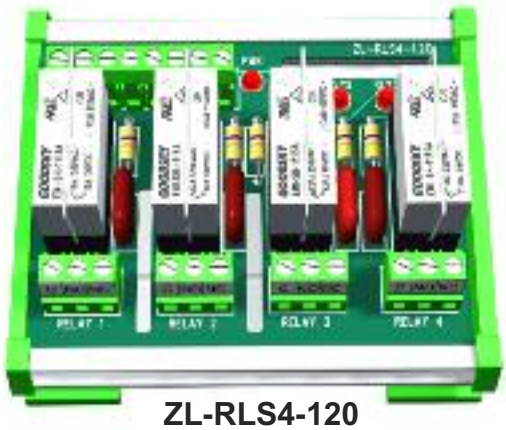
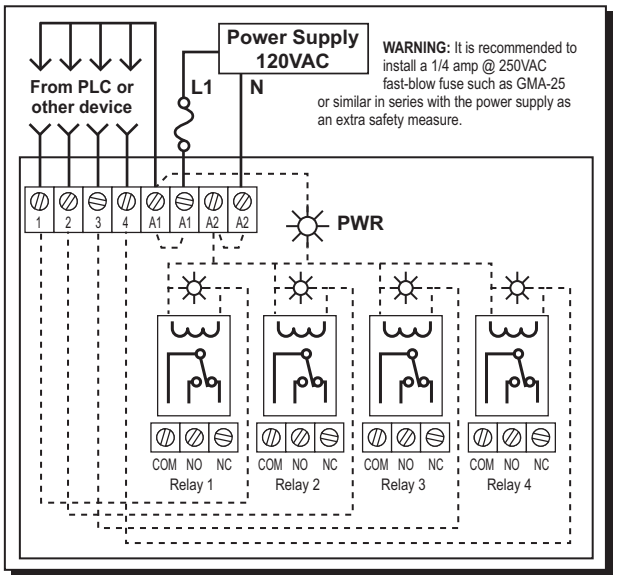
120VAC Stand-Alone Relay Module Installation Instructions

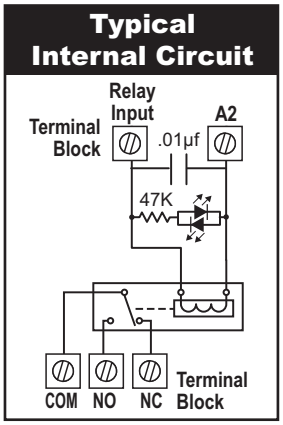
ZL-RLS1-120
ZL-RLS4-120

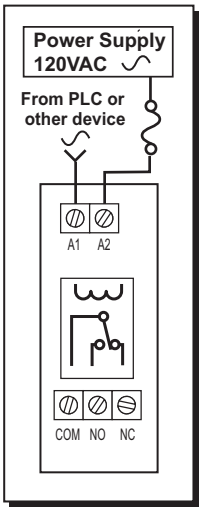


ZL-RLS4-120

ZL-RLS1-120







General Module Specifications		
Description	ZL-RLS1-120	Single output socketed relay(s) for 120VAC relay with LEDs
	ZL-RLS4-120	Four output socketed relay(s) for 120VAC relay 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	ZL-RLS1-120	N/A
	ZL-RLS4-120	1000VAC for 1 minute
Red LED Indicator State Relay		ON = relay energized, OFF = relay de-energized
Surrounding 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 1.5mm
Shock Resistances		1000m/s² endurance 100m/s² operation
Terminal Block Contacts		Copper alloy, tin-lead plated
*Wire Range**		12-24AWG Solid or Stranded Conductor
Wire Strip Length		0.24-0.27" (6-7mm)
Screw Torque		4.4 in-lbs (0.5 Nm)
Dimensions (WxHxD)	ZL-RLS1-120	0.88" x 3.04" x 2.14" (22.4mm x 77.2mm x 54.3mm)
	ZL-RLS4-120	3.71" x 3.42" x 2.14" (94.3mm x 86.8mm x 54.3mm)
Replacement Relays		ZL-RELAY-120X4, Qty. 4/pkg
Approvals		File # E157382 UL, cUL 508, CE, EN 61131-2:2007
Cable/Wire Clearance		0.5" (12.7mm) top and bottom

