

SP-MBS-12-15KVA-2

INSTALLATION AND USER GUIDE

SP-MBS-12-15KVA-2

Installation Instructions for bypass panel

This is a bypass panel manufactured for Powervar. It is intended for use as a bypass switch for the UPS protecting critical loads.

The power circuitry is enclosed in a forced air cooled metal enclosure. Visible from the front of the unit is the bypass switch operating handle.

Access is through the front by use of a screwdriver to remove the front cover. Disconnect all sources of supply (Utility power and UPS power) prior to working on electrical equipment including the bypass and any downstream distribution or loads. It is recommended that a licensed electrician install and troubleshoot the equipment.

This unit is HEAVY, take necessary safety precautions to prevent injury. Locate the panel in a convenient location within sight of the UPS. The unit should be installed within sight of the UPS. Be sure to keep the rear vents clear of any obstructions, failure to do so will result in damage to the unit.

Conduit entry can be at the upper left or upper right side of the enclosure toward the front. Rear entry can be at the lower right side. Bottom entry is available through an access plate (remove to punch and replace). Cover any internal components when punching or drilling through enclosure walls.

Incoming and outgoing wires to be terminated at the terminal block located at the upper rear section of the unit. Input from utility power (208VAC, 1PH, 60Hz, L+L+G), input from the UPS output (240/208/120, 1PH, 60Hz, L+L+L+N+G), output to UPS input (208VAC, 1PH, 60Hz, L+L+G), and output to the load (240/208/120, 1PH, 60Hz, L+L+L+N+G) will be hardwired observing local NEC codes. Wiring to be rated for 100 amps. Utility input protection by others. Refer to UPS operating and installation instructions for actual connections needed for the application.

Check for tightness of all the connections inside the panel. Some wires might have worked themselves loose during shipping and handling. Insure that all connections are tight before applying power to the panel.

Observe proper cable sizing per NEC or local codes. Observe proper phase sequence when hooking up the panel.

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Installation Instructions for bypass

All hardwired inputs and outputs are to be made to the terminal block in the upper section of the backpanel. There are individual terminals for all connections. Follow NEC or local code requirements for wire sizing.

UPS operation:

The bypass switch should be in the “Normal” position. Conditioned power is output from the UPS to the critical load.

TEST operation:

In the event that the UPS needs to be serviced or replaced, rotating the bypass switch to “Test” will reroute the utility power around the UPS through the bypass contacts on the switch to power the load. It is recommended to place the UPS in internal bypass prior to switch operation. Check the UPS installation manual to determine how to perform this operation. This mode also provides power to the input of the UPS for test purposes.

BYPASS operation:

In the event that the UPS needs to be isolated for service or to be replaced, rotating the bypass switch to “Bypass” will reroute the utility power around the UPS through the bypass contacts on the switch to power the load. The UPS will be fully isolated from this panel in this mode. A qualified technician should use proper safety guidelines when working on the UPS. Always confirm that power has actually been removed prior to working on any equipment.

General Specifications:

