

The Appleton™ AEPGI Explosion-Proof Grounding Indicator Installation and Operation Instructions

FOR PROPER AND SAFE INSTALLATION OF THIS PRODUCT, PLEASE READ THE FOLLOWING INSTRUCTIONS

Appleton's AEPGI Explosion-Proof Grounding Indicator provides a means to safely discharge an electrostatic charge to ground in hazardous areas. The arc produced by a rapid discharge of accumulated static electricity to ground can ignite explosive fumes causing damage to equipment and personnel. Therefore, before loading and unloading explosive fluids, it is necessary to provide a safe path that any electrostatic charge can be safely discharged to ground prior to connecting or disconnecting the fluid transfer lines.

The AEPGI is equipped with a green and red indicator to show the status of ground continuity between the vessel and AEPGI. A green indicator shows there is adequate ground continuity for fluid transfer and red indicator shows there is a break in ground continuity. Control of the transfer equipment can also be controlled by a dry relay contact inside the AEPGI. When an adequate ground contact is detected, a normally open contact will close, enabling the fluid transfer equipment to activate. When the ground continuity is broken, the contact will open, stopping the fluid transfer equipment. Transfer operations should never be undertaken when ground continuity is broken, and not restarted until a satisfactory ground path is reestablished.

 **IT IS IMPORTANT TO READ, UNDERSTAND AND FOLLOW THESE INSTRUCTIONS FOR PROPER INSTALLATION AND SAFE USE OF THIS PRODUCT. RETAIN THIS INSTRUCTIONS FOR FUTURE REFERENCE.**

Signal Words Defined:

DANGER indicates a hazardous situation which, if not avoided will result in death or serious injury.

WARNING indicates a hazardous situation which, if not avoided could result in death or serious injury

CAUTION indicates a hazardous situation which, if not avoided could result in minor or moderate injury.

NOTICE is used to address practices not related to physical injury.

 Equipment shall be installed in accordance with all National and Local codes, acceptable to the Authority Having Jurisdiction.

 Only qualified personnel should install, inspect, and perform regular maintenance on the equipment.

 Refer to the product nameplate for important information regarding the hazardous location rating, enclosure environmental rating, agency approval(s), and important safety information. Adhere to all warning and caution statements located on the exterior or interior of the enclosure.

 Class I, Division 1 locations require a conduit seal to be installed in each conduit run within the specified distance noted on the product nameplate.

 Unused conduit openings shall have a certified close-up plug installed that has the same hazardous location ratings as the enclosure. The close-up plug must engage a minimum of five full threads.

 Always keep the cover bolts tight to prevent ignition of hazardous atmospheres and disconnect circuits before opening cover.

 Only use the original cover screws provided with enclosure

 Take extreme care not to damage the flat-machined flange when opening the enclosure cover. Damaging the flange could affect the enclosure's integrity to protect the hazardous area.

 Dirt, grease, and other foreign material must not accumulate on the flat-machined flange surface of the body and cover. The cover and body must fully mate against each other to provide the proper protection to the hazardous area.

 Do not attempt to repair the cover gasket if damaged; contact factory for replacement. Remove damaged gasket and continue to use the enclosure. The gasket does not affect the enclosure's safety for use in the hazardous locations. However, the enclosure's environmental rating(s) will no longer be valid.

 Install only an approved drain fitting that has the same hazardous location ratings as the enclosure. Note, care must be taken during hosedown operations. The enclosure may be watertight, but the drain may not be.

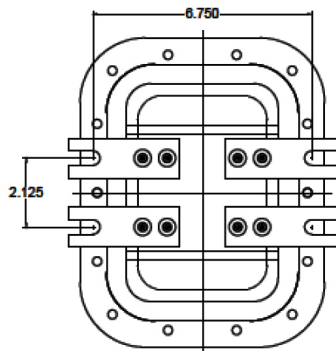
 Since the conditions of use are outside of our control, the purchaser should determine the suitability of the equipment for the intended use and assumes all risk and liability regarding the specific application.

MOUNTING

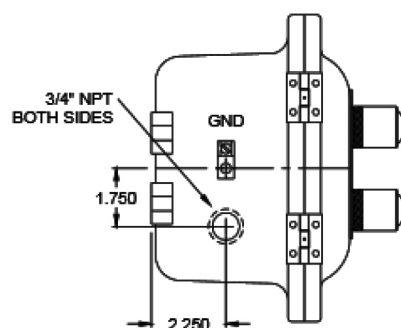
⚠ WARNING: TO AVOID RISK OF ELECTRICAL SHOCK TURN POWER OFF BEFORE INSTALLATION AND MAINTENANCE

