

ABOUT BATTERY BOX 24V FLX S AND BATTERY BOX 24V FLX M - AREA OF USE

Battery box 24V FLS S and Battery box 24V FLX M



The battery box can be mounted in a 19" rack or on a wall. The enclosure is lockable and two pairs of keys are included.

A battery box is used to extend the reserve operating time of a battery backup or to allow for higher currents in a rated system. You can find more about possible average currents in the battery backup's manual.



BATTERIES AND CERTIFICATES

Batteries must be new during installation and battery replacement in order to maintain warranty and certified standards.

Always use the same (type and manufacturer) batteries with which the device is certified.

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.

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.



TEKNISKA DATA BATTERY BOX 24V FLX S BATTERY BOX 24V FLX M

| | |
|---|--------------------------|
| System voltage: | 24 V. |
| Battery capacity, Battery box 24V FLX S | Two 7.2 Ah or two 14 Ah. |
| Battery capacity, Battery box 24V FLX M | Two 45 Ah. |
| Battery type: | AGM lead acid. |
| Enclosure: | Powder coated sheet. |
| Mounting: | Wall or 19 "rack. |
| Country of manufacture | Sweden |

BATTERY BOX WARRANTY

The product has a five-year warranty, from the date of purchase. Support during the warranty period is reached via the contact information on the CE label. Compensation for travel and / or working hours in connection with locating faults, installing repaired or replaced goods is not included in the guarantee. Batteries are not covered by the warranty.

CE MARKING

Each product has a CE label with information about the product and contact information for the manufacturer. If you are missing something or need more information, you should firstly turn to retailers who will also be able to answer questions about warranty and support. You can always contact the manufacturer if you have questions about the product's performance.



TECHNICAL DATA ENCLOSURES

Enclosures - Technical Data FLX S

| Info | Explanation |
|-----------------------|--|
| Name | FLX S |
| Enclosure class | IP 32 |
| Measure | Height: 222 mm, width 437 mm, depth 145 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 |
| Batteries that fit | 2 pcs 7.2 Ah or 4 pcs 14 Ah. |
| Place for fan | Yes |

Enclosures - Technical Data FLX M

| Info | Explanation |
|-----------------|-------------|
| Name | FLX M |
| Enclosure class | IP 32 |

| Info | Explanation |
|-----------------------|--|
| 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. |

TECHNICAL DATA: TAMPER SWITCH

| | |
|----------------|--|
| Name | T-Tamperswitch |
| Article number | A-0000000SAB01 |
| Type | Microswitch |
| Voltage | 12 V / 24 V |
| Note: | RoHS compliance for all products is based on documentation from the manufacturer that the article complies with the RoHS directive. Milletechnik has taken all reasonable steps to confirm the manufacturers' documentation and reviewed other evidence of non-compliance with the banned substances in order to support the manufacturer's compliance claim. Based on the knowledge we have, the above mentioned articles complies to RoHS according to the manufacturer's documentation. |

BATTERY RECYCLING

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



BATTERIES - RECOMMENDED, NOT INCLUDED

Batteries are not included they are sold separately

Batteries are sold separately.

Battery combinations Battery box 24V FLX S and battery backup (14 Ah batteries)

| Battery capacity (Ah) | Battery type | Number of batteries | Batteries in unit |
|-----------------------|--------------|---------------------|---|
| 14 Ah | 14 Ah | 2 pcs. | 2 in Battery Backup |
| 42 Ah | 14 Ah | 6 pcs | 2 in Battery Backup 4 in Battery Box |
| 70 Ah | 14 Ah | 10 pieces. | 2 in Battery Backup 4 in Battery Box 4 in battery box 2 |

