



# **PCORE®** Aluminum and Copper Test Terminals are manufactured with the highest quality materials and are designed for many years of reliable service.

# In order to obtain the highest performance, it is necessary to follow these steps for installation and usage.

PCORE Test Terminals are manufactured from either aluminum or copper. Aluminum models will have "AL" stamped on the movable blades while the Copper versions are left blank. See *Fig 1*. on the reverse side of this instruction sheet.

### **STORAGE**

**PCORE** Aluminum and Copper Test Terminals must be stored in a clean and dry environment. DO NOT STORE OUTDOORS. If the contact surfaces become corroded, the corrosion must be completely removed from the contact surfaces before they are used.

See the reverse side for complete Instructions for Installation and Use of <u>PCORE Copper Test Terminals</u>.

# Instructions for Installation and Use of PCORE<sup>®</sup> Aluminum Test Terminals



**WARNING:** The moveable blades should be kept in the closed position at all times unless 60 Hz dielectric tests (power factor and capacitance measurement) are being performed on the bushings and/or related equipment which each Test Terminal is installed on.

### APPLICATION REQUIREMENTS

*PCORE Aluminum Test Terminals* must be connected properly to the equipment or overheating and damage may result. The following requirements must be met to ensure proper operation:

- 1. All contact surfaces on both the *PCORE Aluminum Test Terminal* and the connected equipment must be properly cleaned with an abrasive pad or sandpaper and antioxidant grease applied before installation.
- 2. The cross section of the current carrying bus must be equal or greater than the cross section of the NEMA pad on the *PCORE Aluminum Test Terminal*.
- 3. For outdoor connections of Aluminum to Copper arranged with one conductor on top of the other, the Aluminum conductor should be on top.
- 4. Maximum cantilever loading of the *PCORE Aluminum Test Terminal* is 575 ft.-lbs. unless otherwise specified on the sales drawing.

### **INSTALLATION**

*PCORE Aluminum Test Terminals* are packaged ready for use. However, a few precautions must be taken before installation:

- 1. The *PCORE Aluminum Test Terminal* should be orientated so that the movable blades open in a downward motion. The longer porcelain section (three petticoats) is on the same side of the guard loop as the apparatus to be tested.
- 2. Make sure all eight bolts on both side blades are tight. The cone washers must be compressed flat to prevent loosening. Use the torque values listed under the Copper Test Terminal Installation Instructions for all bolted connections that use lock washers.
- 3. Clean all connections using an abrasive pad to remove all oxidation. Wipe off all dirt and immediately (within 2 minutes) apply a thin coat of no-ox grease made for aluminum contacts.
- 4. All connections should be bolted tight. The use of cone washers to prevent loosening of the connection is highly recommended. The washers must be flattened at installation to function properly.

#### **OPERATION AND MAINTENANCE**

*PCORE Aluminum Test Terminals* will function properly for a long time with very little care. Performing the following steps will ensure trouble-free operation:

- 1. Anytime the terminal is opened to perform testing, the contact surfaces of the side blades must be inspected for corrosion. Any corrosion on the contact surfaces must be removed. If any surface has become dry or nearly dry, you must clean and re-grease the contact surfaces.
- 2. Always tighten the eight bolts so the cone washers are flat to prevent loosening.
- 3. Check the terminal and connections periodically with an infrared device to be sure that all connections are functioning properly.





# Instructions for Installation and Use of PCORE® Copper Test Terminals



**WARNING:** The moveable blades should be kept in the closed position at all times unless 60 Hz dielectric tests (power factor and capacitance measurement) are being performed on the bushings and/or related equipment which each Test Terminal is installed on.

## **APPLICATION REQUIREMENTS**

*PCORE Copper Test Terminals* must be connected properly to the equipment or overheating and damage may result. The following requirements must be met to ensure proper operation:

- 1. All contact surfaces on both the *PCORE Copper Test Terminal* and the connected equipment must be properly cleaned with an abrasive pad or sandpaper.
- 2. The cross section of the current carrying terminal at the transmission side must be equal or greater than the cross section of the NEMA pad on the *PCORE Copper Test Terminal*.
- 3. Maximum cantilever loading of the *PCORE Copper Test Terminal* is 575 ft.-lbs. unless otherwise specified on the sales drawing.

## **INSTALLATION**

*PCORE Copper Test Terminals* are packaged ready for use. However, a few precautions must be taken before installation:

- 1. The *PCORE Copper Test Terminal* should be orientated so that the movable blades open in a downward motion. The longer porcelain section (three petticoats) is on the same side of the guard loop as the apparatus to be tested.
- 2. Verify all fasteners are tight, recommended Torque Values (including Aluminum Test Terminal bolts that use lock washers):
  - a. Captive Bolts & Terminal Clamp Bolts (1/2-13), 40 ft.-lbs.
  - b. Corona Ring Bolts (3/8-16), 20 ft.-lbs.
- 3. All connections should be bolted tight to the proper torque values to prevent loosening of the connection.

#### **OPERATION AND MAINTENANCE**

*PCORE Copper Test Terminals* will function properly for a long time with very little care. Performing the following steps will ensure trouble-free operation:

- 1. Always torque the fasteners to proper values to prevent loosening.
- 2. Check the terminal and connections periodically with an infrared device to be sure that all connections are functioning properly.