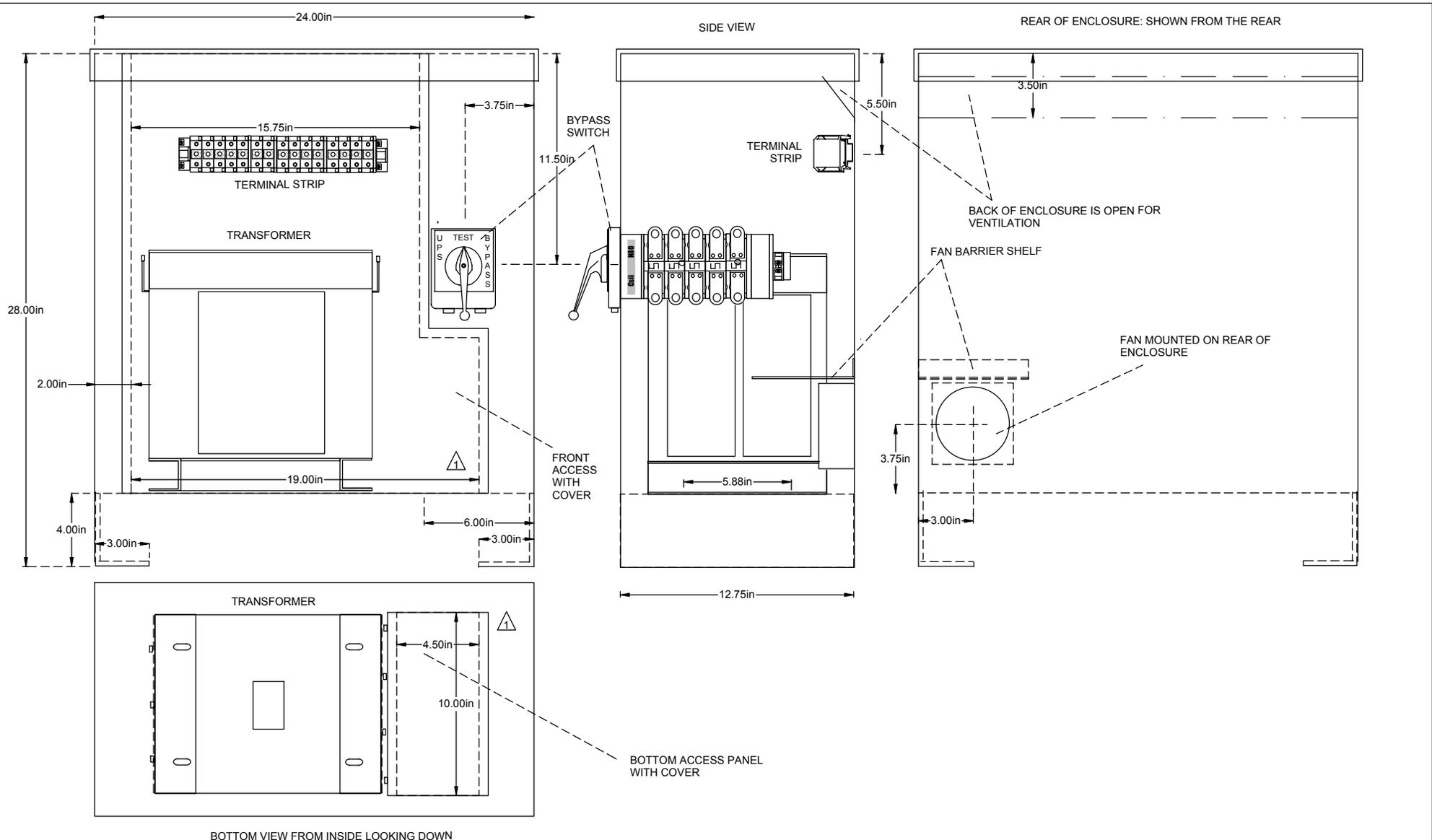
Utility Input: 208VAC, 1PH, 60Hz, hardwired

