

# PSB series power supply

Enclosed, switch mode buffer power supply 13,8 V DC



CODE: **PSB-12V3A** v1.0/I  
TYPE: **PSB 13,8V/3A enclosed, switch mode buffer power supply**

EN

## Features of the power supply:

- DC 13,8 V/3 A uninterruptible power supply
- high efficiency 87%
- controlling of battery charging and maintaining
- protecting of battery against excessive discharging (UVP)
- battery charging current 0,5 A
- optional equipment: set of external LED indicators: PKAZ168, mounting plate DIN1
- 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 production date



## DESCRIPTION

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

### Output current of 3 A + 0,5 A battery charging

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	~ 200 – 240 V; 0,5 A; 50/60 Hz
Inrush current	40 A
Supply power	48 W
Efficiency	87%
Output voltage (factory settings)	11-13,8 V DC – buffer operation 9,5-13,8 V DC – battery operation
Output current	3,5 A
Battery charging current	0,5 A
Voltage adjustment range	13,5 – 14,4 V DC
Current consumption by PSU during battery-assisted operation	approx. 35 mA
Ripple voltage	100mV p-p max.
Short-circuit protection SCP	electronic, automatic recovery
Overload protection OLP	105-150% PSU power, automatically recovered
Overload protection (battery) OLP	polymer fuse
Surge protection	varistors
Overvoltage protection OVP	>19 V (activation requires disconnecting the load or supply for about approx. 1 min.)
Excessive discharge protection UVP	U<9,5 V ( $\pm 5\%$ ) – disconnection of battery
Optical signalisation	LED green – indicates DC voltage at the power
LED optical indication output (intended for optional indication set PKAZ168)	LED AC – presence of AC voltage LED DC – presence of DC voltage on power supply output LED CHARGE – battery charging process
Optional equipment	A set for optical indication LED PKAZ168
Operation conditions	2-nd environmental class, temperature: -10°C+40°C relative humidity 20%...90%, without condensation
Dimensions	L=110, W= 78, H=36 [ $\pm 2$ mm]
Net/gross weight	0,25 / 0,27 [kg]
Protection class electric shock protection	I (first) - requires a protective conductor
Declarations, warranty	CE, 2 year from the production date
Connectors	I/O PCB: 0,5 – 2,5 mm <sup>2</sup> (AWG 26 – 12) output of optical signalization: 4 pins micromatch socket
Additional accessories	Battery wires 6,3F – 45cm, ML062 angle muff (hole 5,2mm)

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## Dimensions and fitting of the PSB-12V3A power supply

