

Maintenance Bypass Module (MBP) PH 7832 / PH 7860

Maintenance bypass module for UPS, allowing the UPS to be isolated and replaced without cutting power to the connected equipment. Available in 32 A (PH 7832) and 60 A (PH 7860), with IEC C19 / C13 outlets.

PRODUCT SUMMARY

References	PH 7832 (32 A) · PH 7860 (60 A)
Type	Maintenance bypass module (MBP) for UPS
Output sockets	IEC C19 / C13
Input / Output	220–240 Vac · 50/60 Hz · single-phase
Rated current	32 A (PH 7832) · 60 A (PH 7860)
Dimensions · weight	288 × 88 × 141 mm (W × H × D) · 2.8 kg
EAN	PH 7832: [0745604517881] · PH 7860: [0745604517898]



1

Safety

Save these instructions. This manual contains important instructions that must be followed during installation and maintenance of the maintenance bypass module (MBP) and the UPS.

Hazardous voltage. The system has its own power source when connected to the UPS (UPS battery). As a result, the output sockets may be energised even if the system is disconnected from the AC mains. Hazardous voltage is present inside: it must be opened by qualified service personnel only.

- The product must be properly earthed; **always connect the earth wire first.**
- Follow the connection and operating instructions in the order given. Disconnection and over-current protection devices for the AC input/output circuits must be provided by the installer.
- **Caution — fire risk:** connect the unit only to a circuit fitted with over-current protection (refer to the UPS manual for the current rating). The upstream circuit breaker must be easily accessible. The unit can be disconnected from the mains by opening this breaker and, if still connected to the UPS, by first shutting down the UPS.
- Check that the rating-plate markings match your AC system and the actual consumption of all the equipment to be connected.
- Never install the system near liquids or in an excessively damp environment.
- Do not let any foreign object get inside the unit.
- Do not expose the system to direct sunlight or heat sources.
- If it must be stored before installation, store it in a dry place.
- All repairs and servicing must be carried out by authorised service personnel only. There are no user-serviceable parts inside.

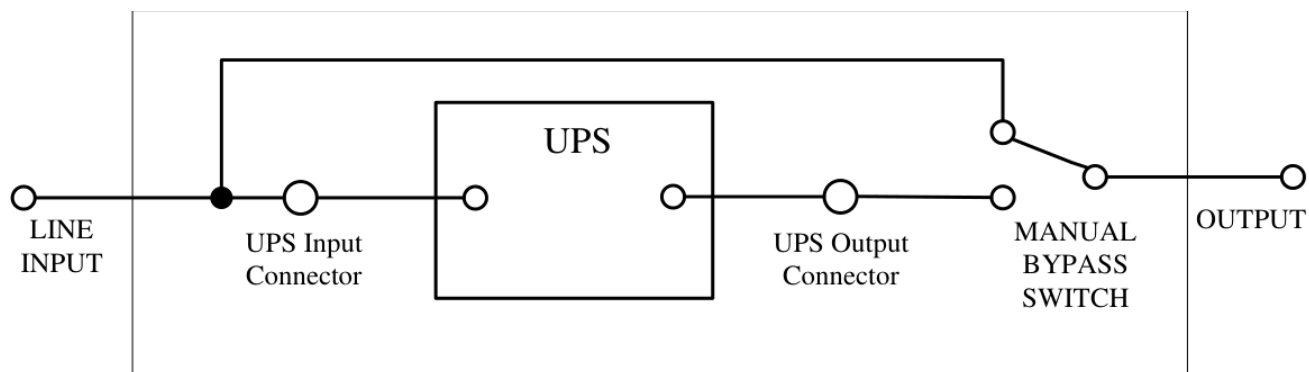
2 Package contents

The maintenance bypass module (MBP) package includes:

- Maintenance bypass module (MBP) unit
- User manual
- UPS input cable (blue)
- UPS output cable (grey)
- Terminal
- 2 × rack-mount ears
- Flat-head screws M4×8L (×8)
- Round-head screws M3×6L (×4)

