



# Installation Guidelines

## Overhead Neutral Current Sensor p/n R-22981



**! DANGER**

The current sensor is designed for measurement of only neutral current. The sensor is insulated for 600V application. Serious injury or death can result if installed on any conductor other than neutral conductors.

**! DANGER**

Sensor must be applied within its electrical and mechanical 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**

The sensor cable leads must remain dry and protected from inclement weather. The cable end is not weatherproofed as shipped and will allow moisture in the cable if left exposed to the elements. Moisture in the cable will result in inaccurate measurement readings.

**! CAUTION**

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

### Specifications:

ELECTRICAL RATINGS:	
CATALOG NUMBER SEQUENCE	R-22981
INSULATION VOLTAGE CLASS	600V
OUTPUT RATIO	50A=5VAC
REQUIRED LOAD IMPEDANCE	200kOhm min

### Characteristics:

The Lindsey neutral current sensor is commonly used to sense neutral current in small capacitor banks, including both pole mounted and padmount banks. The CT has a tilt-top that opens for easy installation around conductors up to 30mm (1.25") in diameter. The neutral current sensor has 1% accuracy and comes complete with a 10.5m (35ft) cast in cable. The cable end are bare conductors. Special versions are available with connectorized cable ends. Contact the factory for more information. The sensor is watertight.

### Installation:

The sensor and mounting hardware are shipped as two separate parts, as shown in Figure 1.

1. If not already assembled, install the I-beam clamp to the plastic mounting bracket by tightening the screw as circled in Figure 1.

Figure 1.



2. Connect the sensor (R-22981) wires to the desired control, meter, relay, etc. The White conductor is the polarity conductor, and the Black wire is the non-polarity conductor.

**Installation (continued):**

3. Open the CT and slide the mounting bracket on to the CT leg as shown in Figure 2.
4. Properly set the I-beam clamp on to a convenient part of the equipment structure, then tighten the 1/4 inch - 20 bolt (see Figure 2) to ensure it is firmly attached.
5. Place neutral current conductor in the center of the sensor making sure that the current supply side comes in from the "label" side of the current sensor. Refer to Figure 3. Close the top of the sensor (see arrow) and ensure it latches.

Figure 2.

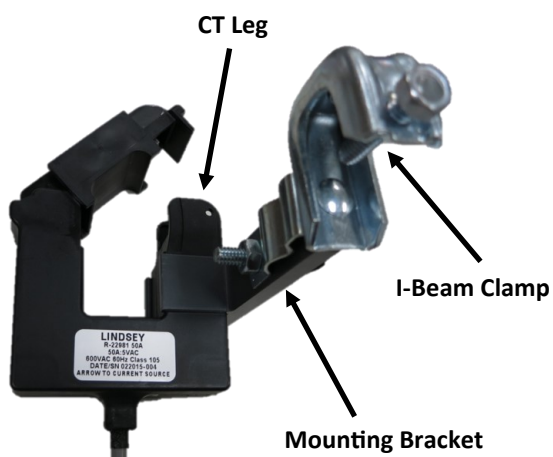


Figure 3.



6. Installation is complete.