VeriSafe™ 600V Absence of Voltage Tester

Simplify absence of voltage testing

PANDUIT®
PRODUCT BULLETIN

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.

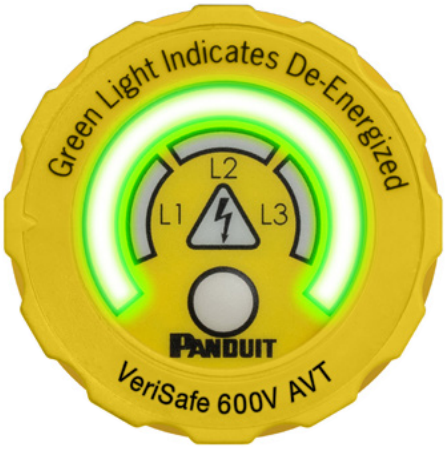
Once installed, a simple push of a button enables workers to verify the absence of voltage and see an active indication when the absence of voltage is confirmed. This provides a new and innovative way to safely, reliably, and efficiently verify the absence of voltage before accessing potentially dangerous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

VeriSafe™
Absence of Voltage Tester



KEY FEATURES & BENEFITS

Improved safety and risk reduction:	No exposure to electrical hazards while testing Reduces human factors
Simplified process for easier compliance:	Satisfies NFPA 70E and CSA Z462 criteria for establishing an electrically safe work condition.
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

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		ABSENCE 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**

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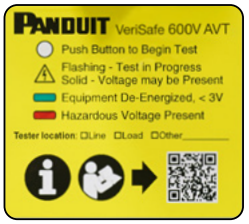
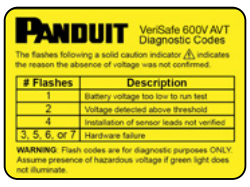
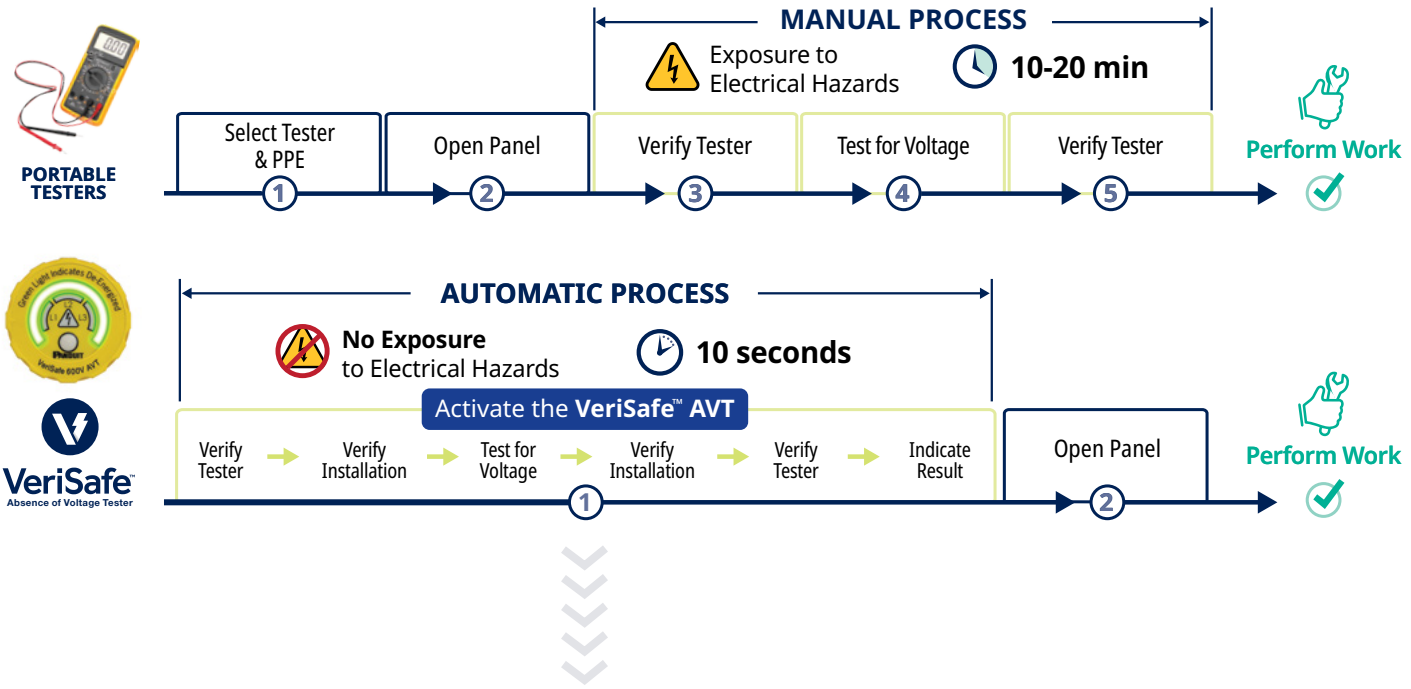


