



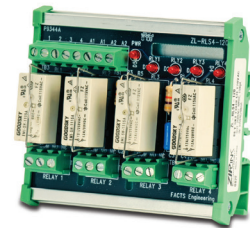
120VAC Stand-Alone Relay Modules

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 Relay Modules | Part # | Pcs/Pkg | Price/Pkg | Weight (lbs) | Part # | Pcs/Pkg | Price/Pkg | Weight (lbs) |
| | | ZL-RLS1-120 | 1 | \$21.00 | 0.10 | ZL-RLS4-120 | 1 | \$62.00 |
| Description | Single-socketed relay with 120VAC relay with LED | | | | Four-socketed relays with 120VAC relays with 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 ² endurance, 100m/s ² 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) | | |

* 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>



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
\$12.50



ZL-RELAY-120X4
\$17.50

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

Installation Accessories

| Accessories | | | |
|-------------------------------|----------|---------|-----------|
| | Part # | Pcs/Pkg | Price/Pkg |
| DIN Rail | DN-R35S1 | 10 | \$28.00 |
| Angled Support Bracket | DN-ASB1 | 50 | \$50.00 |
| End Bracket | DN-EB35 | 50 | \$40.00 |



Accessories

Replacement Relays

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

Sold in packages of 4.



ZL-RELAY-F24X4
\$14.50



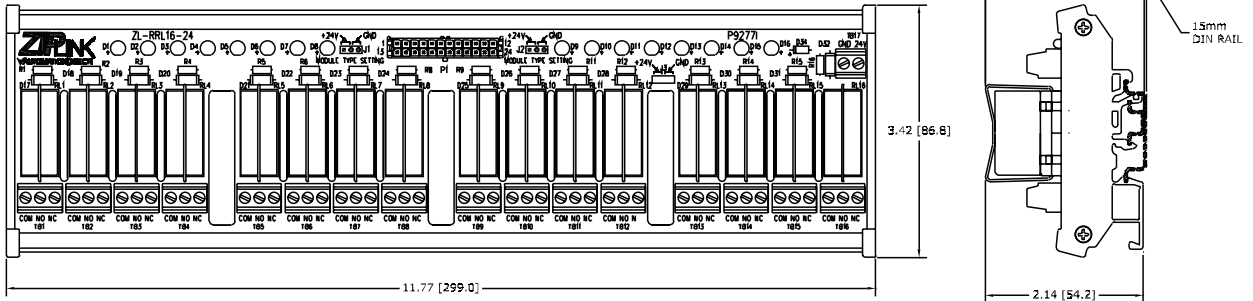
ZL-RELAY-HDF24X4
\$15.50

| ZL-RELAY-F24x4 24VDC Relay Specifications | | | |
|--|--|--|------------------------|
| Contact | | Coil | |
| Current Rating | 30VDC @ 8A 250VAC @ 8A 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 | 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 | Pick Up Current Max. per Coil | 15mA |
| Minimum Load | 10mA @ 5VDC | Drop-Out Voltage Min. | 1.2 VDC |
| Contact Resistance | 100mΩ Max @ 1A, 6VDC | Pick-Up Voltage Max. | 19.2 VDC |
| Contact Material | AgNi (Silver Nickel Alloy) | Off to On/On to Off Response Time | 12ms/8ms |
| 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 | 100mΩ 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) | | |

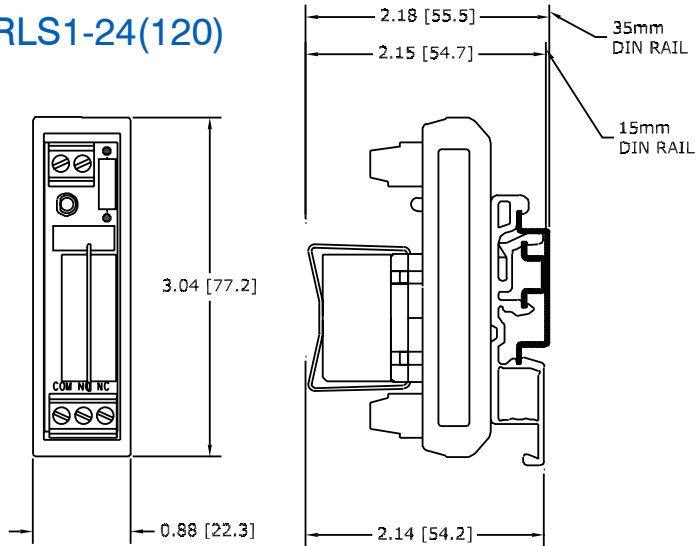


Module Dimensions

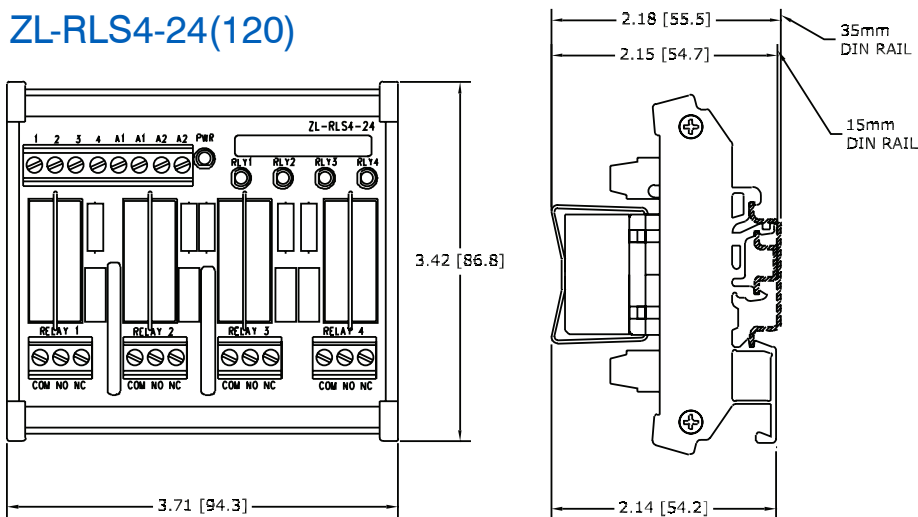
ZL-RRL16-24-1 ZL-RRL16-24-2



ZL-RLS1-24(120)



ZL-RLS4-24(120)



0.098" [2.5 mm]
0.114" [2.9 mm]

All terminal block insertion point opening dimensions are the same.

Note: Dimensions shown in Inches [mm]