

24 V DC UPS FOR EXTERNAL BATTERY. 10 A

UB10.245

DC UPS 24V dc I/P 24V dc 10A & 12V dc 5A O/P 3.9-40Ah

- Requires just one 12 V dc battery
- Selectable buffer times
- Relay outputs for status
- Optimized charging of battery



Product description

A DC-UPS system consists of a control unit, battery and power supply with suitable power for the application. In the event of a power outage, the battery is automatically switched in and supplies the connected loads. The control unit requires just (1) 12 V battery that then transforms the battery voltage up to 22.3 V dc. Two batteries do not need to be matched with one another and the output voltage does not follow the battery's discharge curve but is instead constant at 22.3 V. The battery capacity is utilized 100 % compared with two batteries connected in series, where one of the batteries is not fully charged. Two relay outputs indicate status; the module is ready (battery capacity >85 %) and the module is active (buffer mode). The control unit tests the battery's condition in cycles. When it is time to replace the battery, a relay output is activated (replace battery). At the front, optimized final charging voltage in relation to ambient temperature is selected. There are three available alternatives: 10°C, 25°C and 40°C. The buffer time can be set in different time ranges to save battery capacity. When choosing constant discharge, the output voltage will be active until the battery reaches deep discharge and the control unit then disconnects the battery. In the event of a battery fuse fault, the "ready" output is deactivated and a red LED lights on the control unit. The output is current-limited and turns itself off about 5 seconds after a short circuit to spare the battery and at the same time, avoid tripping the battery fuse. In the event of a short circuit in buffer mode, the module produces about 20 A, which helps trip any secondary fuses. Monitoring of the battery fuse and current limitation in the event of short circuits provides increased reliability and guarantees that the UPS will function after a short circuit. The input is galvanically isolated from the output side.

Battery holder for DIN rail



- Available for 7 and 24 Ah batteries
- Puls DIN rail bracket
- Wiring incl. 30 A fuse
- Heavy duty terminal blocks
- Quick and easy battery replacement

Specifications

| | |
|----------------------------------|------------------------------------|
| Approvals | CB, CE, CSA, CSA US, EX, IECEx, UL |
| Charging The Battery Type | 1.5 |
| Depth | 117 |

| | |
|---|-------------------------|
| Efficiency | 97.5 |
| Height | 124 |
| Input Current During Charging Of Aggregates | 1.2 |
| Input voltage for battery connection | 22.8 |
| Input Voltage From battery | 12 |
| Input Voltage From The Unit | 24 |
| IP Class | IP20 |
| Life span | 114 000 h @ 10 A, 40 °C |
| Material Protection | Aluminium |
| MTBF (IEC 61709) | 788 000 h @ 10 A, 40 °C |
| Output Current At 12 V DC | 5 |
| Output current at 24 V dc | 10 |
| Output Current During Normal Operation Via The Unit Max | 15 |
| Output current for battery operation max | 10 A (15 A @ 5 s) |
| Output Voltage at Battery | 22.25 |
| Output Voltage At Buffering | 22.25 |
| Output voltage max | 24 |
| Output voltage min | 12 |
| Output Voltage Normal Operation | 24 |
| Permitted Battery Sizes | 3,9-40 Ah |
| Power Reduction Of 60 To 70 ° C | 5 |
| Ripple. max | 20 |
| Temperature Range Without Derating From | -25 |
| Temperature Range Without Derating To | 50 |
| Type Power Supply | DC-UPS |
| Weight | 0.65 |
| Width | 49 |
| Voltage Level Of The Connection Of The Battery | 22.3 |

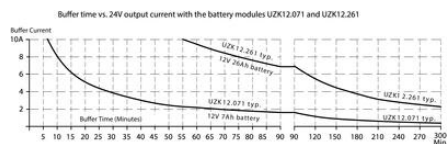


Fig. 24-2 Front view

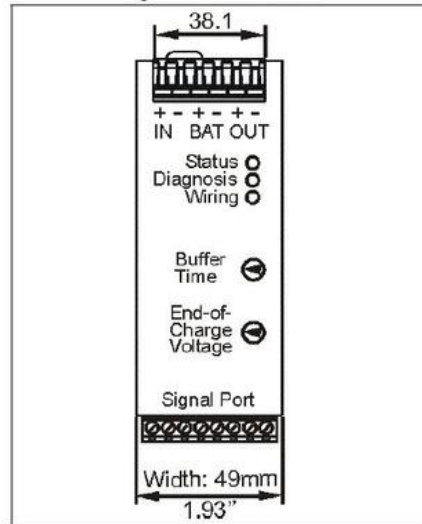


Fig. 24-1 Side view

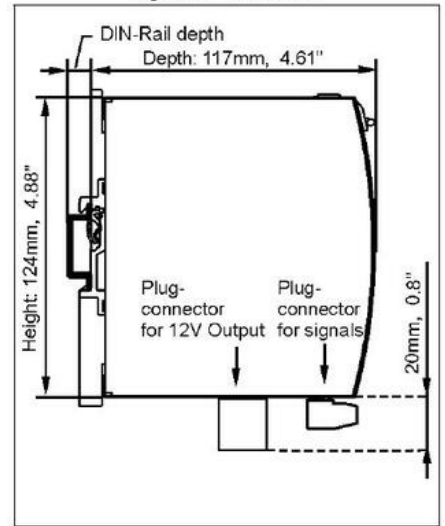


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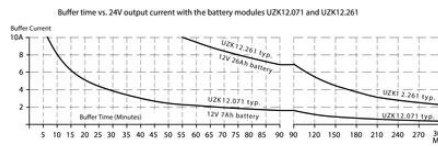
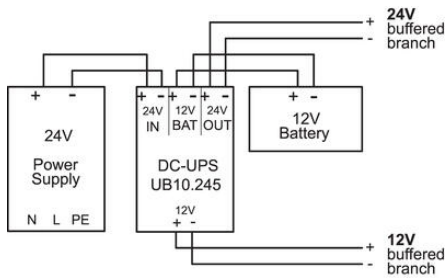
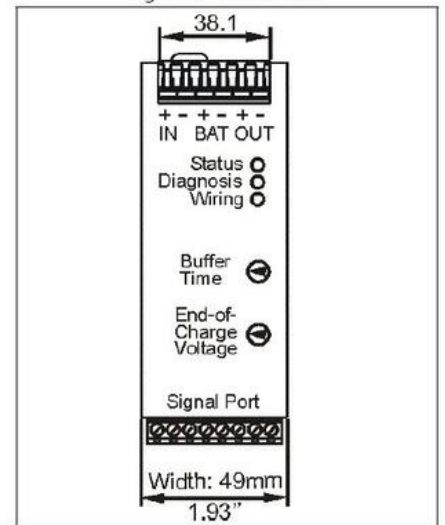


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