




**PANDUIT** VERISAFE 2.0  
Absence of Voltage Tester  
CAT III (1000V), CAT IV (600V)

Tester location:  Line  Load  Other \_\_\_\_\_

 Push Button to Begin Test

 Flashing - Test in Progress

 Solid - Voltage may be Present  
See Diagnostic Code for Status:

# Flashes	Description
1	Check Battery
2	Voltage above Threshold
3	Temperature Out of Range
4	Installation Not Verified
5, 6, 7 or 8	See User Manual

Equipment De-Energized, < 3V

Hazardous Voltage Present



Follow safety procedures & use required PPE

**Simplify absence  
of voltage testing**

# The Safe Way to Protect Employees and Equipment

The VeriSafe 2.0 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  
3.6V Battery powered option shown  
Battery free option available
- 2** System Cable
- 3** Isolation Module
- 4** Instruction Label



## 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



### Increased Productivity

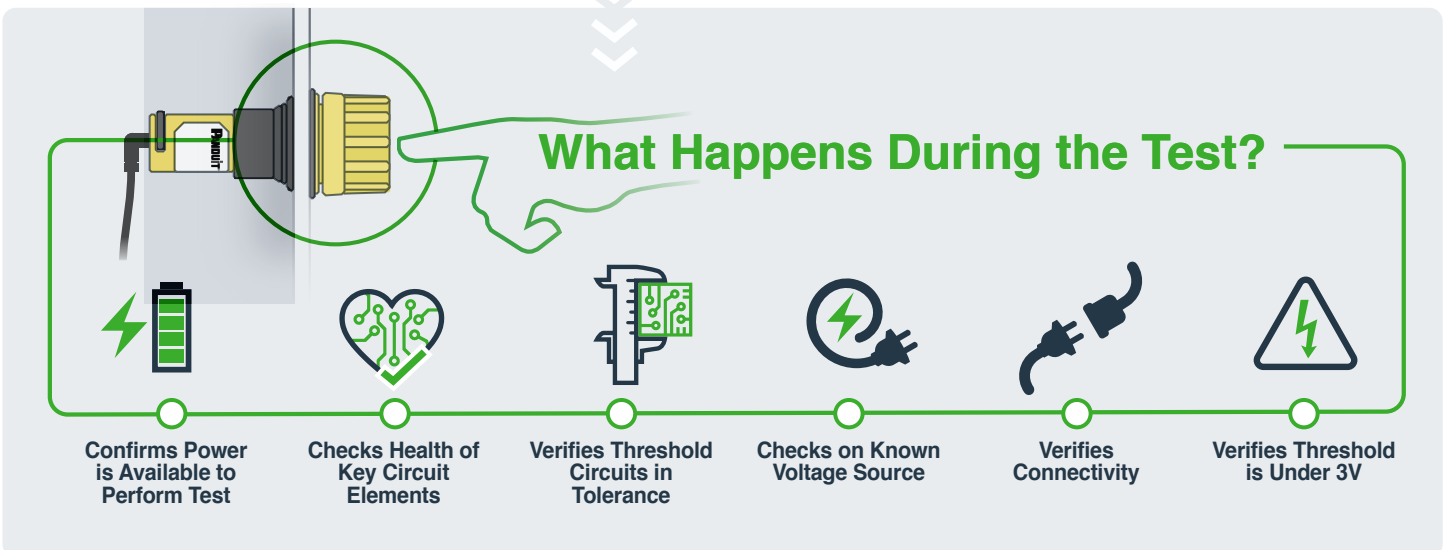
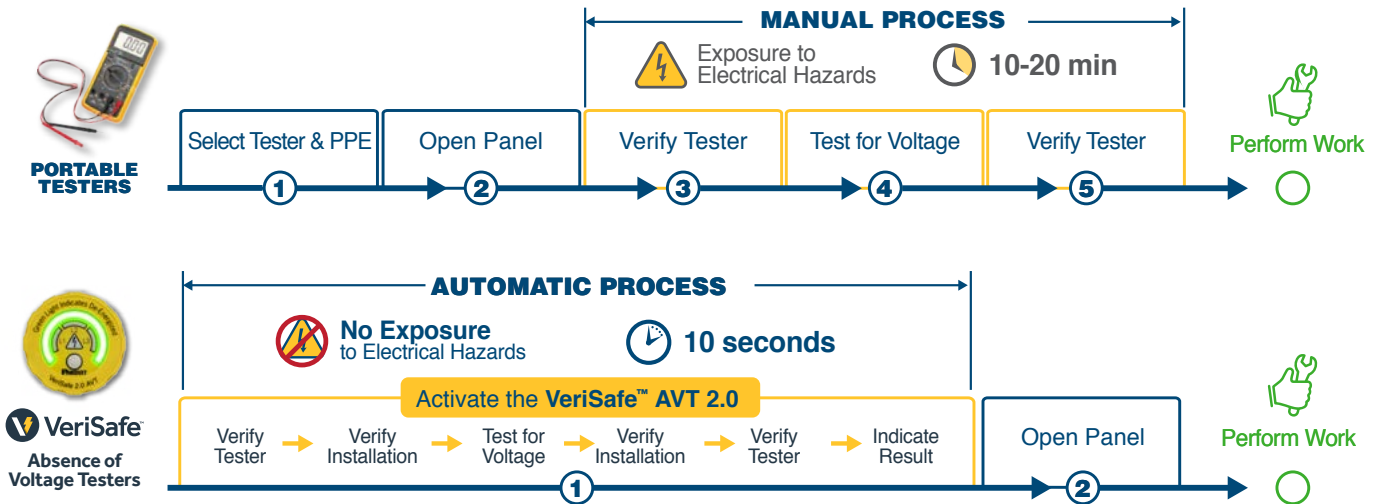
- Results within 10 seconds of button push
- Troubleshoot abnormal power conditions
- Utilize network module for remote monitoring



