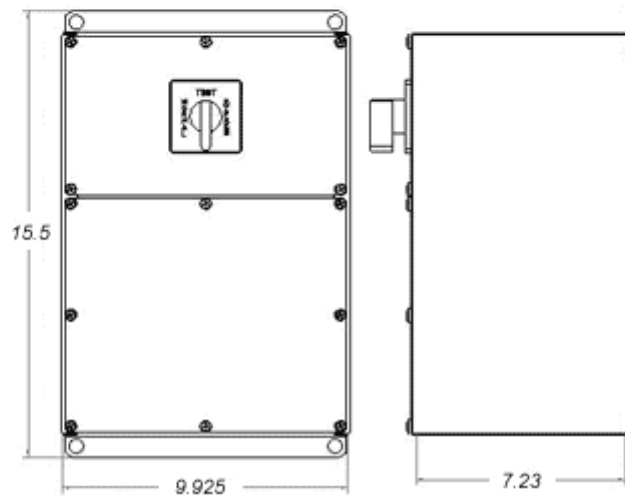


93802-40,50,63

Maintenance Bypass Switch

Installation Manual



INTRODUCTION

The maintenance bypass switches allow the user to put the system in three modes: normal, test, and bypass. All switches are the 'make-before-break' type, guaranteeing a connection at all times.

Normal connects the utility power to the UPS input, which then outputs to the load.

Test disconnects the UPS output to the load, but still maintains utility power to the UPS input and the load.

Bypass connects the utility power directly to the load, bypassing the UPS entirely.

The switches are available in three basic models:

Model	Rating
93802-40	40A @ 120VAC Single Phase, 3 wire
93802-50	50A @ 208VAC Single Phase, 3 or 4 wire
93802-63	63A @ 208VAC Single Phase, 3 or 4 wire

All switches are tested at the factory prior to shipment to ensure product quality.

SALES SUPPORT

Sales support for future equipment or upgrades is provided by our regional sales staff and qualified representatives. All technical questions and service issues should be directed to our main office by dialing the number listed below. This is a 24-hour, 7-day service number. After normal working hours, please leave a detailed message on the voice mail system and a qualified service representative will contact you as quickly as possible.

C&C Power, Inc.
949 North Larch Avenue
Elmhurst, IL USA 60126
Phone: 1-630-617-9022
Fax: 1-630-617-9023

PRECAUTIONS

It is very important to read, understand, and follow the instructions in this manual. Note all SAFETY PRECAUTIONS before installing or performing maintenance on this system.

This is a high voltage switch, capable of working with 120v to 240v inputs. Always make sure main cables are disconnected before attempting installation.

When installing this power system, follow all applicable federal, state, and local regulations and industry guidelines to insure proper installation.

INSPECTION UPON RECEIPT OF GOODS

General: Special precautions and care have been taken to ensure that the panel arrives safe and undamaged. However, upon receipt, inspect the entire shipment, including the crate and/or box, if applicable, for evidence of damage that may have occurred during transit.

Visible Damage: It is the responsibility of the person receiving the shipment to inventory and fully inspect all materials against the bill of lading or weigh bill IMMEDIATELY, while the carrier representative is present.

Verify that all items are accounted for, including number of skids and quantity of boxes. Also note any visible external damage that may have occurred during transit. Make all applicable notations on the delivery receipt before signing and file a damage report with the carrier.

Concealed Damage: Within 15 days of receipt, unpack the disconnect panel and check for any concealed damage. Check the materials received against the detailed packing list to verify the quantity and the condition as complete and satisfactory.

Note any damage to the internal packaging, then request an inspection by the carrier and file a concealed damage claim. If there is a material shortage, contact a C&C Power, Inc. representative at the main office to file a claim.

Please contact your C&C Power, Inc. representative if you have any questions concerning potential damages, or if you experience a lack of cooperation from your carrier, as soon as possible.

Return of Damaged Goods

If equipment is damaged and requires return to C&C Power, Inc. for repair, a representative will provide instructions along with a Return Material Authorization (RMA) number to expedite the return.

An RMA number must be obtained before returning equipment to C&C Power, Inc.

INSTALLATION PROCEDURES

Preparation:

Equipment Inspection: Remove the equipment from the packaging material and inspect for any shipping damage that may have been overlooked upon receipt of goods. Verify that the system includes all necessary hardware for installation.

Necessary Equipment and Tools:

- Heavily insulated assortment of hand tools
- Digital voltmeter

SAFETY PRECAUTIONS

WARNING! HIGH VOLTAGE

High voltage power can be hazardous. Except in the case of system maintenance, by qualified personnel, keep the switch closed at all times.

IMPORTANT!!!

- The disconnecting means should be in the open/off position before servicing.
- All jewelry and watches should be removed before servicing equipment.
- All tool handles and shafts must be heavily insulated.

GENERAL

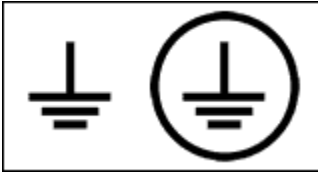
Mounting: Two mounting brackets are provided at the top and bottom of the box with ½" mounting holes. The switches will arrive in a sealed enclosure. It is up to the customer to create the necessary punches in order to route the connections. We suggest connecting through the bottom of the switch.

