

## HIGH VOLTAGE DETECTOR

# 276 HD/ 276SHD

## INTRODUCTION

These models detect the presence of voltage in AC lines. An elongated insulation rod permits checking of high tension circuits for voltage at a safe distance. The instruments are compact, lightweight and easy to handle and are also available for voltage detection in low-tension circuits.

#### **FEATURES**

#### Telescopic, compact, light-weight

276HD: Lenght: From 354 mm to 1005mm, Weight: Approx. 185g 276SHD: Length: From 230mm to 880mm, Weight: Approx. 155g. They are easy to handle and handy to carry

#### High-voltage detectable

The equipment, whether in stretched state is available for voltage detection in high-tension (3.3kV, 6.6kV and 24kV) whether the wires involved are naked or insulated

#### Low-voltage detectable

The equipment can be used for voltage detection in low-tension circuits (80V ~ 600V) by holding the nameplate portion of the detecting head. Before use check, can easily be done by plugging in an AC 100V plug socket, without using a tester

#### Easy to recognize indication

Intermittent lighting in red of a high intensity light-emitting diode and intermittent audible sound of an electronic buzzer are readly recognizable at a full daylight, noisy location

#### Water proof

The detecting head, being tightly enclosed, is free from any trouble due to dust, water or the like.

Meets EN61010-1, EN5008-1, EN55082-1, EN55022, EN61000-4-2, EN61000-4-3

#### Construction:

Waterproof (Detecting head impervious to water)

#### Insulation resistance:

Measure the insulation resistance with the high voltage

The areas we measure are the same as Dielectric strength test.

- (a) Between Sensing tip ~ Grip portion: 1kV (The detector has to be stretched)
  - The insulation resistance has to be more than 2000 M $\Omega$
- Between Sensing tip ~ Nameplate portion: 1kV The insulation resistance has to be more than 2000  $M\Omega$ .

#### Leakage Current Test:

Put high voltage on the parts listed below:

- (a) Between Sensing tip ~ Grip portion: 50kV AC, 1 min (The detector has to be stretched) The leakage current has to be 100 uA or less than 100 uA.
  - Between Sensing tip ~ Nameplate portion : 4kV AC, 1 min.
- The lekage current has to be 100 uA or less than 100 uA
- Working temperature range : -10°C ~ + 50°C
- Battery: 2 button-cells LR44 (1.5V)



## **RATINGS AND SPECIFICATIONS**

#### Working Voltage Range:

H.V.: 3kV~24kV AC... hold grip portion to detect L.V.: 80V~600V AC... hold nameplate portion to detect

Frequency: 50 Hz / 60 Hz

#### Operation Test: (Initial voltage)

(a) When stretched, hold the grip portion. Put the sensing tip in contact with the voltage: 250V, AC ± 50V the LED and buzzer should work. (b) When retracted, hold the nameplate portion. Put the sensing tip in contact with the voltage: 80V, AC or below the LED and buzzer should work.

#### Operation start distance:

Distance at which operation starts when front metal is brought near φ 5mm O.C. wire with grip portion held by hand. Where 24kV / \$\phi 3mm (voltage to ground)... abt 20 cm Where 6.6kV / φ3mm (voltage to ground)... abt 3 cm Where 3.3kV / \$\phi 3mm\$ (voltage to ground)... abt 1 cm

#### Dielectric Strength:

- (a) Between Sensing tip ~ Grip portion : 50kV AC, 1 min (The detector has to be stretched)
- (b) Between Sensing tip ~ Nameplate portion : 4kV AC, 1 min.

<sup>\*</sup>Technical Specifications & Appearance are subject to change without prior notice