### Flexible Applications

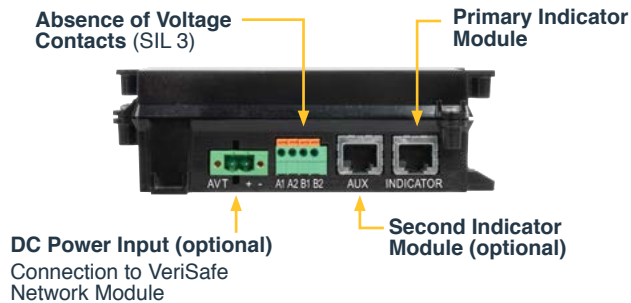
- 2.0 AVT technology is designed for even more applications
- Suitable for indoor, outdoor use

## Comparison of Test Methods



## More than an Absence of Voltage Tester

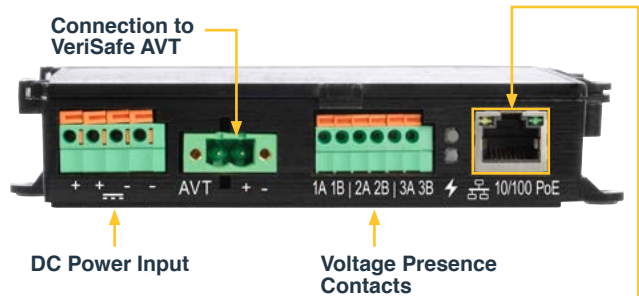
### 2.0 Isolation Module



#### Absence of Voltage Contacts

Redundant solidstate signal outputs (SIL 3) for optional integration with control systems. The contacts are normally open and close only when the green Absence of Voltage Indicator is illuminated.

### Network Module



#### Voltage Presence Contacts

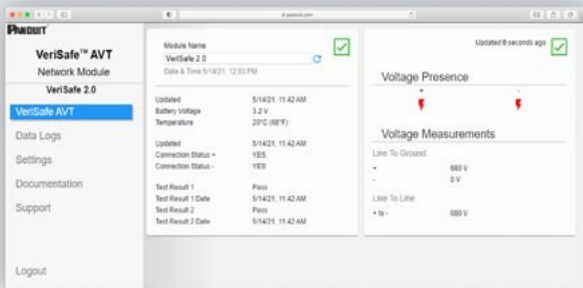
Solidstate signal outputs that are normally open and close when a red voltage presence indicator is not illuminated.