Input Ratings: These switches are designed for 120VAC (model -40) or 208VAC (models -50, -63) inputs.

Terminal Block Connections: Input and output connections are made via terminal block. Please refer to the terminal block schematic drawings on the following pages for the appropriate bypass switch. For the -40 and -50 model systems, 10ga cable is used. For the -63 model systems, 8ga cable is used. Terminal blocks are screw-type, and should be tightened to proper torque ratings. Be sure to use only copper wire for connections.

Model	Terminal Block Torque Rating
93802-40	35 in/lb max
93802-50	35 in/lb max
93802-63	32 in/lb max

Note: Pay attention to the grounding labels on the switch:



The left symbol indicates a normal circuit ground.

The right symbol indicates a safety ground, most often a terminal attached to the chassis and grounded to earth.

INSTALLATION

Each switch has four main terminal blocks: Utility input, UPS input, UPS output, and Critical Load.

1. Begin by mounting the bypass switch in the appropriate location
2. Ensure that the utility power is off
3. Remove the bottom front cover of the switch using a Phillips head screwdriver
4. Connect your utility input to terminal block 1 (labeled 'utility input')
NOTE: Be sure to use the proper torque ratings for tightening the terminal blocks. Excessive heat may be created if connections are loose. See the table on the previous page.
5. Connect terminal block 2 (labeled 'UPS input') to the input of your UPS
6. Connect terminal block 3 (labeled 'UPS output') to the output of your UPS
7. Connect terminal block 4 (labeled 'critical load') to your load
8. Connect your ground to either the mechanical lug (model -40,-50) or the grounding busbar (model -63)
9. Replace the bottom front cover, sealing the unit
10. You may now turn your utility power back on.

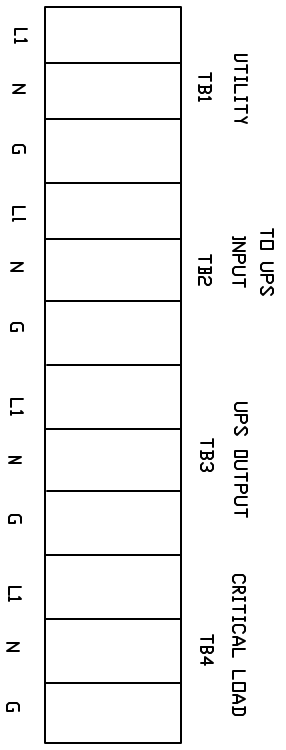
SPECIFICATIONS

Voltage and Current Ratings:

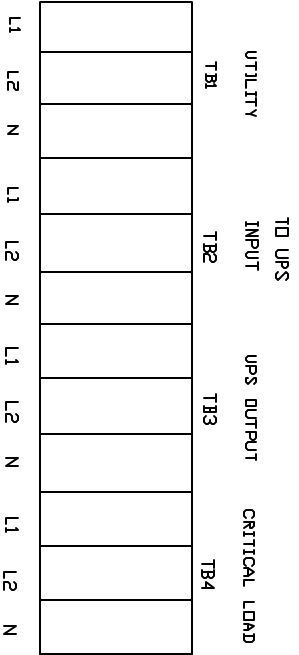
93802-40	40A @ 120VAC Single Phase
93802-50	50A @ 208VAC Single Phase
93802-63	63A @ 208VAC Single Phase

Dimensions: 9.9"W x 7.5"D x 14"H

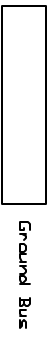
Listed to UL STD 1778 and certified to CSA STD C22.2 NO. 107.1



TERMINAL BLOCK LAYOUT FOR 40 AMP BYPASS SWITCH



TERMINAL BLOCK LAYOUT FOR 50 AND 63 AMP BYPASS SWITCHES



LIMITED WARRANTY AND EXCLUSIONS

C&C Power, Inc. strives to produce quality products at reasonable prices. If you are not satisfied with our product because of a defect, we will repair or replace the defective part or parts free of charge for a period of one year from the date of purchase. In the event you claim that the product contains a defect, simply notify C&C Power, Inc. of the defect, and we will arrange for repair or replacement. The **sole** and **exclusive** remedy against C&C Power, Inc. relating in any way to a product defect shall be the repair and replacement of defective parts as provided for under this **LIMITED WARRANTY**. No other remedy, including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss is available. This **LIMITED WARRANTY** shall not be deemed to have failed of its essential purpose so long as C&C Power, Inc. is willing and able to repair or replace defective parts in the manner prescribed in this **LIMITED WARRANTY**.

Certain integrated products which are not manufactured by C&C Power, Inc., will be warranted by the applicable manufacturer. These warranties shall be between the manufacturer and the user. Terms and conditions may vary. These integrated products include, but may not be limited to, the following products, batteries, inverters, and UPS systems.

Any action for breach relating to the sale of an C&C Power, Inc. product must be commenced within one year after the cause of action has occurred. THIS **LIMITED WARRANTY** IS IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, AND ALL SUCH WARRANTIES ARE EXCLUDED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF **MERCHANTABILITY** OR FITNESS FOR A PARTICULAR PURPOSE.