USER MANUAL EXTERNAL MAINTENANCE BYPASS SWITCH

for UPS 10,000 – 20,000 VA, 3/3-phase

Version: 10/2026

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Imprint

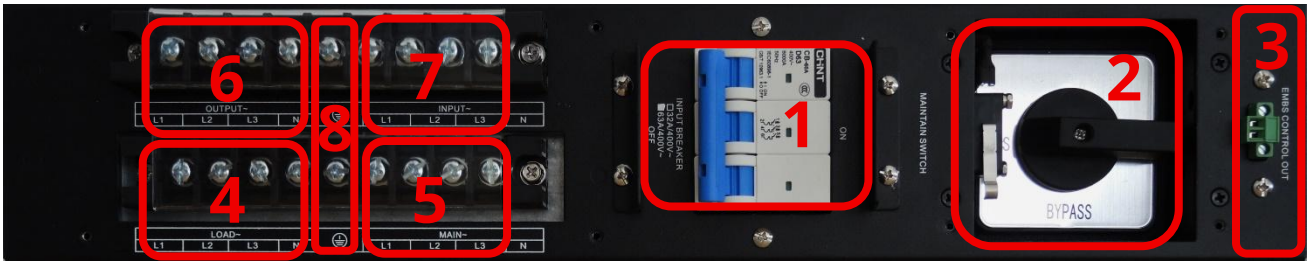
USER MANUAL EXTERNAL MAINTENANCE BYPASS SWITCH

for UPS 10,000 – 20,000 VA, 3/3-phase

1 Introduction

The module is used as an external maintenance bypass switch to provide continuous power without shutting down the connected loads during UPS scheduled maintenance or battery replacement. It is perfect to use in conjunction with 3-phase in/3-phase out 10K/20KVA UPS.
The module can be installed in a 19" rack.

2 Product Overview



1. UPS Input Breaker
2. Maintenance bypass switch (with Maintenance switch cover)
3. Control output signal connector (not used)
4. Output terminal (to load)
5. Utility input terminal (from utility)
6. UPS output terminal
7. UPS input terminal
8. Grounding terminal

Technical Data

Dimensions	88 mm x 440 mm x 195 mm (height x width x depth)
Weight	3,8 Kg

3 Installation

Inspection

Scope of delivery:

- Maintenance bypass switch module x 1
- Quick guide x 1
- Control signal cable x 1 (not used)

> **Please Note**
> Before installation, please inspect the unit. Be sure that nothing inside the package is damaged during transportation. Do not turn on the unit and notify the carrier and dealer immediately if there is any damage or lacking from some parts. Please keep the original package in a safe place for future use.

Initial Setup

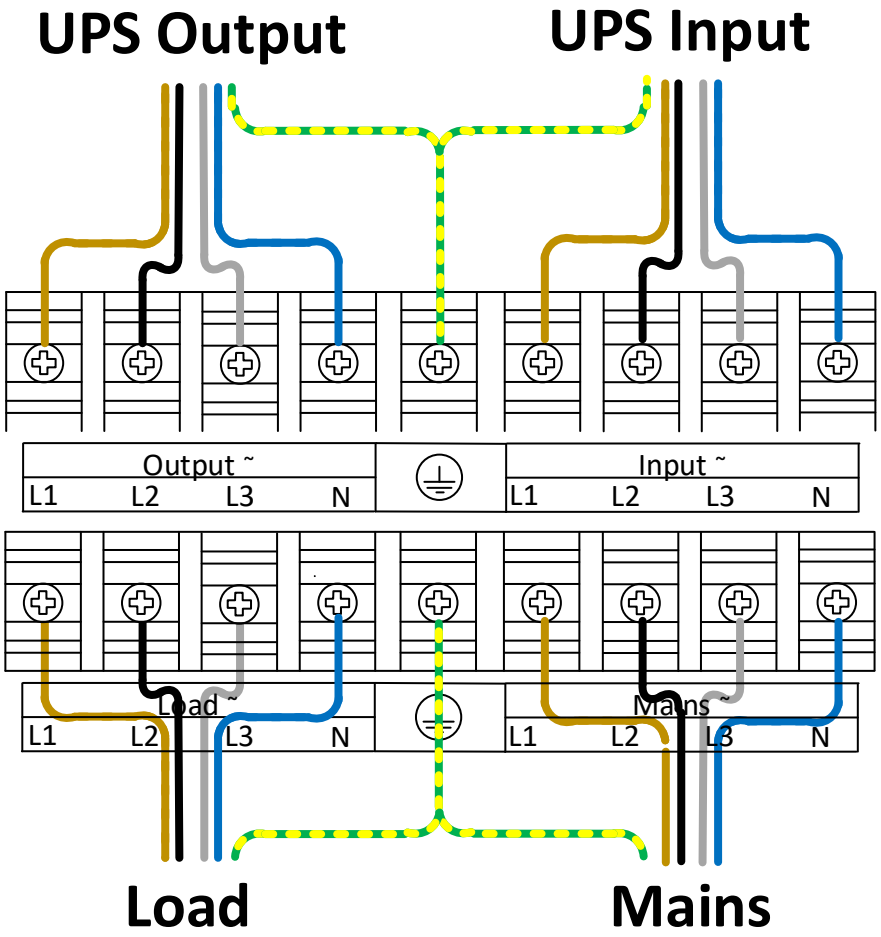
The Installation and wiring must be performed in accordance with the local electric laws/regulations and execute the following instructions by professional personnel.

