

# VeriSafe™ 600V Absence of Voltage Tester

Simplify absence of voltage testing



When servicing electrical equipment, workers must comply with safety regulations that require a voltage verification test to validate the absence of voltage. This process includes a number of stages that can be complex and time-consuming when using hand-held portable test instruments.

The VeriSafe™ Absence of Voltage Tester from Panduit simplifies this process by automating the voltage verification process.

Once installed, a simple push of a button enables workers to verify the absence of voltage and see an active indication when the absence of voltage is confirmed. This provides a new and innovative way to safely, reliably, and efficiently verify the absence of voltage before accessing potentially dangerous electrical equipment.

By automating this process, the VeriSafe Absence of Voltage Tester:

- Reduces the risk of exposure of electrical hazards for improved worker safety
- Reduces testing procedure time and complexity to improve productivity
- Supports compliance when used to verify the electrical lockout/tagout process as described in NFPA 70E and CSA Z462

The VeriSafe Absence of Voltage Tester minimizes risk by verifying the absence of voltage before equipment is accessed, making it easier for workers to verify an electrically safe work condition has been established in a fraction of the time compared to using hand-held portable test instruments.

## KEY FEATURES & BENEFITS

	<b>Improved safety and risk reduction:</b>	No exposure to electrical hazards while testing Reduces human factors
	<b>Simplified process for easier compliance:</b>	Satisfies NFPA 70E and CSA Z462 criteria for establishing an electrically safe work condition.
	<b>Reliable results:</b>	Fail-safe design with active indications Safety functions meet SIL 3 (IEC 61508-1) Redundant channels for measurement and detection
	<b>Increased productivity:</b>	Results within 10 seconds of button push No additional tools required Provides visual alert to abnormal power conditions
	<b>Flexible applications:</b>	Power Distribution, motor control and automation Data Centers, Industrial and commercial facilities Suitable for indoor, outdoor use

# VeriSafe™ 600V Absence of Voltage Tester

## The Safe Way to Protect Employees and Equipment

The VeriSafe Absence of Voltage Tester simplifies the voltage testing process. With the push of a button, workers can quickly determine voltage status and see an active indication when the absence of voltage is confirmed. This provides a new and innovative way to safely, reliably, and efficiently test for the absence of voltage without exposure to electrical hazards.



