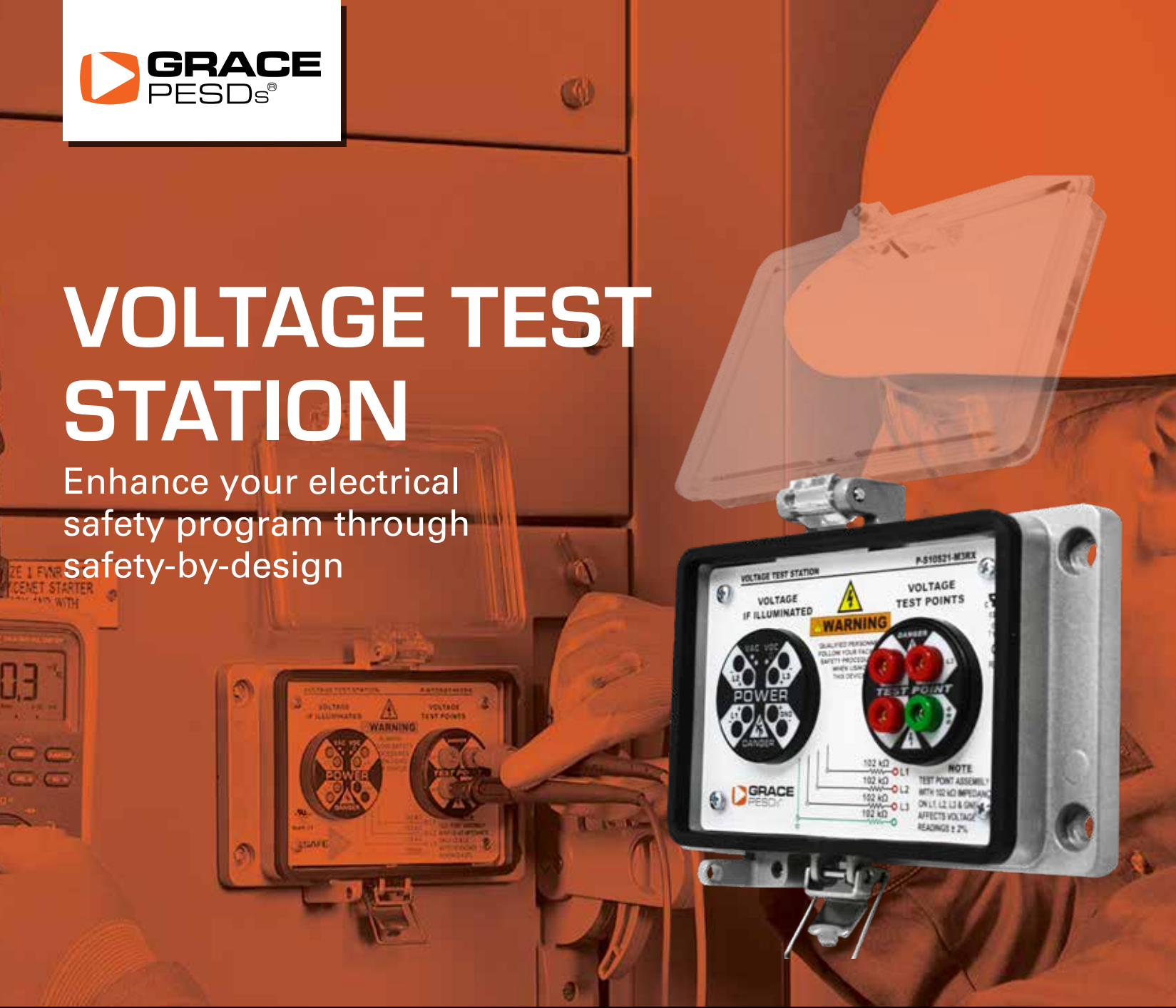


# VOLTAGE TEST STATION

Enhance your electrical safety program through safety-by-design



## VOLTAGE TEST STATION FEATURES

- ▶ The Voltage Test Station (VTS) is a Permanent Electrical Safety Device (PESD) that allows workers a safer way to verify presence of voltage and perform an Absence of Voltage Test from outside the electrical cabinet.
- ▶ The VTS combines our Safe-Test Point™ with a voltage indicator conveniently placed within a protective housing. It can be hardwired directly to energy sources and allows visual verification and measurement of AC/DC voltages through a meter test.
- ▶ Provides a safer and more productive method of performing Lockout/Tagout (LOTO), while exceeding NFPA 70E standards and meeting the OSHA energy isolation principle.
- ▶ Various lockable housing options add additional layers of protection and allow authorized personnel to conveniently access the VTS.

