

**Overview**

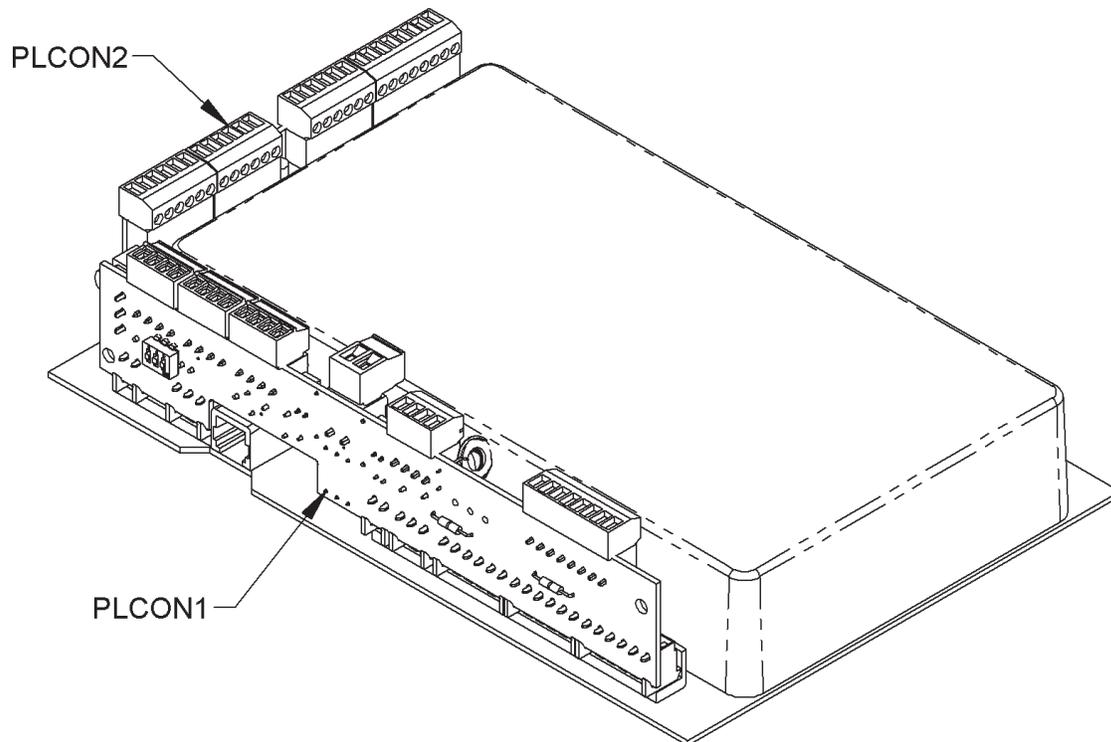
The PLCON modules are designed to simplify the field wiring of Carrier<sup>®</sup> PremierLink<sup>™</sup> direct digital controllers. The modules provide an additional layer of protection for the controller, as well as a power ON/OFF switch and indicator light for future troubleshooting or controller resetting.

Field wiring is easier because the PLCON modules eliminate the need for special tools or hard-to-find connectors. All wires terminate in labeled, pluggable screw terminals on the PLCON so the only tools that a technician needs are a wire stripper and a small screwdriver.

The PLCON1 slips onto the power, communications, analog output and digital output connectors on the PremierLink<sup>™</sup> controller. It includes a power ON/OFF switch, a power pilot light, a self-resetting 1.6 amp fuse and an MOV for an additional layer of protection against power surges.

The three communications connectors simplify system wiring and additional transient protection on the PLCON1 ensures reliable communications in the most challenging environments. A four-conductor plug on the PLCON1 provides power and feedback for the economizer actuator while the eight-pole connector provides termination for the relay outputs. A second transformer can be used to power the relay outputs by simply cutting a jumper wire on the PLCON1.

The PLCON2 module slips onto the analog and digital input connectors on the PremierLink<sup>™</sup> controller. The PLCON2 provides a pluggable screw terminal for every input connection as well as a self-resetting 0.9 amp fuse for each air quality sensor.

**Mounting****Figure 1**

PLCON1 and PLCON2 attached to Carrier<sup>®</sup> Premier Link controller.

Specifications subject to change without notice.

