

## WARNING

1. RISK OF ELECTRICAL SHOCK!
2. Disconnect before servicing.
3. Service to be performed by qualified personnel only.



# E3PA HT

## HT-AI-E3PA-120Y

### INSTALLATION INSTRUCTIONS



Thank you for your recent purchase of our surge protection solution. Your satisfaction with our product and service is important to us. If you have any questions, comments or concerns, please contact us at 800.882.9110 or visit our website at [transector.com](http://transector.com). We look forward to continuing to serve your protection needs.

# HT-AI-E3PA-120Y

## Installation Instructions

The HT-AI-E3PA-120Y suppression cabinet is designed to provide EMP protection for equipment and facilities per Department of Homeland Security (DHS) and the Alliance for Telecommunications Industry Solutions (ATIS) guidelines, and have been tested for survivability to the peak threat levels of the harsh Early Time (E1) High-Altitude (HEMP) environments as defined in MIL-STD-188-125.

The HT-AI-E3PA-120Y suppression cabinet utilizes high-power, solid-state Silicon Avalanche Suppression Diodes (SASDs) in conjunction with custom Metal Oxide Varistor (MOV) assemblies to provide robust, non-degrading protection against high energy transients. In the event of a transient overstress, the MOVs are designed to fail short to provide a low impedance path to ground for subsequent events. The HT-AI-E3PA-120Y suppression cabinet provides protection against AC power faults for a typical 120/208V, 3-Phase, up to 350A systems.

### MOUNTING

The HT-AI-E3PA-120Y suppression cabinet provides four mounting brackets that accept 3/8" hardware. See Figure 2 for installation diagram.

### WIRING

The HT-AI-E3PA-120Y suppression cabinet must be installed by a licensed electrician and/or qualified personnel! The device is intended to be wired in series with the electrical service. Compression lugs are provided inside the cabinet for the input and output phase, neutral & ground connections; all lugs should be torqued to 27ft-lb for proper installation.

The device is bidirectional and can be wired in either direction, depending on the most convenient mounting orientation (see Figure 2).

It is recommended that all wiring entering and exiting the enclosure be housed in grounded metal conduit to maintain the integrity of the containment of high energy transient events.

All seven (7) latches must be securely fastened for the suppression cabinet to operate as intended for high energy transient events.

### TROUBLESHOOTING

The HT-AI-E3PA-120Y suppression cabinet is not equipped with annunciation. Test points are supplied on each SASD module, across the fuse. If electrical continuity between the test points exists, the SASD modules are still functional.

**WARNING!!!** – 120 Vac is present on the test points if unit has voltage supplied to it.

### EXTERNAL DISCONNECT

No disconnect is supplied with the HT-AI-E3PA-120Y. For optimum performance, the device should be installed after a main or branch breaker with a maximum continuous current rating of no greater than 350A.

### GROUNDING

Proper grounding is critical for adequate HEMP protection. Keep ground wire as short as possible between the surge protector ground and the site grounding point. Less than 3 feet, #6 AWG stranded wire is recommended for optimum performance. Refer to local codes and equipment manufacturers standards before installation.

### USAGE AND MAINTENANCE

The suppression cabinet should be scheduled for periodic inspection to ensure the cabinet is operational and all wire connections are tight. Disconnect power prior to inspection and maintenance. If the suppression cabinet is damaged, contact Transtector for replacement.

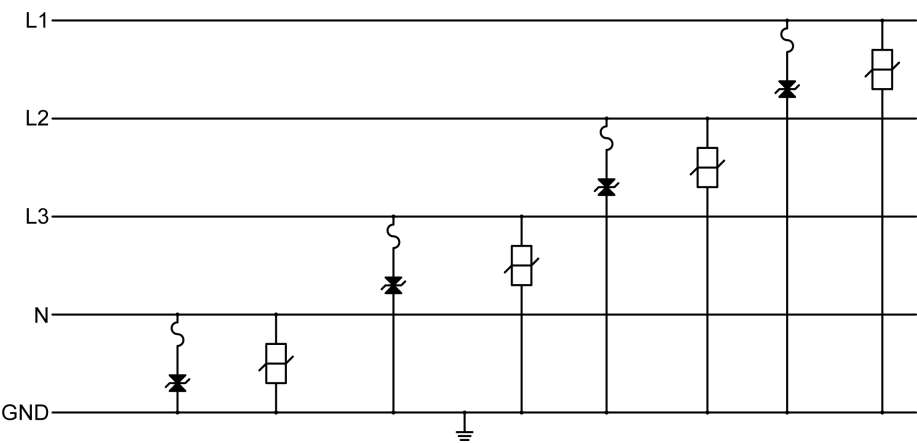


Figure 1 - Schematic Diagram

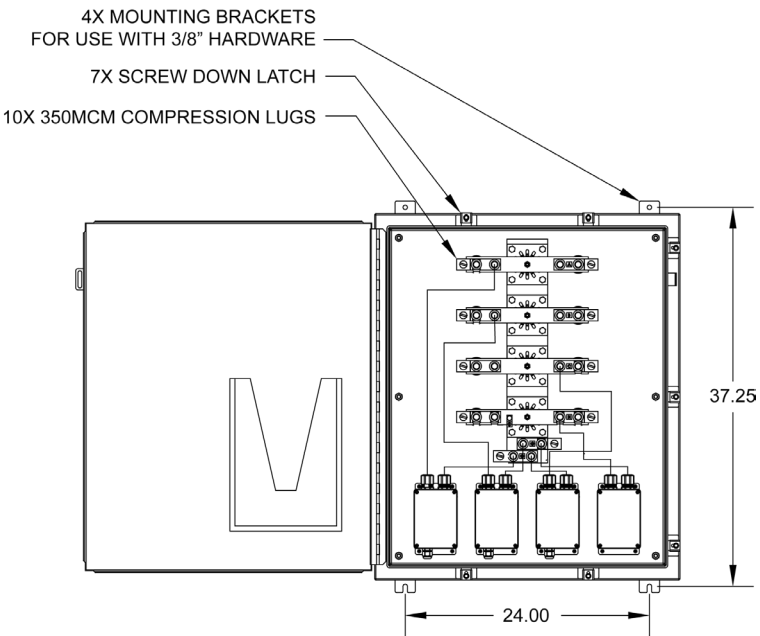


Figure 2 - Installation Diagram