1) Make sure the mains wire and breakers in the building are enough for the rated capacity of UPS to avoid the hazards of electric shock or fire.
   NOTE: Do not use the wall receptacle as the input power source for the UPS, as it is rated current is less than the UPS's maximum input current. Otherwise, the receptacle may be burned and destroyed.
2) Switch off the mains switch in the building before installation.
3) Turn off and shut down the connected UPS.
4) Prepare wires based on the following table:

UPS Model	Wire Spec (AWG)
10 kVA UPS	12
20 kVA UPS	10

> **Please Note**
> All wire requirements are in accordance with the line diameter provided in the table.
> The selections for color of wires should be followed by the local electrical laws and regulations.

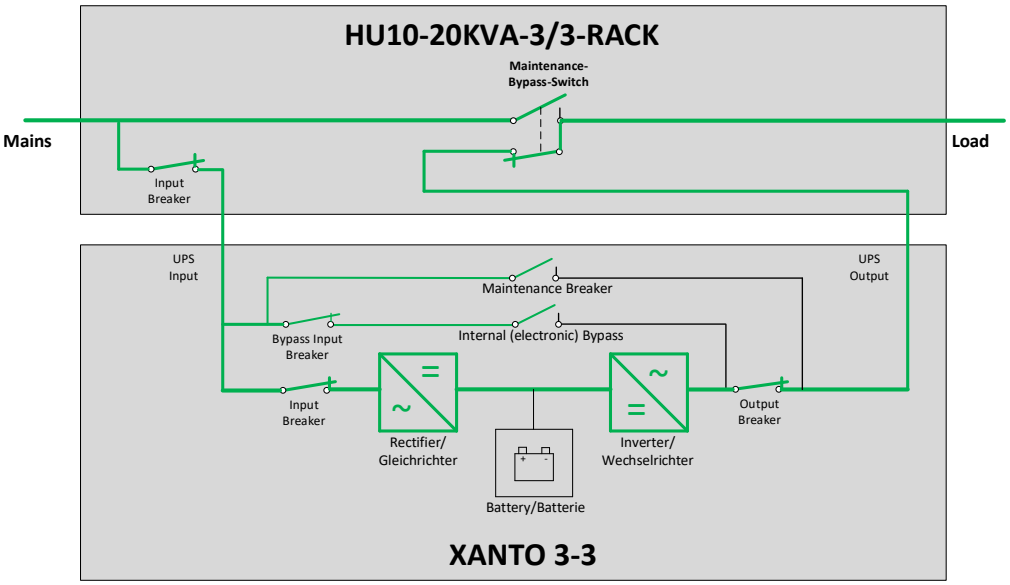
5) Remove the terminal block cover on the rear panel of the module.
   Then connect the lines to the terminal blocks according to the following instructions:
   a. Connect the input of the UPS to the UPS input of the maintenance bypass switch.
   b. Connect the output of the UPS to the UPS output of the maintenance bypass switch.
   c. Connect the load to the output of the maintenance bypass switch.
   d. Connect the utility to the input of the maintenance bypass switch.


