

Unparalleled Protection

AVT (Absence of Voltage Tester)

Simple, fail-safe and intuitive ...

When servicing electrical equipment, workers must comply with safety regulations that require a voltage verification test to validate the absence of voltage.

The AVT (Absence of Voltage Tester) is a simple, fail-safe and intuitive product that combines the process of voltage verification and ground fault indication.



Exception No. 1: An adequately rated permanently mounted test device shall be permitted to be used to verify the absence of voltage of the conductors or circuit parts at the work location, provided it meets the following requirements.¹

Subsection	Voltage Meter	Voltage Indicator	Voltage Test Portals	I-Gard AVT
A - It is permanently mounted and installed in accordance with the manufacturer's instructions.	Yes	Yes	Yes	Yes
It tests the conductors and circuit parts at the point of work.				
B - It is listed and labeled for verifying the absence of voltage.	N/A	N/A	No	Yes
C - It tests each phase conductor or circuit part both phase-to-phase and phase-to-ground	Phase-to- ground only	Phase-to- ground only	Yes, with hand- held tester	Yes
D - The test device is verified as operating satisfactorily on any known voltage source before and after verifying the absence of voltage.	No	No	No	Yes

Skip the risk ...

Traditional servicing of electrical equipment involves risk of injury from electrical hazards. I-Gard's permanently mounted AVT alleviates this risk by automating the testing process - as shown below.

18.3% of facilities experienced personal injury and **11.7**% experienced interruptions of operations, while using hand-held voltage testers.²



1. SELECT HANDHELD TESTER



2. Test the tester

3. Check for voltage

4. Retest the tester

5. PERFORM TASK



1. PRESS TEST BUTTON

Reliable, automated and SAFE testing

2. Allow AVT to perform safety tests and present GREEN light

3. OPEN PANEL

The AVT provides the following indications:

- Positive indication of presence of voltage from 3V-600V
- Positive indication of absence of voltage
- · Positive indication of a ground fault
- · Positive indication of loss of phase

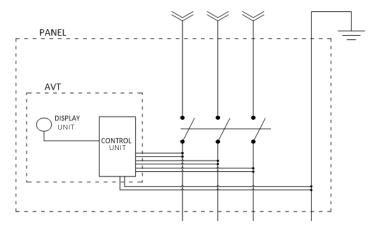


Figure 1. Typical Application



Blue light indicates tester is ready for use

Load side de-energized

SAFE to open panel



UNIQUE TO I-GARD!

Blue light indicates tester is ready for use
Load side energized
Ground fault present (on phase indicated)



Blue light indicates tester is ready for use
Load side unknown
TEST in progress



Blue light indicates tester is ready for use

Load side energized

UNSAFE do not open



Blue light indicates tester is ready for use
Load side unknown
Test Failed
Do not open

¹Standard for Electrical Safety in the Workplace 2018 Edition, NFPA 70E, 2018.

² H.L. Floyd and B.J. Nenninger, "Personnel Safety and Plant Reliability Considerations in the Selection and Use of Voltage Test Instruments", IEEE Transactions on Industry Applications, vol.33, no. 2, pp. 367-373, 1997.

