

# High Voltage Ground Monitor



Part Number 17-0009

## Application

The Line Power Manufacturing High Voltage Ground Monitor is an impedance-type ground monitor that can operate in either of two modes: UVR Mode or Non-UVR mode. Mode selection is made by changing the position of the "C1" lead on the rear of the unit. The unit is normally shipped wired in the UVR Mode. The UVR mode is fail-safe where the Non-UVR mode is not fail-safe.

In the UVR Mode, the monitor relay will energize when control power is present and the pilot-ground loop is complete with normal continuity. If the ground loop is "lost" (impedance increases 3 ohms or more after proper initial adjustment of the unit) the monitor relay will trip (de-energize) and the face plate indicator will indicate "Tripped". The monitor is shipped wired for manual ("lockout" or "hand reset mode") and can be wired for

automatic reset by the addition of a jumper on the rear terminals. When this jumper is added, the trip indicator continues to function, but the relay will automatically reset when the ground loop is restored.

In the Non-UVR Mode, the relay is normally de-energized. The relay energizes to perform a trip function only when control power is present and the ground loop is open. To utilize the advantages of the monitor in the Non-UVR mode, the associated circuit breaker must employ a potential trip device. As with the UVR mode, the lock-out function can be defeated with a jumper. With this jumper (while in the Non-UVR mode) the relay states are reversed (lock-out puts the relay into an energized state instead of de-energized.)

## Features

A 0.25 second time delay is incorporated into the monitor to prevent relay trip from occurring when power is removed and re-applied in the Non-UVR mode.

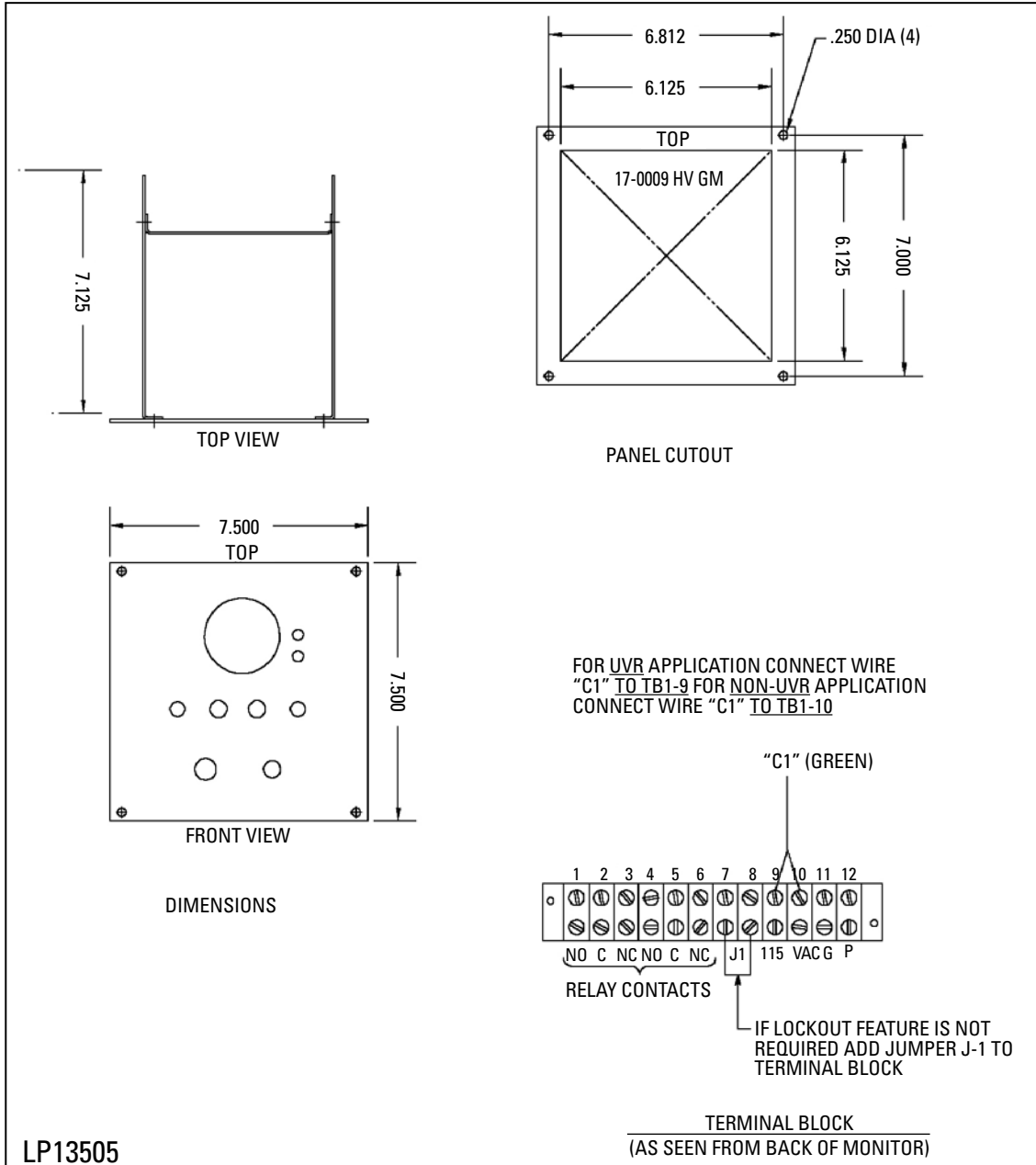
## Initial Adjustment

The monitor must be adjusted for the particular installation with its cable at the time it is commissioned into service. Full adjustment instructions are printed on the face plate of the monitor. Also at this time, the polarity switch position should be set according to the instructions on the monitor face plate. The monitor can be adjusted for operation with up to 15 ohms total pilot-ground loop impedance.

## Specifications

**Control Power:** 115 VAC, +/- 15% Continuous<sup>1</sup>  
**Pilot Output:** Maximum 16 VAC, 50/60 Hz.  
 Maximum 1.5 Amps.  
**Operating Temperature:** + 10° F to +120° F

<sup>1</sup> Allowed dip will vary from installation to installation. However, generally a 30% dip will not cause problems. Should dips greater than 30% be anticipated, the addition of a constant voltage transformer (50/60 Hz, 100 VA Minimum) is recommended.



**Specifications subject to change without notice.**

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