

i-AVT

Absence of Voltage tester

NFPA 70E, Article 120.5

120.5 Process for Establishing and Verifying an Electrically Safe Work Condition.

Establishing and verifying an electrically safe work condition shall include all of the following steps, which shall be performed in the order presented, if feasible:

- (1) Determine all possible sources of electrical supply to the specific equipment. Check applicable up-to-date drawings, diagrams, and identification tags.
- (2) After properly interrupting the load current, open the disconnecting device(s) for each source.
- (3) Wherever possible, visually verify that all blades of the disconnecting devices are fully open or that drawout-type circuit breakers are withdrawn to the test or fully disconnected position.
- (4) Release stored electrical energy.
- (5) Block or relieve stored nonelectrical energy in devices to the extent the circuit parts cannot be unintentionally energized by such devices.
- (6) Apply lockout/tagout devices in accordance with a documented and established procedure.
- (7) Use an adequately rated portable test instrument to test each phase conductor or circuit part to test for the absence of voltage. Test each phase conductor or circuit part both phase-to-phase and phase-to-ground. Before and after each test, determine that the test instrument is operating satisfactorily through verification on any known voltage source.**

NFPA 70E, Article 120.5 (continued)

Exception No. 1 to 7:

An adequately rated permanently mounted absence of voltage tester shall be permitted to be used to test for the absence of voltage of the conductors or circuit parts at the work location, provided it meets all of the following requirements:

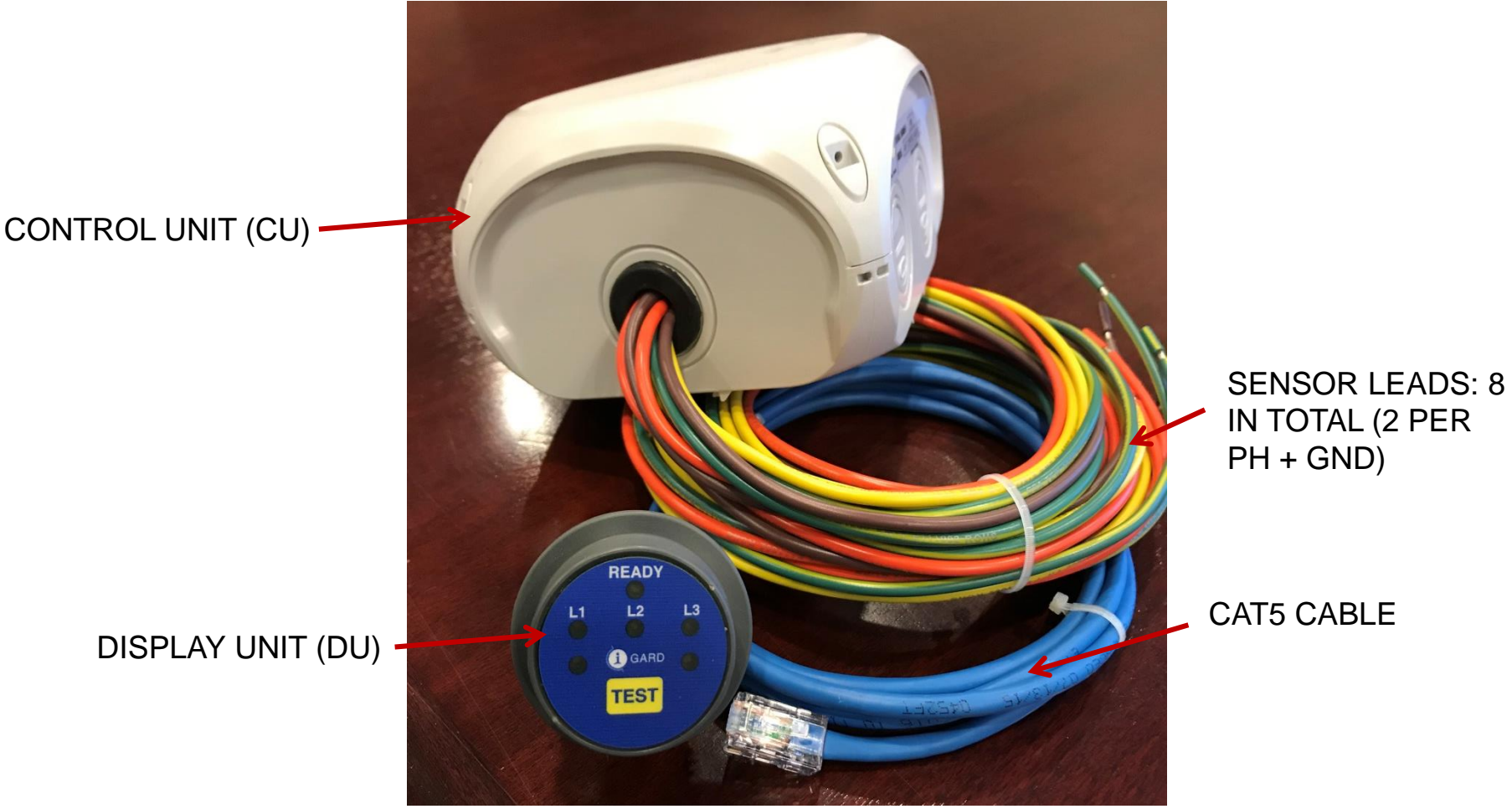
- (1) It is permanently mounted and installed in accordance with the manufacturer's instructions and tests the conductors and circuit parts at the point of work;*
- (2) It is listed and labeled for the purpose of testing for the absence of voltage;*
- (3) It tests each phase conductor or circuit part both phase-to-phase and phase-to-ground;*
- (4) The test device is verified as operating satisfactorily on any known voltage source before and after testing for the absence of voltage.*

