

## HIGH VOLTAGE DETECTOR



276 HD

276SHD

This Model 276HD detects the presence of voltage in AC lines. An elongate insulation rod permits checking of high tension circuits at safe distance for voltage. The equipment is compact, light weight, and easy to handle, and is also available for voltage detection in low-tension circuits.

### FEATURES

- **Telescopic, compact, light-weight**

276HD :

length : From 354mm to 1005mm

Weight : Appox. 150g.

276SHD :

length : From 230mm to 880mm

Weight : Appox. 140g.

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 circuits (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 readily recognizable at a full daylight, noisy location.

- **Waterproof**

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

- Meets EN61010-1 EN50081-1 EN55082-1

EN55022 EN61000-4-2 EN61000-4-3

### 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 : 50Hz / 60Hz**

- **Operation Test : ( Initial voltage )**

(a) When stretched, hold the grip portion.

Put the sensing tip in contact with the voltage : 250V AC  $\pm$ 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  $\phi$ 5mm O.C. wire with grip portion held by hand.

Where 24kV /  $\phi$ 3mm (voltage to ground) .....abt 20cm.

Where 6.6kV /  $\phi$ 3mm (voltage to ground) .....abt 3cm.

Where 3.3kV /  $\phi$ 3mm (voltage to ground) .....abt 1cm.

- **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.

- **Construction :**

Waterproof (detecting head impervious to water).

- **Insulation resistance :**

Measure the insulation resistance with the high voltage insulation tester.

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 $\Omega$ .

(b) 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  $\mu$ A or less than 100  $\mu$ A.

(b) Between Sensing tip~Nameplate portion : 4kV AC, 1 min.

The leakage current has to be 100  $\mu$ A or less than 100  $\mu$ A.

- **Working temperature range : -10° C ~ +50° C**

- **Battery : 3 button-cells LR44(1.5V)**

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