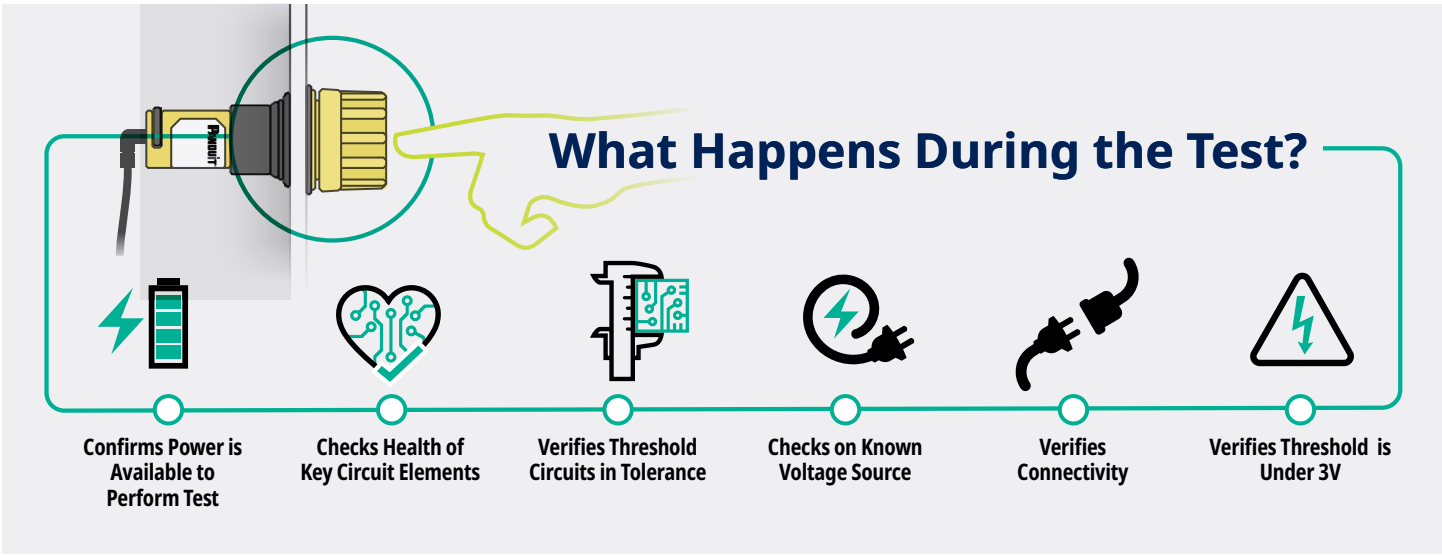
Instruction Label – VS-AVT-RL



Diagnostic Label – VS-AVT-DL

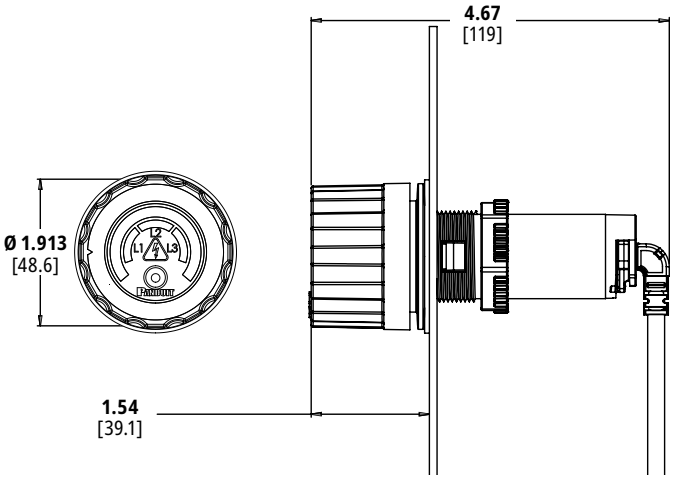
COMPARISON OF TEST METHODS



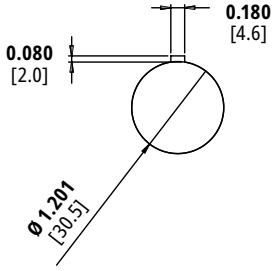


DIMENSIONS

Indicator Module

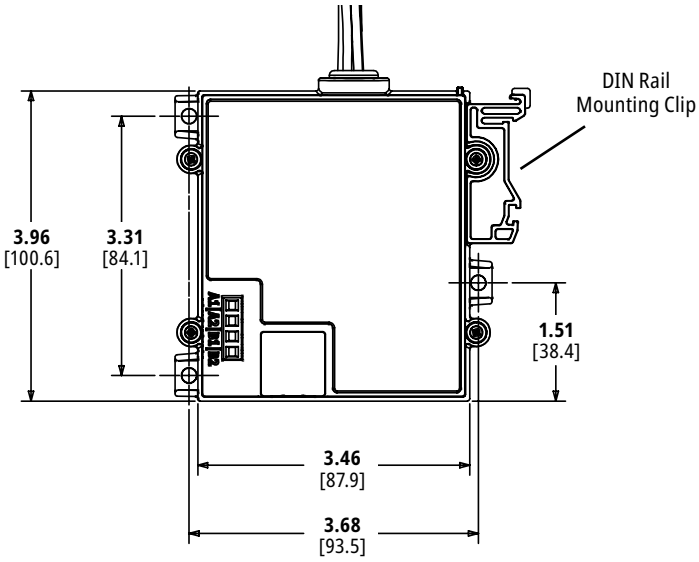


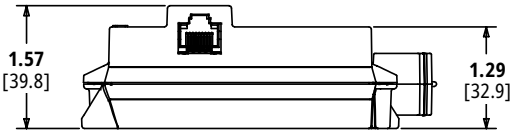
Panel Knockout



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.

TECHNICAL SPECIFICATIONS

APPLICATIONS

Electrical system:	For use in 3-phase AC systems
Voltage detection range:	Up to 600 VAC (50/60 Hz)
Absence of voltage threshold:	3 V
Overvoltage category:	CAT 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

Temperatures:	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)
Humidity:	5 to 90% non-condensing; Rated 80% at 104°F (40°C), decreasing linearly to 50% at 140°F (60°C)
Pollution degree:	3
Altitude:	Up to 16,400 feet (5,000 meters)

*Refer to Instruction Manual at **panduit.com/verisafe/VeriSafe_Manual_EN** for complete list of product specifications and standards

STANDARDS AND CERTIFICATIONS

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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 Numbers	Description
VERISAFE 600V	
