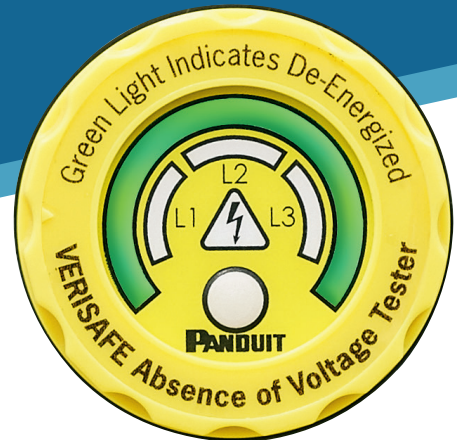


# VeriSafe™ 1.0 Absence of Voltage Tester

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.



# 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 <b>PRESENCE</b> Indication		<b>ABSENCE</b> of Voltage Testing	
Red LEDs indicate hazardous voltage present	Lack of red LEDs does not guarantee voltage absence	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 Labels



**4**

**PANDUIT** VERISAFE Absence of Voltage Tester (Call in above)

- Push Button to Begin Test
- ⚡ Flashing - Test in Progress
- Solid - Voltage may be Present
- Equipment De-Energized, < 3V
- Hazardous Voltage Present

Tester location:  Line  Load  Other

**i**

Follow safety procedures and use required PPE

Instruction Label - VS-AVT-RL

**PANDUIT** VERISAFE AVT Diagnostic Codes

The flashes following a solid caution indicator ⚡ indicates the reason the absence of voltage was not confirmed.

# Flashes	Description
1	Battery voltage too low to run test
2	Voltage detected above threshold
4	Installation of sensor leads not verified
3, 5, 6, or 7	Hardware failure

**WARNING** Flash codes are for diagnostic purposes ONLY. Assume presence of hazardous voltage if green light does not illuminate.

Diagnostic Label - VS-AVT-DL

## Features and Benefits



### Improved Safety and Risk Reduction

- No exposure to electrical hazards while testing
- Reduces human factors



### Simplified Process for Easier Compliance

- Satisfies criteria in NFPA 70E 120.5(7) Exception 1 & CSA Z462 4.2.5 (g) Exception 2
- UL 1436 listing



### Reliable Results

- Fail-safe design with active indications
- Safety functions meet SIL 3 (IEC 61508-1)
- Redundant channels for measurement and detection



### Increased Productivity

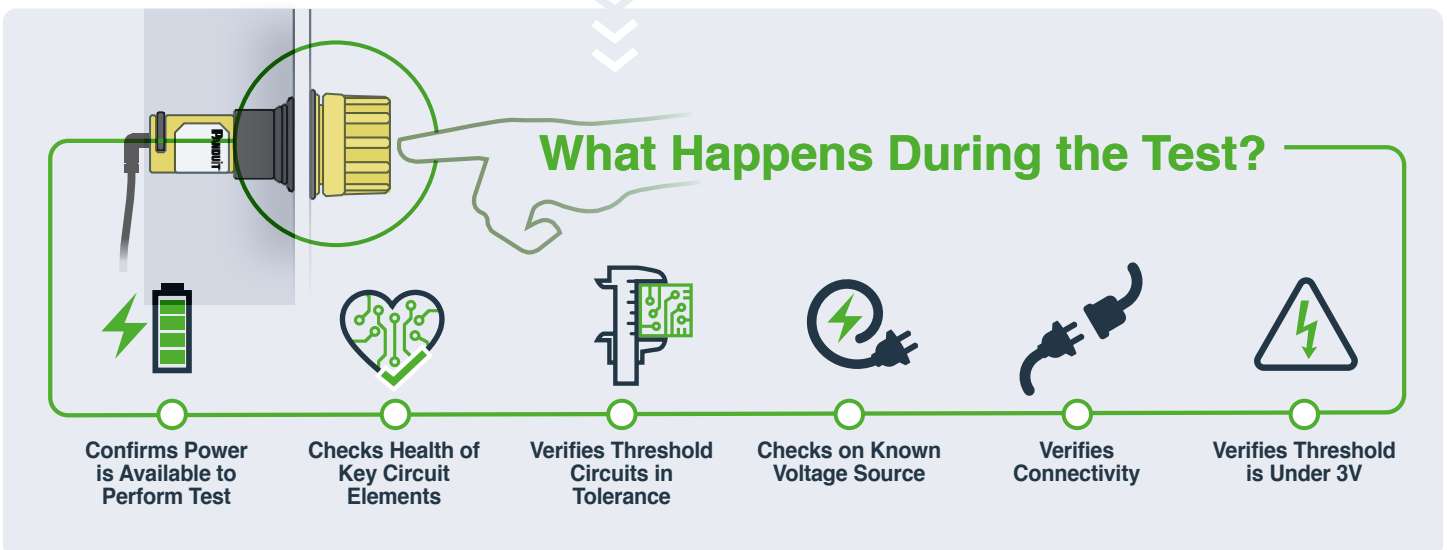
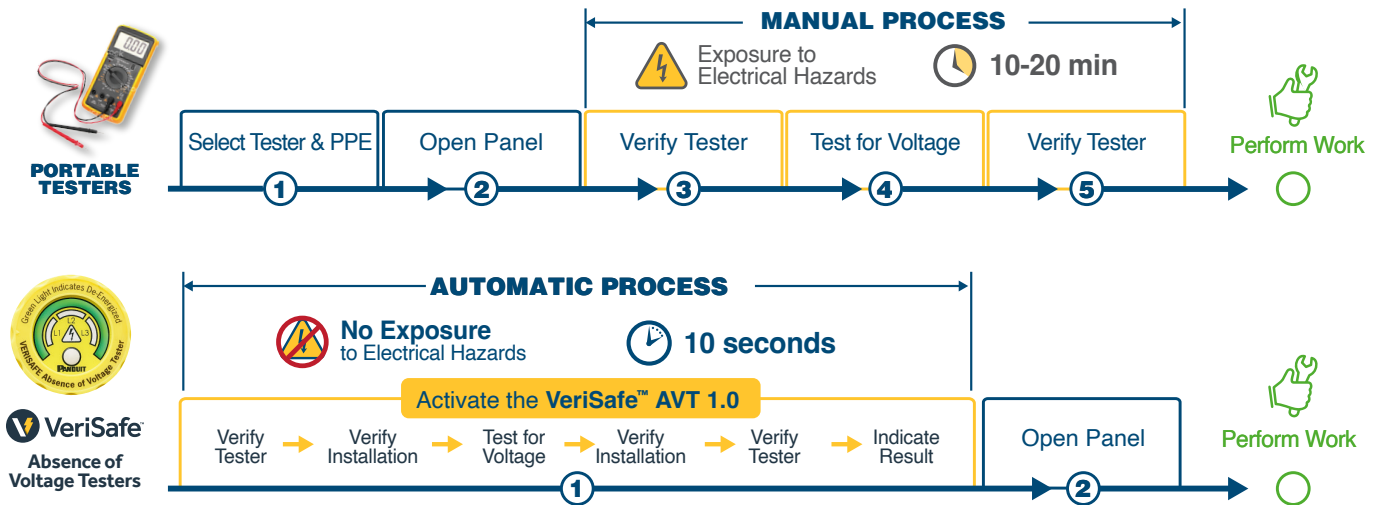
- Results within 10 seconds of button push
- No additional tools required
- Provides visual alert to abnormal power conditions



