

PSB series power supply

Enclosed, switch mode buffer power supply 54 V DC



CODE: **PSB-48V3A** v1.0/I
 TYPE: **PSB 54V/3A enclosed, switch mode buffer power supply**

EN

Features of the power supply:

- DC 54 V/3 A uninterruptible power supply
- high efficiency 90%
- controlling of battery charging and maintaining
- protecting of battery against excessive discharging (UVP)
- battery charging current 0,5 A/1 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 **48 V DC (+/-15%)**. The power supply provides a voltage of **U=54 V DC** with an output current of:

1. Output current of **2,5 A + 0,5 A battery charging**
 2. Output current of **2 A + 1 A battery charging**
- Total device current + battery: 3 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; 1,5 A; 50/60 Hz
Inrush current	50 A
Supply power	162 W
Efficiency	90%
Output voltage (factory settings)	44-54 V DC – buffer operation 38-54 V DC – battery operation
Output current	3 A
Battery charging current	0,5 A / 1 A jumper selectable
Voltage adjustment range	53 – 56 V DC
Current consumption by PSU during battery-assisted operation	approx. 25 mA
Ripple voltage	150mV 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 F3 A
Surge protection	varistors
Overvoltage protection OVP	>60 V (activation requires disconnecting the load or supply for about approx. 1 min.)
Excessive discharge protection UVP	U<38 V (± 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 enviromental class, temperature: -10°C+40°C relative humidity 20%...90%, without condensation
Dimensions	L=199, W= 110, H=50 [±2mm]
Net/gross weight	0,68 / 0,72 [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 ² (AWG 26 – 12) output of optical signalization: 4 pins micromatch socket
Additional accessories	Battery wires 6,3F – 45cm, ML062 angle muff (hole 5,2mm)