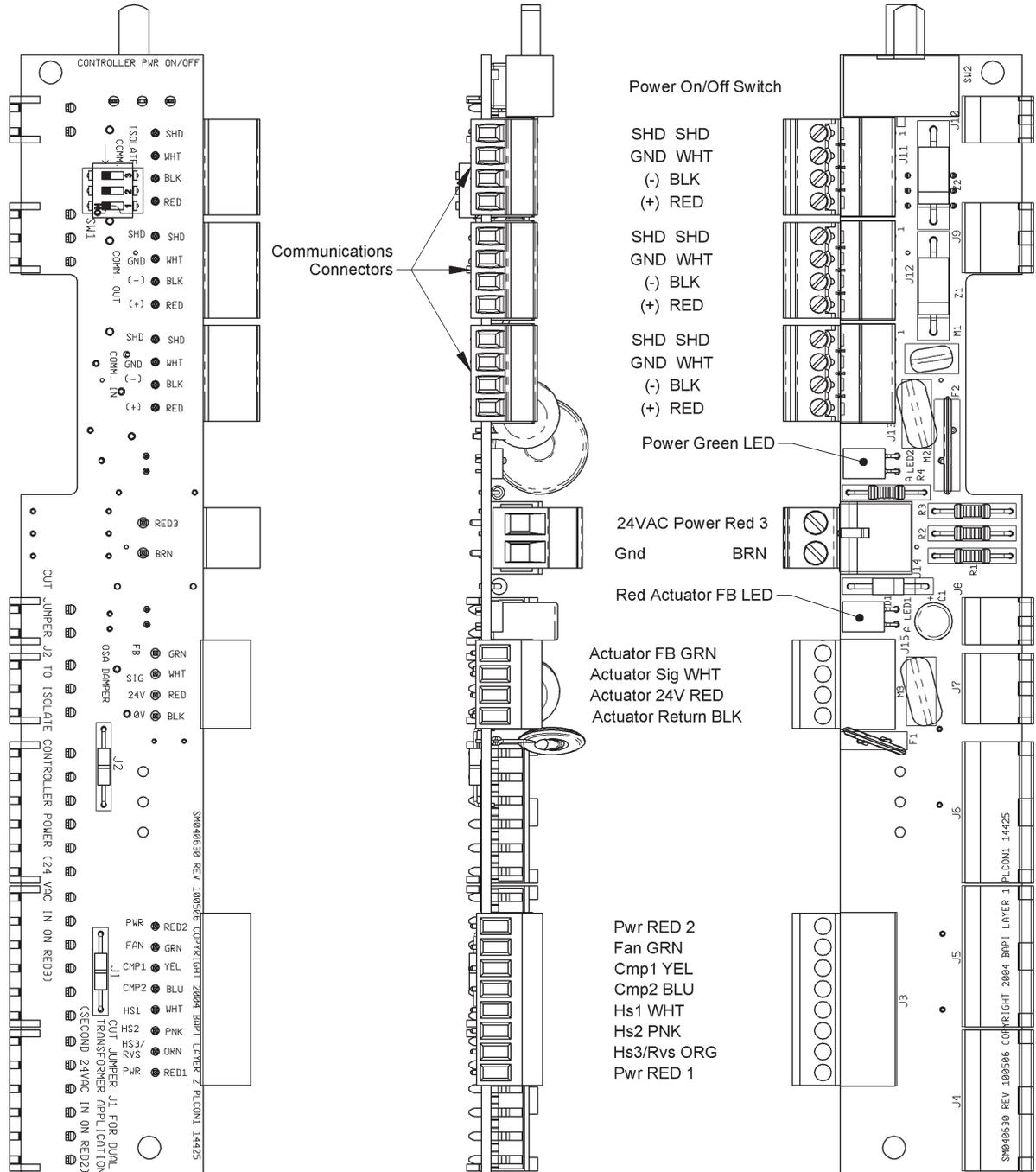
**Termination - PLCON1**

For controller specific terminal applications see the applicable Carrier® literature.

The male connectors that plug into the jacks on the board use a rising block screw terminal to hold the wires. It is possible for the block to be in a partially up position allowing the wire to be inserted under the block. Be sure that the male connector screws are turned fully counterclockwise before inserting the wire. Lightly tug on each wire after tightening to verify proper termination.

**Note: SW1 toggles must be down towards Premier Link controller circuit board, or ON for communications to work.**

**Figure 2**  
PLCON1



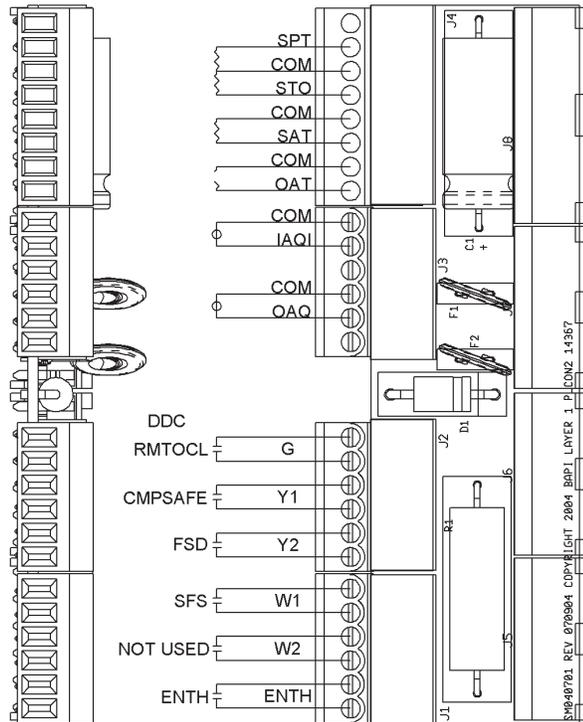
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**Termination - PLCON2**

For controller specific terminal applications see the applicable Carrier® literature.

The male connectors that plug into the jacks on the board use a rising block screw terminal to hold the wires. It is possible for the block to be in a partially up position allowing the wire to be inserted under the block. Be sure that the male connector screws are turned fully counterclockwise before inserting the wire. Lightly tug on each wire after tightening to verify proper termination.

**Figure 3**  
PLCON2


**Troubleshooting**
**Possible Problems:**

General Troubleshooting

**Possible Solutions:**

- Determine that the input is set up correctly in the controller's and building automation software.
- Check wiring for proper termination
- Check for corrosion at either the controller or the sensor. Clean off the corrosion, re-strip the interconnecting wire and reapply the connection. In extreme cases, replace the controller, interconnecting wire and/or sensor.
- Label the terminals that the interconnecting wires are connected to at the sensor end and the controller end. Disconnect the interconnecting wires from the controller and the sensor. With the interconnecting wires separated at both ends measure the resistance from wire-to-wire with a multimeter. The meter should read greater than 10 Meg-ohms, open or OL depending on the meter you have. Short the interconnecting wires together at one end. Go to the other end and measure the resistance from wire-to-wire with a multimeter. The meter should read less than 10 ohms (22 gauge or larger, 250 feet or less). If either test fails, replace the wire.

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