



UPS Battery Box 24 V FLX M

350-230

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1. TECHNICAL SPECIFICATIONS: THE UPS BATTERY BOX

The battery box is made for two 45 Ah batteries and can be connected to the UPS in FLX L housing. See [This battery box fits the following UPSs \[4\]](#) UPSs this battery box fits.

1.1. Manufacturer support

Manufacturers provide support for the life of the product, however, for a maximum of 10 years after the date of purchase. Switching to an equivalent product may occur if the manufacturer deems that repair is not possible. Support costs will be added after the warranty period has expired.

1.2. About translation of this document

User manual and other documents are in the original language in Swedish. Other languages are machine translated and not reviewed, errors may occur.

1.3. Product life cycle, environmental impact and recycling

The product is designed and constructed for a long service life, which reduces the environmental impact. The product's service life depends on, among other things, environmental factors, mainly ambient temperature, unforeseen load on components such as lightning strikes, external damage, handling errors, and more. Products are recycled by being handed over to the nearest recycling station or sent back to the manufacturer. Contact your distributor for more information. Costs that arise in connection with recycling are not reimbursed.

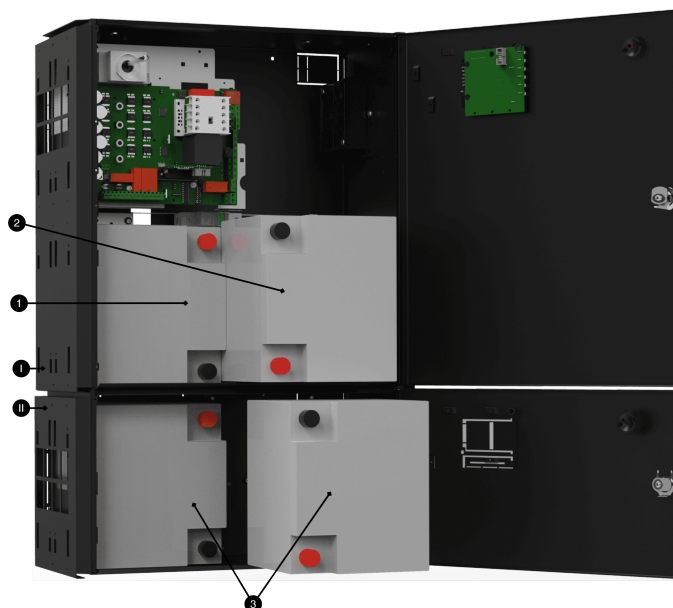


2. THIS BATTERY BOX FITS THE FOLLOWING UPSS

UPS	Item number
SIN 600W FLX L	FL01U0021FP006
SIN 1100W FLX L	FL01U0031FP011
SIN 1500W FLX L	FL01U0031FP015
TEL-1200W-ST5-SIN2*	5144
*Not sold directly by Milletechnik .	

