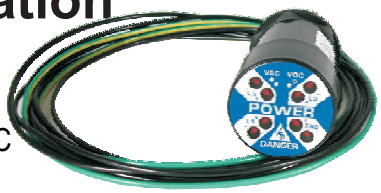
SAFESIDE®
Permanent Electrical Safety Devices

Thru-Door Voltage Indicator
Multi-Environment
CAT III/IV* - Hazardous Area
Product Data Sheet

Catalog Number
R-3W2
Class I Division 2

Voltage Indicator for Any Location[1]



R-3W2 Features:
- 40-750VAC / 30-1000VDC
- UL Hazardous Location
  (Class 1 Division 2 Group A, B, C & D)
- CAT III/IV* Electrical Rating
- UL Type 4X, 12, 13
- Potted Construction with 6' Lead

Other Benefits:
- Stored Energy Detector (120.1(6))**
- Visible Blades Disconnect (120.1(3))**
- Permanent Devices is Less Prone to Damage
- Voltage Source Labels (120.2(F)(1)(a))**

****NFPA 70E 2009 Edition**

* CAT III 1000V
CAT IV 600V
DC or AC-rms to Ground
(Peak Impulse Transient 8000V
20 repetitions, 2 ohm source)

UL TYPE 4X
TYPE 12
TYPE 13

c UL us LISTED
IND. CONT. EQ.
HAZ. LOC. 42RV
46RD

RoHS

One-Size-Fits-All
The R-3W2 SafeSide® thru-door voltage indicator provides electrical safety information while the panel doors are safely closed. A "one-size-fits-all" SafeSide® voltage indicator works on any voltage (40-750VAC/30-1000VDC), in any location on your power system (CAT IV*), and can be installed into most industrial environments. The encapsulated construction, redundant circuit design, and CAT IV* rating means rugged reliability.

Safer Lock-Out Tag-Out (LOTO)
Keeping personnel away from live voltage is foundational to electrical safety. Electrical safety demands a precise answer to the question 'Is voltage present?'. Thru-door voltage indicators provide visibility of voltage from outside the enclosure without exposing personnel to voltage.

More Productivity in Mechanical LOTO
Workers performing mechanical LOTO must isolate electrical energy. An externally-mounted voltage detector provides a means to check voltage inside an electrical panel. Without a voltage indicator, a mechanic performing mechanical LOTO would be required to work in tandem with an electrician using a voltmeter to physically verify voltage inside an electrical panel. In this case, the electrician is exposed to voltage. With SafeSide® Thru-door voltage indicators, the mechanic can verify zero electrical energy without any exposure to voltage.

Reduced Voltage Exposure and Arc Flash Risk
Voltage is the common denominator in an electrical accident or an arc flash; no voltage means no accident, no arc flash. While performing electrical LOTO with a SafeSide® thru-door voltage indicator installed, the electrician can pre-check the internal voltage state without opening the enclosure. Next, the electrician should replicate a zero voltage reading with his voltmeter as per NFPA 70e 120.1(5). This low-cost, redundant voltage-verification task reduces arc flash risk and increases electrical safety for workers.

Three Phase 40-750VAC/30-1000VDC UL-Listed Voltage Indicator for Type 4X/12/13 with 30mm Mounting

R-3W2	Hazardous Duty/Multi-Location Voltage Indicator (Suitable for use in Class 1, Division 2 (Zone 2), Groups A, B, C, D hazardous Location, or Non-Hazardous Locations Only)
R-3W2-KB[2]	Flush Mount Assembly with Bezel and R-3W2 (UL)
R-3W-L	Adhesive-Backed Warning Label (slips over installed R-3W2)
R-3W2-KB-L	Adhesive-Backed Warning Label (slips over installed R-3W2-KB)

Accessories

Door Mount #10NTW Conduit Wire Protection and Isolation Adaptor Kit

R-3W-DR-C3	3Ft #10 NTW Conduit
R-3W-DR-C4	4Ft #10 NTW Conduit
R-3W-DR-C6	5Ft #10 NTW Conduit

R-3W-DIN	Internal Panel Mount DIN Rail Mounting Bracket
R-3W-NPT125	30mm to 1 1/4" R-3W Conduit/Adapter

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.

(1) The R-3W2 environmental ratings cover most industrial applications.
(2) Must be purchase as an assembly for UL Listing - Bezel is not sold separately.

