

R-1A SERIES VOLTAGE PORTAL INSTALLATION GUIDE



The R-1A single-phase non-contact voltage portal reduces arc flash risk while increasing electrical safety and productivity by providing task qualified maintenance personnel a no-touch voltage portal on the outside of grounded metallic electrical enclosures. The Voltage Portal, once installed on an electrical panel, allows maintenance technicians to use an adequately rated non-contact voltage detector pen to check voltage presence before and after they open the main isolator/disconnect switch. The ability to pre-verify the de-energized state before opening a panel puts an additional safety measure between technicians and hazardous voltage.

INSTALLATION

The Grace PESDs[®] R-1A Series Voltage Portal is designed to be installed into a securely grounded metallic electrical enclosure as per state and local codes. Ensure the power is shut off and follow your facility's LOTO procedures prior to installing. Note: Voltage portals and NCVD pens are NOT suitable for use in ungrounded AC systems and DC applications.

- 1. A voltage portal interface is designed to be installed into a securely grounded metallic electrical enclosure.
- 2. After the voltage portal interface mounting location has been identified, drill a ½"(13mm) hole, and install voltage portal into the hole. Tighten the threaded nut until the gasket has compressed approximately 80%. The voltage portal interface is suitable for mounting the flat surface of a Type 4, 4X and/or 12 enclosures.
- 3. For label installations, remove the adhesive backing, and affix the label to the enclosure. Use the locator tabs to center the drill. Once completed, break off the locator tab and install voltage portal as per step #2.
- 4.Securely terminate the 6 ft lead wire supplied to the voltage source.

OPERATION INSTRUCTIONS

- Verify proper operation of the adequately rated Non-Contact Voltage Detector (NCVD) Pen. With the Isolator/disconnect switch closed and the electrical panel powered, verify the NCVD indicates voltage by completely inserting the NCVD Pen into the bottom of the recessed area of the voltage portal (shown in Figure 1).
- 2.Open the isolator/disconnect switch, insert the NCVD Pen individually into the recessed area of each installed voltage portal interface (one for each phase). If the phases have been isolated from the voltage source, then the NCVD should not sense voltage presence and the panel has been pre-verified. From here on follow your facility's LOTO procedure.

SPECIFICATIONS

Voltage Rating: 1000V Temperature Rating: -20 to 60°C Altitude: Up to 2000M Pollution: Degree 2

Flame Rating: V-1 Material: UV Rated Polycarbonate Wire Size: 18AWG

Warning: Verify an electrical conductor has been de-energized using an adequately rated test instrument before working on it. Follow appropriate Energy Control (Lockout/Tagout) procedures as per OSHA Subpart S. © Grace Engineered Products, Inc. All rights reserved. Specifications are subject to change with/without notice.



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Figure 1

APPROVALS

UL LISTED: E311256 (TYPE 4, 4X, 12)



1/2-13 THREADS

QUESTIONS

For questions or technical support, please contact us at 1-800-280-9517.

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