### Flexible Applications

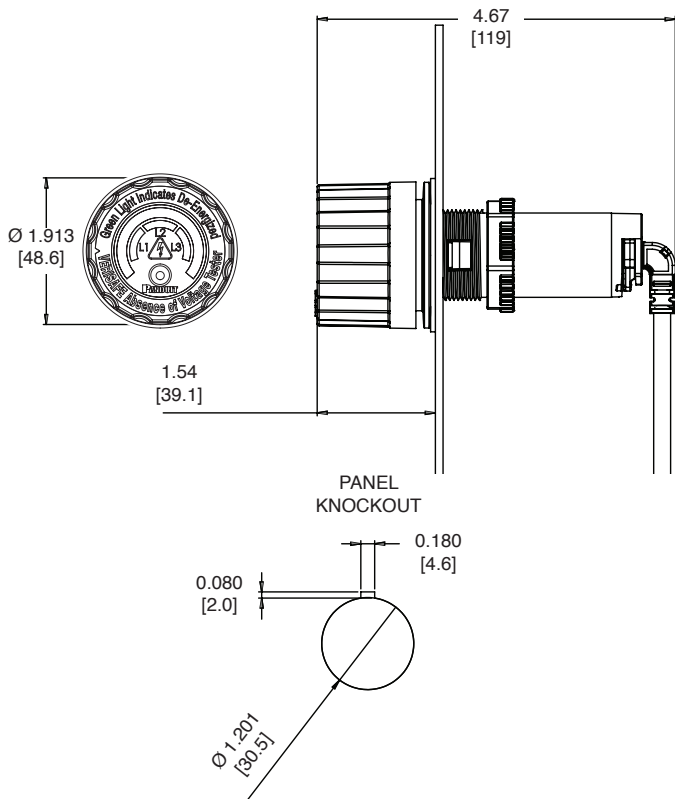
- Power Distribution, motor control and automation
- Data Centers, Industrial and commercial facilities
- Suitable for indoor, outdoor use

