

Lindsey Manufacturing Company

Current and Voltage Monitoring Insulator

Installation Instructions

(Clamp Top Style)

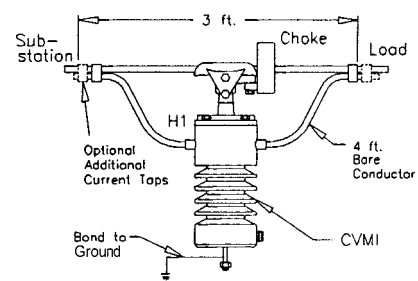
The Lindsey Current and voltage Monitoring Insulator (CVMI) is designed to be installed without de-energizing the line or cutting the main conductor. The CVMI can be installed in either a horizontal or vertical line post configuration, depending on the accessory hardware used. Following the instructions below will insure a safe and simple installation.

1. Pre-assemble the hardware accessories to the insulator. This may include the horizontal or the vertical clamp adapter, the conductor clamp, the bottom-mounting stud and /or the horizontal mounting base. The actual hardware will depend on the specific installation.

CHOKE INSTALLATION ONLY: The bottom half of the choke should be bolted to the conductor clamp. The top half of the choke should be loosely bolted to one side of the bottom half, allowing it to swing out of the when installing the conductor. The choke should not be closed over the main conductor until after the jumper loop has been installed. The top and bottom halves of the choke are marked with a serial number, and it is important that the mating halves of the choke are used. Also, each choke is matched to the CVMI at the time of shipment and should be used with the proper CVMI. The "Certification Data Sheet" for each insulator will indicate the matching choke number to use.

2. If the CVMI is replacing an existing insulator, raise the conductor away from the insulator using standard techniques and remove the existing insulator.
3. Mount the Lindsey CVMI with H1 identification labeled on the tube (opposite side of connector) closest to the supply or the substation direction.
4. Connect the base of the CVMI to ground. **IT IS IMPORTANT THAT THE CVMI BE GROUNDED BEFORE THE INSULATOR IS ENERGIZED.**
5. Plug the signal wire from the base of the pole into the connector at the base of the insulator.
6. Place the bare conductor in the hot line clamp on top of the insulator and secure. Armor rods can be used if desired. If the installation includes a choke, do not close the choke over the main conductor until after the jumper has been installed.

7. Install a four-foot jumper OF EQUAL, OR GREATER AMPACITY AS THE MAIN CONDUCTOR through the embedded, stainless steel tube of the CVMI, using standard techniques. The taps used for the jumper loop should be rated for fully ampacity of the conductor and have a contact resistance of less than 10^{-4} Ohms to insure accurate current measurements. If there is any doubt about the suitability of the taps, two taps can be used. When installing the taps, all of the normal procedures to minimize contact resistance, such as brushing the conductor and applying anti-corrosion grease, should be used.



Typical Jumper Installation

8. If the stainless steel tube of the CVMI is equipped with an optional "U"-bolt clamp, install and tighten the clamp.
9. If the installation includes a choke, apply a layer of silicone grease to the exposed bottom half of the choke. This grease is supplied in a small packet with the insulator. Swing the top half of the choke into position, align the two halves and bolt into position. Be aware that if the choke is installed on an energized system with sufficient current flowing through the lines, the two halves of the choke will become magnetized and should pull together.

Lindsey Manufacturing Company

Current and Voltage Monitoring Insulator

Installation Instructions

(Substation Style)

The Lindsey Current and Voltage Monitoring Insulator (CVMI) is designed to be installed without de-energizing the line or cutting the main conductor. The CVMI can be installed in either a horizontal or vertical configuration, depending on the accessory hardware used.

Following the instructions below will insure a safe and simple installation.

1. Pre-assemble the hardware accessories to the insulator. This may include the bottom mounting stud, the horizontal mounting base, or other hardware depending on the specific installation.
2. Mount the Lindsey CVMI, with the H1 identification (labeled on the tube) toward the supply or the substation direction.
3. Connect the base of the CVMI to ground. **IT IS IMPORTANT THAT THE CVMI BE GROUNDED BEFORE THE INSULATOR IS ENERGIZED.**
4. Plug the signal wire from the base of the pole into the connector at the base of the insulator.

INSULATORS WITH A STAINLESS STEEL TUBE

5. Install the bare conductor through the stainless steel tube in the head of the CVMI.
6. If the stainless steel tube of the CVMI is equipped with an optional "U"-bolt clamp, install and tighten the clamp.

INSULATORS WITH A BUS BAR

5. Attach conductor to the two hole or four hole NEMA pad.

