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# **High Voltage Detector**



The 276 HD and 276S HD detect the presence of voltage in AC lines. Elongated insulation rods permit checking high-tension circuits from a safe working distance. The units are compact, lightweight, and easy to handle. They are also capable of voltage detection in low-tension circuits.

# **FEATURES**

- Telescopic, compact, lightweight
- High voltage and Low voltage detection
- Self-test button
- Easy-to-recognize indication

# SPECIFICATIONS

	276S HD	276 HD
Sections	7	4
Working voltage	H.V. : 3kV~24kV AC L.V. : 80V~600V AC	
Frequency	50/60Hz	
Operating temperature & humidity	0°C ~ 40°C Max: 80%	
Retracted length	255±30mm	354±30mm
Extended length	870±30mm	1010±30mm
Weight (battery included)	150g	180g
Power source	CR 2032(3V) × 1	
Safety standards	EN 61326-1	

Working Voltage Range:

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

- Operational Test: (Initial voltage)
  - (a) When extended, hold the grip portion. Put the sensing tip in contact with the voltage (250V AC ± 50V). The LED and buzzer should operate.
  - (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 operate.

#### • Operation Start Distance:

Distance at which operation starts when front metal is brought near Ø5mm O.C. wire with grip portion held by hand.

Where  $24kV / \sqrt{3}$  (voltage to ground)....about 20cm. Where 6.6kV /  $\sqrt{3}$  (voltage to ground)....about 3cm. Where  $3.3kV / \sqrt{3}$  (voltage to ground)....about 1cm.

## • Dielectric Strength:

(a) Between sensing tip and grip portion: 50kV AC. 1 min. (The detector must be extended)

(b) Between sensing tip and 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 measured are the same as in the dielectric strength test.

- (a) Between sensing tip and grip portion: 1kV. (The detector must be extended) The insulation resistance must be more than 2000MQ.
- (b) Between sensing tip and nameplate portion: 1kV. The insulation resistance must be more than 2000MΩ.

## • Leakage Current Test:

Apply high voltage to the parts listed below.

- (a) Between sensing tip and grip portion: 50kV AC, 1 min. (The detector must be extended) The leakage current must be 100uA or less.
- (b) Between sensing tip and nameplate portion: 4kV AC, 1 min.

The leakage current must be 100uA or less.



(For 276S HD)

(For 276 HD)