STS 300 Series Electronic Indicating Ground Assembly

Installation and Operating Instructions

Installation:

Note: Installation of this equipment should be performed by a licensed electrician and according to all applicable requirements of the NEC and local authorities.

Mounting: Four 5/16-18 mounting holes on the back of the enclosure are provided to secure to Unistrut type rack. Refer to **Figure 1**. Optimal height of the installation is eye-level of the operator. A seal fitting is required immediately before the supply conduit enters the top of the enclosure. After wiring and testing, the seal fitting is required to be filled with the proper sealing compound. Failure to do so could result in vapors and liquids being able to enter the enclosure causing damage, explosion, bodily harm.

<u>Electrical Connections:</u> Refer to **Figure 2**. Supply voltage should be in accordance with the rating specified on the nameplate on the front cover. Connect supply voltage to terminals 1 & 2. There are no connections to terminals 3 & 4. Connect NO and NC closed contacts to interlocking control contactors to permit operation of pumps etc. when proper ground is detected. Do not connect these contacts directly to motor loads.

An optional power on/off switch rated for the environmental conditions can be installed to disconnect power to the unit while not in use. This will extend the life of the indicating bulbs.

A permanent ground cable (Type SOW or SOJ) must be connected to the enclosure ground screw and to a grounding bus or rod. Refer to **Figure 3** for details.

Operation and Care:

Attach grounding clamp at the end of ground cable to metal frame of vehicle, vessel, railcar, barge, etc. The red light should turn off and the green light should turn on when a good ground connection is made. At the same time, all auxiliary contacts will change state, allowing pump, blower, etc. to operate.

The ground cable should be inspected regularly to insure there is no damage to the insulation. Damaged insulation may impair the proper operation of the grounding device. All hardware should also be checked to insure proper tightness.

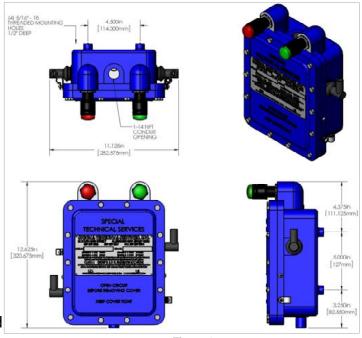


Figure 1

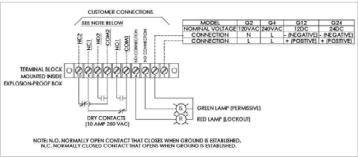


Figure 2

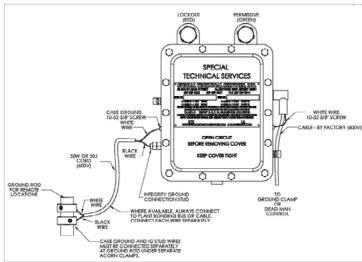


Figure 3