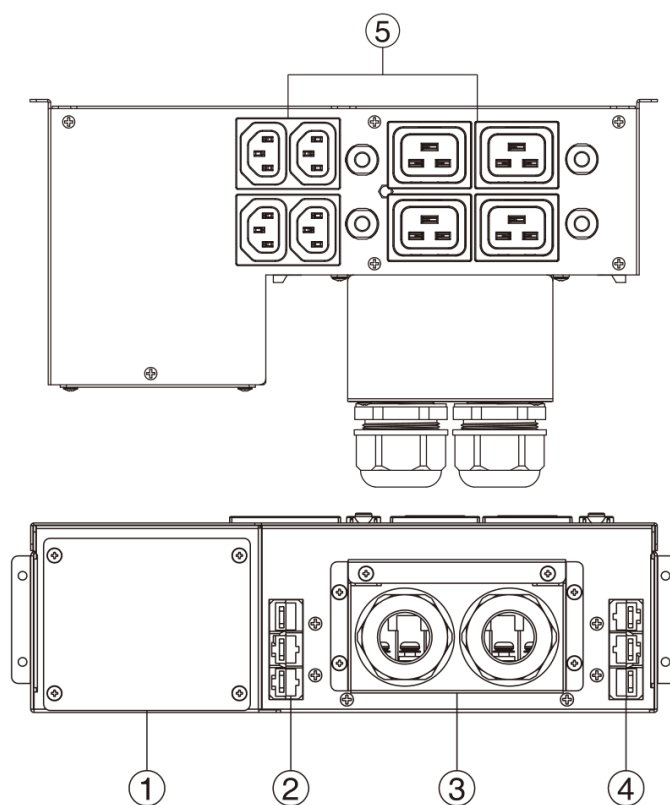
3 Basic operation

3.1 · Schematic



Connection schematic of the maintenance bypass module (MBP) between mains, UPS and output.

3.2 · Panel description



Top and rear views of the module.

- ① **Manual bypass switch.** Rotary selector with two positions: **UPS** → the load is supplied by the UPS; **BYPASS** → the load is supplied directly from the AC mains.
- ② **UPS output connector.** Connects the MBP to the UPS output.
- ③ **Input/output terminal block.** Connection to the mains and to your equipment.
- ④ **UPS input connector.** Connects the MBP to the UPS input.

5 Output sockets (IEC C19 / C13).

3.3 · Electrical specifications

Line input	
Phase	Single
Voltage	220–240 Vac
Frequency	50/60 Hz
Rated current	32 A (PH 7832) · 60 A (PH 7860)
Output	
Voltage	220–240 Vac
Frequency	50/60 Hz
Rated current	32 A (PH 7832) · 60 A (PH 7860)

3.4 · Operating environment

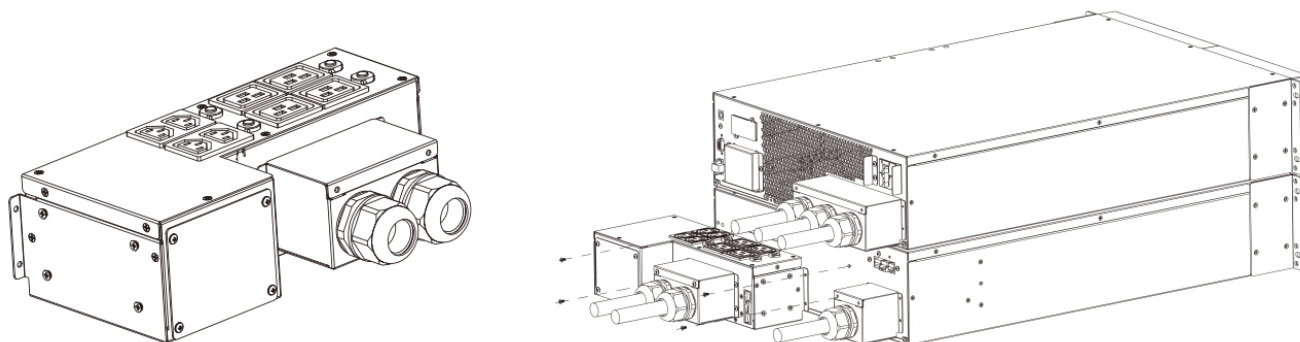
Operating temperature	Humidity	Storage temperature
0 °C – 40 °C	< 95 %	-15 °C – 50 °C

