

# HIGH VOLTAGE CAPACITIVE DETECTOR

98298



### **FEATURES**

- Excellent shock resistance.
- Rugged nylon moulding.
- Auto-ON (when voltage detected).
- Excellent drop resistance.
- Good vibration resistance.
- Loud sound alarm indication.
- Built-in proving and self-test circuit.
- High bright color coded LEDs.
- Works from normal 9V battery.
- Interchangeable contact electrode.
- Use in all wheather conditions.
- Compatible with all link sticks.
- Light weight, robust & compact.
- Models available from 11kV to 132kV.
- Suitable for indoor and outdoor use.
- Self (Auto-ON) or manual arming.
- Easy access to batteries.
- Customized threshold on demand.,
- Auto-OFF (if no voltage detected).
- Meets IEC 61423-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-32, IEC 60529
- This family of Capacitive High Voltage Detectors has been designed to meet the latest IEC standards. Our HVD are self-starting and automatically activated when the High Voltage is applied to the contact electrode.
- They can also be manually armed before use by depressing the "TEST/ARMING" button. These detectors are intended for use on sinusoidal (50 or 60Hz) High Voltage Systems.
- Our Detectors are utilized to determine if a system is live or not, so that it may be safely earthed/grounded.
- All our models are designed for outdoor use, but can be utilized indoor and in all wheather condition. This family of capacitive High Voltage Detectors are housed in a rugged, reinforced nylon moulded casing and are shock drop and vibration resistant.
- Non-standard threshold voltages can be customized to suit applications requirements. The HVD has a low battery detection which inhibit manual arming when the battery is too low.
- The Nylon case is easy to clean and maintain and the HVDs are supplied with the cleaning kit. A visual indication shows when the HVD is armed. When armed, the green LEDs flashes about twice per second.
- When HV is detected, the red LEDs flashes approximately twice per second and the buzzer will also sound intermittently.
- A range of accessories is available...



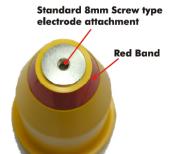
## 98298 HIGH VOLTAGE CAPACITIVE DETECTOR



FLASHING RED LAMP = VOLTAGE DETECTED

ARMING & TEST button
TEST = Depress and hold down
ARMING = Depress and release

FLASHING GREEN LAMP = ARMED (waiting for detection) or VOLTAGE NOT PRESENT



#### **SUITABLE TO WORK NON - STOP**

Auto-OFF<sup>1</sup> = The auto-OFF timer is reset every time the contact electrode of the T21xHVD touch a High Voltage or each time High Voltage is detected. The auto-off timer is also reset each time the device is armed and tested, using the front button.

Auto-OFF timer is approximatively 3 minutes.

Bridging Protection<sup>2</sup> = The Detector and it's accessories will not cause flashover between live parts of the installation or between live parts of the installation and earth/ground.

Spark Protection<sup>3</sup> = The Detector will not be damaged as a result of spark discharge while making contact with the conductor under test.

Battery Low<sup>4</sup>=When battery is low, the THVD will not stay armed after depressing the "TEST/ARMING" button, and green LED will not flashes. (The flashing green Light indicates the standby mode).

Do not use if the green Led does not flashes after depressing "TEST/ARMING", this indicate a low battery condition. Replace battery immediately. DO NO OPERATE.

Red = V Detected<sup>8</sup>= The Red light flashes when High Voltage is detected. This happen when the voltage detected is higher than the threshold of that model ( see tables ).

Threshold<sup>5</sup>= This is the optimum recommended Threshold to set the detection level at which the detector show and sound an High Voltage Alarm. This is the recommended level at which the calibration laboratories must set the detector. In Factory, it is set within a range, but optionally, it can be set to this threshold and a calibration certificate issued. HTTP://WWW.TOPTRONICCALIBRATION.COM

Battery Current<sup>6</sup>= This is the total current consumption taken from the battery when the buzzer sounds and Red Light lit (voltage detected mode). This is the worst case of current consumption.

Green = Armed'= The Green light flashes when the detector is armed and waiting for HV to be detected.

This also means that the battery is ok.

Test / Arming Button<sup>\*</sup> = This button is utilized to arm (turn ON) the detector. When this button is pressed, and while pressing it, a internal proofing oscillator is connected to the detector and simulate HV on the electrode. While the "TEST/ARMING" button is depressed, the RED light flashes and the buzzer sounds, indicating that the detector works properly. When releasing this button, the green light must flash, indicating the battery is ok, and the detector is in standby, waiting for detection.

### **TECHNICAL SPECIFICATIONS**

PART#	T220HVD
System Voltage	6.6/132kV
Threshold Set within Range	2 kV To 3 kV
Response Time	<1 Sec
Auto-OFF¹	±3Min
<b>Bridging Protection<sup>2</sup></b>	YES
Spark Protection <sup>3</sup>	YES
Battery Low⁴	<7V
Threshold⁵	2.5kV
Battery Current <sup>6</sup>	<30mA
Green = Armed <sup>7</sup>	YES
Red = V Detected <sup>8</sup>	YES
Test / Arming Button <sup>o</sup>	YES