### Network Connection

Real-Time Diagnostics and Performance Reporting



- **Record Test Results**  
Time stamp, result, diagnostic codes, data logs
- **Troubleshoot Remotely**  
See voltage values in real time  
Set alerts for voltage drops and outages
- **View sensor lead status**
- **Monitor battery life status**
- **Analyze temperature trends**
- **Power the AVT**
- **EtherNet/IP and Modbus TCP Connection**  
Easy integration or utilize onboard web server



Refer to VS2-NET specification sheet for more technical information.

## Ordering Information

### Step 1 Select Configuration

VS2-AVT - XY - Z - ##

#### Choose your system

XY



**3P** 3-Phase 2.0 System  
10' (3.0 m) Black Sensor Leads



**1P** DC/Single-Phase 2.0 System  
10' (3.0 m) Black Sensor Leads

#### Choose your indicator

Z



**F** Battery Free Indicator



**B** Battery Powered Indicator  
(battery included)

#### Choose your cable

##



**02** 2' (0.6m) System Cable

**08** 8' (2.4m) System Cable

**16** 16' (4.8m) System Cable

### Step 2 Select Upgrades (optional)

#### Additional Indicator Options



**VS2-NET**

Network Module  
for use with  
VS2-AVT models.



**VS2-AVT-11F**

Battery Free Single-Phase Indicator



**VS2-AVT-31F**

Battery Free 3-Phase Indicator



**VS2-AVT-11B**

Battery Powered Single-Phase Indicator  
No Battery Included



**VS2-AVT-31B**

Battery Powered 3-Phase Indicator  
No Battery Included

**Replacement System Cable:** For use with VeriSafe 2.0 Base and Base Plus Modules only



**VS2-CABLE-02**

2' Cable Length  
.6 m

**VS2-CABLE-04**

4' Cable Length  
1.2 m

**VS2-CABLE-08**

8' Cable Length  
2.4 m

**VS2-CABLE-16**

16' Cable Length  
4.8m

**VS2-CABLE-20**

20' Cable Length  
6.1 m

### Step 3 Select Connectors (optional)

**VeriSafe Insulation Piercing Connection Kit**  
Kits includes 3 connectors and ferrules for installation of 1 AVT.



**VS-CKP-14-6**

Connection Kit  
For Tapping 14 to 6 AWG  
conductors. Rated up to 600V



**VS-CKP-4-000**

Connection Kit  
For Tapping 4 to 3/0 AWG  
conductors. Rated up to 600V.

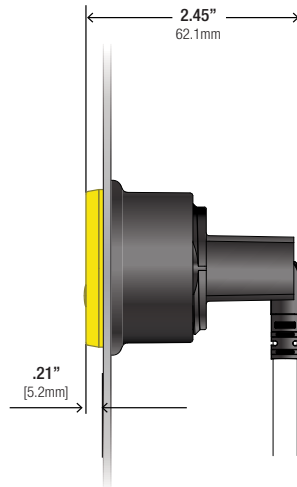
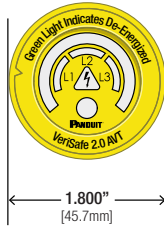


**VS-CKP-1K4/0-500**

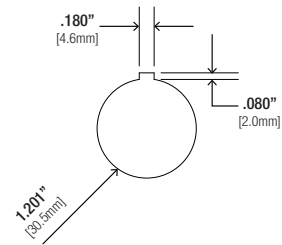
Connection Kit  
For Tapping AWG 4/0 to 500 MCM  
conductors. Rated up to 1000V.

## Dimensions

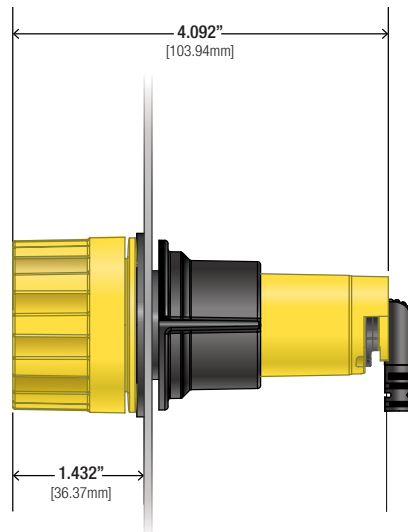
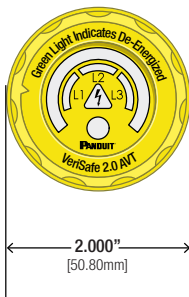
### Battery Free Indicator Module