3.5 · Dimensions and weight

Dimensions W × H × D (mm)	Net weight (kg)
288 × 88 × 141	2,8

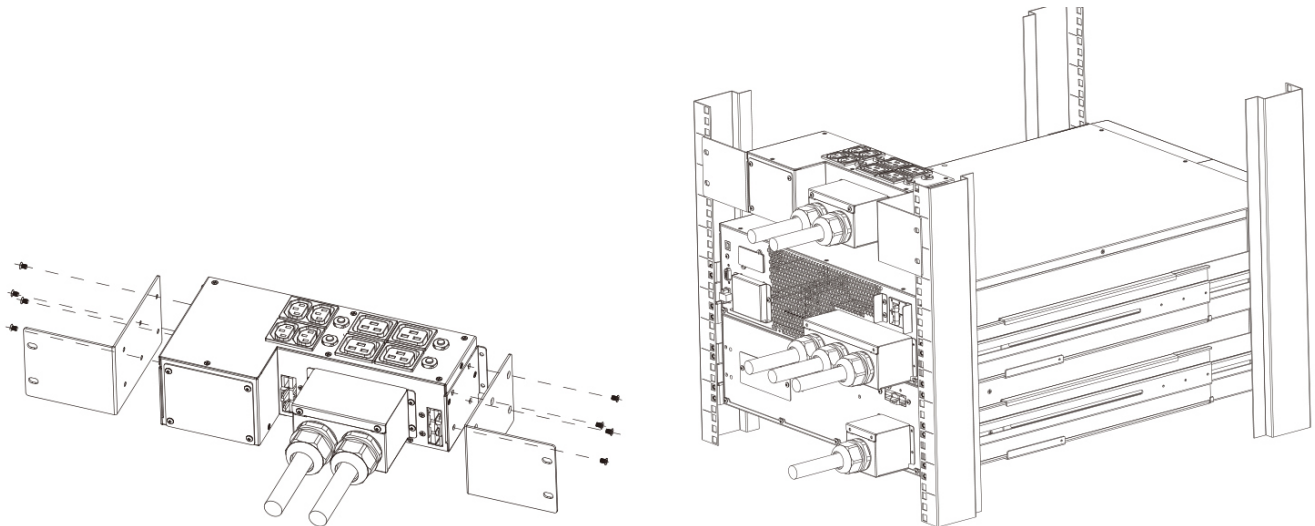
3.6 · Hardware installation

3.6.1 · Rear installation. Fix the module to the rear of the UPS using the supplied screws.



Rear installation of the module on the UPS.

3.6.2 · Rack installation. Fit the rack ears and secure the assembly in the 19" rack.