Battery combinations Battery box 24V FLX M and battery backup (20 Ah batteries)

| Battery capacity (Ah) | Battery type | Number of batteries | Batteries in unit |
|-----------------------|--------------|---------------------|---|
| 20 Ah | 20 Ah | 2 pcs | 2 in Battery Backup |
| 45 Ah | 45 Ah | 2 pcs | 0 in Battery Backup 2 in Battery Box 1 |

| Battery capacity (Ah) | Battery type | Number of batteries | Batteries in unit |
|-----------------------|--------------------|---------------------|---------------------|
| 65 Ah | 20 Ah + | 4 st | 2 in Battery Backup |
| | 45 Ah | | 2 in Battery Box 1 |
| 90 Ah | 45 Ah | 4 st | 0 in Battery Backup |
| | | | 2 in Battery Box 1 |
| | | | 2 and Batteribox 2 |
| 110 Ah | 20 Ah + | 6 st | 2 in Battery Backup |
| | 45 Ah | | 2 in Battery Box 1 |
| | 2 and Batteribox 2 | | |
| 135 Ah | 45 Ah | 6 st | 0 in Battery Backup |
| | | | 2 in Battery Box 1 |
| | | | 2 and Batteribox 2 |
| | | | 2 and Batteribox 3 |
| 155 Ah | 20 Ah + | 8 st | 2 in Battery Backup |
| | 45 Ah | | 2 in Battery Box 1 |
| | 2 and Batteribox 2 | | |
| | 2 and Batteribox 3 | | |
| 180 Ah | 45 Ah | 8 st | 0 in Battery Backup |
| | | | 2 in Battery Box 1 |
| | | | 2 and Batteribox 2 |
| | | | 2 and Batteribox 3 |
| | | | 2 and Batteribox 4 |
| 200 Ah | 20 Ah + | 10 pieces | 2 in Battery Backup |
| | 45 Ah | | 2 in Battery Box 1 |
| | 2 and Batteribox 2 | | |
| | 2 and Batteribox 3 | | |
| | 2 and Batteribox 4 | | |

Battery combinations Battery box 24V FLX M and battery backup (45 Ah batteries)

| Battery capacity (Ah) | Battery type | Number of batteries | Batteries in unit |
|-----------------------|--------------|---------------------|---------------------|
| 45 Ah | 45 Ah | 2 pcs. | 2 in Battery Backup |
| 90 Ah | 45 Ah | 4 pcs | 2 in Battery Backup |
| | | | 2 in Battery Box 1 |
| 155 Ah | 45 Ah | 6 pcs | 2 in Battery Backup |
| | | | 2 in Battery Box 1 |
| | | | 2 and Batteribox 2 |
| 180 Ah | 45 Ah | 8 pcs | 0 in Battery Backup |
| | | | 2 in Battery Box 1 |
| | | | 2 and Batteribox 2 |
| | | | 2 and Batteribox 3 |
| 225 Ah | 45 Ah | 10 pieces. | 2 in Battery Backup |
| | | | 2 in Battery Box 1 |
| | | | 2 and Batteribox 2 |
| | | | 2 and Batteribox 3 |
| | | | 2 and Batteribox 4 |

Certified with battery type

The device is certified with a UPLUS battery that must be used to maintain the certificate.

7.2 Ah, 12 V AGM battery

| Fits in | Number of batteries | |
|--|---------------------|--------|
| Batterybox 24V FLX S | 4 | |
| Battery type | V | Ah |
| Maintenance-free AGM, lead-acid battery. | 12 V | 7.2 Ah |

10+ Design life * battery

| Article number | E-number | Article name | Terminal | Measure. Height width depth | Weight per piece | Make |
|----------------|----------|---|-----------------|-----------------------------|------------------|-------|
| MT113-12V07-01 | 5230536 | UPLUS 12V 7.2Ah 10+ Design Life battery | Flat pin 6.3 mm | 151 x 65 x 100 mm. | 2.4 kg | UPLUS |

* Design Life is the durability this year for unused battery. Environmental factors such as heat and load affect service life. Batteries that have a durability (+10 Design lLife) of 10+ years usually need to be replaced after 4-5 years.

14 Ah, 12 V AGM battery

| Fits in | Number of batteries | |
|--|---------------------|-------|
| Batterybox 24V FLX S | 4 | |
| Battery type | V | Ah |
| Maintenance-free AGM, lead-acid battery. | 12 V | 14 Ah |

10+ Design life * battery

| Article number | E-number | Article name | Terminal | Measure. Height width depth | Weight per piece | Make |
|----------------|----------|--|-----------------|-----------------------------|------------------|-------|
| MT113-12V14-01 | 5230537 | UPLUS 12V 14Ah 10+ Design Life battery | Flat pin 6.3 mm | 151x98x101 mm | 4.2 kg | UPLUS |

* Design Life is the durability this year for unused battery. Environmental factors such as heat and load affect service life. Batteries that have a durability (+10 Design lLife) of 10+ years usually need to be replaced after 4-5 years.

