

# Hoffman|Controls

## Installation & Operating Instructions

## 905 Series Single Phase Power Switch

### General

The 905 Series Power Switch is the recommended replacement for the previous 900 Series of single phase power switches being controlled by Hoffman Controls 901-D/DP Series Logic.

Three models are available to accommodate all line voltage applications: 905-120/277, 905-347/480, and 905-600. All units are capable of handling line currents up to 48 Amps in capacity.

The 905 Series Power Switch also includes an optional Thermal Cut Out control. The power switch temperature is monitored and the unit safely disabled if temperatures exceed rated limits.

### 900 Series Upgrade

The 905 Series Power Switch is 100 % electrically compatible with the 900 Series Power Switch in that both units utilize a simple 4 wire flying lead connection scheme. There are 2 power leads to connect the switch in series with the load, and 2 signal leads to activate the power switch. The required connections are shown in Figure 1.

Connections for the 900 Series Power Switch are present at the end of an electronics tube that protruded into the control cabinet through an approximately 2.0" diameter hole. The 905 Series Power Switch has eliminated the need for this space consuming configuration.

A new rectangular cutout will be required in the control cabinet to access the lower profile connections and provide appropriate clearance of terminals. A full size mounting template for accommodating the 905 Series Power Switch is shown in Figure 2.

While a new cutout is required for the 905 Series Power Switch connections, the heatsink mounting holes utilized for the 900 Series Power Switch product will be suitable for the 905 Series Power Switch product. The 905 Series Power Switch product will continue to mount vertically to the external surface of the control cabinet for ventilation.

The depth of the heatsink protrusion on the back panel of the control cabinet has not changed and remains approximately 3.0".

The 905 Series heatsink is 1.0" taller / longer than that of the 900 Series Power Switch (5.0" vs. 4.0" respectively), and may require additional clearance on the outside of the control cabinet.

### Installation

1. Remove all power to the control cabinet and load.
2. Disconnect wiring to 900 Series Power Switch.
3. Remove heatsink mounting hardware and remove 900 Series Power Switch.
4. Cut new rectangular access hole 2.0" wide by 4.5" high. This hole should be centered around the existing circular hole from the 900 Series Power Switch. Clean and de-burr edges as needed.
5. Install the 905 Series Power Switch and secure it with the hardware removed in #3 above.
6. Re-establish load wiring as previously configured to the RED / BLK line voltage connections.
7. Connect the W1(+) control signal of the 905 Series Power Switch to the 24VAC OUT 4 terminal of the 901-D Series Logic.
8. Connect the W2(-) control signal of the 905 Series Power Switch to the 24VAC OUT 3 terminal of the 901-D Series Logic.
9. Refer to Figure 1 for determining control signal connection points on 901-D Series Logic.
10. Restore power and prepare for checkout with your desired input to the 901-D Series Logic.

### Checkout

When retrofitting an existing 900 Series Power Switch, the 901-D/DP and signal source are assumed to be functioning normally. Checkout consists of generating demand with the signal source and verifying 905 Power Switch operation via it's indicator led or monitoring the load.

For complete re-calibration instructions (if required) refer to HCC Document #176-0171-000, 901-D and 901-DP Recalibration Procedures.