FOR MORE INFORMATION VISIT [PESD.COM](http://PESD.COM) OR CALL 1.800.280.9517








P-S10S21-M2RX-V

## OPERATION

The **Voltage Test Station (VTS)** combines our Safe-Test Point™ with a voltage indicator conveniently placed within a protective housing. The VTS test point jacks allow measurement of AC/DC voltages either phase to phase or phase to ground. The R-3W Series voltage indicators with either flashing or non-flashing LEDs visually represent presence of voltage. Following facility safety procedures, insert the 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*).

## VOLTAGE TEST STATION AND COMPONENTS TECHNICAL SPECIFICATIONS

Products shown to the right are a sampling of units offered. Please contact your sales representative for your specific needs.		CAT III & IV RATED					
							All configurations supplied with Safe-Test Point™
Product Number	P-S10S21-M3RX P-S10S21-M3RX-V*	P-S11S21-M3RX P-S11S21-M3RX-V*	P-S12S21-M2RX P-S12S21-M2RX-V*	P-S13S21-M3RX P-S13S21-M3RX-V*	R-3MT		
Voltage Indicator	R-3W (Flashing red LEDs)	R-3W2 (Flashing red LEDs)	R-3W-SR (Non-flashing red LEDs)	R-3WA-RA (Flashing red with amber GND LEDs)	N/A		
Housing Dimensions	M Housing (see Housing Dimensions to the right)					K Housing (Not shown. Safe-Test Point™ ONLY configurations)	
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	0 to 600VAC phase to phase or phase to ground 0 - 400HZ		
Operational Range DC or Stored Energy	30 to 600 VDC					0 to 600VDC, any (2) wires line-to-line or line-to-ground	
Safe-Test Point™ Internal Resistance	102 kΩ 6 Watt, 5% Tolerance in series with each input (L1, L2, L3 and GND) wire to respective output jack maximum momentary						
Safe-Test Point™ Correction Factor	1.02 x Test Point voltage reading with a10MΩ meter						
Wire Specifications	PVC insulated with nylon jacket, 8ft, 18AWG Wire, 90°C @ 1000V, UL 1452, pre-stripped and tinned						
Certifications	UL File (RU) #E207344, CE, RoHS					N/A	

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

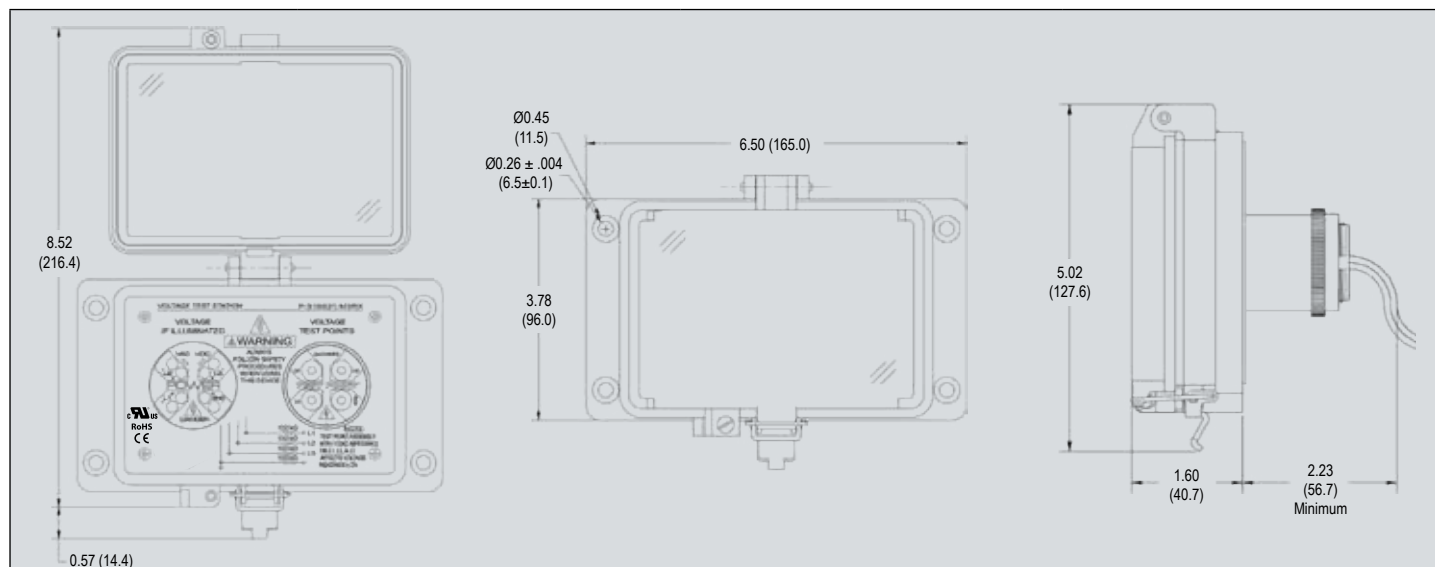
\*Part numbers ending in V are vertical mount units.