UPS Input: 208VAC, 1PH, 60Hz, hardwired

UPS Output: 240/208/120VAC, 1PH, 60Hz, hardwired

Output to Load: 240/208/120VAC, 1PH, 60Hz, hardwired

Ampacity rating: 100 amps



NOTES:  OPENINGS SHOWN WITH DASHED LINES, AND COVERS OVER THE OPENINGS ARE IN RED

PART NUMBER SP-MBS-12-15kVA-2
Reference: BPT100-4P-N1-00

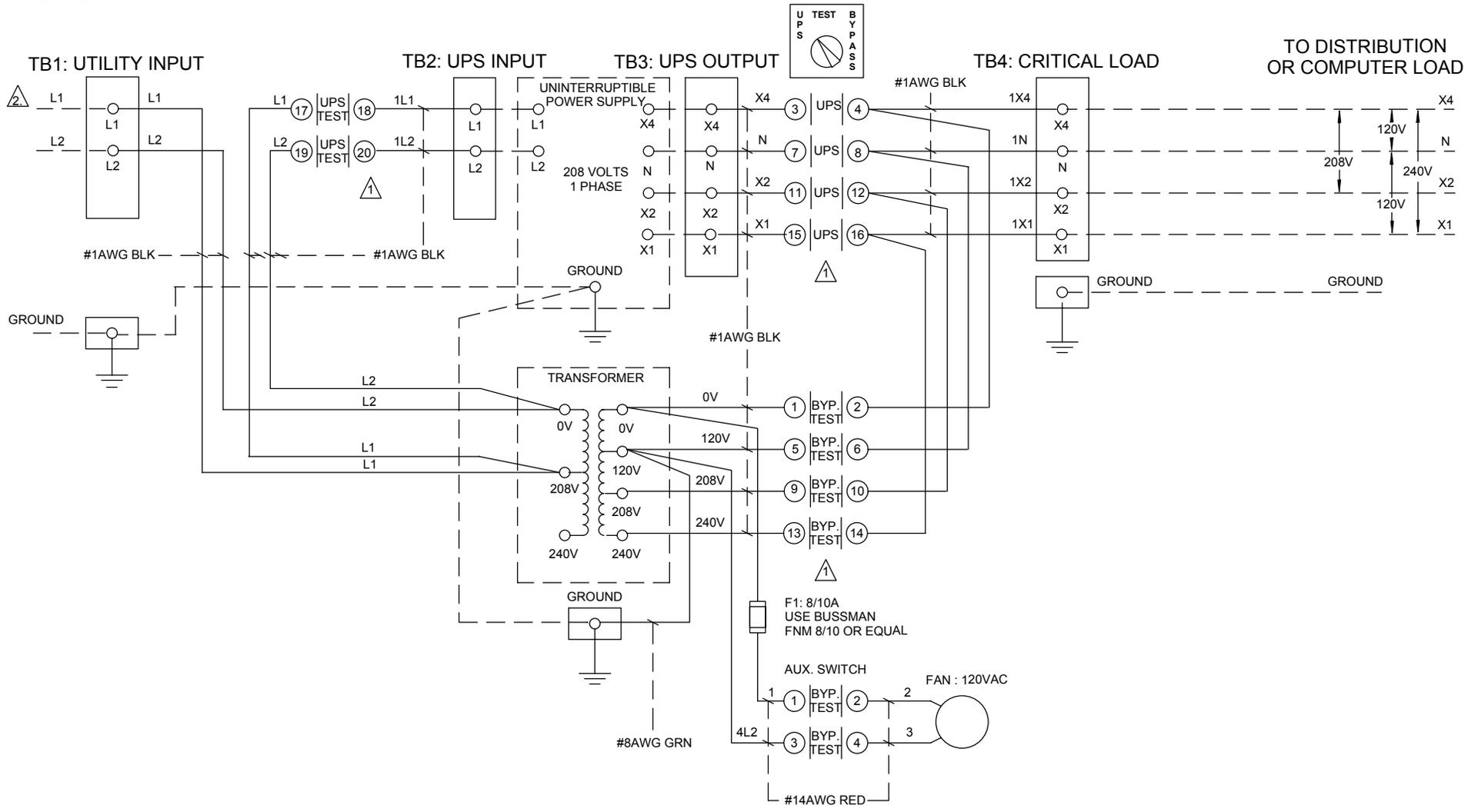
REV.	DATE:	DESC.:	APPR :
REV. A:	07/06/10	Modifications include moving fan and grill to rear of encl.	D.U.
REV. B:	08/05/10	Changed logo and P/N to Powervar	D.U.
REV. C:	08/25/10	Changed desc. per customer	D.U.
REV. D:			
DRAWING NO:		BPT100-4P-N1-00-D-0510	

POWERRAR
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 1450 Lakeside Drive, Waukegan, IL 60085
 www.powervar.com

DESCRIPTION 12-15kVA MBS WITH ISOLATION TRANSFORMER (100 AMP)
DRAWN BY: MFN **DATE:** 05/11/10 **APPROVAL :** D.U. **DATE:** 05/11/10

INCOMING POWER 208 VOLTS AC, 1 PHASE, 3 WIRE, 60Hz
 INTERNAL CABLE: #1 AWG (130A)
 PANEL RATED FOR 100A

BYPASS SWITCH



NOTES:

- ⚠ SWITCH CONTACTS ARE "MAKE-BEFORE-BREAK" CONTACTS MARKED "UPS" ARE CLOSED IN THE "UPS" POSITION. CONTACTS MARKED "TEST" ARE CLOSED IN THE "TEST" POSITION. CONTACTS MARKED "BYP" ARE CLOSED IN THE "BYPASS" POSITION.
- ⚠ MAIN DISCONNECT AND BRANCH CIRCUIT PROTECTION PROVIDED BY OTHERS

PART NUMBER
SP-MBS-12-15kVA-2

Reference: BPT100-4P-N1-00

REV.	DATE:	DESC.:	APPR :
REV. A:	08/25/10	Changed desc. per customer	D.U.
REV. B:			
REV. C:			
REV. D:			

DRAWING NO: BPT100-4P-N1-00-S-0810

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RATING INFORMATION:

VOLTAGE: 240/208/120VAC, 60 HZ

PHASE: SINGLE PHASE

FULL LOAD CURRENT: 100 AMPS

INTERRUPT RATING: 5KAIC SYM @ 600VAC

TYPE 1 ENCLOSURE

CONTACT INFORMATION:

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