GRACE ENGINEERED PRODUCTS, INC

DS: R3W2:8/2014
LIT-DS-R3W2

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Voltage Indicator

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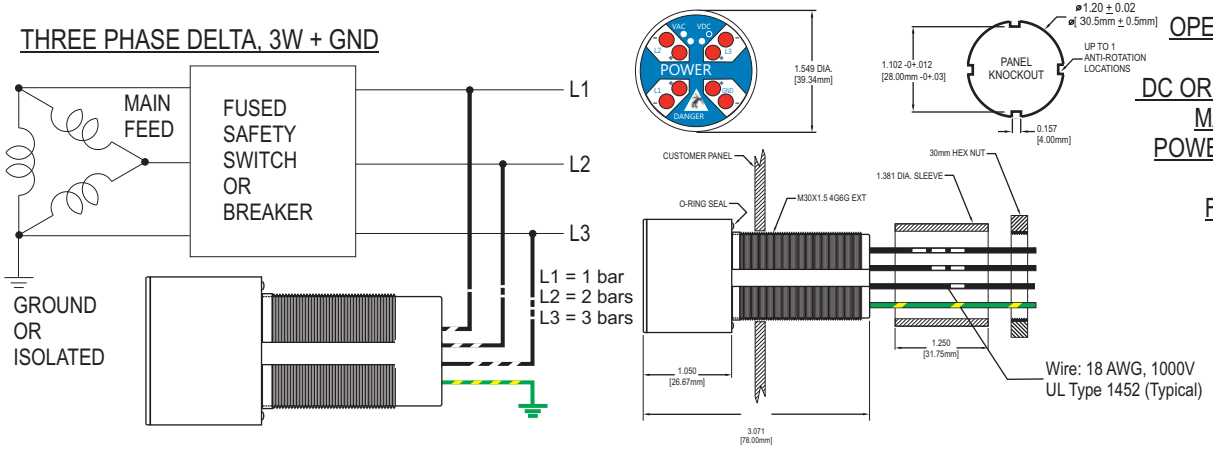
TYPICAL CONFIGURATION*:



OPERATIONAL RANGE: 3-Phase: 40-750V, 40-600VAC 1- Phase 50/60Hz Operates up to 400 Hz

DC OR STORED ENERGY: 30 to 1000 VDC

MAXIMUM VOLTAGE: 750VAC/1000VDC - Surge 4300V for 5 seconds

POWER CONSUMPTION: 1.2 Watts @ 750 VAC (Approximately)

TEMPERATURES: Operate: -20ºC to +55ºC, Storage: -45ºC to +85ºC

FAILURE CURRENT: Maximum single component failure fault current is 3.7mA @ 750 3-Phase

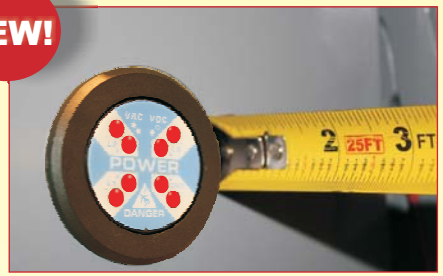
FUSING: Follow all Local, State, and national Electrical Codes when installing this equipment. Overcurrent protection of the supply leads may be necessary. The installation of overcurrent protection shall be in accordance with the requirements in the NEC (NFPA 70) or end product standard(s) when used in the final installation.

INDICATOR FLASH RATES for the R-3W2 only (L1,L2,L3,GND)

3-PHASE LINE-TO-LINE	<29	30	120	240	480	600	750
FLASHES/SEC (TYPICAL)	0	1.3	4.2	5.8	7.3	8	8.8
DC OR STORED ENERGY (VDC)	<27	30	48	110	300	600	1000
FLASHES/SEC (TYPICAL)	0	1.6	2.5	4.5	6.9	8.8	9.1

Accessories:

NEW!



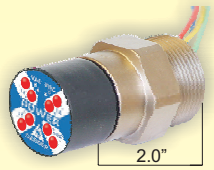
Dimensions of the Bezel - Diameter: 2.25”
Outside cabinet depth: .20”
Inside cabinet depth: 3.50”

New! Bezel-mount Installation for Voltage Indicator!

Create a near-flush look by purchasing your Class 1 Division 2 Voltage Indicator with our new bezel.

Part Number	Description
R-3W2-KB	Class 1 Div 2 Voltage indicator with Bezel

*Corresponding label available for bezel-mount configurations.
Note: When mounting the Bezel (part numbers with -KB), the diameter of the cut-out is as follows: 1.701 inches (43.21mm)



Part #: R-3W-NPT125

A 30mm to 1 ” NPT conduit adapter. This assembly fits into a standard conduit LB for mounting on the outside of an enclosure.

Voltage Indicator Label

Label dimensions are 3"W x 2.3"H.

This adhesive-back label fits over an installed Voltage Indicator.

Part Number	Description
R-3W-L	Label for Flashing and Class 1 Div 2 Voltage Indicator

Part #: R-3W-DR-C6

Use this door mount accessory for additional voltage protection. Includes a 30mm adapter and 6' of NW10 flexible conduit. (Allow 4.5" depth into panel).