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**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.

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## HOUSING OPTIONS



HOUSING CODE	M2	M3	M4
UL TYPE	4X	4	12
IP Rating	IP65		N/A
DIMENSIONS L x W x D IN/MM (OVERALL)	L: 6.50 (165.0) X W: 3.78 (96.0) X D: 2.50 (64.0)		

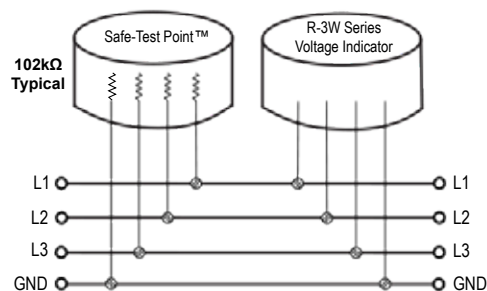
Stainless Steel housing (304 & 316) is also available. K4, K3, & K2 Housings (not shown) are available for Safe-Test Point™ only configurations. Contact a sales representative for more information.

## 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".

## TYPICAL WIRING CONFIGURATION

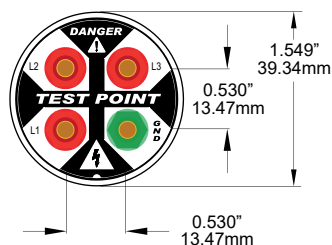


### Note:

The Voltage Test Station can be installed on either the load or line side based on your application.

## SAFE-TEST POINT™ DETAIL

- ▶ 3 Red Insulated Jacks
- ▶ 1 Green Insulated Jack
- ▶ .080" DIA Pin Sockets
- ▶ 30mm push button hole
- ▶ Minimum insertion length .480"



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## FREQUENTLY ASKED QUESTIONS

**Q: What is the value of the VTS?**

*A: The VTS combines our Safe-Test Point™ with a voltage indicator and conveniently places them within a UL Type protective housing (4, 4X, and 12). The protective housing provides tool access for qualified personnel and also helps keep dust and contaminants away from the individual test points.*

**Q: Is the VTS UL listed?**

*A: The VTS is UL recognized which enables OEMs (UL 508 Shops) to easily add to their existing UL File.*

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

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

**Q: What are the recommended connection accessories for the Voltage Test Station?**

*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: Where do I install the Voltage Test Station on my equipment?**

*A: Voltage Test Station can be directly hardwired 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: 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 (2021).*

**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 Voltage Test Station allows voltage measurements from phase to phase and phase to ground to check for presence and test for absence of voltage safely from outside the enclosure.*

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

*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 (2021)--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 test for absence of voltage on the R-3MT assembly by measuring the voltage on L1-L2, L1-L3, L2-L3, L1-G, L2-G and L3-G. Once you have tested for absence of voltage, re-verify the test instrument to any 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 Voltage Test Station.*