### Panel Knockout

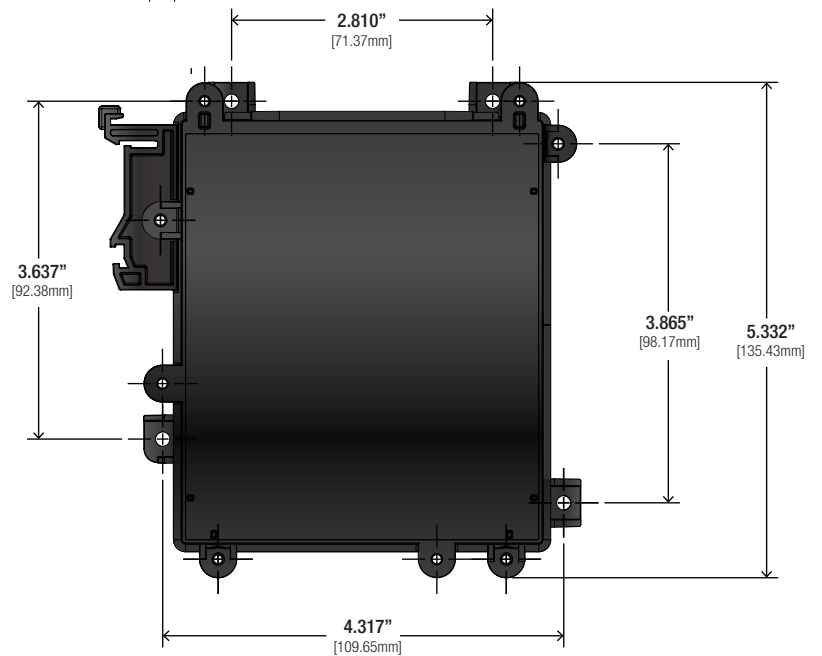
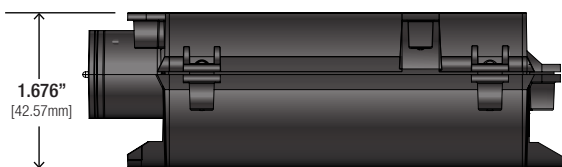


### Battery Powered Indicator Module



### Isolation Module

Install on DIN rail or with optional mounting tabs



Dimensions in inches [millimeters]

## Technical Specifications

### Applications

Electrical System	For use in 1 and 3-phase AC systems, DC systems
Voltage Detection Range	Up to 1000V AC (50/60Hz), 1000V DC; Rated tolerance +10%
Absence of Voltage Threshold	3 V
Overvoltage Category	III (1000 V), IV (600 V)
Degree of Protection	Battery Indicator Module: For Flat Surface Mounting in a TYPE (UL, NEMA and CSA) 1, 12, 13, 4, 4X, IP66 or IP67 Enclosure Battery Free Indicator Module: For Flat Surface Mounting in a TYPE (UL, NEMA and CSA) 1, 12, 13, 4, 4X, IP66, IP67 or IP69K Enclosure Isolation Module: Open Type, IP20
Hazardous Locations	cULus: Class I, Division 2, Groups A, B, C, D T3 Class II, Division 2, Groups F and G T3 Class I Zone 2 AEx ic ec T3 Gc; Ex ic ec T3 Gc Zone 22 AEx tc IIIC T200°C Dc; Ex tc IIIC T200°C Dc  ATEX: Ex II 3G Ex ic ec T3 Gc Ex II 3D Ex tc IIIC T200°C Dc  IECEX: Ex ic ec T3 Gc Ex tc IIIC T200°C Dc

### Environment

Operating Temperature	-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 5,000 meters (3.1 miles)

### 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

Refer to Instruction Manual ([http://www.panduit.com/verisafe/VS2\\_AVT\\_Manual\\_EN](http://www.panduit.com/verisafe/VS2_AVT_Manual_EN)) for complete list of product specifications and standards

