

FREQUENTLY ASKED QUESTIONS

Q: What is the shock hazard when using this device?

- A: This high impedance device limits the max. available fault current to 2.94mA at 600V and 2.35mA at 480V when any two test point jacks are shorted together. According to OSHA document 3075 (2002) page 7, "any shock hazard under 6mA is considered a slight shock; uncomfortable, but not painful."
- Q: What would a typical Lockout/Tagout (LOTO) procedure include with this device?
- A: Follow NFPA 70E Article 120.5, Process for establishing and verifying an electrically safe work condition. The R-3MT allows voltage measurements from phase to phase and phase to ground to check for absence of voltage safely from outside the enclosure.
- Q: Where do I install the Safe-Test Point[™] on my equipment?
- A: Safe-Test Point[™] can be directly wired to either the load side or line side of the LOTO voltage source point. It can also be directly wired onto the bus below the fuses to measure a blown fuse or a tripped circuit breaker.
- Q: What are the recommended connection accessories for Safe-Test Point™?
- A: Always ensure any accessory is compatible with your specific application and voltage. We suggest the following connectors (based on typical applications): T&B Sta-Kon Series, 3M Scotchlok, Wago 773 Series, or Wago 222 Series.

Q: What are the added benefits of the voltage indicator?

A: The voltage indicator provides a redundant verification and visual representation of voltage absence and presence from outside the door. In addition, the voltage indicator provides the indication of a blown fuse and/or phase loss in the circuit.

for gualified personnel and also helps keep dust and

contaminants away from the individual test points.

A: We recommend installing the dust cap on the R-3MT

for each installation. The dust cap provides tool access

Q: How do I perform a "live-dead-live" test with this device?

Q: Can I use this device without the dust cap?

A: Always follow lockout/tagout procedures as per Article 120.4 and "live-dead-live" test procedure as per Article 120.5(7) of NFPA 70E (2018)--with a properly rated test instrument, verify the test instrument to a known source, then insert the test probes into the R-3MT test point assembly to verify the presence of voltage. Next, open the isolator and proceed to verify the absence of voltage on the R-3MT assembly by measuring L1-L2, L1-L3, L2-L3, L1-G, L2-G and L3-G. Once you have verified voltage absence, re-verify the test instrument to a known source.

Q: Do I need to follow any other safety procedures?

A: Always follow the safety procedure established by your facility and/or employer; in addition, we suggest following a sample procedure outlined on the assembly instructions provided with the Safe-Test Point™.

Q: Do I need Personal Protective Equipment (PPE)?

A: Use the recommended PPE based on your facility's electrical safety program and adhere to the PPE guidelines in Table 130.5(G) or Table 130.7(C)(15)(c) of the NFPA 70E.



GRA

SS-STP-DS-EN 1810

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.

POINTTM

absence of voltage test



SAFE-TEST POINT™ FEATURES

- Safe-Test Point[™] is a Permanent Electrical Safety Device (PESD) that allows workers a safer way to perform Absence of Voltage Test (AVT) from outside the electrical cabinet.
- The **Safe-Test Point**[™] contains four test point jacks that are hardwired directly to energy sources and allows measurement of both AC and DC voltages by inserting the insulated meter probes into any two test point jacks to take a voltage reading.
- Provides a safer and more productive method of performing Lockout/Tagout (LOTO), while exceeding NFPA 70E and meeting the OSHA energy isolation principle.
- Safe-Test Point[™] comes complete with a tool-entry dust cap and label.

FOR MORE INFORMATION VISIT PESD.COM OR CALL 1.800.280.9517







OPERATION

Safe-Test Point™ can be mounted on the side of the enclosure, door or flange and provides four test point jacks to allow measurement of AC/DC voltages either phase to phase or phase to ground. Following facility safety procedures, insert insulated meter probes with .080" tips into any two test point jacks to take a voltage reading with properly rated test equipment (see Equipment Requirements).

