

# **120VAC Stand-Alone Relay Modules**

Our AC-powered stand-alone relay modules provide isolation, switch high current (10A) loads and are offered in single or 4-socket modules. Relays are included with the modules.

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



ZL-RLS1-120



ZL-RLS4-120

Specifications								
120VAC Stand-Alone Relay Modules	Part #	Pcs/ Pkg	Price/Pkg	Weight (lbs)	Part #	Pcs/ Pkg	Price/Pkg	Weight (Ibs)
	<u>ZL-RLS1-120</u>	1	\$34.50	0.10	<u>ZL-RLS4-120</u>	1	\$102.00	0.45
Description	Single-socketed relay with 120VAC relay with LED Four-socketed relays with 120VAC relays with LEDs					ith LEDs		
Mechanical Life	10,000,000 Operations at no load condition							
Electrical Life	100,000 Operations at rated resistive load							
<b>Operating Frequency</b>	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	N/A				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 Resistances	1000m/s <sup>2</sup> endurance, 100m/s <sup>2</sup> 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)							
Replacement Relays	ZL-RELAY-120X4, Qty. 4/pkg							
Cable/Wire Clearance	0.5 in (12.7 mm) Required							
Approvals	File # E157382 UL, cUL 508							

Relay Specifications					
Contact		Coil			
Current Rating	30VDC @ 10A 250VAC @ 8A General Use	Input Voltage Rating	115VAC (-20%/+30%), 50–60Hz		
Contact Type	1 Form C (SPDT)	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)	On to On/On to Off Response Time			

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

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





## **Replacement Relays**

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

Sold in packages of 4.



ZL-RELAY-24X4 \$21.50



ZL-RELAY-120X4 \$29.00

	24VDC F	lelay Specifications		
Contact		Coil		
Queront Doting	30VDC @ 10A 250VAC @ 8A	Input Voltage Range	24VDC (-20%/+30%)	
Current Rating	General Use	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		115VAC (-20%/+30%), 50–60Hz	
	250VAC @ 8A General Use	Input Voltage Range		
		Input Voltage Hange Maximum Continuous Coil Voltage		
Contact Type	General Use		50–60Hz	
Contact Type Contact Voltage (per point)	General Use 1 Form C (SPDT)	Maximum Continuous Coil Voltage	50–60Hz 150VAC 7.65 mA (±10%) @ 115VAC 50Hz 6.30 mA (±10%) @ 115VAC	
Contact Type Contact Voltage (per point) Maximum Power Inductive Maximum Power Resistive	General Use 1 Form C (SPDT) 250VAC/30VDC	Maximum Continuous Coil Voltage Rated Current per Coil	50–60Hz 150VAC 7.65 mA (±10%) @ 115VAC 50Hz 6.30 mA (±10%) @ 115VAC 60Hz	
Contact Type Contact Voltage (per point) Maximum Power Inductive Maximum Power Resistive	General Use 1 Form C (SPDT) 250VAC/30VDC 2000VA General Use	Maximum Continuous Coil Voltage Rated Current per Coil Coil Resistance	50–60Hz 150VAC 7.65 mA (±10%) @ 115VAC 50Hz 6.30 mA (±10%) @ 115VAC 60Hz 8100Ω (±10%) 0.88 W @ 50Hz	
Contact Type Contact Voltage (per point) Maximum Power Inductive	General Use 1 Form C (SPDT) 250VAC/30VDC 2000VA General Use AC 2000VA, DC 300W	Maximum Continuous Coil Voltage Rated Current per Coil Coil Resistance Power Consumption per Coil	50–60Hz 150VAC 7.65 mA (±10%) @ 115VAC 50Hz 6.30 mA (±10%) @ 115VAC 60Hz 8100Ω (±10%) 0.88 W @ 50Hz 0.73 W @ 60Hz	
Contact Type Contact Voltage (per point) Maximum Power Inductive Maximum Power Resistive Maximum Switching Voltage	General Use 1 Form C (SPDT) 250VAC/30VDC 2000VA General Use AC 2000VA, DC 300W 250VAC, 110VDC	Maximum Continuous Coil Voltage Rated Current per Coil Coil Resistance Power Consumption per Coil Drop-Out Voltage Min.	50–60Hz 150VAC 7.65 mA (±10%) @ 115VAC 50Hz 6.30 mA (±10%) @ 115VAC 60Hz 8100Ω (±10%) 0.88 W @ 50Hz 0.73 W @ 60Hz 34.5 VAC	

### **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	<u>DN-EB35</u>	50	\$67.00		





## **Replacement Relays**

Replacement 24VDC relays are offered for use with the **ZIP**Link relay modules <u>ZL-RRL16F-24-1</u>/-2. Sold in packages of 4.



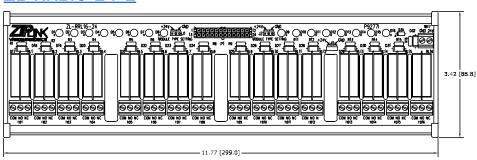
ZL-RELAY-F24X4 \$24.00

ZL-RELAY-F24x4 24VDC Relay Specifications					
Contact		Coil			
Current Poting	30VDC @ 8A	Input Voltage Range	24VDC (-20%/+30%)		
Current Rating	250VAC @ 8A General Use	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)	ontact Voltage (per point) 250VAC / 30VDC		1440Ω (±10%)		
Iaximum 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		
Aximum 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		



## **Module Dimensions**

#### ZL-RRL16-24-1 ZL-RRL16-24-2

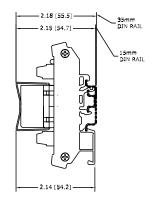


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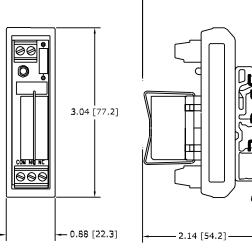
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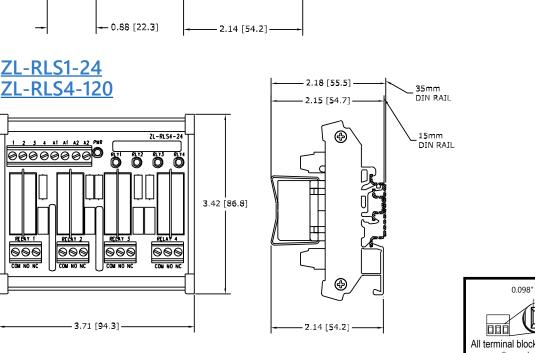
35mm DIN RAIL

15mm DIN RAIL



#### <u>ZL-RLS1-24</u> ZL-RLS1-120





Note: Dimensions shown in Inches [mm]