## Ordering Information

Part Number	Part Description
<b>VeriSafe 2.0 AVT Absence of Voltage Tester</b>	
VS2-AVT-3PB-02	Includes three-phase battery powered indicator module, 2ft (0.6m) system cable, and 10ft (3.0m) sensor leads
VS2-AVT-3PB-08	Includes three-phase battery powered indicator module, 8ft (2.4m) system cable, and 10ft (3.0m) sensor leads
VS2-AVT-3PB-16	Includes three-phase battery powered indicator module, 16ft (4.8m) system cable, and 10ft (3.0m) sensor leads
VS2-AVT-3PF-02	Includes three-phase battery free indicator module, 2ft (0.6m) system cable, and 10ft (3.0m) sensor leads
VS2-AVT-3PF-08	Includes three-phase battery free indicator module, 8ft (2.4m) system cable, and 10ft (3.0m) sensor leads
VS2-AVT-3PF-16	Includes three-phase battery free indicator module, 16ft (4.8m) system cable, and 10ft (3.0m) sensor leads
VS2-AVT-1PB-02	Includes single-phase/DC battery powered indicator module, 2ft (0.6m) system cable, and 10ft (3.0m) sensor leads
VS2-AVT-1PB-08	Includes single-phase/DC battery powered indicator module, 8ft (2.4m) system cable, and 10ft (3.0m) sensor leads
VS2-AVT-1PB-16	Includes single-phase/DC battery powered indicator module, 16ft (4.8m) system cable, and 10ft (3.0m) sensor leads
VS2-AVT-1PF-02	Includes single-phase/DC battery free indicator module, 2ft (0.6m) system cable, and 10ft (3.0m) sensor leads
VS2-AVT-1PF-08	Includes single-phase/DC battery free indicator module, 8ft (2.4m) system cable, and 10ft (3.0m) sensor leads
VS2-AVT-1PF-16	Includes single-phase/DC battery free indicator module, 16ft (4.8m) system cable, and 10ft (3.0m) sensor leads

### Accessories

VS2-NET	Network Module accessory, for use with VS2-AVT models.
VS2-AVT-3IF	Battery Free Indicator Module, three-phase faceplate, indicator module only (system cable sold separately)
VS2-AVT-11F	Battery Free Indicator Module, single-phase/DC faceplate, indicator module only (system cable sold separately)
VS2-AVT-3IB	Battery Powered Indicator Module, three-phase faceplate, indicator module only (battery and system cable sold separately)
VS2-AVT-11B	Battery Powered Indicator Module, single-phase/DC faceplate, indicator module only (battery and system cable sold separately)
VS2-AVT-3P-ISO	Three-Phase Isolation Module replacement
VS2-AVT-1P-ISO	Single-Phase/DC Isolation Module replacement
VS2-CABLE-02	Replacement Cable, 2ft (0.6m), for use with VeriSafe 2.0 AVTs only.
VS2-CABLE-04	Replacement Cable, 4ft (1.2m), for use with VeriSafe 2.0 AVTs only.
VS2-CABLE-08	Replacement Cable, 8ft (2.4m), for use with VeriSafe 2.0 AVTs only.
VS2-CABLE-16	Replacement Cable, 16ft (4.8m), for use with VeriSafe 2.0 AVTs only.
VS2-CABLE-20	Replacement Cable, 20ft (6.0m), for use with VeriSafe 2.0 AVTs only.
VS2-CABLE-30	Replacement Cable, 30ft (9.1m), for use with VeriSafe 2.0 AVTs only.
VS-AVT-BATTERY	Replacement Battery, VeriSafe AVT, 3.6V
VS2-AVT-RL	Replacement Labels. Includes one faceplate and instruction label replacement for each offered language.

### Insulation Piercing Connector 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 1 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 1 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 1 AVT.

#### WORLDWIDE SUBSIDIARIES AND SALES OFFICES

PANDUIT CANADA  
Markham, Ontario  
cs-cdn@panduit.com  
Phone: 800.777.3300

PANDUIT EUROPE LTD.  
London, UK  
cs-emea@panduit.com  
Phone: 44.20.8601.7200

PANDUIT SINGAPORE PTE. LTD.  
Republic of Singapore  
cs-ap@panduit.com  
Phone: 65.6305.7575

PANDUIT JAPAN  
Tokyo, Japan  
cs-japan@panduit.com  
Phone: 81.3.6863.6000

PANDUIT LATIN AMERICA  
Guadalajara, Mexico  
cs-la@panduit.com  
Phone: 52.33.3777.6000

PANDUIT AUSTRALIA PTY. LTD.  
Victoria, Australia  
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