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 durability this year for unused battery. Environmental factors such as heat and load affect service life. Batteries that have a durability (+10 Design lLife) of 10+ years usually need to be replaced after 4-5 years.

Reserve operating times for different alarm classes - overview

The table shows the requirements for backup operating time and recharging of batteries for different alarm classes.



IMPORTANT

This is a guide and all times are approximate and may differ from actual times. Load, temperature and other factors come into play, which is why exact time can not be provided.

Applies to new batteries.

Amperage and batteries vary with configuration, check if the configuration can handle batteries and amperage.

Backup operating times 24 V units - with battery box, 28 Ah - 70 Ah

| Medium current | 28 Ah | 42 Ah | 65 Ah | 70 Ah |
|----------------|--|------------------------|-------------------------------|------------------------|
| - | 4 batteries (14 Ah) | 6 batteries (14 Ah) | 4 batteries (20Ah + 45 Ah) | 10 batteries (7 Ah) |
| Loading | Backup operating time (approx.), Minutes | | | |
| 0.5 A | 1650 | 2090 | 5574 | 3440 |
| 1 A | 970 | 865 | 3252 | 2118 |
| 2 A | 560 | 815 | 1770 | 1329 |
| 4 A | 335 | 490 | 930 | 864 |
| 6 A | 245 | 360 | 600 | 605 |
| 8 A | 210 | 310 | 426 | 544 |
| 10 A | 160 | 240 | 342 | 414 |
| 12 A | 140 | 210 | 270 | 363 |
| 14 A | 120 | 180 | 234 | 311 |
| 16 A | 100 | 150 | 204 | 286 |
| 18 A | 90 | 130 | 150 | 254 |
| 20 A | 84 | 126 | 138 | 241 |

Backup operating times 24 V units - with battery box, 90 Ah - 155 Ah

| Medium current | 90 Ah | 110 Ah | 135 Ah | 155 Ah |
|----------------|--|--------------------------------|------------------------|--------------------------------|
| - | 4 batteries (45 Ah) | 6 batteries (20 Ah + 45 Ah) | 6 batteries (45 Ah) | 8 batteries (20 Ah + 45 Ah) |
| Loading | Backup operating time (approx.), Minutes | | | |
| 0.5 A | 4705 | 5796 | 7056 | 8215 |
| 1 A | 2928 | 3582 | 4392 | 5070 |
| 2 A | 1836 | 2247 | 2754 | 3230 |
| 4 A | 1183 | 1438 | 1762 | 2018 |
| 6 A | 788 | 959 | 1175 | 1345 |
| 8 A | 748 | 861 | 1048 | 1150 |
| 10 A | 570 | 689 | 839 | 920 |
| 12 A | 499 | 603 | 699 | 765 |
| 14 A | 427 | 516 | 629 | 655 |
| 16 A | 404 | 499 | 592 | 590 |
| 18 A | 359 | 444 | 526 | 520 |
| 20 A | 340 | 420 | 498 | 495 |

Backup operating times 24 V units - with battery box, 180 Ah - 225 Ah

| Medium current | 180 Ah | 200 Ah | 225 Ah |
|----------------|--|---------------------------------|-------------------------|
| - | 8 batteries (45 Ah) | 10 batteries (20 Ah + 45 Ah) | 10 batteries (45 Ah) |
| Loading | Backup operating time (approx.), Minutes | | |
| 0.5 A | 9408 | 12972 | 11760 |
| 1 A | 5856 | 7872 | 7320 |

| Medium current | 180 Ah | 200 Ah | 225 Ah |
|----------------|--------|--------|--------|
| 2 A | 3672 | 4548 | 4590 |
| 4 A | 2365 | 2670 | 2945 |
| 6 A | 1577 | 1780 | 1960 |
| 8 A | 1500 | 1558 | 1800 |
| 10 A | 1140 | 1246 | 1410 |
| 12 A | 950 | 1038 | 1200 |
| 14 A | 855 | 890 | 1055 |
| 16 A | 810 | 902 | 995 |
| 18 A | 715 | 802 | 885 |
| 20 A | 680 | 722 | 840 |

Subject to typos.