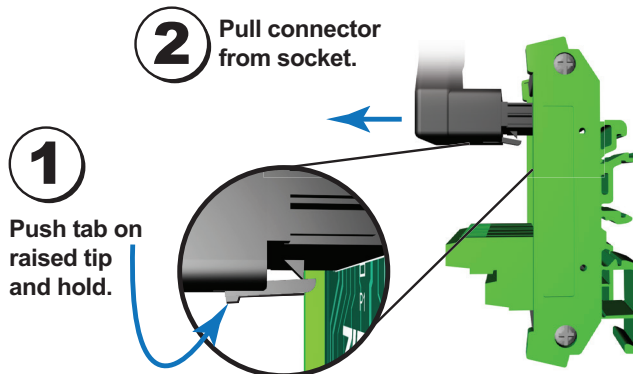
WARNING: To minimize the risk of potential safety problems, you should follow all applicable local and national codes that regulate the installation and operation of your equipment. These codes vary from area to area and it is your responsibility to determine which codes should be followed, and to verify 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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ZIPLink Cable Removal



For Replacement Relay
Use ZL-RELAY-F24X4, Qty. 4/pkg.

Part Number	Revision	Date
ZL-RRL16F-24	6th Ed.	1/20/2021