

From

East Pittsburgh, 6N-S

WIN

299-4769 May 21, 1985

Date Subject

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VAC-CLAD Electrically Closed Grounding and Test Device

East Pittsburgh, 6N-S

All Salesmen & Proposal Engineers

Give Copy to B. Bins J. Mottat 6. Have

cc: East Pittsburgh, 6N-S - J. M. Earl East Pittsburgh, 6N-S - P. F. Schaefer

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A standard electrically operated ground and test device is available for current shipments.

Attached is a three page description of it.

When a special E.O. G&T device (i.e., Consolidated Edison, Boston Edison, PEPCO, etc.) is specified, propose the standard device by sending a copy of the attached description.

Use the following list prices when quoting an E.O. G&T device.

1200A/2000A - \$ 26,980. 3000A - \$ 52,060.

J. E. Cox

G. C. Cot/j

Attach:

VAC-CLAD ELECTRICALLY CLOSED GROUNDING AND TEST DEVICE

Purpose

The VAC-CLAD electrically closed grounding and test device provides a means of access to the upper and lower studs in VAC-CLAD switchgear so that the following tests can be performed:

- 1. Grounding
- 2. Applying Test Voltage
- 3. Phasing

Features

VAC-CLAD switchgear is a 2-high arrangement. In a lower compartment the top studs normally connect to the bus and the bottom studs normally connect to the incoming line or feeders. In an upper compartment the opposite normally holds true. Because of this arrangement, the bus and line positions of the Electrically Closed Grounding and Test Device studs and test ports will change as the device is used in an upper or lower compartment. Therefore, on the VCP Grounding and Test Device the studs and selector switch positions are referred to as UPPER and LOWER only. The test ports are labeled UPPER STUDS and SELECTABLE STUDS.

The device cannot be levered into or out of the housing unless the grounding switch is open.

The device cannot be levered into the housing with the selector switch in an intermediate position.

The device cannot be levered into the housing with the selector switch handle in place.

The selector switch cannot be operated with the device in the housing.

The selector switch has a spring operated latch which must be manually unlatched to operate the selector switch handle.

An indicator shows the position of the selector switch.

An indicator shows the position of the grounding switch.

The upper test ports connect to the upper studs.

The lower (selectable stud) test ports connect to the selector switch hinges.

The lower (selectable stud) test ports can be padlocked in the closed position.

The studs to be grounded are always connected to the lower test ports and the lower test ports are always available for voltage checking.

Features (Continued)

The ground switch can be locked closed with a Kirk Lock.

The selector switch can be locked in the lower position with a Kirk Lock only when the device is in the test position.

The upper test ports are locked closed with a Kirk Lock. They can only be opened with the key locking the selector switch in the lower position.

An auxiliary switch in the selector switch Kirk Lock is wired to prevent the grounding switch from closing when the switch is locked in the lower position.

The grounding switch cannot be manually closed when the device is in the housing.

The closing spring cannot be manually charged without removing the front cover.

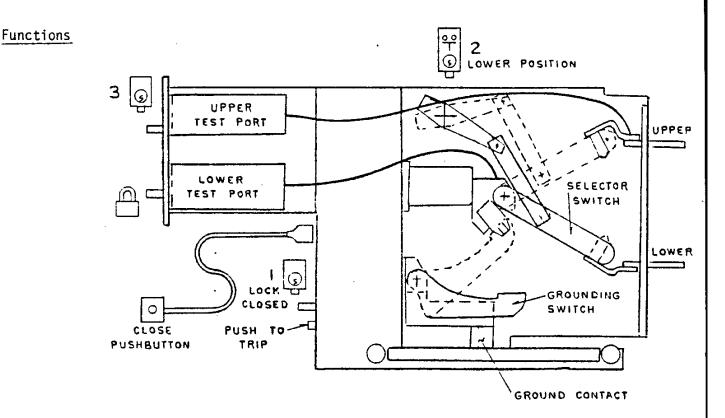
The grounding switch is electrically closed and manually opened.

The grounding switch is electrically closed by a push-button on the end of a 50-foot flexible cable.

The cable is connected to the grounding and test device with a twist-lock connector.

The power to operate the device is obtained through the secondary disconnecting contacts in each switchgear compartment.

VAC-CLAD ELECTRICALLY CLOSED GROUNDING AND TEST DEVICE



Regardless of which studs are to be grounded, they are always connected to lower test ports.

Grounding

- 1. Set selector switch.
- 2. Lever into compartment.
- 3. Unlock lower test ports and check for voltage.
- 4. Electrically close ground switch.
- 5. Ground switch can be locked closed by removing key from Lock 1.

Phasing

- 1. Set selector switch in lower position.
- 2. Lock selector switch in lower position with Lock 2. Auxiliary switch in Lock 2 is wired in closing circuit to prevent closing the grounding switch.
- 3. Remove key from Lock 2.
- 4. Lever into compartment.
- 5. Insert key from Lock 2 into Lock 3 to open upper test ports.

<u>Testing</u>

- 1. Set selector switch to UPPER or LOWER position as required.
- 2. Lever into compartment.
- 3. Unlock lower test ports and check for voltage.
- 4. With ground switch open, test voltage can be applied thru lower test ports.