

## 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 \[1\]](#) UPSs this battery box fits.

### 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.

### About translation of this document

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

### 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.

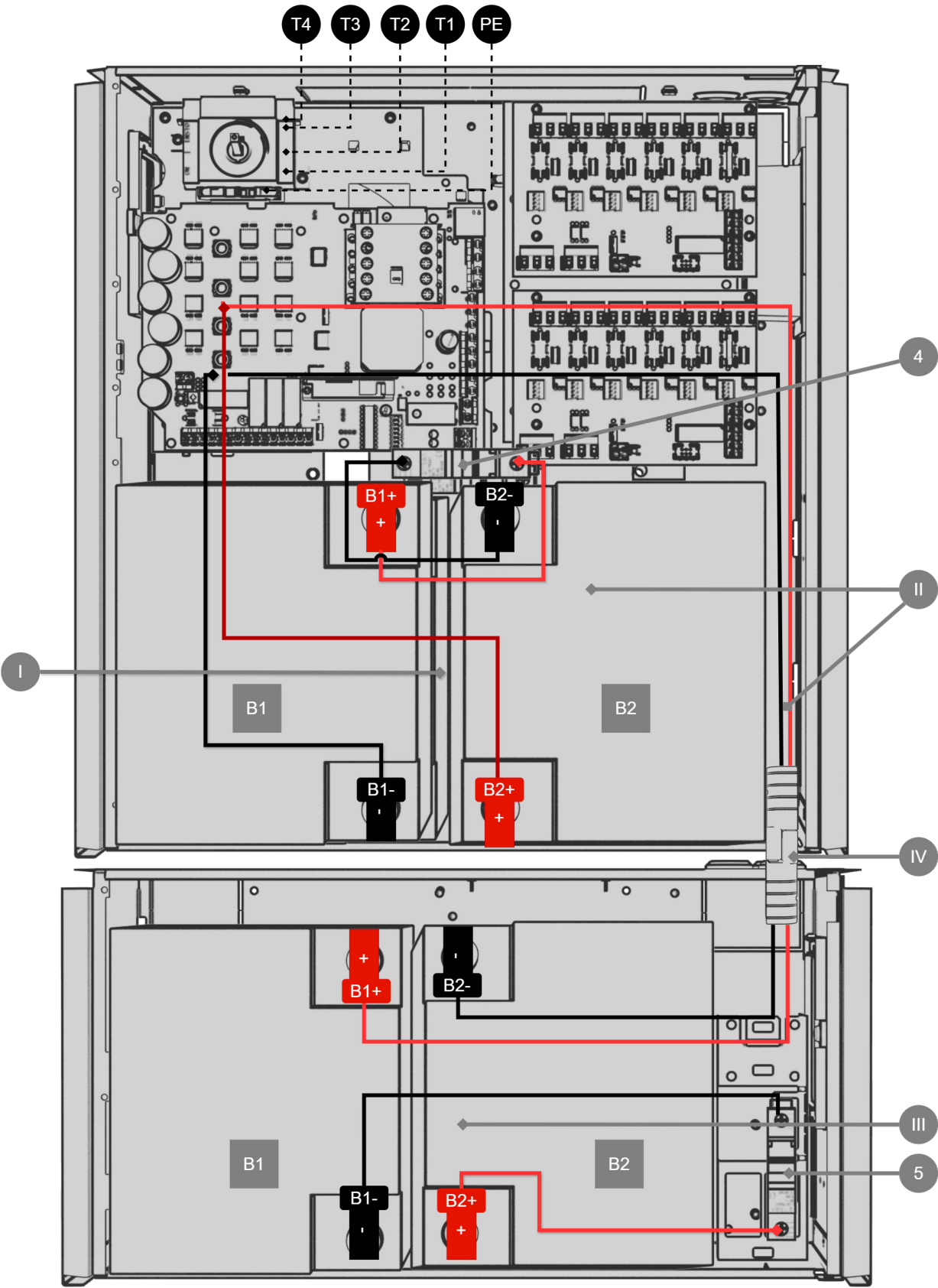


## THIS BATTERY BOX FITS THE FOLLOWING UPSS

| 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 Milleteknik . |                |

BATTERIES - PLACEMENT AND CONNECTION

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.

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.  |

## 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               |

## TECHNICAL DATA ENCLOSURES

### 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                                 |
| Batteries that fit    | 2 pcs 12 V, 45 Ah.   |

## BATTERIES - RECOMMENDED, NOT INCLUDED

Batteries are not included they are sold separately

Batteries are sold separately.

### 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 |

## 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 Bolt  | 197x165x170 mm              | 14.5 kg          | UPLUS |

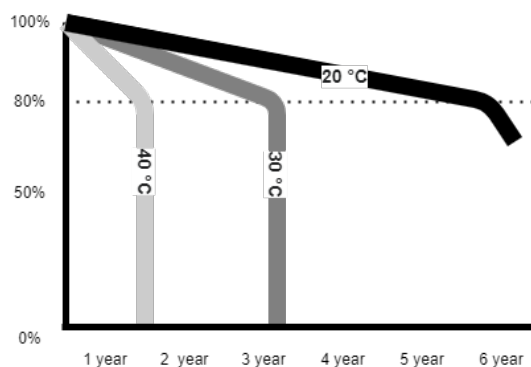
\*Design life is the shelf life in years for an unused battery. Environmental factors such as heat and load affect the service life. Batteries that have a durability (+10 Design Life) of 10+ years usually need to be replaced after 5-6 years.

## MAINTENANCE

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

### 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 purchased 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.



### [sv] Tillverkares angivna livslängd och rekommenderat batteribyte

| [sv] Tillverkares angivna livslängd <sup>a</sup> | [sv] Batteri i drift bör bytas efter <sup>b</sup> . |
|--|---|
| [sv] 3-5 år                                      | [sv] 2-3 år   |
| [sv] 6-9 år                                      | [sv] 3-5 år   |
| [sv] 10-12 år                                    | [sv] 5-7 år   |
| [sv] 15+ år                                      | [sv] 8-10 år  |

<sup>a</sup>Gäller vid helt outnyttjat batteri som är lagrat under optimala förhållanden.

<sup>b</sup>Vid drift i idela omgivningstemperatur, 20 °C.

### 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.
- Test the system by briefly disconnecting the mains voltage, (= the load is driven by the batteries), and then switch on the mains voltage again.



## IMPORTANT

*[sv] För att systemet skall mäta in nya batteriers kapacitet behöver enheten rensa tidigare batterikapacitet. Dip-switch 8 gör en mjukvaru-reset som bland annat nollställer larm. Se [Resetting data after battery change \(Dip-switch 8\)](#)*

### Battery recycling

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



## ADDRESS AND CONTACT DETAILS

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