

# PSB series power supply

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



CODE: **PSB-12V10A** v1.0/l  
TYPE: **PSB 13,8V/10A enclosed, switch mode buffer power supply**

EN

## Features of the power supply:

- DC 13,8 V/10 A uninterruptible power supply
- high efficiency 87%
- controlling of battery charging and maintaining
- protecting of battery against excessive discharging (UVP)
- battery charging current 1 A/4 A, changed by jumper
- optional equipment: set of external LED indicators: PKAZ168, mounting plate DIN3
- 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:

- 1. Output current of 9 A + 1 A battery charging**
  - 2. Output current of 6 A + 4 A battery charging**
- Total device current + battery: 10 A 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	~ 200 – 240 V; 1,3 A; 50/60 Hz
Inrush current	40 A
Supply power	138 W
Efficiency	87%
Output voltage (factory settings)	11-13,8 V DC – buffer operation 9,5-13,8 V DC – battery operation
Output current	10 A
Battery charging current	1 A / 4 A jumper selectable
Voltage adjustment range	13,5 – 14,4 V DC
Current consumption by PSU during battery-assisted operation	approx. 25 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	melting fuse T10 A
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=199, W= 110, H=50 [ $\pm 2$ mm]
Net/gross weight	0,67 / 0,71 [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 $\Phi 6$ (M6-2,5), 45cm

