Instructions for the 15 kV Type VCP-T
Manual Grounding and Testing Device

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Figure 1: Device shown with upper terminals grounded

Figure 2: Device shown with lower terminals grounded
INTRODUCTION

WARNING
READ AND UNDERSTAND THESE INSTRUCTIONS BEFORE ATTEMPTING TO USE THIS DEVICE. IMPROPER USE CAN RESULT IN DEATH, BODILY INJURY AND/OR PROPERTY DAMAGE.

Type VacClad-W switchgear assemblies are designed with all the bus work completely insulated for safety. Since the current carrying parts are not readily accessible, type VCP-T Manual Grounding and Testing Device is designed for insertion into the breaker compartment to gain access to the primary stationary contacts. It provides a convenient means to:

1. Ground a circuit for maintenance work;
2. Apply potential for cable testing; and,
3. Access both bus and line circuits for “phasing out” tests.

CAUTION
BECAUSE OF THE UNIQUE APPLICATION AND VAST VARIETY OF SYSTEM AND USERS REQUIREMENTS, SPECIFIC OPERATING PROCEDURES MUST BE DEVELOPED BY THE USER. FAILURE TO DEVELOP THESE PROCEDURES COULD LEAD TO IMPROPER USE OR OTHER MORE SERIOUS CONSEQUENCES.

DESCRIPTION

The device consists of a draw-out element that can be inserted into a circuit breaker compartment in the same manner as a type VCP-T circuit breaker. It includes six terminals and ground bus connections. Each terminal is isolated from each other and the bus connection by insulating barriers. The upper and lower terminals are accessible by removing the respective front panel. The ground connection is located in the lower front section of the device.

VacClad-W switchgear is a two-high arrangement. In the lower compartment the top terminals normally connect to the main bus and the bottom terminals normally connect to the incoming line or feeders. In an upper compartment, the opposite normally holds true, i.e., the top terminals connect to the incoming line or feeders and the bottom terminals connect to the main bus. This must be verified for each application. Because of this two-high arrangement, the bus and the line positions of the grounding and testing device terminals will vary depending upon whether the device is used in an upper or lower compartment. Therefore, IT IS MOST IMPORTANT THAT THE BUS OR LINE TERMINALS BE CORRECTLY IDENTIFIED FOR EACH COMPARTMENT BEFORE USING THIS DEVICE.
OPERATION

Grounding and testing device is a safety-related device. It must be recognized that IMPROPER USE CAN RESULT IN DEATH, SERIOUS PERSONAL INJURY, OR PROPERTY DAMAGE. That is why it is most important that user develop specific and safe operating procedure for its use.

The following general safe practices are recommended:

• Store the device in a clean, dry area free from dust, dirt, moisture, etc.

• Keep all insulating surfaces, which include primary support insulation barriers, clean and dry.

• Check all primary circuit connections to make certain that they are clean and tight.

• Permit only authorized trained personnel to use this device.

• **TAKE EXTREME CARE WHILE USING THIS DEVICE TO AVOID CONTACTING “LIVE” OR “HOT” (ENERGIZED) TERMINALS.**

• **CORRECTLY IDENTIFY LINE AND BUS TERMINALS FOR THE BREAKER COMPARTMENT BEFORE USING THIS DEVICE.**

The grounding of either upper or lower terminals is accomplished by connecting grounding links (provided with the device) from either the upper or the lower terminals to the device ground connection. Cable testing or “phasing out” testing may be accomplished by connecting suitable test equipment, as required to the terminals.

A dummy secondary cord bracket is provided (figure 3) to work with the device when the device needs to be inserted into or drawn out of the cassette (figure 4).
Figure 3: Dummy secondary cord bracket

Figure 4: Put on or take off the dummy secondary cord bracket