### VOLTAGE PRESENCE INDICATION

Red LEDs indicate hazardous voltage present



Lack of red LEDs does not guarantee voltage absence



### ABSENCE OF VOLTAGE TESTING

Push to initiate test and see progress

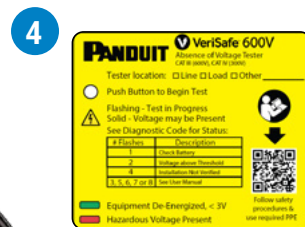


Green indicates absence of voltage is confirmed



## WHAT'S INCLUDED

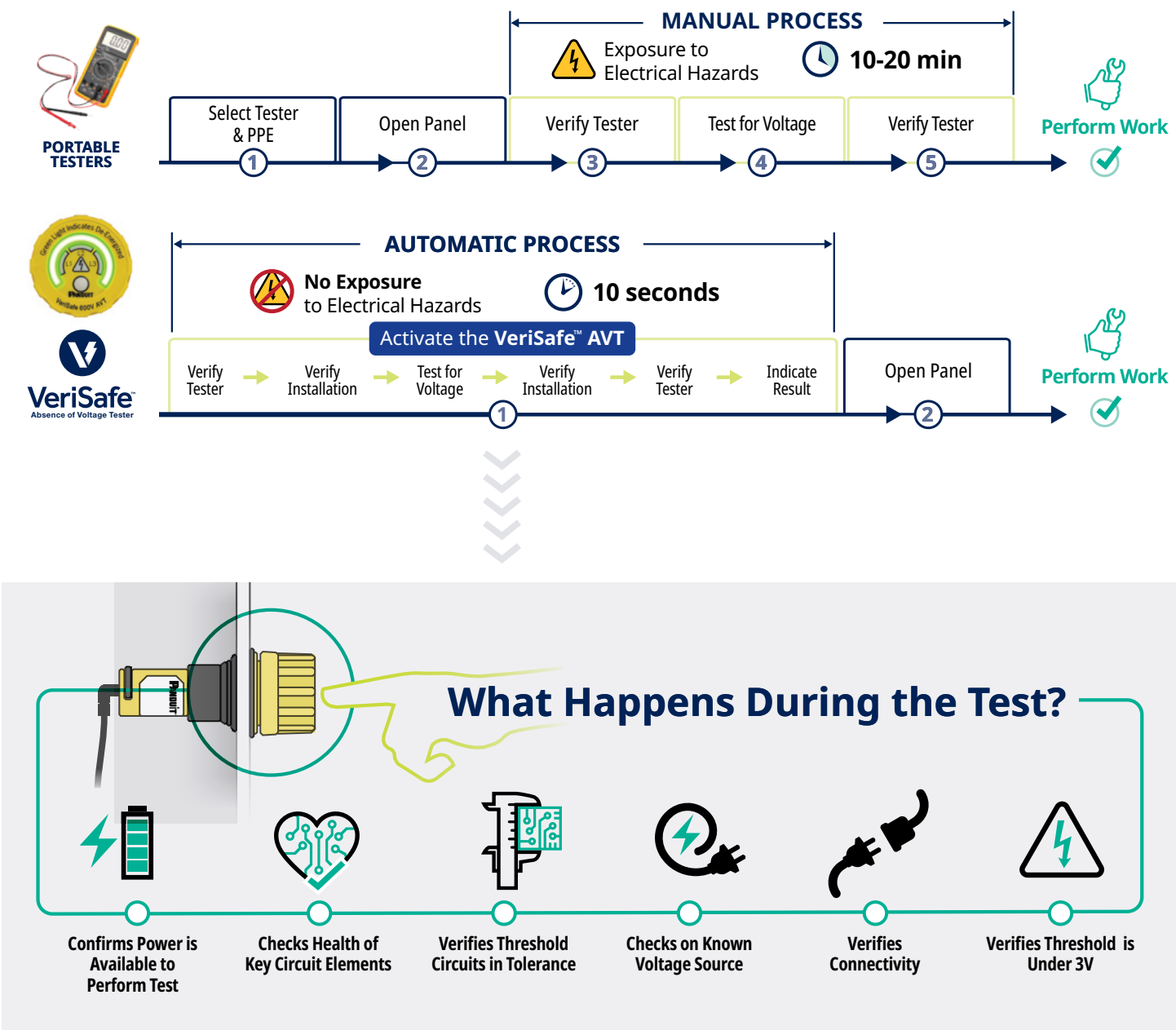
- 1 Indicator Module
- 2 System Cable
- 3 Isolation Module
- 4 Instruction Label