3. BATTERIES - PLACEMENT AND CONNECTION

3.1. Placement of batteries

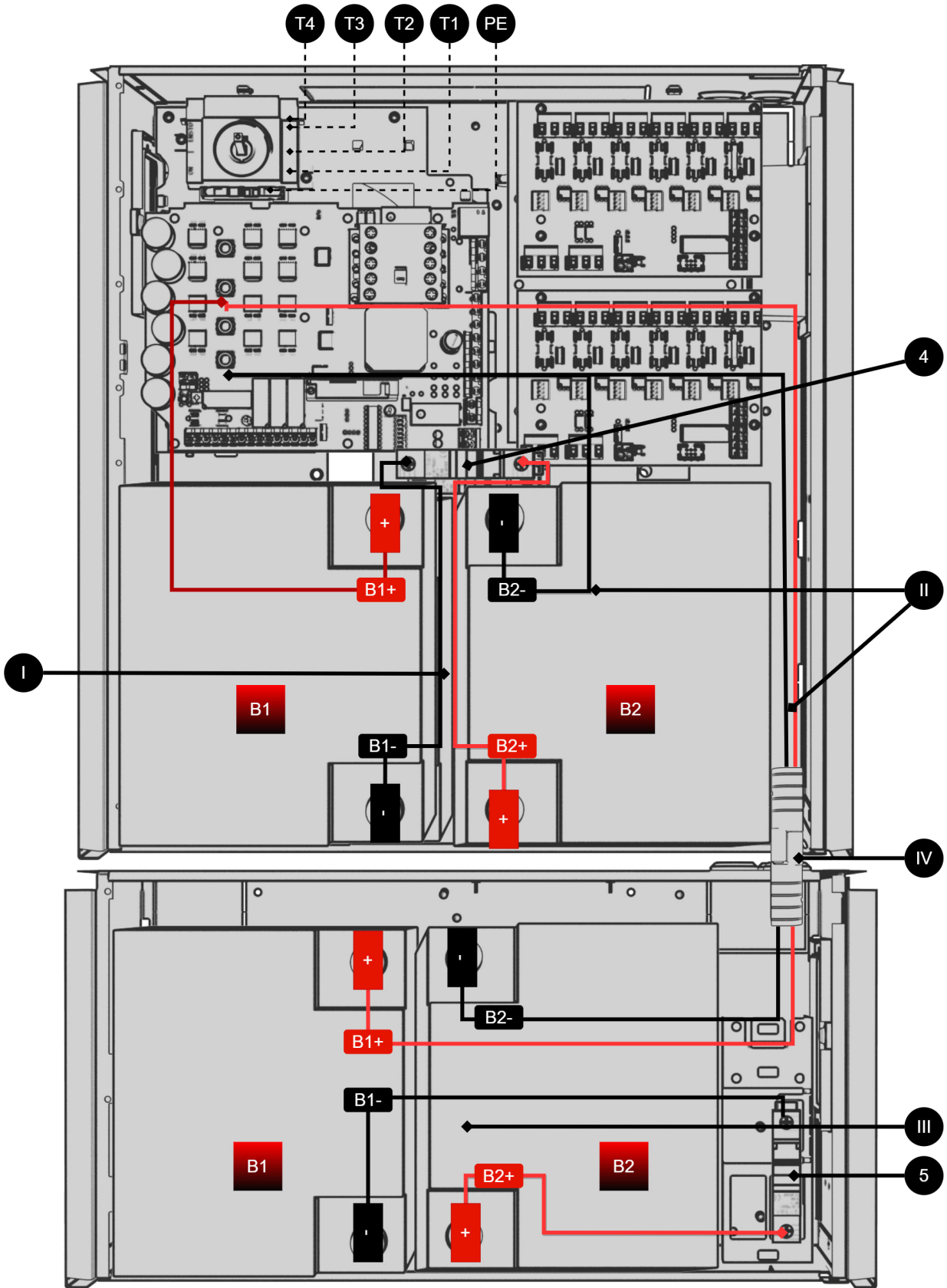


No	Explanation
1	Insert the battery on the left first (I).
2	Then insert the battery on the right (I).
3	In the battery box, batteries are inserted in the same way as in battery backup (II).





3.2. Connection battery box with battery backup





The picture shows a battery backup with extra battery box with 2 batteries.

The picture also gives an overview of connection points for battery cables and battery fuses.

Table 1. Overview of incoming mains and battery connection

No. / letter	Explanation
I, III	Battery wiring for automatic fuse.
II	Battery wiring from motherboard.
IV	Battery wiring, on Battery connector, from battery box, must be connected with opposite battery connector in UPS.
4,5	Battery fuse (automatic fuse)
T3	Internal emergency stop.
T2	Phase, mains, incoming.
T1	Neutral mains, incoming.
PE	Incoming protective earth.

Table 2. Battery number

B1, B2	Explanation
B1+	+ from circuit board/battery connector to battery
B1-	- from fuse to battery.
B2+	+ from fuse to battery.
B2-	- from circuit board/battery connector to battery.

