



Installation Guidelines

600A Underground Plug Voltage Sensor

35kV p/n 9554



⚠ DANGER

The system must be de-energized and grounded before attempting installation or retrofit. Failure to de-energize and ground equipment can result in serious injury or death.

⚠ DANGER

The sensor must be solidly grounded to earth before it is energized. Connection to the phase conductor will energize the sensor and will result in high voltage across the output unless grounded. Failure to ground before energizing can result in serious injury or death.

⚠ DANGER

Sensor must be applied within its electrical ratings. Application of sensor in excess of its ratings can result in immediate or delayed electrical or mechanical failure. Failure to apply the sensor within its ratings can result in serious injury or death, or in premature failure of the sensor.

⚠ CAUTION

Sensor must remain in packaging during transportation to installation site. Transportation of the sensor without its protective packaging may result in damage to the sensor body. Physical damage can result in premature failure of the sensor or reduced electrical ratings.

⚠ CAUTION

Both the sensor cable connectors and the cable connector located on the sensor must remain dry and protected from inclement weather. The connectors are weatherproof once joined, but may allow moisture in the cable when the male or female connectors are left exposed to the elements. Moisture in the cable will result in inaccurate measurement readings.

⚠ WARNING

DO NOT HIPOT. HIPOT (high potential) testing will thermally damage the resistor assemblies in the sensor causing permanent damage. HIPOT testing voids the sensor's warranty.

Specifications:

| ELECTRICAL RATINGS: | |
|----------------------------|---|
| CATALOG NUMBER SEQUENCE | 9554 |
| INSULATION CLASS | 35kV |
| IMPULSE (BIL) | 150kV |
| CORONA (extinction) | 26kV |
| INTERFACE | IEEE Std. 386 interface provides convenient connection with other 600A deadbreak devices. |

| MECHANICAL: | |
|------------------------|------|
| INSULATION CLASS | 35kV |
| WEIGHT (lbs.) | 6 |
| SHIPPING WEIGHT (lbs.) | 9 |

Characteristics:

The Lindsey ElbowSense™ 600A voltage sensor is available at 35kV in an IEEE 386- plug connector for simple, fast, and flexible installation. Lindsey 600A class sensors are suitable for padmount and metal clad applications.

Lindsey ElbowSense are designed and tested per applicable IEEE-386 and other industry standards.

Installation:

1. Using the sensor catalog number, use the Specifications tables to ensure the sensor is being applied in accordance with its ratings and utility underground construction and safety standards.
2. The system must be de-energized and grounded before attempting installation or retrofit.
3. Remove the existing tap or plug from the grounded bushing per utility operating procedures.
4. Install current monitoring ring on “T” connector if it is to be used.
5. Apply a light, uniform coat of supplied grease, working thoroughly onto all mating surfaces.
6. Insert and torque the 600A plug to a maximum of 60 ft.- lbs. using a 1 1/8” hex socket and a torque wrench. Excessive torque will cause permanent damage.
7. Attach a #12 AWG or #10 AWG ground wire to the terminal provided on the shell of the voltage monitoring plug and connect it to the ground bus.
8. Plug in and hand tighten the waterproof signal cable and connect it to the input of the electronic monitoring device being used. The red wire is the output signal, and the white wire is the ground.
9. Installation is complete. The system can now be re-energized.