

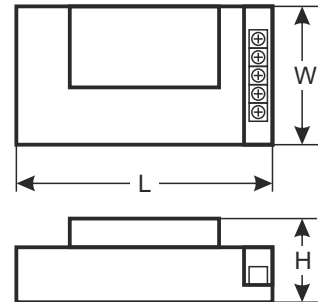
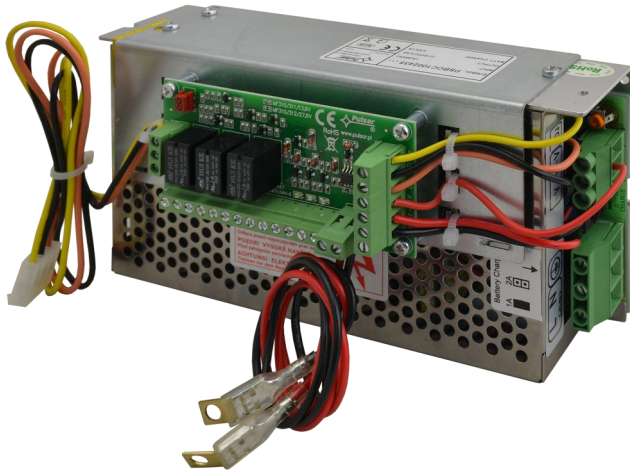
# PSBOC series power supply unit

Enclosed buffer switch mode power supply unit 13,8V DC with technical outputs



EN\*\*

CODE: **PSBOC1001270** v.1.1/IX  
TYPE: **PSBOC 13,8V/7A/OC** Enclosed buffer switch mode power supply unit with technical outputs.



## Features:

- 13,8VDC/7A uninterrupted supply\*
- wide range of supply voltage 176÷264VAC
- high efficiency 80%
- battery charge and maintenance control
- deep discharge battery protection (UVP)
- battery charging current 1A/2A jumper selectable
- battery output protection against short circuit and reverse polarity connection
- LED indication
- EPS technical output indicating AC power loss – OC and relay type
- PSU technical output indicating PSU failure – OC and relay type
- LoB technical output indicating battery low voltage – OC and relay type
- protections:
  - SCP short-circuit protection
  - OVP over voltage protection
  - surge protection
  - OLP overload protection
- warranty – 2 year from the production date

## DESCRIPTION

A buffer PSU is intended for an uninterrupted supply to devices requiring stabilized voltage of 12V DC (+/-15%). The PSU provides voltage of 13,8V DC with current capacity:

1. Output current 6A + 1A battery charging\*
2. Output current 5A + 2A battery charging\*

**Total device current + battery: 7A max\*.**

In the case of power failure from prime supply, the unit is instantly switched to battery assisted operation. The power supply unit features: short circuit, overload, surge and over voltage protections.

\* See chart 1

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SPECIFICATIONS	
Mains supply	176 ÷ 264V AC
Current consumption	0,95A@230VAC max.
PSU power	100W max.
Efficiency	80%
Output voltage	11V ÷ 13,8DC – buffer operation 9,5V ÷ 13,8DC – battery-assisted operation
Output current $t_{AMB} < 30^{\circ}\text{C}$	<b>6A + 1A battery charge – see chart 1</b> <b>5A + 2A battery charge – see chart 1</b>
Output current $t_{AMB} = 40^{\circ}\text{C}$	<b>4,9A + 0,1A battery charge - see chart 1</b> <b>3,9A + 2A battery charge - see chart 1</b>
Voltage adjustment range	12 ÷ 14V DC
Ripple voltage	120 mV p-p max.
Battery charging current	1A/2A jumper selectable
Short-circuit protection SCP	electronic, automatic recovery
Overload protection OLP	105 ÷ 150% of power supply, automatic recovery
Battery circuit protection SCP and reverse polarity connection	polymer fuse
Surge protection	varistors
Surge over voltage protection OVP	>16V (automatic recovery)
Deep discharge protection UVP	$U < 9,5\text{V} (\pm 5\%)$ – disconnection of the battery terminal
Technical outputs: - EPS; output indicating AC power failure  - PSU; output indicating DC absence/PSU failure  - LoB output indicating battery low voltage	- relay type: 1A@ 30VDC/50VAC - OC type, 50mA max., normal status: L (0V) level, failure: hi-Z level  - relay type: 1A@ 30VDC/50VAC, - OC type, 50mA max., normal status: L (0V) level, failure: hi-Z level  - relay type: 1A@ 30VDC/50VAC, - OC type, 50mA max., normal status: ( $U_{BAT} > 11,5\text{V}$ ): L (0V) level, failure: ( $U_{BAT} < 11,5\text{V}$ ): hi-Z level The power supply unit does not feature a battery detection function.
LED indication	Yes – LEDs
Operating conditions	2nd environmental class, temperature: $-10^{\circ}\text{C} \div +40^{\circ}\text{C}$
Dimensions	L=199, W=97, H=70 [+/- 2mm]
Net/gross weight	0,77kg / 0,81kg
Declarations, warranty	CE, RoHS, 2 year from the production date

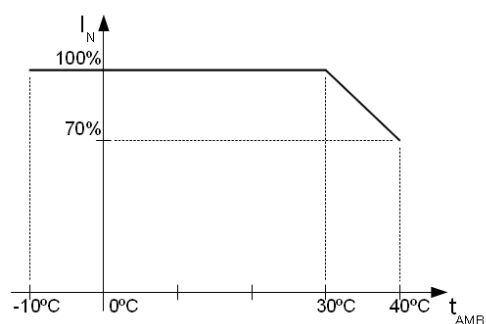


Chart 1.  
Acceptable output current from the PSU depending on ambient temperature.