4. TEKNISKA DATA UPS

System voltage:	24 V.
Battery type:	AGM lead acid.
Enclosure:	Powder coated sheet.
Mounting:	Wall or 19 "rack.
Country of manufacture	Sweden

5. TECHNICAL DATA ENCLOSURES

5.1. Enclosures - Technical Data FLX M

Info	Explanation
Name	FLX M
Enclosure class	IP 32
Measure	Height: 224 mm, width 438 mm, depth 212 mm
Height units	5 HE
Mounting	Wall or 19 "rack
Ambient temperature	+ 5 ° C - + 40 ° C. For best battery life: + 15 ° C to + 25 ° C.
Environment	Environmental class 1, indoors. 20% ~ 90% relative humidity
Material	Powder coated sheet
Color	Black
Cable entries, number	4 Knockout for Battery connector





Info	Explanation
Batteries that fit	2 pcs 12 V, 45 Ah.

6. BATTERIES - RECOMMENDED, NOT INCLUDED

6.1. Batteries are not included they are sold separately

Batteries are sold separately.

6.2. 45 Ah, 12 V AGM battery

Fits in	Number of batteries
Batterybox 24V FLX M	2

Battery type	V	Ah
Maintenance-free AGM, lead-acid battery.	12 V	45 Ah

Table 3. 10+ Design life * battery

Article number	E-number	Article name	Terminal	Measure. Height width depth	Weight per piece	Make
MT113-12V45-01	5230546	UPLUS 12V 45Ah 10+ Design Life battery	M5 Bult	197x165x170 mm	14.5 kg	UPLUS

*Design life is the shelf life in years for an unused battery. Environmental factors such as heat and load affect the service life. Batteries that have a durability (+10 Design Life) of 10+ years usually need to be replaced after 5-6 years.

7. MAINTENANCE

The system with the exception of batteries is maintenance-free when installed in an indoor environment.

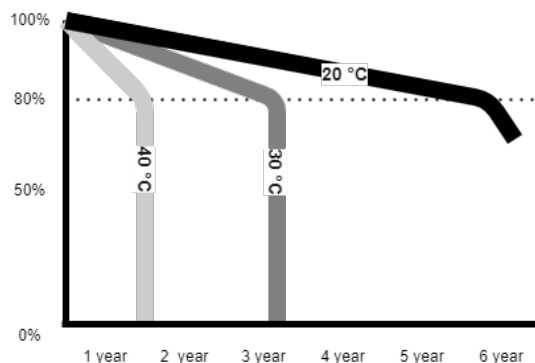
Check the fan annually. The fan should rotate smoothly without any noise. Clean the fan from dust and dirt. The fan must be replaced if it does not rotate smoothly or is so dirty that it cannot be completely cleaned. If the fan does not work well, the air flow in the unit will be obstructed, which leads to an increase in heat in the enclosure, which can lead to a deterioration of the battery capacity and to a significantly shorter battery replacement interval.

7.1. About batteries

Batteries generate electricity through a chemical process and there is thus a natural degradation of capacity. The biggest factor in battery life is temperature. The higher the temperature, the shorter the battery life. The date of manufacture stamped on the battery and the service life (as stated by the battery manufacturer). An ideal temperature is 20 °C both in operation and in storage. Higher ambient temperature greatly reduces the service life. Thus, actual lifespan varies when used. Batteries should be replaced after half specified (from the battery manufacturer) lifetime for safe operation. Batteries pur-



chased through the manufacturer of the battery backup have a lifespan (from the battery manufacturer) of between 10-12 years with recommended replacement after 5-6 years.



7.2. battery change

- If possible, disconnect mains (voltage) when replacing the battery.
- Disconnect battery cables. Note how battery cables are mounted before removing them.
- Remove battery fuse between batteries.
- Insert and fasten the new batteries.
- Connect the battery cables in the same way as before.
- Connect battery fuse between batteries.
- Switch on mains voltage. The indicator LED may not be green (up to 72 hours), until the batteries are charged.
- In order for the system to measure the capacity of new batteries, the device needs to clear previous battery capacity. Dip-switch 8 performs a software reset which, among other things, resets alarms. See [Resetting data after battery change \(Dip-switch 8\)](#)
- Test the system by briefly disconnecting the mains voltage, (= the load is driven by the batteries), and then switch on the mains voltage again.

7.3. Battery recycling

All batteries must be recycled. Return to manufacturer or return to recycling station.

