

24V DC-Powered Relay Module

Our DC-powered relay module provides isolation, switches high current (10A) loads, is offered in 16 points, and includes diode protection to prevent voltage spikes at the relay coil from damaging connected PLC I/O modules. Relays are included with the module.

Module mounts on 35 mm DIN rail part #DN-R35S1.



ZL-RRL16-24

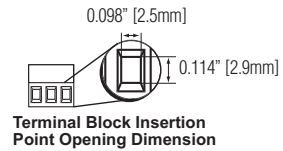
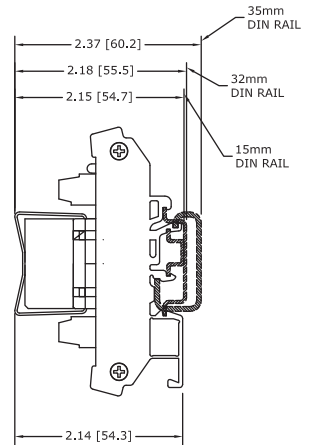
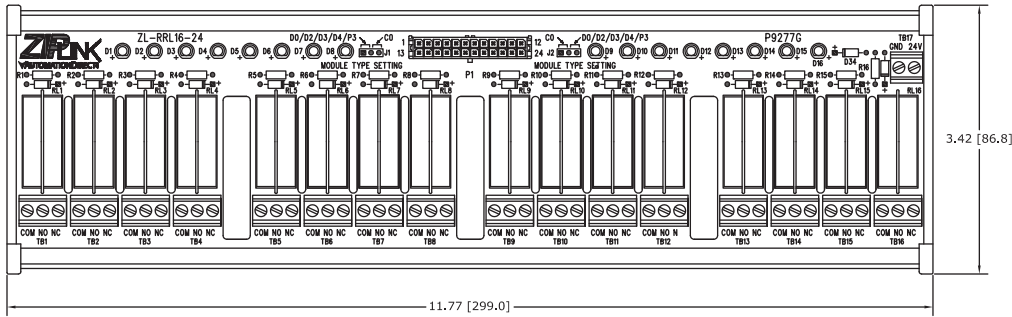
Specifications			
24V DC-Powered Relay Module	Part #	Pcs/Pkg	Price/Pkg
	ZL-RRL16-24	1	<--->
Description	16 Output Relay module with LEDs, 24 VDC coil		
Mechanical Life	10,000,000 Operations at no load condition		
Electrical Life	100,000 Operations at rated resistive load		
Operating Frequency	20 cycles per minute electrical, 300 cycles per minute mechanical		
Isolation Coil to Contact	2500VAC for 1 minute		
Isolation NC Contact to NO Contact Same Relay	1000VAC for 1 minute		
Isolation Between Relays	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)		
Humidity Range	45 to 85% RH		
Vibration Resistance	10 to 55 Hz dual amplitude width 1.5mm		
Shock Resistances	1000m/s ² endurance, 100m/s ² operation		
Terminal Block Contacts	Copper alloy, tin-lead plated		
Wire Range*	12-24AWG Solid or Stranded Conductor		
Wire Strip Length	0.24-0.27" (6-7mm)		
Screw Torque	4.4 in-lbs (0.5 Nm)		
Connector Type	Molex Micro-Fit 3.0, 24 pin connector, example receptacle 43020-2400, Pins 43031 Series, Male		
Connecting Cables (Sold Separately)	See Wiring Selection Guides at the beginning of this section. See Connection Cable specifications tables at the end of this section.		
Dimensions (WxHxD)	11.77" x 3.42" x 2.14" (299mm x 86.8mm x 54.3mm)		
Replacement Relays	ZL-RELAY-24X4, Qty. 4/pkg		
Approvals	File # E157382 UL, cUL 508		
Cable/Wire Clearance	0.5" (12.7mm) Required		
Mounting Restrictions	Horizontal Mounting Only		

