

# PSH24 Series

## Installation Instructions

### Application

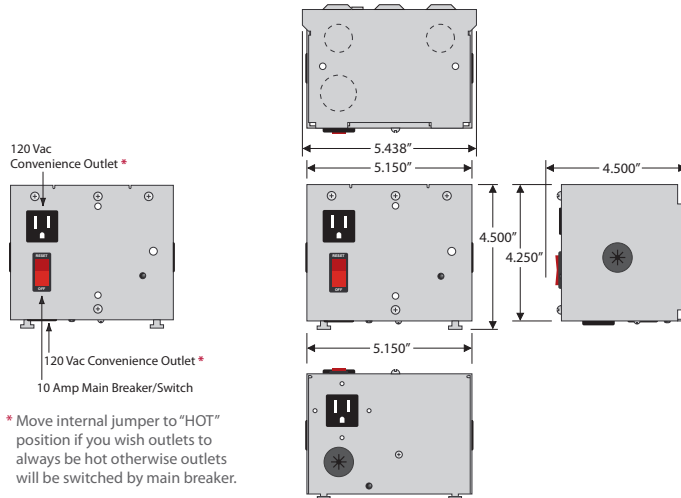
These general-purpose power supplies can be used to fulfill all the 120Vac and 24 Vdc power requirements needed inside a building automation (BAS) panel, industrial enclosure, or other general purpose electrical

enclosure, in addition to on/off control, equipment over-current protection, and convenience receptacle. They are also useful for many applications outside of BAS.

### PSH24DWB10

Enclosed Single Switching DC Power Supply 120 to 24 Vdc @ 2.5 Amp

### DC Power Supply – 120 Vac to 24 Vdc



### Specifications

**Input Voltage:** 120 Vac  
**Frequency:** 50/60 Hz  
**DC Output:** 24 Vdc @ 2.5 Amp  
**Over Current Protection:** Circuit Breaker  
**Main Breaker ON/OFF:** Switch / Breaker (10 Amp)  
 (Kills power to entire unit)\*  
 Total Combined Output 9A  
**Operating Temperature:** 32 to 122°F  
**Dimensions:** 4.500" x 5.438" x 4.500"  
**Weight:** 2.980 lbs.

**Input Wires:** Input Power Wires  
 BLK: 120 Vac  
 WHT: Neutral  
 GRN: Ground

**Output Wires:** DC Supply Output  
 WHT/RED: 24 Vdc  
 WHT/BLU: 24 Vdc COM

Auxiliary Output  
 BLU: 120 Vac

**Notes:**  
 • This device is not certified for use as a Class 2 power source.

## Installation

### When installing this Product...

1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
2. Check the product ratings and ensure that the product is suitable for your application.
3. Installer must be a trained, experienced service technician.

4. After installation is complete, perform a voltage check as provided in these instructions.

### CAUTION

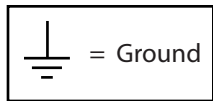
RISK OF ELECTRICAL SHOCK - MORE THAN ONE DISCONNECT MAY BE REQUIRED TO DE-ENERGIZE THE DEVICE BEFORE SERVICING.

