



24V DC-Powered Fused Relay Modules

DC-powered fused relay modules provide isolation, switch high current (8A) loads, and includes fused protection to prevent voltage spikes at the relay coil from damaging connected 16-point PLC I/O modules. Relays are included with these modules.

Modules mount on 35mm DIN rail (part #DN-R35S1) or 15mm DIN rail (part #DN-R15S1).



ZL-RRL16F-24-1



ZL-RRL16F-24-2

Specifications								
24V DC-Powered Fused Relay Module	Part #	Pcs/ Pkg	Price/Pkg	Weight (lbs)	Part #	Pcs/ Pkg	Price/Pkg	Weight (lbs)
	ZL-RRL16F-24-1	1	\$280.00	2.05	ZL-RRL16F-24-2	1	\$280.00	2.05
Description	16 Fused Output Relay module, sinking, with LEDs, 24VDC coil				16 Fused Output Relay module, sourcing, with LEDs, 24VDC coil			
Mechanical Life	1,000,000 Operations no load condition							
Electrical Life	1,000,000 Operations at rated resistive load							
Operating Frequency	6 cycles per minute electrical, 180 cycles per minute mechanical							
Isolation Coil to Contact	2500VAC for 1 minute							
Isolation NC Contact to NO Contact	1000VAC for 1 minute							
Isolation Between Relays	1000VAC for 1 minute							
Red LED Indicator State Relay	ON = relay energized, OFF = relay de-energized				ON = relay de-energized, OFF = relay 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 1.5 mm							
Shock Resistances	1000m/s2 endurance, 100m/s2 operation							
Terminal Block Contacts	Copper alloy, tin-lead plated							
Wire Range *	12–24 AWG Solid or Stranded Conductor							
Wire Strip Length	0.24–0.27 in (6–7 mm)							
Screw Torque	4.4 in-lbs (0.5 N-m)							
Connector Type	Molex Micro-Fit 3.0, 24-pin connector, example receptacle 43020-2400, Pins 43031 Series, Male							
Replacement Relays	ZL-RELAY-24X4, Qty. 4/pkg							
Fuses (Sold Separately)	Sixteen 5x20mm, 250V							
Replacement Fuses	See Edison 5x20mm Glass Fuse section, range up to Max. 10							
Cable/Wire Clearance	0.5 in (12.7 mm)							
Approvals	File # E139594 UL, cUL 508, CE, EN61131-2:2007							

Relay Specifications **			
Contact		Coil	
Current Rating	30VDC @ 8A, 250VAC @ 8A, General Use	Input Voltage Rating	24VDC (-20%/+30%)
Contact Type	1 Form C (SPDT)	Maximum Continuous Coil Voltage	31.2 VDC
Contact Voltage (per point) *	250VAC/30VDC	Rated Current per Coil	16.7 mA (±10%) @ 24VDC
Maximum Power Inductive	2000VA General Use	Coil Resistance	1440Ω (±10%)
Maximum Power Resistive	AC 2000VA, DC 240W	Power Consumption per Coil	0.4 W
Maximum Switching Voltage	250VAC, 300VDC	Total Coil Supply Current Max.	400mA (Total 16 relays)
Minimum Load	10mA @ 5VDC	Pick Up Current Max. per Coil	15mA
Contact Resistance	100mΩ Max @ 1A, 6VDC	Drop-Out Voltage Min.	1.2 VDC
Contact Capacity	5FLA/30LRA, 250VAC, 1/2 HP, 250VAC, Pilot Duty B300-C300	Pick-Up Voltage Max.	19.2 VDC
Contact Material	AgNi (Silver Nickel Alloy)	Off to On/On to Off Response Time	12ms/8ms

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

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

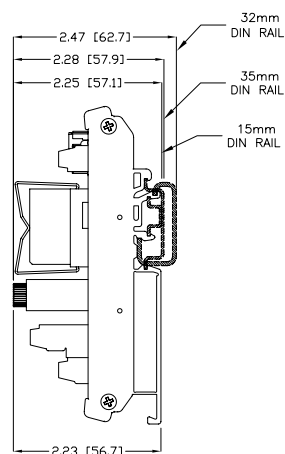
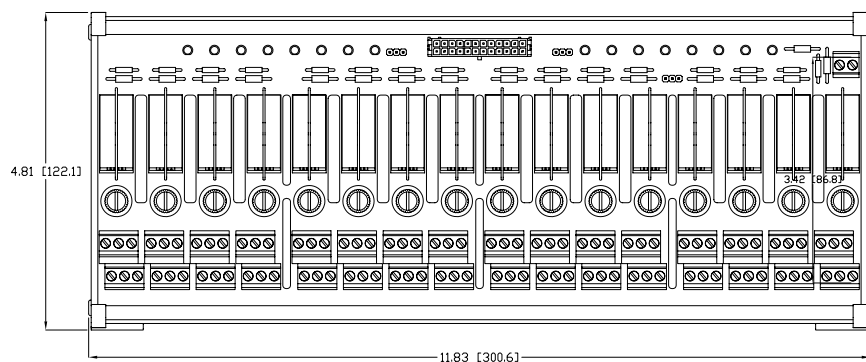


Note: See wiring details and dimensional drawings on our Web site at: <http://www.automationdirect.com/static/manuals/ziplinks/ziplinks.html>.