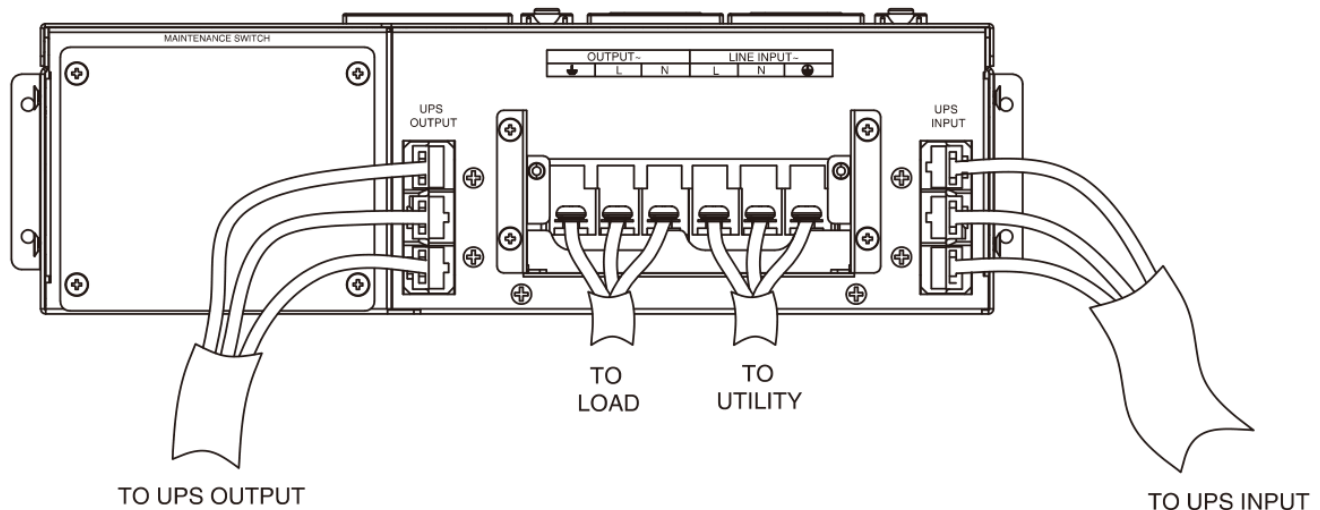
Installation in a 19" rack cabinet.

4 Electrical installation

Warning. This connection must be carried out by qualified electrical personnel. Refer to the UPS manual for the breaker current rating and cable cross-sections; the breaker must be installed upstream of the MBP AC source. Before any connection, check that the upstream protection device (AC source) is open “O” (Off).

Electrical risk. Before connecting the MBP to the UPS, make sure the UPS has been properly shut down (refer to its manual). Always connect the earth wire first.

1. Install the “UPS input cable”, the “UPS output cable” and the “battery cable” to the UPS terminals (refer to the UPS manual).
2. Open the manual bypass switch cover and verify it is in the “UPS” position.
3. Following the diagram below: **a)** connect the input and output wires to the MBP terminal block; **b)** connect the “UPS input cable” and “UPS output cable” to their corresponding connector.



Wiring diagram: mains input (utility), output to the load, and connection to the UPS input/output.

1. Refit all safety protection covers.
2. Connect the battery cable (refer to the UPS manual).
3. Set the breaker upstream of the MBP to the “ON” position.
4. Set the UPS input breaker to “ON” and verify the UPS is in bypass mode.
5. Turn on the UPS (refer to its manual).

5 UPS maintenance with the MBP

This operation allows authorised qualified personnel to remove the detachable MBP from the UPS for maintenance or replacement **without interrupting power** to the connected equipment.

5.1 • How to remove the UPS

1. Put the UPS in internal “bypass mode” (refer to its manual).
2. Verify on the UPS panel that it is in bypass mode.

DO NOT OPERATE THE MANUAL BYPASS SWITCH IF THE UPS IS NOT IN BYPASS MODE.

1. After opening the cover, set the manual bypass switch to “BYPASS”.
2. Set the UPS input breaker to “OFF” and wait a few minutes; the UPS will shut down.
3. With the UPS stopped, it can be disconnected: disconnect the battery cable from the battery module and the UPS input/output cables from the MBP.
4. Replace the UPS.

Hazardous voltage and lost-load risk: do not operate the manual bypass switch without the UPS input and output cables connected.

5.2 · How to refit the UPS

1. Install the “UPS input cable”, “UPS output cable” and “battery cable” to the UPS terminals.
2. Open the manual bypass switch cover and check it is in the “BYPASS” position.
3. Connect the cables to their corresponding connector.
4. Set the UPS input breaker to “ON”.
5. Verify on the panel that the UPS is in bypass mode.

DO NOT OPERATE THE MANUAL BYPASS SWITCH IF THE UPS IS NOT IN BYPASS MODE.

1. Set the manual bypass switch to “UPS”.
2. Turn on the UPS (refer to its manual).
3. Check that the UPS is in normal mode.

Hazardous voltage and lost-load risk: do not operate the manual bypass switch without the UPS input and output cables connected.

PHASAK · www.phasak.com — For internal/commercial use. Specifications are subject to change without notice. ISO 9001 certified product.