Installation of Safe-Test Point™ allows workers to perform Absence of Voltage Tests from outside an electrical cabinet. By following proper safety procedures, the risks of arc flash or shock hazard is reduced.

SAFE-TEST POINT™ TECHNICAL SPECIFICATIONS

SERIES	SAFE-TEST POINT™		
Product Number	R-3MT-KIT-H* R-3MT-KIT-F*		
Descriptions	Safe-Test Point™ with label and dust cap		
Operating & Storage Temperature	Operate: -20°C to +55°C Storage: -45°C to +85°C		
Operational Range AC Single or 3-Phase	0 to 600VAC phase to phase or phase to ground 0 - 400HZ		
Operational Range DC or Stored Energy	0 to 1000VDC, any (2) wires line-to-line or line-to-ground (UL Listed to 600VDC)		
Internal Resistance	102 k Ω 6 Watt, 5% Tolerance in series with each input (L1, L2, L3, GND) wire to respective output jack maximum momentary		
Correction Factor	1.02 x Test Point voltage reading with a 10M Ω meter		
Wire Specifications	PVC insulated with nylon jacket, 8ft, 18AWG wire, 90°C @ 1000V, UL 1452, Pre-stripped and tined		
Components	3 red jacks, 1 green insulated jack, .080" DIA pin sockets, 30mm push button hole, minimum probe insertion length .480"		
Certifications***	UL Type 12 & 13 File #: E256847; CE		

R-3MT TERMINATIONS



Note: Test Point Assembly with 102 k Ω impedance on L1, L2, L3, and GND affects voltage readings - 2%.



R-3W SERIES VOLTAGE INDICATOR AND SAFE-TEST POINT™ COMBO TECHNICAL SPECIFICATIONS



•		CAT III & IV RATED			
All R-3W combos supplied with R-3MT, label and dust cap.	R-3WMT-LMH	R-3W2MT-LMF	Image: second	R-3WAMT-LMF	
Product Number	R-3WMT-LMH* R-3WMT-LMF*	R-3W2MT-LMH* R-3W2MT-LMF*	R-3WSMT-LMH* R-3WSMT-LMF*	R-3WAMT-LMH* R-3WAMT-LMF*	
Voltage Indicator	R-3W (Flashing red LEDs)	R-3W2 (Flashing red LEDs)	R-3W-SR (Non-flashing red LEDs)	R-3WA-RA (Flashing amber ground LEDs)	
Label Dimensions	Horizontal - 4.323"H x 6.50"W Flange - 10.058"H x 1.90"W				
Operating & Storage Temperature	Operate: -20°C to +55°C Storage: -45°C to +85°C				
Operational Range AC Single or 3-Phase	40-600VAC 50/60Hz	40-600VAC 50/60/400Hz	40-600VAC 50/60Hz	40-600VAC 50/60Hz	
Operational Range DC or Stored Energy	Voltage Indicators: 30 to 1000VDC Safe-Test Point: 0 to 1000VDC (UL listed to 600VDC)				
Wire Specifications	PVC insulated with nylon jacket, 6ft, 18AWG Wire, 90°C @ 1000V, UL 1452, pre-stripped and tinned				
Certifications***	UL 12 & 13, CE				

Special configurations and custom labels available upon request. Contact your sales representative for more information.

EQUIPMENT REQUIREMENTS

Voltage test instrument with 1000V AC/DC rated input minimum, a typical 10MΩ input impedance and CAT III & IV. A pair of insulated test probes with .080" DIA. points with minimum probe insertion length of .480".

*Part numbers ending in H are horizontal mount units and labels. Part numbers ending in F are flange mount units and labels. **Safe-Test Point™ is recommended to be used with supplied dust cap and label (assembly required). ***Dust cap and label are not UL or CE certified.

FOR MORE INFORMATION VISIT PESD.COM OR CALL 1.800.280.9517

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.