UPS Output
UPS Input
Output ~
L1 L2 L3 N
Input ~
L1 L2 L3 N
Load ~
L1 L2 L3 N
Mains ~
L1 L2 L3 N
Load
Mains

4 Operation

Normal operation

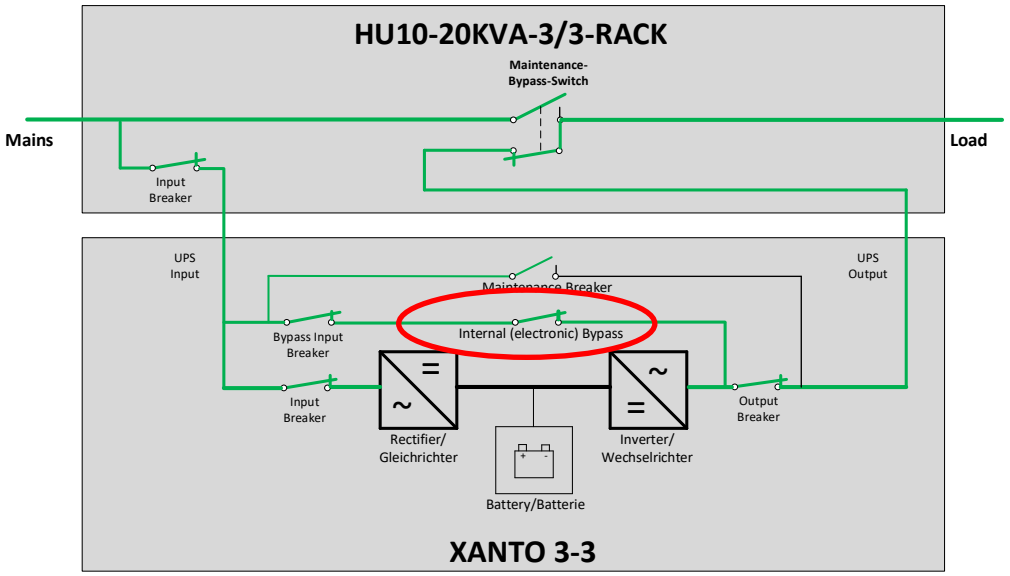
Load is supplied by UPS via rectifier and inverter



Transfer to Bypass Operation

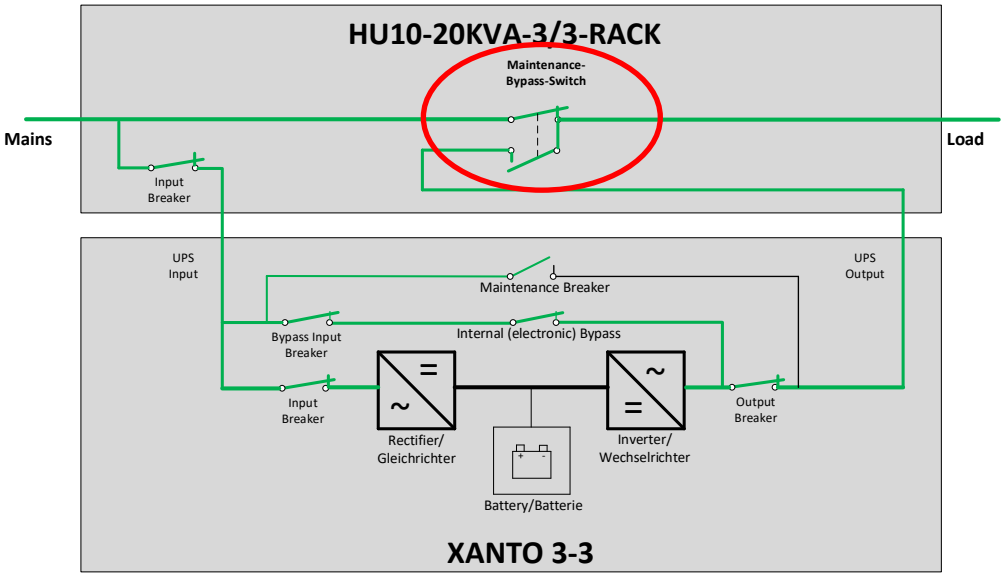
Step 1 – switch UPS to internal Bypass (please refer to UPS manual)

