

## **TRINK** 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 #DN-R35S1) or 15mm DIN rail (part #DN-R15S1).





**ZL-RLS1-120** 

**ZL-RLS4-120** 

Specifications								
120VAC Stand-Alone	Part #	Pcs/ Pkg	Price/ Pkg	Weight (lbs)	Part #	Pcs/ Pkg	Price/ Pkg	Weight (lbs)
Relay Modules	ZL-RLS1-120	1		0.10	ZL-RLS4-120	1		0.45
Description	Single-socketed relay with 120VAC relay with LED Four-socketed relays with 120VAC relays with LEDs				th LEDs			
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	N/A 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 1.5 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	ximum Power Inductive 2000VA General Use		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	100m <b>Ω</b> Max @ 1A, 6VDC	Off to On/On to Off Possoness Time	12ms / 8ms		
Contact Material	AgNi (Silver Nickel Alloy)	Off 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:// /static/manuals/ziplinks.html.



### Accessories

#### **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



ZL-RELAY-120X4

24VDC Relay Specifications					
Contact		Coil			
Current Boting	30VDC @ 10A	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)	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	100m <b>Ω</b> Max @ 1A, 6VDC	Off to On/On to Off Response Time	12ms/8ms		
Contact Material	AgNi (Silver Nickel Alloy)	Weight (lbs)	0.11		
	120VAC F	lelay Specifications			
Contact		Coil			
Current Rating	30VDC @ 10A 250VAC @ 8A General Use	Input Voltage Range	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	100m <b>Ω</b> 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			
Angled Support Bracket	DN-ASB1	50			
End Bracket	DN-EB35	50			



## Accessories

#### **Replacement Relays**

Replacement 24VDC relays are offered for use with the *ZIP*Link relay modules ZL-RRL16F-24-1/-2 and ZL-RRL16HDF-24-1/-2.

Sold in packages of 4.





ZL-RELAY-F24X4

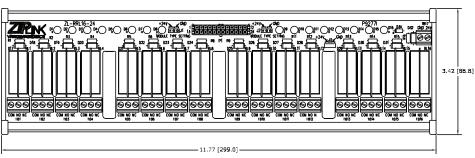
ZL-RELAY-HDF24X4

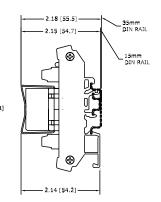
ZL-RELAY-F24x4 24VDC Relay Specifications					
Contact		Coil			
Current Dating	30VDC @ 8A 250VAC @ 8A	Input Voltage Range	24VDC (-20%/+30%)		
Current Rating	General Use	Maximum Continuous Coil Voltage	31.2 VDC		
Contact Type	1 Form C (SPDT)	Rated Current per Coil	16.7 mA (±10%) @ 24VDC		
Contact Voltage (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 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	100m <b>Ω</b> Max @ 1A, 6VDC	Off to On/On to Off Response Time	12ms/8ms		
Contact Material	AgNi (Silver Nickel Alloy)	Weight (lbs)	0.11		
ZL-RELAY-HDF24x4		24VDC Relay Specifications			
Contact		Coil			
Current Rating	30VDC @ 5A 250VAC @ 5A General Use	Input Voltage Range	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	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	Drop-Out Voltage Min.	1.2 VDC (TBD)		
Minimum Load	10mA @ 5VDC	Pick-Up Voltage Max.	19.2 VDC		
Contact Resistance	100m <b>Ω</b> Max @ 1A, 6VDC	Off to On/On to Off Response Time	8ms/4ms		
Contact Capacity	D300, 0.8 A/240VAC Pilot Duty FLA 2A @ 277VAC / 125VAC 1/8 HP @ 250VAC	Weight (lbs)	0.11		
Contact Material	AgNi (Silver Nickel Alloy)				



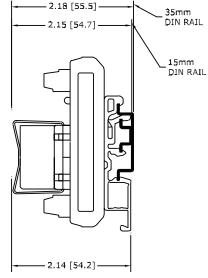
## **Module Dimensions**

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



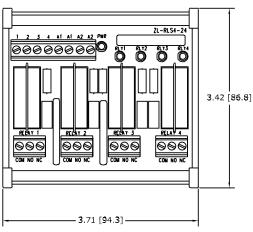


# ZL-RLS1-24(120)

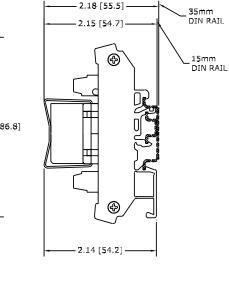


#### ZL-RLS4-24(120)

006



- 0.88 [22.3]



0.098" [2.5 mm] 0.114" [2.9 mm] All terminal block insertion point opening dimensions are the same.