i-AVT

1. The i-AVT is an Absence of Voltage Tester that is used as a permanently mounted device to provide verification of an electrically safe work condition (refer to NFPA 70E 120.5, exception No. 1).
2. The function as an **Absence of Voltage Tester** is a key distinction. The difference between this and presence of voltage indication should be appreciated.
3. This difference notwithstanding, the i-AVT provides presence of voltage indication as well as absence of voltage verification.

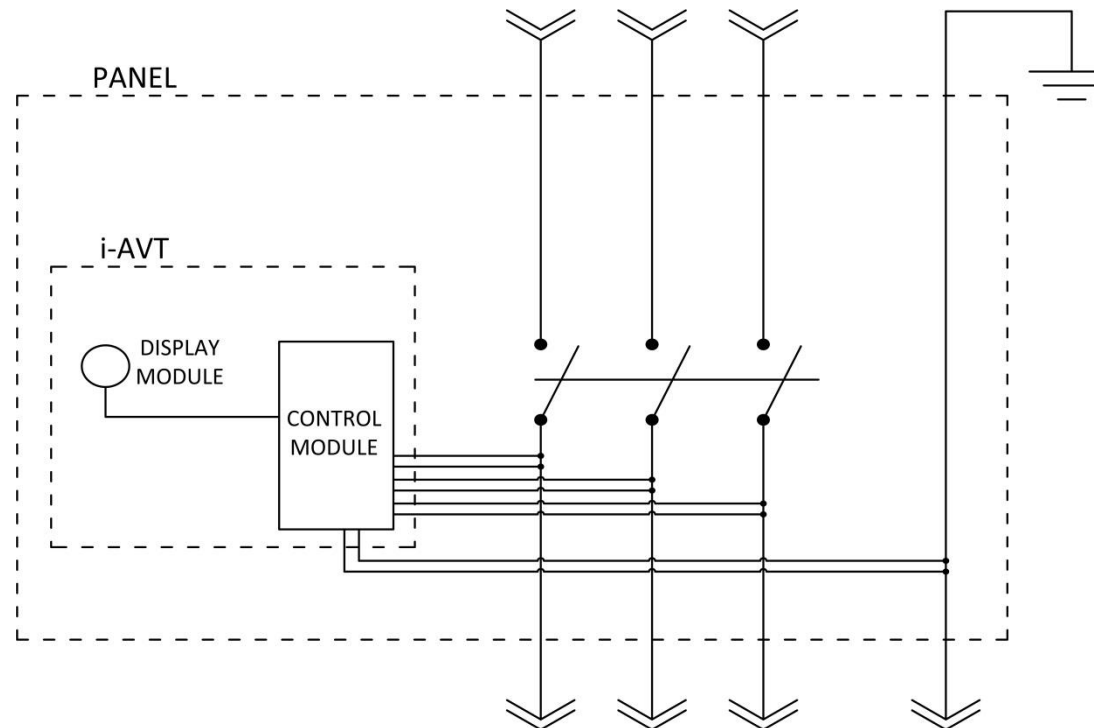


Construction - Components




Application










- Two sensor leads are connected to each phase and two sensor leads are connected to ground
- No connection to the line side



Operation

 **i GARD**

i-AVT (ABSENCE OF VOLTAGE TESTER)

INDICATION DESCRIPTION		SETUP AND OPERATION
READY 	READY LED IS SOLID BLUE WHEN VOLTAGE IS PRESENT AND UNIT IS READY FOR ABSENCE OF VOLTAGE TEST	1. ENERGIZE AVT FOR 20 MINUTES UNTIL READY LED TURNS SOLID BLUE 2. PRESS TEST BUTTON TO INITIATE ABSENCE OF VOLTAGE TEST
L1  L2  L3 	PHASE LEDS SOLID RED INDICATES HAZARDOUS VOLTAGE PRESENT	
L1  L2  L3 	SOLID GREEN FOR 5S INDICATES HAZARDOUS VOLTAGE IS NOT PRESENT	
 	BLINKING AMBER W/ CYCLING RED PHASE LEDS INDICATES ABSENCE OF VOLTAGE TEST IS IN PROGRESS	

- 20min to charge supercap
- About 10 tests per charge
- Charge remains after 15 hours

**Please come to our booth for a
demonstration!**

Thank you