- load is supplied direct from UPS input



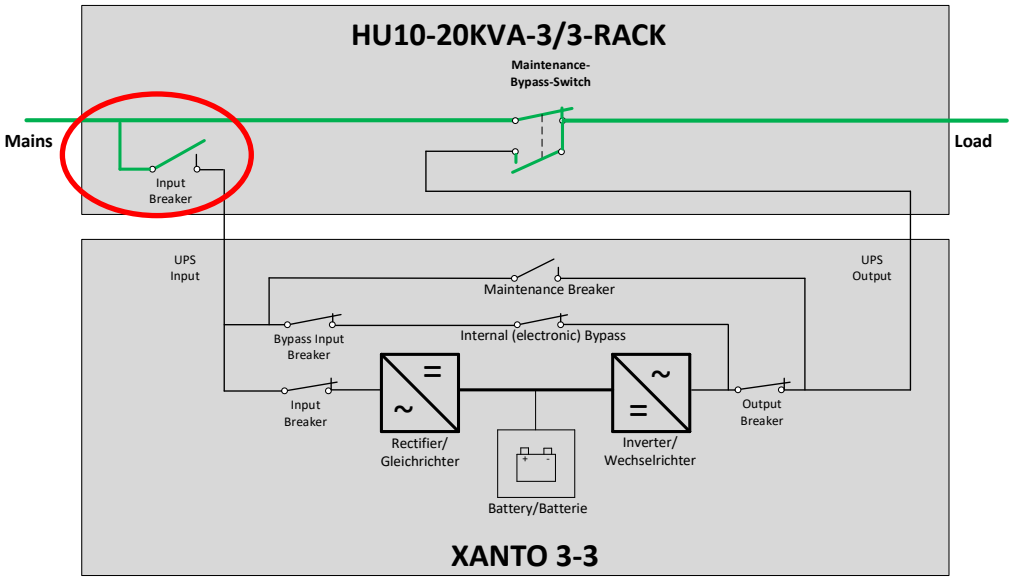
Step 2 – open the maintenance switch cover
then turn Maintenance Bypass Switch on HU10-20KVA-3/3-RACK to BYBASS position

- load is supplied direct from Mains via HU10-20KVA-3/3-RACK



Step 3 – switch UPS Input Breaker on HU10-20KVA-3/3-RACK to position OFF

- load is supplied direct from Mains via HU10-20KVA-3/3-RACK – UPS is OFF



Transfer to Normal Operation

Step 1 - switch UPS Input Breaker on HU10-20KVA-3/3-RACK to position ON

Step 2 – turn Maintenance Bypass Switch on HU10-20KVA-3/3-RACK to UPS position
then close the maintenance switch cover

Step 3 – switch UPS to Normal Operation (please refer to UPS manual)

5 Specification of Critical Components

Model		10 kVA UPS	20 kVA UPS
Parameter		**Max.**	**Max.**
Input breaker (each pole)	Current	25 A	40 A
	Voltage	400 V	400V
Bypass switch	Current	25 A	40 A
	Voltage	400 V	400V
Input / Output terminal	Current	32 A	40 A
	Voltage	400 V	400V

6 Support

ONLINE USV-Systeme AG (ONLINE) is one of the leading manufacturers of uninterruptible power supplies (UPS). Since 1988, the German company has focused on the development, production, sale and support of UPS systems. Based on unit numbers sold, ONLINE products are the German number one in the UPS market and internationally recognized because of their top quality and excellent support.

As a German provider, ONLINE guarantees direct approachability, simple processing and short response times. Comprehensive support is a matter of course – before and after purchase.

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- Free 24 h advance exchange
- Interactive UPS configurator online or as app
- Optional extended warranty
- Unbureaucratic 14 day money-back guarantee
- Excellent product availability and wide network of distributors

Further information: > www.online-ups.com

7 Warranty

ONLINE USV-Syteme AG (ONLINE) guarantees that this product will be free of material and production faults for a period of three years from the purchase date. ONLINE's obligation in accordance with this guarantee is restricted to the repair or replacement (at ONLINE's discretion) of any faulty products. Before warranty claims can be asserted, a Returned Material Authorization (RMA) number must be obtained from customer services. Products must be returned with the postage paid by the sender, a brief description of the problem and evidence of the place and date of purchase. This warranty does not apply to devices damaged by accidents, negligence or misuse or those which have otherwise been altered or modified.

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