### CAUTION

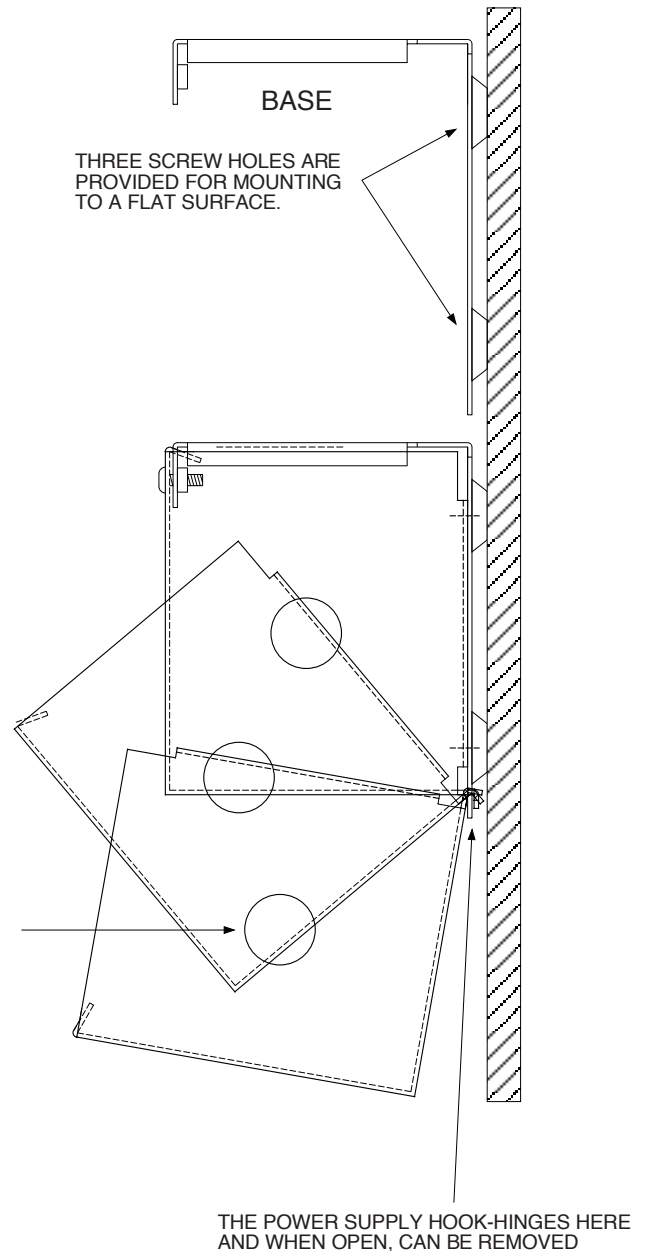
REMOVAL OF COVER OR ACCESS PLATE (IF PRESENT) EXPOSES HIGH VOLTAGE.

## Mounting

1. Remove the front of the power supply from the base by extracting the two screws in the top front of the power supply.
2. Mount the base of the power supply by using the provided screw holes to any flat surface.
3. The front of the power supply can then be reconnected to the base (after mounting) by using the hook hinges at the bottom of the base.
4. Let the front of the base hang free from the hinges while making the appropriate wiring connections. (see wiring instructions)
5. Close the power supply by hinging upwards and replacing the screws from the top front of the power supply.



WIRES CAN ENTER THE HOUSING THROUGH OPENINGS ON EACH SIDE AND BOTTOM THAT ARE PROVIDED WITH UL RECOGNIZED CAPS TO ALLOW ENTRANCE OF JACKETED WIRES (OR CAN BE REMOVED FOR CONNECTION OF 1/2" CONDUIT).



## Wiring

All wiring must comply with local codes and ordinances. Disconnect power before making wiring connections to prevent electrical shock or equipment damage.

**Note:** Use copper wire, 18 AWG minimum with insulation rated for 60°C minimum.

Input Power:

Line voltage 120 Vac = Black wire

Neutral = White wire

Ground = Green wire

Line voltage can be brought into power supply from 1 of 3 options:

