

PSB series power supply

Enclosed, switch mode buffer power supply 13,8V DC, without automatic operation control

CODE: **PSB-1001270** v1.0/VI

EN

TYPE: **PSB 13,8V/7A enclosed switch mode buffer power supply**

Features of the power supply:

- DC 13,8V/7A uninterruptible power supply*
- wide AC input voltage range 176+264V
- high efficiency 80%
- controlling of battery charging and maintaining
- protecting of battery against excessive discharging (UVP)
- battery charging current 1A/2A, changed by jumper
- additional accessories: automation module MPSB12 (technical outputs):
 - EPS technical output indicating AC power loss
 - PSU technical output indicating PSU failure
 - LoB technical output indicating battery low voltage
- battery output is full protected against short-circuit and reverse connection
- LED optical signalisation
- protections:
 - short-circuit protection SCP
 - over voltage protection OVP
 - surge protection
 - overload protection OLP
- warranty – 2 year from the production date



DESCRIPTION

Buffer-type power supply units are intended for continuous power supply to devices that require stabilised voltage of **12V DC (+/-15%)**. The power supply provides a voltage of **U=13,8V DC** with an output current of:

1. Output current of 6A + 1A battery charging*

2. Output current of 5A + 2A battery charging*

Total device current + battery: 7A max*

In case of power voltage decay, prompt switching to battery supply occurs. The power supply unit is protected against a short circuit, an overload, a surge or over voltage protection.

TECHNICAL DATA

| | |
|---|---|
| Supply voltage | 176+264V AC |
| Current consumption | 0,95A@230VAC max. |
| Supply power | 100W max. |
| Efficiency | 80% |
| Output voltage | 11V± 13,8V DC – buffer operation 9,5V± 13,8V DC – battery operation |
| Output current t_{AMB}<30°C | 6A + 1A battery charging - see chart 1 5A + 2A battery charging - see chart 1 |
| Output current t_{AMB}=40°C | 4,9A + 1A battery charging - see chart 1 3,9A + 2A battery charging - see chart 1 |
| Voltage adjustment range | 12±14V DC |
| Ripple voltage | 120mV p-p max. |
| Battery charging current | 1A or 2A max. |
| Short-circuit protection SCP | electronic, automatic recovery |
| Overload protection OLP | 105-150% of power supply, automatic recovery |
| Overload protection (battery) OLP | glass fuse |
| Surge protection | varistors |
| Overvoltage protection OVP | >16V (automatic recovery) |
| Excessive discharge protection UVP | U<9,5V (± 5%) – disconnection of battery |
| Optical signalisation | green LED- presence of AC voltage |
| Output of optical signalization | LED AC- presence of AC voltage LED DC- presence of DC voltage on power supply output |
| Additional accessories | Module MPSB12 (technical outputs) |
| Operation conditions | 2-nd environmental class, temperature: -10 °C+40 °C relative humidity 20%...90%, without condensation |
| Dimensions | L=199, W=97, H=42 [±2mm] |
| Net/gross weight | 0,6kg / 0,65kg |
| Protection class EN 60950-1:2007 | I (first) - requires a protective conductor (PE) |
| Declarations, warranty | CE, 2 year from the production date |
| Connectors | power-supply: Φ0,63±2,5 I/O PCB: Φ0,41±1,63 battery output BAT: 6,3F-2,5/40cm, output of optical signalization: plug 3-pin 5 mm |

* See chart 1

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Output current vs temperature

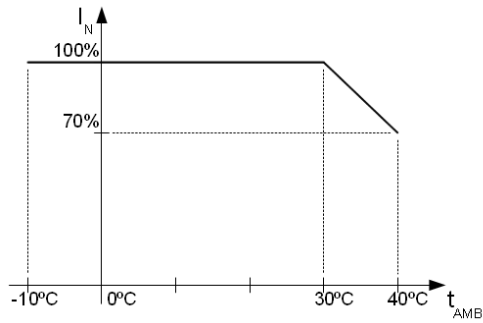


Chart 1.
Allowable output current from the power supply depending on ambient temperature.

Dimensions and fitting of the PSB-1001270 power supply