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

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

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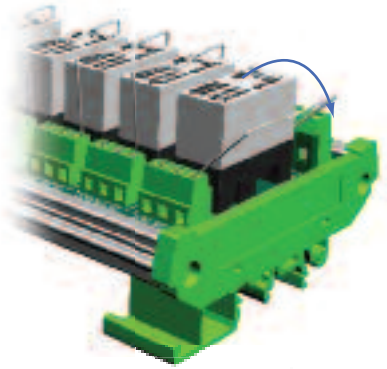
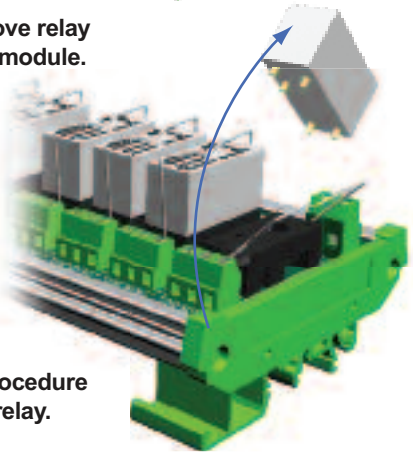
ZL-RLS1-120
ZL-RLS4-120

Remove or Install Relay

1 Rotate retaining clip away from relay.



2 Remove relay from module.



Reverse procedure to replace relay.

DIN Rail Installation and Removal

To install ZIPLink module, insert upper tab into DIN rail.

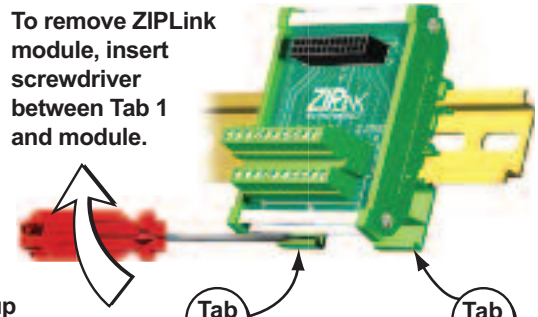
Note: For cable/wire clearance requirements see specifications.

Rotate until firmly seated

Click

and locked on DIN rail.

To remove ZIPLink module, insert screwdriver between Tab 1 and module.



Pry up to release clip from DIN rail.

Tab 1

Tab 2

Repeat for Tab 2.

WARNING: To minimize the risk of potential safety problems, you should follow all applicable local and national codes that regulate the installation and operation of your equipment. These codes vary from area to area and it is your responsibility to determine which codes should be followed, and to verify that the equipment, installation, and operation are in compliance with the latest revision of these codes.

Equipment damage or serious injury to personnel can result from the failure to follow all applicable codes and standards. We do not guarantee the products described in this publication are suitable for your particular application, nor do we assume any responsibility for your product design, installation, or operation.

If you have any questions concerning the installation or operation of this equipment, or if you need additional information, please call Technical Support at 770-844-4200.

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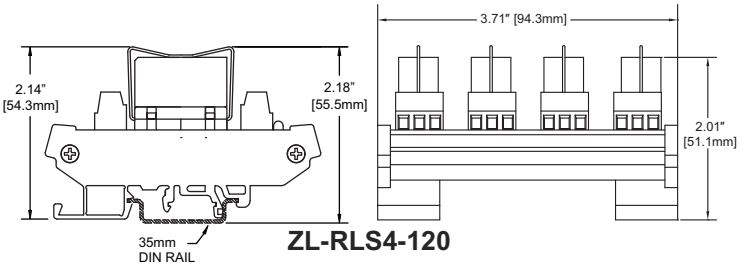
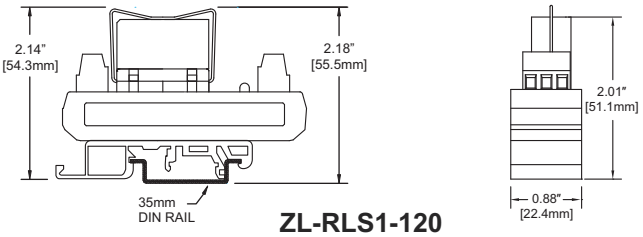
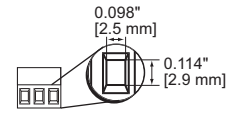


ZL-RLS4-120



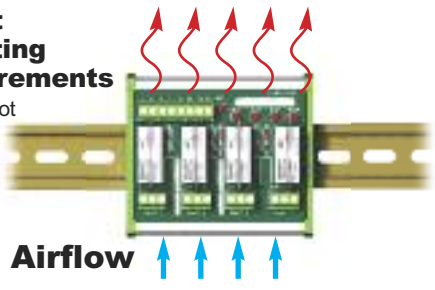
ZL-RLS1-120



Terminal Block Insertion Point Opening Dimension

ZL-RLS4-120 Heat Dissipation Mounting Orientation Requirements

Note: ZL-RLS1-120 does not have mounting orientation requirements.



IMPORTANT! Mount Module horizontally to provide proper ventilation.

AUTOMATIONDIRECT.com
3505 Hutchinson Road, Cumming GA 30040
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