## **WARNING**

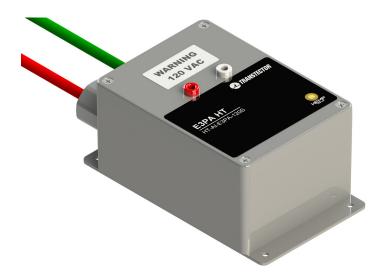
- Important safety instructions. Read and understand all instructions prior to installation. Save these instructions for future reference
- 2. Installation shall be performed by a licensed electrician and/or qualified technician only.
- 3. Disconnect all power prior to installation or service.
- 4. RISK OF ELECTRIC SHOCK. 120 Vac is present on the test points of each module when voltage is supplied.



E3PA HT HT-AI-E3PA-120S

**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 transfector.com. We look forward to continuing to serve your protection needs.

HT-E3PA-120S-M Rev A © Transtector, 2018. All rights reserved

an INFINIT@ company

# HT-AI-E3PA-120S

# Installation Instructions

The HT-AI-E3PA-120S Protection Module 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) and Intermediate Time (E2) High-Altitude (HEMP) environments as defined in MIL-STD-188-125.

The HT-AI-E3PA-120S Protection Modules utilize high-power, solid-state Silicon Avalanche Suppression Diodes (SASD) to provide robust, non-degrading protection against nominal transients. These modules are intended for use in 120/208VAC single or three phase systems.

#### MOUNTING

The HT-Al-E3PA-120S Protection Modules feature a metal enclosure with 4 mounting holes (See Figure 1) designed to accept #8 hardware.

#### WIRING

The HT-AI-E3PA-120S shall be installed in parallel with the load or electrical system wiring as shown in Figure 2. The modules come equipped with #2 AWG stranded wire, 30" in length, with a minimum bend radius of 2". Cut wire to required length. Strip wire insulation 5/8" and install crimp lugs (provided).

#### **TROUBLESHOOTING**

The HT-Al-E3PA-120S is not equipped with annunciation. Test points are supplied across the fuse of each module (see Figure 1). If electrical continuity between the test points exists, the modules are still functional.

WARNING!!! - 120 Vac is present on the test points when voltage is supplied to the module.

## **EXTERNAL DISCONNECT**

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**

Each module should be scheduled for periodic inspection to ensure the module is operational and all wire connections are tight. Disconnect power prior to inspection and maintenance. If the module is damaged, contact Transfector for replacement.

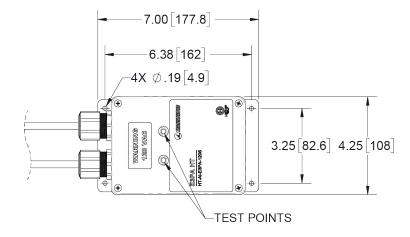


Figure 1 - Mounting Diagram

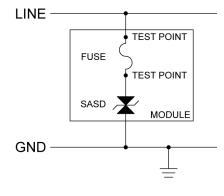


Figure 2 - Schematic Diagram (120/208VAC)