

**ZIPINE** 24V DC-Powered Fused Relay Modules

DC-powered fused relay modules provide isolation, switch high current (10A) loads, and include diode and 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.

Module mounts on 35mm DIN rail (part #DN-R35S1) or 15mm DIN rail (part #DN-R15S1)



#### ZL-RRL16HDF-24-2

Specifications							
24V DC-Powered	Part #	Pcs/ Pkg	Price/Pkg	Weight (lbs)			
Fused Relay Module	ZL-RRL16HDF-24-2	1		1.06			
Description	16 Fused Output Relay module, sourcing, with LEDs, 24VDC coi						
Mechanical Life	1,000,000 Operations no load condition						
Electrical Life	50,000 Operations at rated resistive load (Normally Open) 30,000 Operations at rated resistive load (Normally Closed)						
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						
<b>Operating Temperature Range</b>	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 Resistance	1000m/s <sup>2</sup> endurance, 100m/s <sup>2</sup> operation						
Terminal Block Contacts	Copper alloy, tin-lead plated						
Wire Range 1	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-HDF24X4, Qty. 4/pkg						
Fuses (Sold Separately)	Sixteen 8.35 x 3.95 x 7.55 mm or 8.4 x 8.3 mm						
Recommended Fuses	Littelfuse, Subminiture TR5 Series or Equivalent						
Cable/Wire Clearance	0.5 in (12.7 mm)						
Approvals	File # E139594 UL, cUL 508, CE, EN61131-2:2007						

Replacement Fuses* (Sold Separately)						
Part Number	Current Rating	Pcs/Pkg	Price/Pkg			
ZL-FUSE-H3	3A	4				
ZL-FUSE-H4	4A	4				
ZL-FUSE-H5	5A	4				
ZL-FUSE-H63	6.3 A	4				
Dimensions	8.35 x 3.95 x 7.55 mm or 8.4 x 8.3 mm					
Alternate Fuse	Littlefuse, Subminiature TR5 Series or Equivalent					

\* Sixteen fuses required.



**ZL-FUSE-HXX** 

Relay Specifications 2						
Contact		Coil				
Current Rating	30VDC @ 5A, 250VAC @ 5A, 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	7.1 mA (±10%) @ 24VDC			
Maximum Power Inductive	1250VA General Use	Coil Resistance	3388Ω (±10%)			
Maximum Power Resistive	AC 1250VA, DC 150W	Power Consumption per Coil	0.17 W			
Maximum Switching Voltage	250VAC, 30VDC	Total Coil Supply Current Max.	275mA (Total 16 relays)			
Minimum Load	10mA @ 5VDC	Pick Up Current Max. per Coil	15mA			
Contact Resistance	100m <b>Ω</b> Max @ 1A, 6VDC	Drop-Out Voltage Min.	1.2 VDC			
Contact Capacity	D300, 0.8 A/ 240VAC Pilot Duty FLA 2A @ 277VAC/125VAC 1/8HP @ 250VAC	Pick-Up Voltage Max.	19.2 VDC			
		Off to On/On to Off Posnanco Time	8ms/4ms			
Contact Material	AgNi (Silver Nickel Alloy)	Off to On/On to Off Response Time				

<sup>1</sup> Use conductors rated for 60°/75°C for relay outputs.

<sup>2</sup> Relay modules are reverse polarity protected and will not operate if reverse voltage is connected.

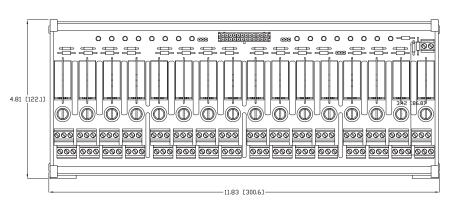
Note: See wiring details and dimensional drawings on our Web site at: http://

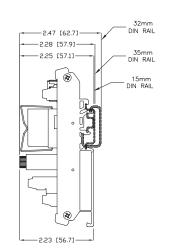
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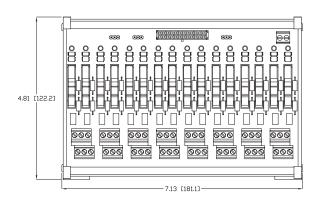
# **Module Dimensions**

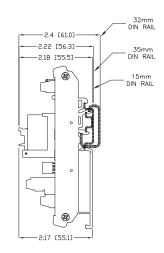
## ZL-RRL16F-24-1 ZL-RRL16F-24-2



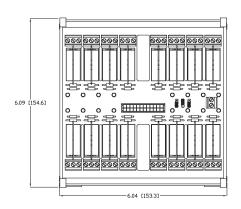


#### ZL-RRL16HDF-24-1 ZL-RRL16HDF-24-2





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



Note: Dimensions shown in Inches [mm]