1. It is the responsibility of the installer to properly install the enclosure using the mounting feet supplied with the enclosure. If the mounting feet are damaged, contact the factory for replacement.
2. Mount the enclosure on a flat surface capable of supporting the enclosure, controls devices, wiring, etc. Approximate weight of the AEPGI is 20 pounds.
3. Attach conduit system with seal fitting(s) in accordance with the required distance stated on the product nameplate. One, 3/4-NPT opening is provided on each side of the enclosure. A conduit seal shall be installed within the specified distance noted on the product nameplate.
4. Unused conduit openings shall have a certified close-up plug installed with the same hazardous location ratings as the enclosure. The close-up plug must engage a minimum of five (5) full threads.
5. Remove cover bolts and set aside. Take extreme care not to damage the flat-machined flange of the body and cover.
6. Pull wires into enclosure leaving enough length to make the required electrical connections.
7. To ensure the AEPGI is properly bonded to earth, two independent earth grounds are required. In addition to the electrical system ground, it is recommended a separate copper grounding rod be installed near the detector. The grounding rod shall be driven and in contact (7 ft. minimum) of clean EARTH and comply with the National Electrical Code® and all local electrical codes.
8. Inspect and perform a continuity test for all electrical connections.
9. Check cover and body flat-machined flanges for scratches and/or gouges before installing cover. Clean the flanges and inspect the cover gasket for damage.
10. Line up the cover and body bolt holes. Hand start the corner bolts first, before installing the remaining cover bolts. Tighten cover bolts to the required torque.
11. Cover must fully seat against the body flange to provide a proper explosion proof joint.
12. Install conduit seal per manufacturer's installation instructions.

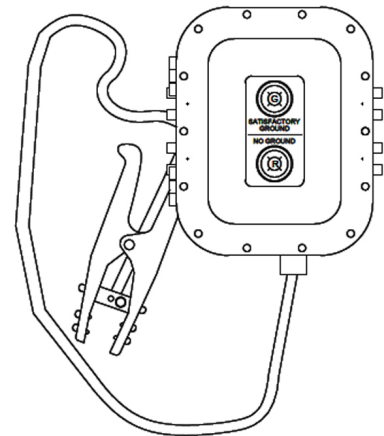
Rear View



Left View



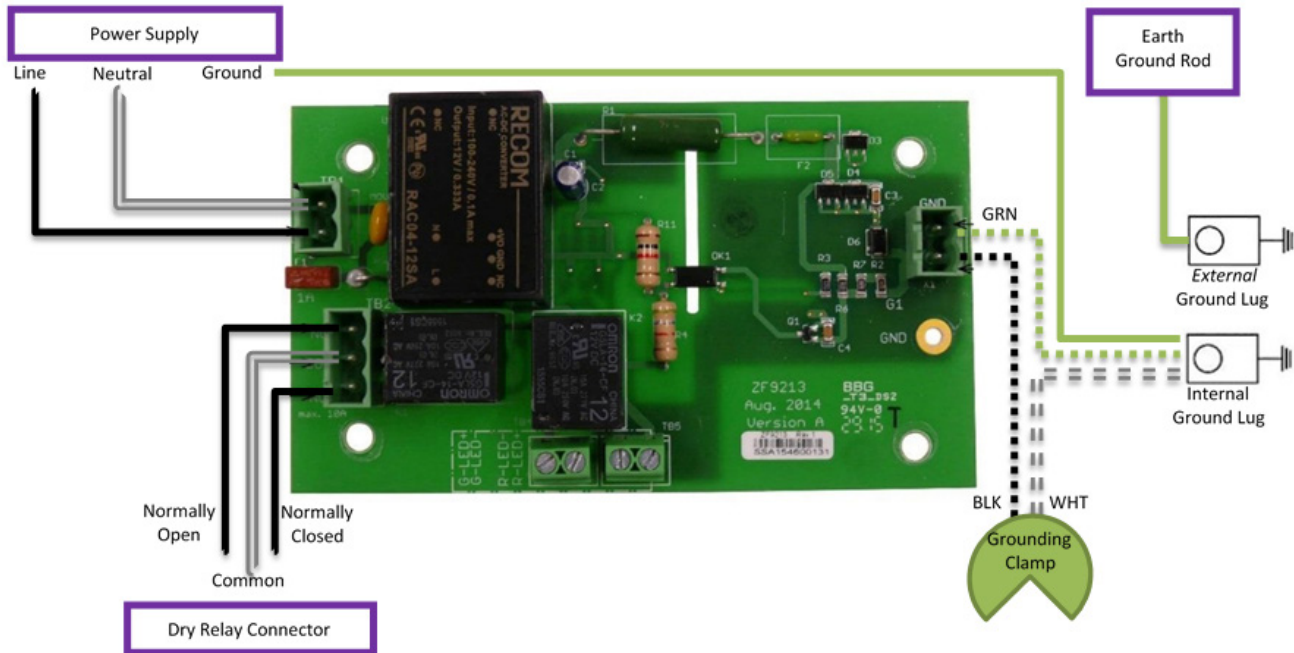
Front View



INSTALLATION

⚠ WARNING: FAILURE TO CONNECT TO A SATISFACTORY EARTH GROUND CAN CAUSE THE DETECTOR TO INDICATE A FALSE “SATISFACTORY” GROUND CONDITION.

