

# TDX Modular Diagnostic Sheet

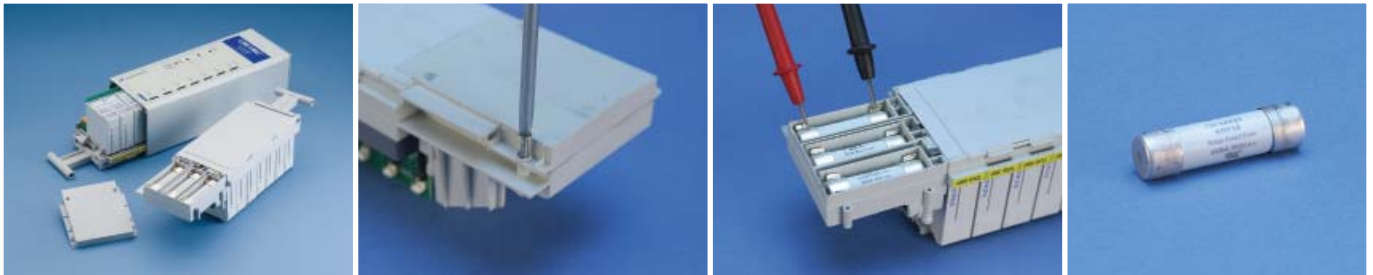
- ⚠️ **DANGER:** Electrical shock or burn hazard. Installation of this SPD should only be made by qualified personnel. Failure to lockout electrical power during installation or maintenance can result in fatal electrocution or severe burns.
- ⚠️ **CAUTION:** Check to make sure system voltages do not exceed the SPD voltage requirement and the correct SPD voltage/model has been selected. This unit must be installed in accordance with the National Electrical Code (ANSI/NFPA-70) and applicable local codes.
- ⚠️ **CAUTION:** Ungrounded power systems are inherently unstable and can produce excessively high line-to-ground voltages during certain fault conditions. During these fault conditions any electrical equipment, including an SPD, may be subjected to voltages which exceed their designed ratings. This information is being provided to the user so that an informed decision can be made before installing any electrical equipment on an ungrounded power system.

## Operational Chart

Alarm Buzzer	Protection Status Indicator Light	L1, L2, L3 Indicator Light	Remote Contacts	Unit Status	Action
Off	On	On	Closed	Unit operational	
Off	Off	Off	Open	Power not applied to unit	Check power source
On	Off	Off	Open	Fuse blown or both fuse blown and module failed	Test fuses, visually inspect modules / replace if required
On	Off	On	Open	Module failed	Replace failed module(s)

- All indicator lights are red
- The L1, L2, L3 indicator lights (L1,L2 on split phase) monitor the TDXFUSE status to the unit when power is applied. If power is applied and this light is OFF, it is an indication that the TDXFUSE on that phase has blown open circuit.

## Servicing your TDX unit - Testing fuses



Remove plate at the base of the TDX unit. Remove fuse cover on the bottom tray using a #1 Phillips head screw driver (recommended). Fuses should be tested using a multimeter as above. If a fuse(s) has blown, the replacement part number is TDXFUSE.

## Tools / Parts you may need:

- Replacement Module(s) and Replacement Fuse(s)
- 3/16" Flat head screw driver
- 5/16" Flat head screw driver
- #1 Phillips head screw driver



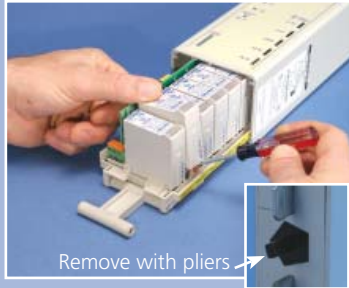
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## Replacing fuses



Remove the fuse by turning the fuse ejector 90 degrees using a 3/16" flat head screw driver (recommended.) Make sure the head of the screw driver is as large as the access point to prevent stripping the slot.

## Replacing modules



Replacement modules can be identified by the chart below or by the plastic strip on the side of the tray. A small flathead screw driver (above photo) will assist in removing the tripped module. Modules ship with a black key for use in dinrail bases. This key must be removed prior to installation into the TDX tray.

## Reinstalling the Tray



Make sure the green PCB board lines up with the slots as you slide the tray into the housing. Push tray firmly into housing and replace base plate and screws. For models with a surge counter, the slot will start 1" (25.4mm) into the housing.

Orderable replacement part number	Part number on module	Number on tray	Model Voltage
TDS150M150	TDS150 1S(R)-150	TDS 150	120/208, 120/240, 120/240D
TDS150M240	TDS150 1S(R)-240	TDS 240	240D, 120/240D
TDS150M277	TDS150 1S(R)-277	TDS 277	277/480, 277/480TT
TDS150M560	TDS150 1S(R)-560	TDS 560	347/600, 480D
SGD125M	SGD125 1S(R)NE	SGD 125	277/480TT (N-E)

For any other issues, visit [erico.com](http://erico.com) for a list of technical support contact numbers.

**DANGER**  
ELECTRICAL SHOCK OR BURN HAZARD. HAZARDOUS VOLTAGES EXIST INTERNAL TO THE TDX. THIS UNIT SHOULD BE INSTALLED AND SERVICED ONLY BY QUALIFIED PERSONNEL IN CONFORMANCE WITH ALL GOVERNING CODES AND INSTRUCTIONS. FAILURE TO LOCKOUT ELECTRICAL POWER DURING INSTALLATION OR MAINTENANCE CAN RESULT IN FATAL ELECTROCUTION, SEVERE BURNS, OR OTHER INJURIES. BEFORE WORKING WITH OR MAKING ANY CONNECTIONS TO THIS DEVICE, BE SURE THAT POWER HAS BEEN REMOVED FROM ALL ASSOCIATED WIRING, ELECTRICAL PANELS, AND OTHER ELECTRICAL EQUIPMENT.

1. The power supply to the TDX should always be turned (and locked) OFF before the unit is accessed for any reason.
2. Prior to installation, ensure that the TDX is of the correct voltage, current, phasing, and frequency for the applicable rating of the power distribution system.
3. Diagrams are for reference only. Schematics are representative of typical applications and are only to be used for reference.

**WARNING**  
1. ERICO products shall be installed and used only as indicated in ERICO product instruction sheets and training materials. Instruction sheets are available at [www.erico.com](http://www.erico.com) and from your ERICO customer service representative.  
2. ERICO products must never be used for a purpose other than the purpose for which they were designed or in a manner that exceeds specified load ratings.  
3. All instructions must be **completely** followed to ensure proper and safe installation and performance.  
4. Improper installation, misuse, misapplication or other failure to completely follow ERICO instructions and warnings may cause product malfunction, property damage, serious bodily injury and death.

**SAFETY INSTRUCTIONS**  
All governing codes and regulations and those required by the job site must be observed. Always use appropriate safety equipment such as eye protection, hard hat, and gloves as appropriate to the application.

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