## Comparison of Test Methods



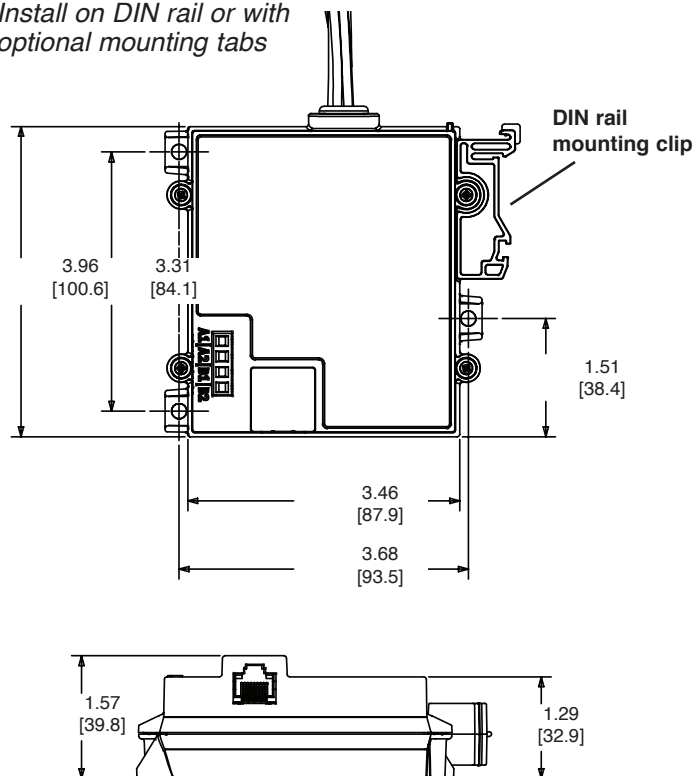
**Dimensions** in inches [millimeters].

**Indicator Module**



**Isolation Module**

Install on DIN rail or with optional mounting tabs



**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.**



## Technical Specifications

### Applications

Electrical System	For use in 3-phase AC systems
Voltage Detection Range	Up to 600 VAC (50/60 Hz), 600 VDC
Absence of Voltage Threshold	3 V
Overvoltage Category	III (600 V) CAT IV 300 V
Degree of Protection*	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

Operating Temperature (with Titus ER14505M) (VS-AVT-BATTERY)	-25°C to + 60°C (-13°F to 140°F)
Storage Temperature	-45°C to + 85°C (-49°F to +185°F)
Humidity	5 to 90% non-condensing; Rated 80% at 40°C, decreasing linearly to 50% at 60°C
Pollution Degree	3
Altitude	Up to 5000 meters (3.11 miles)

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

### Standards and Certifications



UL 1436	Standard for outlet circuit testers and similar indicating devices
UL 508 & CSA-C22.2 No. 14	Industrial control equipment
CAN/CSA-C22.2 No. 160	Voltage and Polarity Testers
CAN/CSA-C22.2 No. 107.1	Power Conversion Equipment
IEC / UL / CSA C22.2 NO. 61010-1	Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 1: General Requirements
IEC / UL / CSA C22.2 NO. 61010-2-030	Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 2-030: Particular requirements for testing and measuring circuits
IEC 61508-1, -2, and -3 {SIL 3 Rating}	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

## Ordering Information

Part Number	Part Description
<b>VeriSafe 1.0 AVT Absence of Voltage Tester</b>	
VS-AVT-C08-L10	VeriSafe 1.0 AVT, 8ft (2.4m) system cable, 10ft (3m) sensor leads
VS-AVT-C02-L03	VeriSafe 1.0 AVT, 2ft (0.6m) system cable, 3ft (0.9m) sensor leads

### Sensor Lead Termination Kits

VS-CKP14-6	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
VS-CKP4-000	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
VS-CKP1K4/0-500	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

### Replacement Parts

VS-AVT-CABLE-02	VeriSafe 1.0 AVT Replacement Cable, 2ft (0.6m), for use with VeriSafe 1.0 AVTs only
VS-AVT-CABLE-04	VeriSafe 1.0 AVT Replacement Cable, 4ft (1.2m), for use with VeriSafe 1.0 AVTs only
VS-AVT-CABLE-08	VeriSafe 1.0 AVT Replacement Cable, 8ft (2.4m), for use with VeriSafe 1.0 AVTs only
VS-AVT-CABLE-16	VeriSafe 1.0 AVT Replacement Cable, 16ft (4.8m), for use with VeriSafe 1.0 AVTs only
VS-AVT-CABLE-20	VeriSafe 1.0 AVT Replacement Cable, 20ft (6.0m), for use with VeriSafe 1.0 AVTs only
VS-AVT-CABLE-30	VeriSafe 1.0 AVT Replacement Cable, 30ft (9.1m), for use with VeriSafe 1.0 AVTs only
VS-AVT-DL	VeriSafe 1.0 Diagnostic Codes Label. English, German, Mandarin, French Canadian, Italian, Korean, Spanish and French
VS-AVT-RL	VeriSafe 1.0 Instruction Label. English, German, Mandarin, French Canadian, Italian, Korean, Spanish and French
VS-AVT-ROR	Replacement Gaskets for Battery Indicator Module, compatible with Verisafe 1.0 and 2.0
VS-AVT-BATTERY	Replacement Battery, compatible with Verisafe 1.0 and 2.0, 3.6V lithium ion. AA form factor

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or by phone: 800.777.3300



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