VS-AVT-C08-L10	VeriSafe 600V AVT, 8 ft. (2.4m) system cable, 10 ft. (3m) sensor leads
VS-AVT-C02-L03	VeriSafe 600V AVT, 2 ft. (0.6m) system cable, 3 ft. (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 600V AVT Replacement Cable, 2 ft. (0.6m), for use with VeriSafe 600V AVTs only
VS-AVT-CABLE-04	VeriSafe 600V AVT Replacement Cable, 4 ft. (1.2m), for use with VeriSafe 600V AVTs only
VS-AVT-CABLE-08	VeriSafe 600V AVT Replacement Cable, 8 ft. (2.4m), for use with VeriSafe 600V AVTs only
VS-AVT-CABLE-16	VeriSafe 600V AVT Replacement Cable, 16 ft. (4.8m), for use with VeriSafe 600V AVTs only
VS-AVT-CABLE-20	VeriSafe 600V AVT Replacement Cable, 20 ft. (6.0m), for use with VeriSafe 600V AVTs only
VS-AVT-CABLE-30	VeriSafe 600V AVT Replacement Cable, 30 ft. (9.1m), for use with VeriSafe 600V AVTs only
VS-AVT-DL	VeriSafe 600V Diagnostic Codes Label. English, German, Mandarin, French Canadian, Italian, Korean, Spanish and French
VS-AVT-RL	VeriSafe 600V Instruction Label. English, German, Mandarin, French Canadian, Italian, Korean, Spanish and French
VS-AVT-ROR	Replacement Gaskets for Battery Indicator Module
VS-AVT-BATTERY	VeriSafe Battery Indicator Module Replacement Battery, 3.6V lithium ion. AA form factor