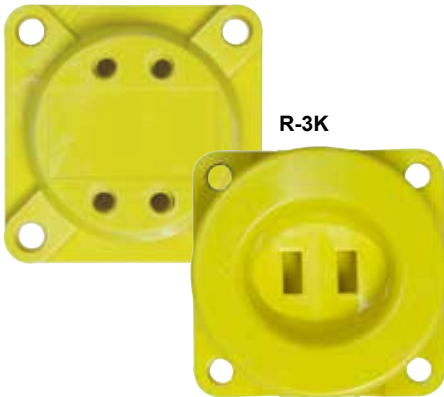


# EASY INSTALL PASS-THRU (R-3K) INSTALLATION GUIDE



R-3K

Grace Engineered Products' R-3K allows workers to verify energy using a NCVD. Operators now have a single test location to verify energy, simplifying installation through the use of existing voltage indicator wiring (designed for, but not limited to electrical panels) and reduces overall installation cost. Additional wiring is not necessary when installed in conjunction with a Voltage Indicator or another door-mount device.

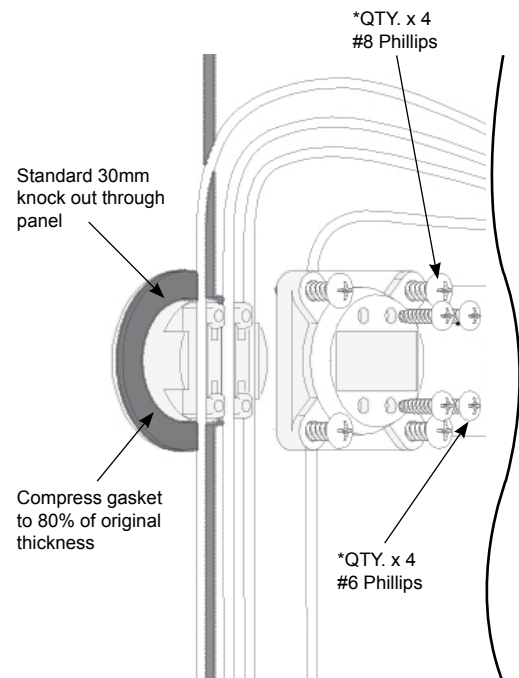
The R-3K also reduces arc flash risk while increasing electrical safety and productivity by providing workers a single safe-touch voltage portal on the outside of grounded metallic electrical enclosures. The R-3K interface, installed on an electrical panel, allows electricians and maintenance personnel to use a NCVD pen to check line voltage before and after they open the main disconnect. The ability to pre-verify electrical isolation prior to opening an electrical panel puts an additional safety barrier between people and hazardous voltage.

## INSTALLATION

The R-3K is designed to be installed into a securely grounded metallic electrical enclosure as per state and local codes.

**Be sure power is shut off prior to installing.**

1. For optional labeled installations (may not apply to your installation scenario), remove the adhesive backing from the label, and affix the label to the enclosure. Use the label locator tab to center the punch. If the label has holes at the corners you may use a #4 self-tapping screw or type U drive screw to help secure the label. Once complete, break off the locator tab and install R-3K as listed.
2. After the location has been determined, punch a 30mm hole through the enclosure.
3. Remove the four screws that hold the back half to the front half of the R-3K with a #2 Phillips screw driver. Separate the front and the back completely.
4. From the front of the cabinet insert the front half of the R-3K through the 30mm mounting hole on the cabinet. Verify that the rectangular test locations run vertically.
5. From the inside of the enclosure, position the individual phase wires into the recessed channels of the front half of the R-3K. The ground wire will hang freely outside of the R-3K.
6. Before re-assembling the front half and the back half, make sure the sides of the front and the back are aligned and secure by lightly holding the front and back together. Rotate the front or back until they align. Tighten the four #6 Phillips interior screws through the back half until it is seated securely.
7. While holding the R-3K in place equally tighten the four #8 Phillips corner screws with a #2 Philips screwdriver until the gasket on the front half has compressed approximately 80%. The R-3K is suitable for mounting on the flat surface of a type 4, 4X and/or 12 enclosures.



\*#6 and #8 self-tapping screws supplied with product.

**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.

SS-R3K-IG-EN 1705

## OPERATION INSTRUCTIONS

1. Verify proper operation of Non-Contact Voltage Detector (NCVD) to a known source. With the Isolator closed and the electrical panel powered, verify the NCVD indicates voltage when completely inserted into the bottom of the recessed areas of the R-3K interface. 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 recessed areas of the installed R-3K interface. If the phases have been isolated, then the NCVD should not sense voltage on the R-3K interface and the panel has been pre-verified. From here on follow approved electrical LOTO procedure.

## SPECIFICATIONS

Voltage Rating: 1000V  
Temperature Rating: -20 to 60°C  
Altitude: Up to 2000M  
Pollution: Degree 2  
Flame Rating: V-2  
Material: UV Rated Polycarbonate  
Wire Slot Size: 18AWG to 12 AWG

## APPROVALS

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



## QUESTIONS

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