Instruction Label –  
VS-AVT-RL

# VeriSafe™ 600V Absence of Voltage Tester

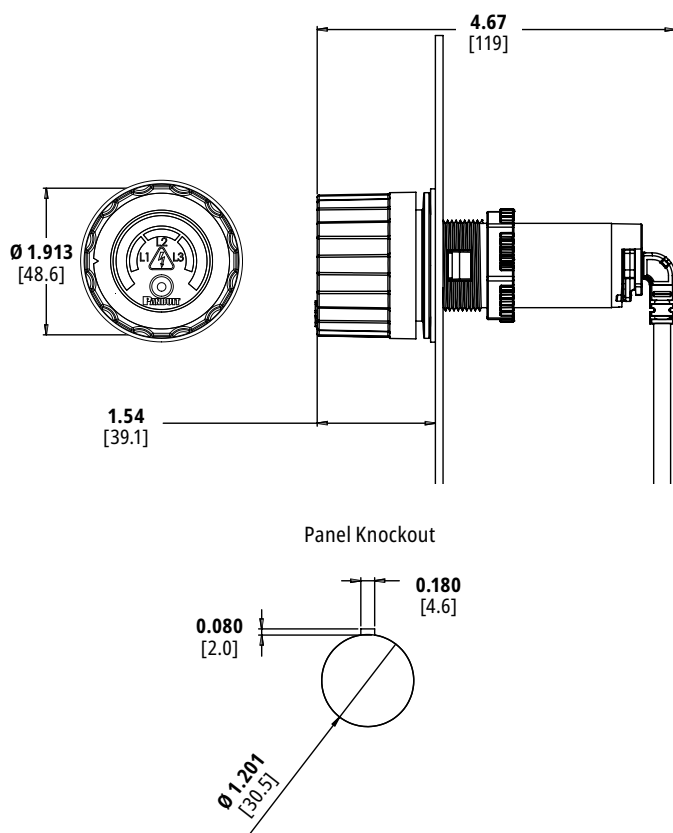
## COMPARISON OF TEST METHODS



# VeriSafe™ 600V Absence of Voltage Tester

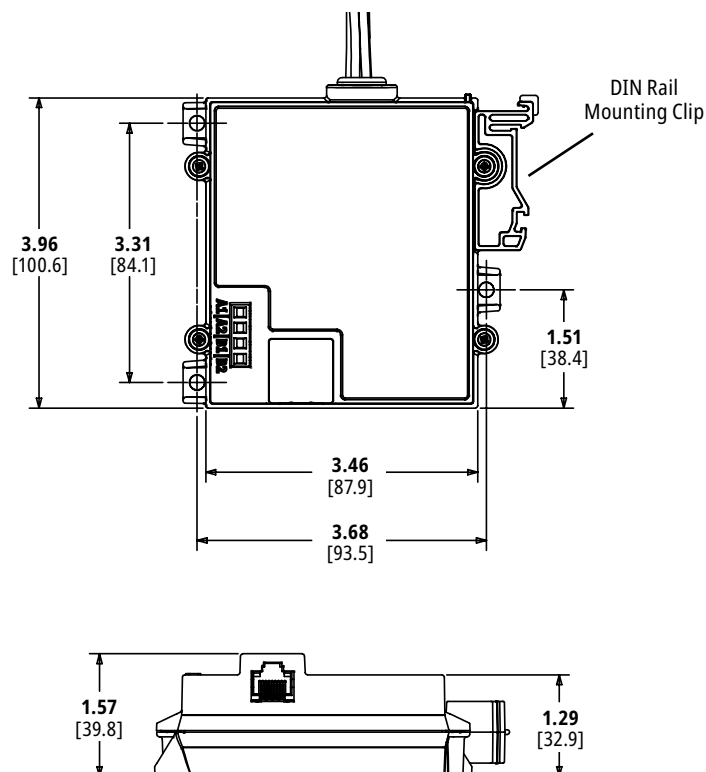
## DIMENSIONS

### Indicator Module



### Isolation Module

Install on DIN rail or with optional mounting tabs



Dimensions are in inches. [Dimensions in brackets are metric].

## CONNECTION OPTIONS

Several connection options available. For full list of installation methods, please refer to the VeriSafe Insulation Piercing Connector specification sheet and Best Practices for Terminations document located on **Panduit.com**.



**WARNING:** The AVT must be installed correctly and grounded as described in the Instruction Manual to provide proper indication of absence of voltage. Sensor leads, including ground, must not be mechanically connected to each other in order for the device to verify connection to the circuit. **Use of ferrules on the AVT sensor leads are highly recommended.**



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## TECHNICAL SPECIFICATIONS

### APPLICATIONS

<b>Electrical system:</b>	For use in 3-phase AC systems
<b>Voltage detection range:</b>	Up to 600 VAC (50/60 Hz)
<b>Absence of voltage threshold:</b>	3 V
<b>Overvoltage category:</b>	CAT III (600 V) CAT IV (300 V)
<b>Degree of protection*:</b>	Indicator Module: for flat surface mounting in a TYPE (UL, NEMA and CSA) 1, 12, 13, 4, 4X, IP66, IP67 or IP69 enclosure. Verify that the seal, o-rings and gaskets are clean to ensure proper sealing.

