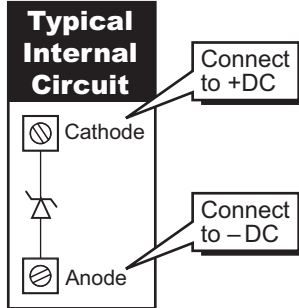




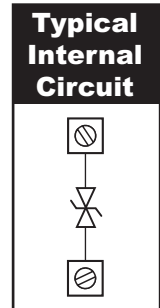
ZL-TSD8-24



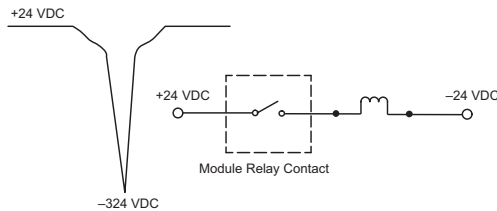
Note: Incorrect wiring can cause a short across the power source which could result in component damage.



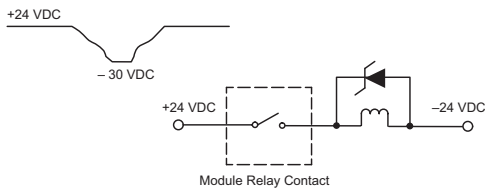
ZL-TSD8-120



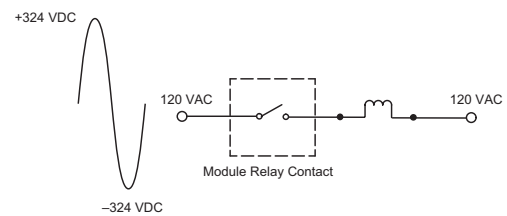
The waveform in the figure below shows the energy released when opening a contact switching a 24 VDC solenoid. Notice the large voltage spike.



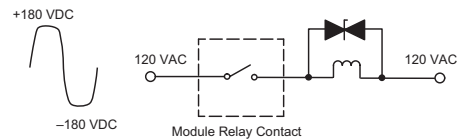
This figure shows the same circuit with a transorb (TVS) across the coil. Notice that the voltage spike is significantly reduced.



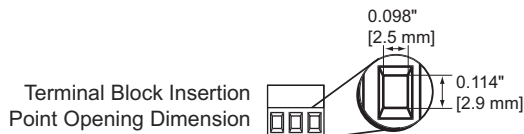
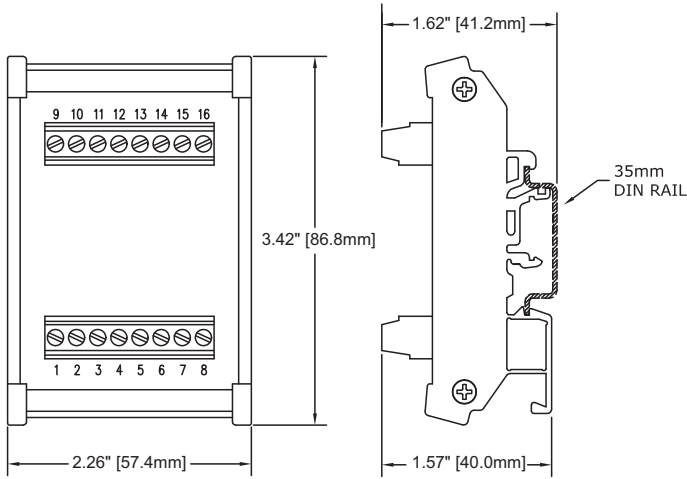
The waveform in the figure below shows the energy released when opening a contact switching a 120 VAC solenoid. Notice the large voltage spike.



This figure shows the same circuit with a transorb (TVS) across the coil. Notice that the voltage spike is significantly reduced.

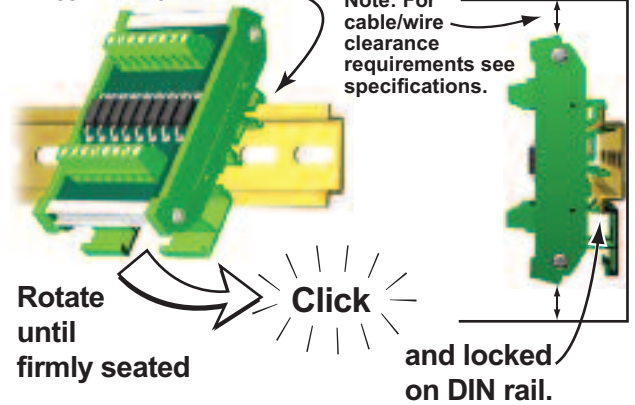


| Specifications | | |
|--|--|--|
| | ZL-TSD8-24 | ZL-TSD8-120 |
| Description | 8-Channel Transient Voltage Suppressor Module, 24VDC | 8-Channel Transient Voltage Suppressor Module, 120VAC |
| Approvals | File # E200031 UL, cUL, Class 1, Division 2, Groups A,B,C,D Hazardous Locations, CE, EN 61131-2:2007 | |
| Number of Circuits | 8 | |
| UL Voltage Rating Use conductors rated 60°/75°C. | 24VDC Voltage Breakdown: Min: 28.5VDC Normal: 30VDC Max: 31.5VDC | 120VAC Voltage Breakdown: Min: 171 Normal: 180 Max: 189 |
| Peak Power Dissipation | 1500W surge capability at 1ms | |
| Maximum Surge Current | 2A | |
| Terminal Block Contacts | Copper alloy, tin-lead plated | |
| 1-Wire Range (Rated Cross Section) | 12-24AWG Solid or Stranded Copper Conductor (2.5mm ²) | |
| 2-Wire Range (Rated Cross Section) | 16-24AWG Solid or Stranded Copper Conductor (2.5mm ²) | |
| Wire Strip Length | 0.24-0.27" (6-7mm) | |
| Screw Torque | 4.4 in-lbs (0.5 Nm) | |
| Surrounding Temperature Range | 32 to 140°F (0 to 60°C) | |
| Dimensions (WxHxD) | 2.26" x 3.42" x 1.57" (57.4mm x 86.8mm x 40mm) | |
| Cable/Wire Clearance | 0.5" (12.7mm) Required | |
| Mounting Restrictions | None | |

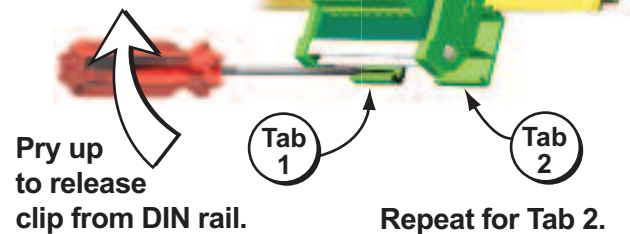


DIN Rail Installation and Removal

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



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



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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HAZARD WARNING

A. THIS EQUIPMENT IS SUITABLE FOR USE IN CLASS I, DIVISION 2/ZONE 2, GROUPS A, B, C AND D OR NON-HAZARDOUS LOCATIONS ONLY.

B. **WARNING – EXPLOSION HAZARD –** SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2/ZONE 2.

C. **WARNING – EXPLOSION HAZARD –** DO NOT CONNECT OR DISCONNECT CONNECTORS OR OPERATE SWITCHES WHILE CIRCUIT IS LIVE UNLESS THE AREA IS KNOWN TO BE NON-HAZARDOUS.