

PSB series power supply

Enclosed, switch mode buffer power supply 54 V DC



CODE: **PSB-48V5A** v1.0/I
 TYPE: **PSB 54V/5A enclosed, switch mode buffer power supply**

EN

Features of the power supply:

- DC 54 V/5 A uninterruptible power supply
- high efficiency 87%
- built-in power factor correction system (PFC)
- controlling of battery charging and maintaining
- protecting of battery against excessive discharging (UVP)
- battery charging current 0,5/1/2 A, changed by jumper
- optional equipment: set of external LED indicators: PKAZ168, mounting plate DIN4
- 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
 - OHP overheat protection
- forced cooling - built-in fan
- 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 4,5 A + 0,5 A battery charging
 2. Output current of 4 A + 1 A battery charging
 3. Output current of 3 A + 2 A battery charging
- Total device current + battery: 5 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	60 A
Supply power	270 W
Efficiency	87%
Factor PF	>0,95
Output voltage (factory settings)	44-54 V DC – buffer operation 38-54 V DC – battery operation
Output current	5 A
Battery charging current	0,5/1/2 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 T5 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 environmental class, temperature: -10°C+40°C relative humidity 20%...90%, without condensation
Dimensions	L=237, W= 168, H=54 [±2mm]
Net/gross weight	1,25 / 1,31 [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 wire 6,3F – 45cm, angle muffs ML062 (hole 5,2mm)

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Dimensions and fitting of the PSB-48V5A power supply

