

Single Phase Non-Contact Voltage Portal Product Data Sheet

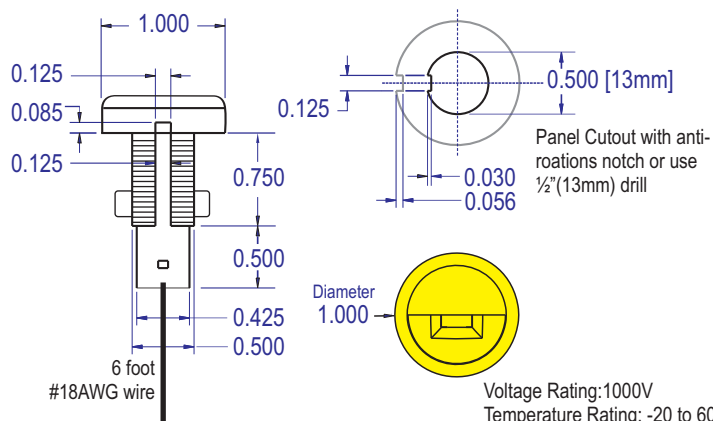
Catalog Numbers
R-1A003-LPH
R-1A003-LPF
R-1A3W-LPB
R-1A3W-LPBF
R-1A-LPA



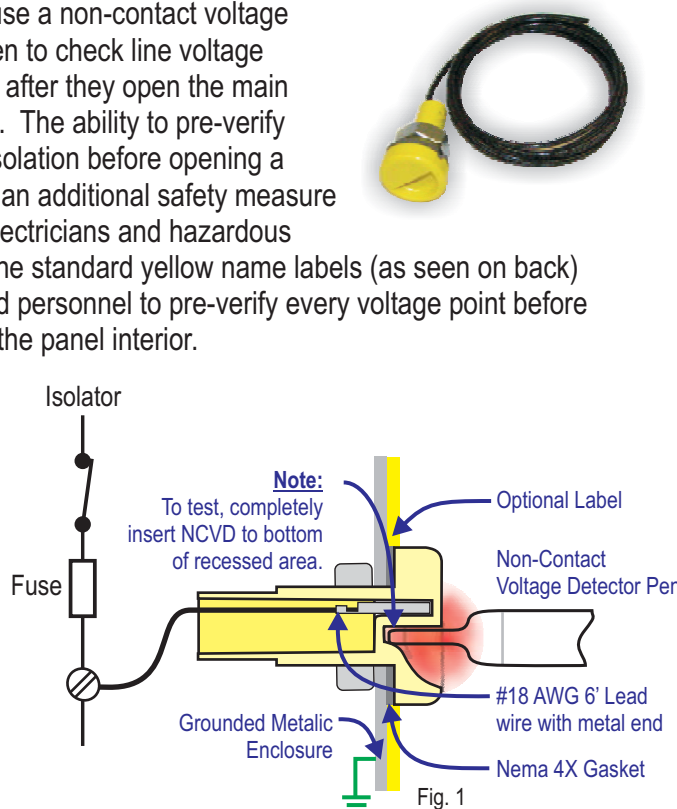
**See back page
for application story!**

Features

- ➡ Integral 6' lead wire
- ➡ Installs in a 1/2" hole for easy installation
- ➡ Rugged polycarbonate construction for safety
- ➡ UV outdoor rated so you can mount it anywhere
- ➡ Cost less than \$15 per point



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



Flame Rating: V-2
UL Listed Device
UL Type 4, 4X and 12 Ratings
Material: UV Rated Polycarbonate

RoHS
CE
(pending)

UL TYPE 4, 4X, 12
CULUS
LISTED
31ZC

Installation Instructions:

- 1.) A voltage portal interface is designed to be installed into a securely grounded metallic electrical enclosure within 6 feet of a voltage source as per state and local codes.
- 2.) After the voltage portal interface has been located, drill a 1/2" (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 nameplate installations, remove the adhesive backing, and affix the nameplate to the enclosure. Use the nameplate locator tabs to center the drill. Secure nameplate in the corners with a #4 self tapping screw or type U drive screw. Once completed, break off the locator tab and install voltage portal as per step #2.
- 4.) Securely terminate the lead wire to the voltage source.

Operating instructions:

- 1.) Verify proper operation of Non-Contact Voltage Detector (NCVD). With the Isolator closed and the electrical panel powered, verify the NCVD indicates voltage when completely inserted into the bottom of the recessed area of the voltage portal interface (figure 1). If the NCVD does not indicate voltage, then proceed with Lock-out Tag-out (LOTO) procedure as per NFPA 70E Annex G or other approved procedure).
- 2.) Open the isolator, insert the NCVD individually into the indent of each installed voltage portal interface (one for each phase). If the phases have been isolated, then the NCVD should not sense voltage on each voltage portal interface and the panel has been pre-verified. From here on follow approved electrical LOTO procedure.

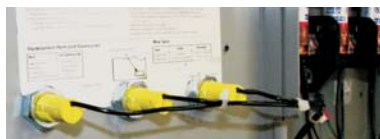
US Patent 6,717,293 B1
UL E311256

Promote Electrical Safety and INCREASE Productivity!