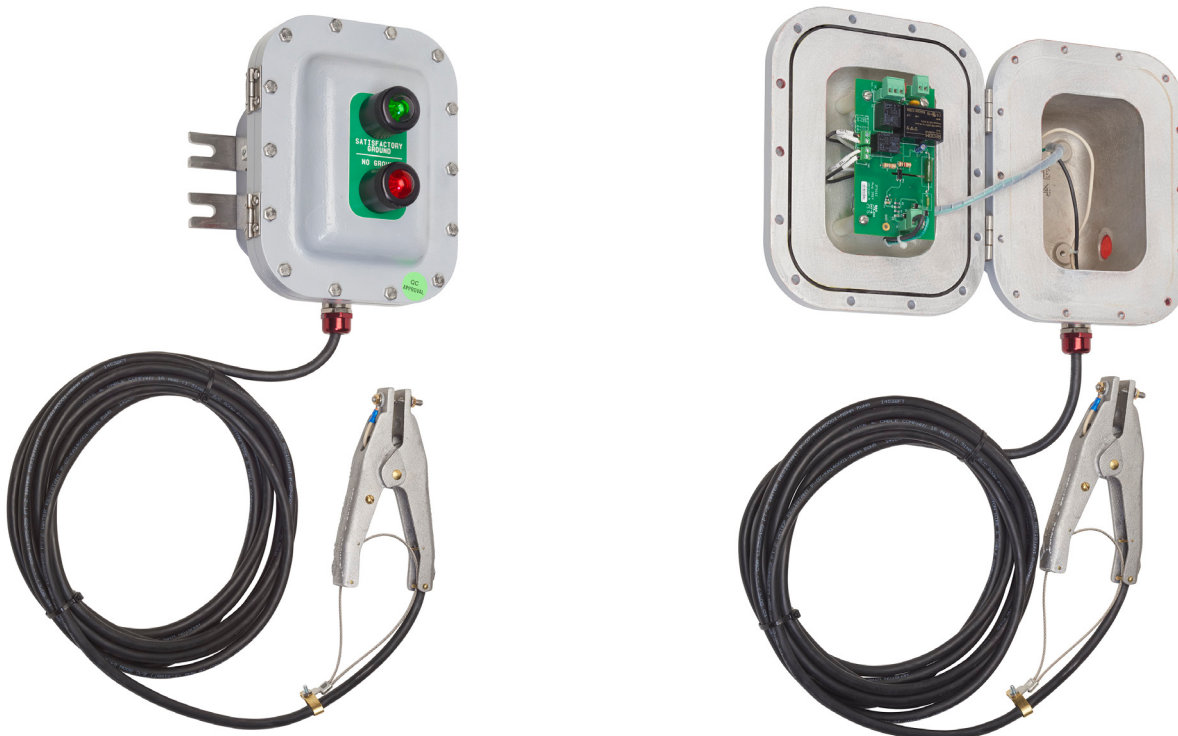
1. Connect incoming power, line and neutral to the connector marked TB1.
2. Connect the system ground to the internal grounding lug.
3. Connect the external earth grounding rod to the external grounding lug.
4. To control the transfer of fluid, connect the transfer equipment to the connector marked TB2.



OPERATION

⚠ WARNING: Failure to operate correctly could result in serious injury.

1. Anyone operating the ground indicator should be trained on proper use of the detector and how to safely transfer flammable liquids.
2. Visually inspect the cable, cable connections, and clamp for damage.
3. Connect grounding clamp to transport vessel.
4. When transport vessel is grounded, the green light will come on and the red light will turn off.
5. When not in use the ground clamp should be attached and clamped on a nonconductive insulator, like a PVC pipe. Make sure the teeth are not touching anything conductive.



Contact Factory for Replacement Parts

Part Number	Description
AEPGIC25KIT	25' Orange Coiled Cord Clamp Assembly
AEPGIC50KIT	50' Orange Coiled Cord Clamp Assembly
AEPGIS25KIT	25' Straight Cord Clamp Assembly
AEPGIS50KIT	50' Straight Cord Clamp Assembly
LEDC12V	12VDC Clear Replacement LED Bulb
ZF9213	120V Circuit Board
AEPL7RLED	Red 12V LED Pilot Light Assembly
AEPL7GLED	Green 12V LED Pilot Light Assembly
A302T	Four (4) Mounting Feet + Screws
ECD50B4X	Drain

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