Relay Specifications			
Contact		Coil	
Current Rating	30VDC @ 10A 250VAC @ 8A General Use	Input Voltage Rating	24VDC (-20%/+30%)
Contact Type	1 Form C (SPDT)	Maximum Continuous Coil Voltage	31.2VDC
Contact Voltage (per point)*	250VAC/30VDC	Rated Current per Coil	16.7mA (±10%) @ 24 VDC
Maximum Power Inductive	2000VA General Use	Coil Resistance	1440Ω (±10%)
Maximum Power Resistive	AC 2000VA, DC 300W	Power Consumption per Coil	0.4W
Maximum Switching Voltage	250VAC, 110VDC	Total Coil Supply Current Max.	293mA (Total 16 relays)
Minimum Load	10mA @ 5VDC	Pick Up Current Max. per Coil	15mA
Contact Resistance	100mΩ Max @ 1A, 6VDC	Drop-Out Voltage Min.	1.2VDC
Contact Material	AgNi (Silver Nickel Alloy)	Pick-Up Voltage Max.	19.2VDC
		Off to On/On to Off Response Time	12ms/8ms

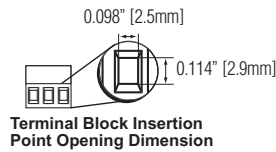
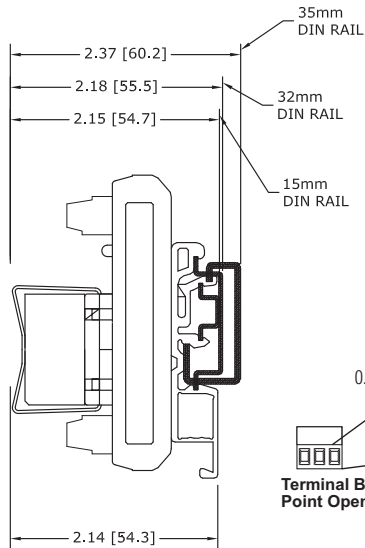
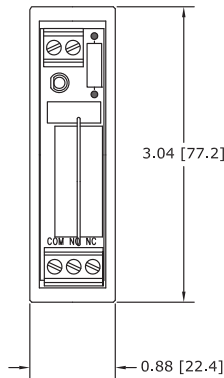
Note: See wiring details and dimensional drawings on our Web site at:
<http://www.automationdirect.com/static/manuals/ziplinks/ziplinks.html>

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

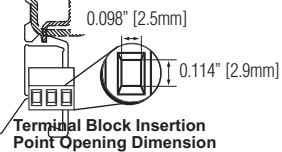
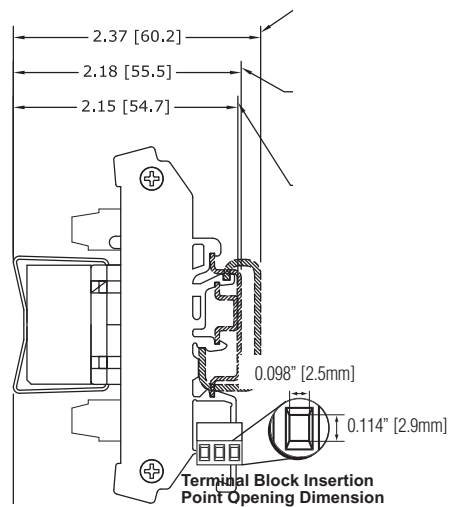
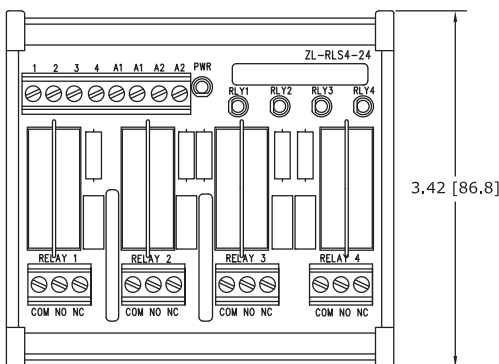
ZL-RRL16-24



ZL-RLS1-24(120)



ZL-RLS4-24(120)



Note: Dimensions shown in Inches [mm]