### ENVIRONMENT

<b>Temperatures:</b>	Operating temperature (with Titus ER14505M) (VS-AVT-BATTERY): -13°F to +140°F (-25°C to +60°C) Storage temperature: -49°F to +185°F (-45°C to +85°C)
<b>Humidity:</b>	5 to 90% non-condensing; Rated 80% at 104°F (40°C), decreasing linearly to 50% at 140°F (60°C)
<b>Pollution degree:</b>	3
<b>Altitude:</b>	Up to 16,400 feet (5,000 meters)

\*Refer to Instruction Manual at [panduit.com/verisafe/VeriSafe\\_Manual\\_EN](http://panduit.com/verisafe/VeriSafe_Manual_EN) for complete list of product specifications and standards

## STANDARDS AND CERTIFICATIONS



<b>UL 1436:</b>	Standard for outlet circuit testers and similar indicating devices
<b>UL 508 &amp; CSA-C22.2 No. 14:</b>	Industrial control equipment
<b>CAN/CSA-C22.2 No. 160:</b>	Voltage and Polarity Testers
<b>CAN/CSA-C22.2 No. 107.1:</b>	Power Conversion Equipment
<b>IEC / UL / CSA C22.2 No. 61010-1:</b>	Safety requirements for electrical equipment for measurement, control, and laboratory use — Part 1: General Requirements
<b>IEC / UL / CSA C22.2 No. 61010-2-030:</b>	Safety requirements for electrical equipment for measurement, control, and laboratory use — Part 2-030: Particular requirements for testing and measuring circuits
<b>IEC 61508-1, -2, and -3 {SIL 3 Rating}:</b>	Safety of Electrical/Electronic/programmable Electronic safety-related security systems — Part 1: General Requirements Part 2: Requirements for Electrical / Electronic / Programmable safety related systems Part 3: Software Requirements

# VeriSafe™ 600V Absence of Voltage Tester

## ORDERING INFORMATION

Part Numbers	Description
<b>VERISAFE 600V</b>	
<b>VS-AVT-C08-L10</b>	VeriSafe 600V AVT, 8 ft. (2.4m) system cable, 10 ft. (3m) sensor leads
<b>VS-AVT-C02-L03</b>	VeriSafe 600V AVT, 2 ft. (0.6m) system cable, 3 ft. (0.9m) sensor leads
<b>SENSOR LEAD TERMINATION KITS</b>	
<b>VS-CKP14-6</b>	Insulation Piercing Connection Kit for Tapping 14 to 6 AWG conductors. Rated for 600V installations. Kit includes 3 connectors for installation of a single AVT
<b>VS-CKP4-000</b>	Insulation Piercing Connection Kit for Tapping 4 to 3/0 AWG conductors. Rated for 600V installations. Kit includes 3 connectors for installation of a single AVT
<b>VS-CKP1K4/0-500</b>	Insulation Piercing Connection Kit for Tapping AWG 4/0 to 500MCM copper conductors. Rated for 1kV installations. Kit includes 3 connectors for installation of a single AVT
<b>REPLACEMENT PARTS</b>	
<b>VS-AVT-CABLE-02</b>	VeriSafe 600V AVT Replacement Cable, 2 ft. (0.6m), for use with VeriSafe 600V AVTs only
<b>VS-AVT-CABLE-04</b>	VeriSafe 600V AVT Replacement Cable, 4 ft. (1.2m), for use with VeriSafe 600V AVTs only
<b>VS-AVT-CABLE-08</b>	VeriSafe 600V AVT Replacement Cable, 8 ft. (2.4m), for use with VeriSafe 600V AVTs only
<b>VS-AVT-CABLE-16</b>	VeriSafe 600V AVT Replacement Cable, 16 ft. (4.8m), for use with VeriSafe 600V AVTs only
<b>VS-AVT-CABLE-20</b>	VeriSafe 600V AVT Replacement Cable, 20 ft. (6.0m), for use with VeriSafe 600V AVTs only
<b>VS-AVT-CABLE-30</b>	VeriSafe 600V AVT Replacement Cable, 30 ft. (9.1m), for use with VeriSafe 600V AVTs only
<b>VS-AVT-RL</b>	VeriSafe 600V Instruction Label. English, German, Mandarin, French Canadian, Italian, Korean, Spanish and French
<b>VS-AVT-ROR</b>	Replacement Gaskets for Battery Indicator Module
<b>VS-AVT-BATTERY</b>	VeriSafe Battery Indicator Module Replacement Battery, 3.6V lithium ion. AA form factor