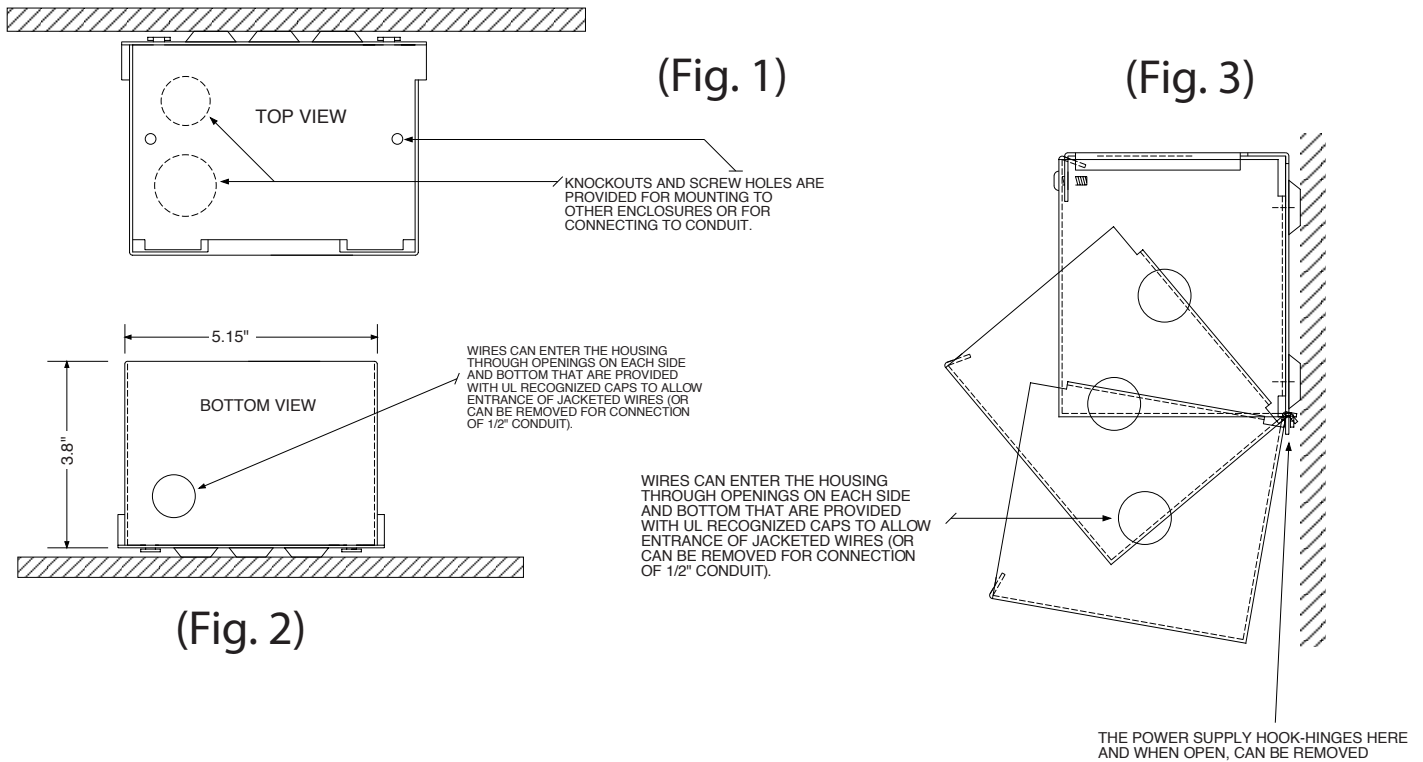
1. Bring wiring into one of two sized knockouts on the top of the base of the power supply while the front of the power supply is hinged down from its hinge hooks. Be sure to use proper connections for available power supply and make wire connections appropriately using wire nuts (see Fig. 1).

## Wiring (cont.)

2. Bring wiring into one the two openings on the side of the power supply while the front of the power supply is hinged down from its hinged hooks. Star grommet may be removed if using conduit for the connection. Be sure to use correct leads for available power supply and make wire connections appropriately using wire nuts (see Fig. 2).

3. Bring wiring into opening on the bottom of the power supply and then hang the power supply on the hook hinges of the base. Star grommet on bottom can be removed if using conduit for the connection. Be sure to use correct leads for available power supply and more wire connections appropriately using wire nuts (see Fig. 3).

**Note:** All field wire leads are intended for installation inside the enclosure.



## Voltage Check

After installation is complete, turn on power supply and perform a voltage check:

1. Place controlled equipment in operation and observe through one complete cycle.
2. Using a voltmeter, check for proper primary and secondary voltages.
3. If voltage readings are incorrect, be sure primary voltage connections are made correctly.
4. Measure voltage again:
  - a. If correct primary voltage is measured and secondary voltage is significantly less than 24Vdc, the unit is damaged. Replace transformer and repeat checkout procedures.
  - b. If primary voltage is 0V, be sure power supply is connected correctly or repair, if necessary. Repeat checkout procedures.