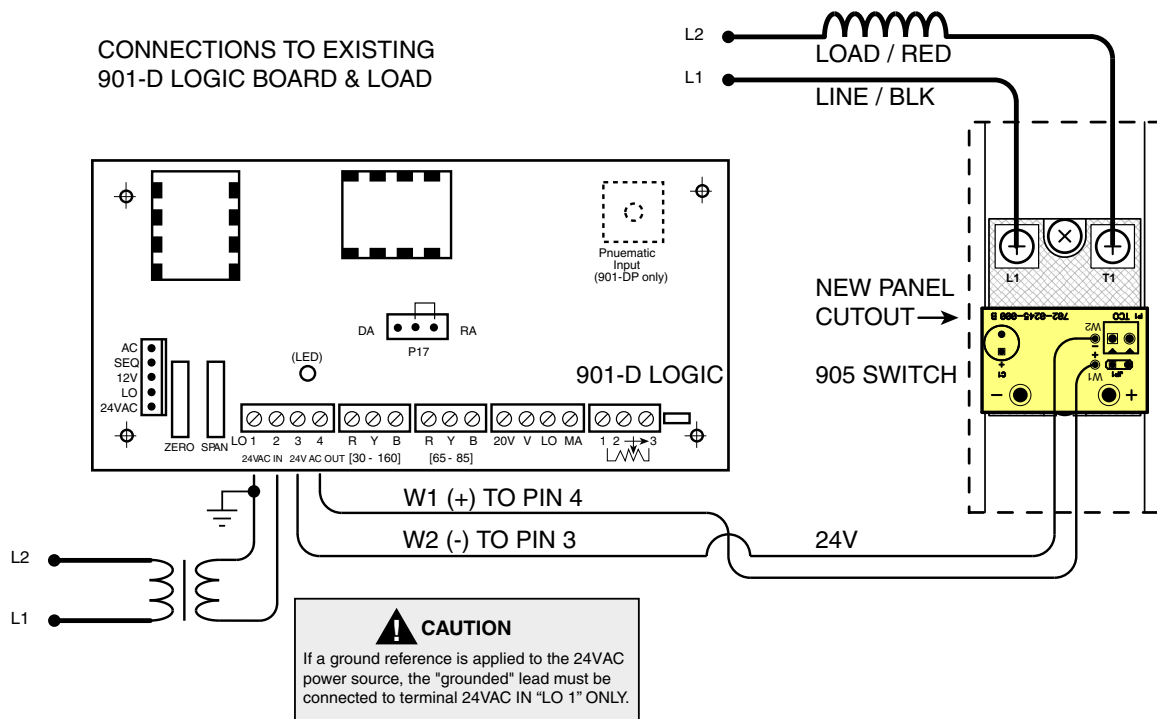


Figure 1 - Wiring Diagram for the 905 Series Power Switch

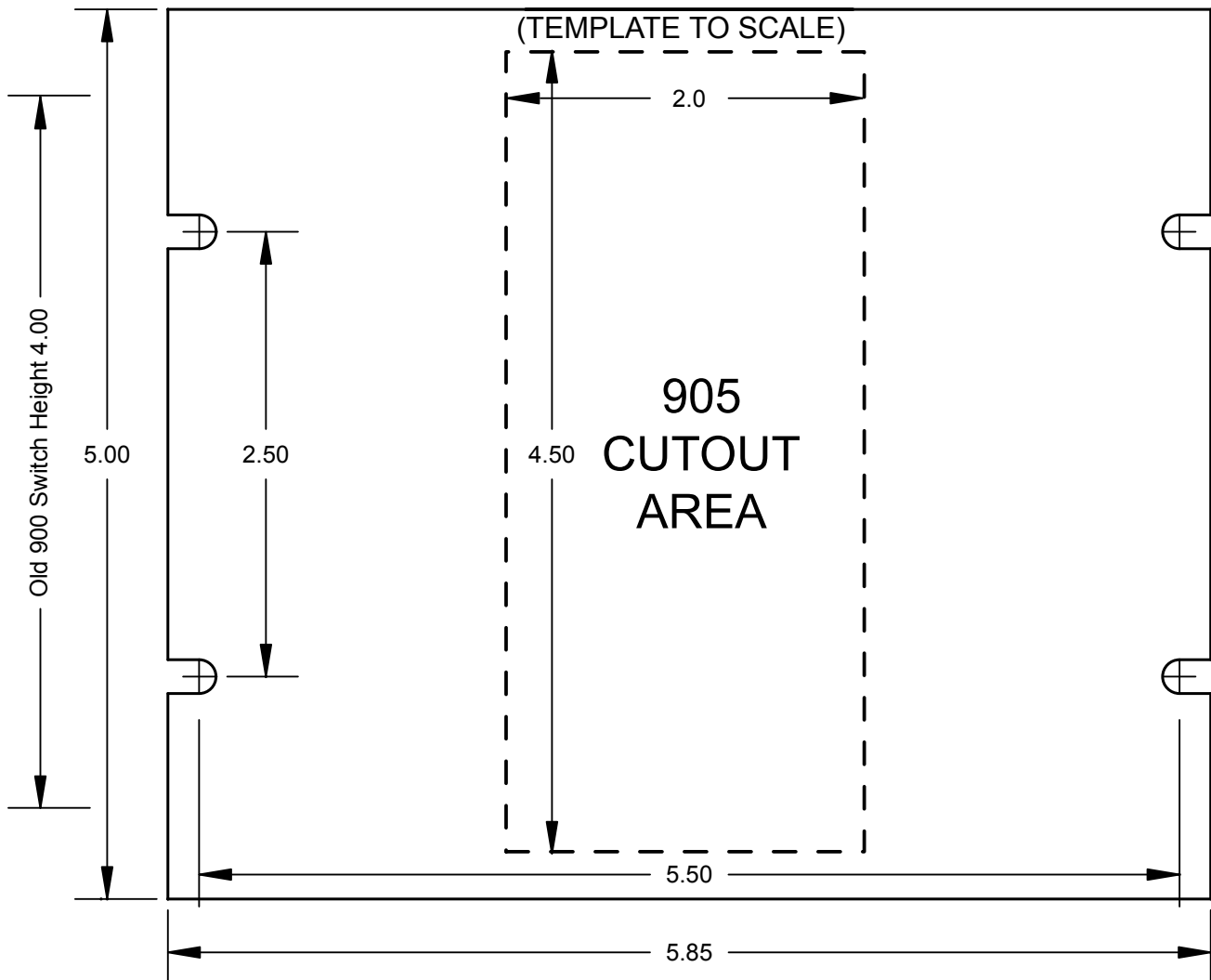


Figure 2 - Dimensions & Mounting Hole Positions

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