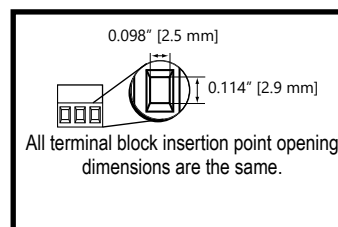
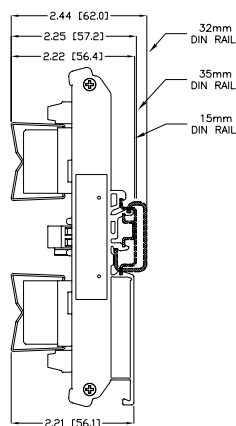
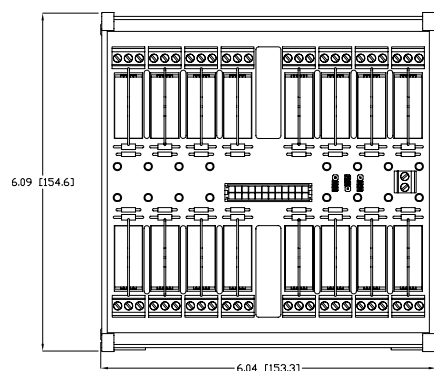


Module Dimensions

ZL-RRL16F-24-1 ZL-RRL16F-24-2



ZL-RRL16W-24-1 ZL-RRL16W-24-2



Note: Dimensions shown in Inches [mm]



Accessories

Replacement Relays

Replacement relays are offered with a 24VDC coil or 120VAC coil and are for use with the **ZIPLink** relay modules.

Sold in packages of 4.



ZL-RELAY-24X4
\$21.50



ZL-RELAY-120X4
\$29.00

24VDC Relay Specifications			
Contact		Coil	
Current Rating	30VDC @ 10A 250VAC @ 8A General Use	Input Voltage Range	24VDC (-20%/+30%)
		Maximum Continuous Coil Voltage	31.2 VDC
Contact Type	1 Form C (SPDT)	Rated Current per Coil	16.7 mA (±10%) @ 24VDC
Contact Voltage (per point)	250VAC/30VDC	Coil Resistance	1440Ω (±10%)
Maximum Power Inductive	2000VA General Use	Power Consumption per Coil	0.4 W
Maximum Power Resistive	AC 2000VA, DC 300W	Pick Up Current Max. per Coil	15mA
Maximum Switching Voltage	250VAC, 110VDC	Drop-Out Voltage Min.	1.2 VDC
Minimum Load	10mA @ 5VDC	Pick-Up Voltage Max.	19.2 VDC
Contact Resistance	100mΩ Max @ 1A, 6VDC	Off to On/On to Off Response Time	12ms/8ms
Contact Material	AgNi (Silver Nickel Alloy)	Weight (lbs)	0.11
120VAC Relay Specifications			
Contact		Coil	
Current Rating	30VDC @ 10A 250VAC @ 8A General Use	Input Voltage Range	115VAC (-20%/+30%), 50–60Hz
		Maximum Continuous Coil Voltage	150VAC
Contact Voltage (per point)	250VAC/30VDC	Rated Current per Coil	7.65 mA (±10%) @ 115VAC 50Hz
			6.30 mA (±10%) @ 115VAC 60Hz
Maximum Power Inductive	2000VA General Use	Coil Resistance	8100Ω (±10%)
Maximum Power Resistive	AC 2000VA, DC 300W	Power Consumption per Coil	0.88 W @ 50Hz 0.73 W @ 60Hz
Maximum Switching Voltage	250VAC, 110VDC	Drop-Out Voltage Min.	34.5 VAC
Minimum Load	10mA @ 5VDC	Pick-Up Voltage Max.	92VAC
Contact Resistance	100mΩ Max @ 1A, 6VDC	Off to On / On to Off Response Time	12ms/8ms
Contact Material	AgNi (Silver Nickel Alloy)	Weight (lbs)	0.11

Installation Accessories

Accessories			
	Part #	Pcs/Pkg	Price/Pkg
DIN Rail	DN-R35S1	10	\$39.00
Angled Support Bracket	DN-ASB1	50	\$107.00
End Bracket	DN-EB35	50	\$67.00



Accessories

Replacement Relays

Replacement 24VDC relays are offered for use with the **ZIPLink** relay modules [ZL-RRL16F-24-1/-2](#).

Sold in packages of 4.



ZL-RELAY-F24X4
\$24.00

ZL-RELAY-F24x4 24VDC Relay Specifications			
Contact		Coil	
Current Rating	30VDC @ 8A 250VAC @ 8A General Use	Input Voltage Range	24VDC (-20%/+30%)
		Maximum Continuous Coil Voltage	31.2 VDC
Contact Type	1 Form C (SPDT)	Rated Current per Coil	16.7 mA (±10%) @ 24VDC
Contact Voltage (per point)	250VAC / 30VDC	Coil Resistance	1440Ω (±10%)
Maximum Power Inductive	2000VA General Use	Power Consumption per Coil	0.4 W
Maximum Power Resistive	AC 2000VA, DC 240W	Pick Up Current Max. per Coil	15mA
Maximum Switching Voltage	250VAC, 300VDC	Drop-Out Voltage Min.	1.2 VDC
Minimum Load	10mA @ 5VDC	Pick-Up Voltage Max.	19.2 VDC
Contact Resistance	100mΩ Max @ 1A, 6VDC	Off to On/On to Off Response Time	12ms/8ms
Contact Material	AgNi (Silver Nickel Alloy)	Weight (lbs)	0.11