Electrical safety demands we know the correct answer to one question: Is there voltage? Since a wrong answer can have life-threatening consequences, like arc flash, for example - many companies spend time and money making sure they can answer that important question with unerring certainty.

When the NFPA published their Standard for Electrical Safety in the Workplace in the year 2000, that document generated essential changes in the way both electrical and mechanical maintenance is performed in today's industrial and commercial facilities. There is no doubt these changes are positive because injuries and deaths caused by electrical accidents have been significantly reduced. Yet, as with any new regulation, employee productivity has been adversely affected because of the Standard and some in the industry are asking an important question. Can we retain the reduction in injuries and deaths we witnessed because of NFPA 70e while regaining the level of productivity we experienced prior to NFPA 70E? The answer is yes.

As one paper mill in Arkansas discovered, pre-verifying electrical isolation is an excellent way to safely have your cake and eat it too.



In an effort to boost employee safety during their Lock-out Tag-out procedures (LOTO), the paper mill ordered several SafeSide® Non-Contact

Voltage Portals from their local electrical distributor. When installed in the door of an electrical panel, SafeSide® voltage portal provides their maintenance personnel a no-touch voltage portal on the outside of a grounded metallic electrical enclosure. The SafeSide® voltage

portal interface allows for the use a non-contact voltage detector pen to pre-verify electrical isolation before opening an electrical panel. This pre-verifying ability provides the paper mill an additional safety barrier between their maintenance person and hazardous voltage. But, as the Arkansas paper mill discovered, it significantly increased their productivity.

Prior to installing the voltage portals, the paper mill's Mechanical Lock-out Tag-out procedures took 45 minutes for each MCC room, according to maintenance personnel. They go on to say that after installing the voltage portals in each bucket of two MCC rooms they were able to reduce their "Lock-out Tag-out procedure from 45 minutes to 12 minutes in the first MCC Room [and] from 45 minutes to 15 minutes in the second MCC Room." This 70% reduction was possible because, with SafeSide® voltage portal, they were able to combine and even eliminate some procedures. Normally, when maintenance work was performed on an electrical enclosure, an electrician would have to be called to verify from where power was coming. Next, the electrician would have to throw the disconnect switch, put on PPE, and open the panel door to verify electrical isolation with a voltmeter. By pre-verifying electrical isolation with voltage portals, those steps are preformed in seconds rather than minutes and the panel door is never opened.

The time-saving benefits of pre-verifying electrical isolation with voltage portals can be experienced by any company that must routinely perform mechanical LOTO procedures. This cost-effective device allows companies to correctly answer that all-important question is there voltage? without sacrificing safety for productivity, or vice versa. That's something everyone can live with.

How Many Would You Like?

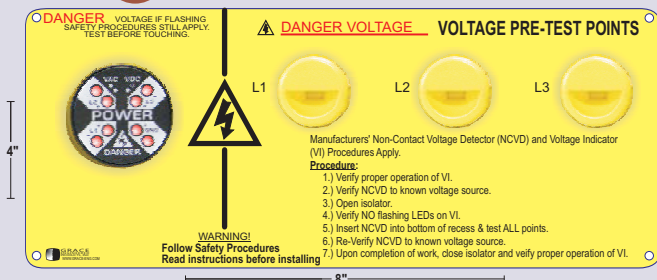
Catalog Number
R-1A003

R-1A003 - Package of (3) SafeSide® R-1A Interfaces



NEW

Catalog Number
R-1A0033W-NPLPH

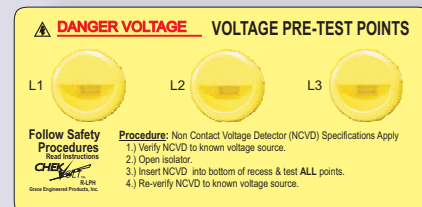
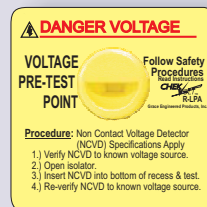


R-1A0033W-NPLPH: For additional safety, use SafeSide® (R-1A003) with SafeSide® (R-3W). Our R-3W monitors 3-phases (phase-to-phase and phase-to-ground), and both AC and DC voltage. These products can be ordered together (as seen here) or separately. This kit includes the nameplate, three R-1A003 portals and one R-3W.

Don't Forget Your Labels!

Catalog Number
R-1A-LPA

Catalog Number
R-1A003-LPH



R-1A-LPA*- Single-Point with Adhesive Label (3.0 in. X 3.0 in.)

R-1A003-LPH*- Three-Point with Adhesive Label (6.0 in. X 3.0 in.)

*Sold in packages of three

Warning: Verify an electrical conductor has been de-energized using an adequately rated voltage detector before working on it. Follow appropriate Energy Control (Lockout/Tagout) procedures as per OSHA Subpart S; the current edition of NFPA 70E; and the current edition of CSA Z462.

Non-Contact Voltage Detectors (NCVD) require solidly grounded power systems for proper operation. Using NCVDs and/or SafeSide® voltage portals on power systems with a floating, isolated grounds, or other ungrounded systems will result in false-negative voltage indication (voltage present, but not indicated by the NCVD). Follow the NCVDs' manufacturer operating instructions for proper procedures and operation of the NCVD.



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