

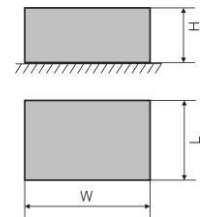
PSBOC series power supply unit

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



EN**

CODE: **PSBOC15512110** v.1.1/VIII
TYPE: **PSBOC 13,8V/11A/OC Enclosed buffer switch mode power supply unit with technical outputs.**



Features:

- 13,8VDC/11A uninterrupted supply*
- wide range of supply voltage 176÷264VAC
- high efficiency 83%
- battery charge and maintenance control
- deep discharge battery protection (UVP)
- battery charging current 1A/4A 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 10A + 1A battery charging***
- 2. Output current 7A + 4A battery charging***

Total device current + battery: 11A 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	1,4A@230VAC max.
PSU power	155W max.
Efficiency	83%
Output voltage	11V± 13,8V DC – buffer operation 9,5V±13,8V DC – battery-assisted operation
Output current $t_{AMB}<30^{\circ}\text{C}$	10A + 1A battery charge – see chart 1 7A + 4A battery charge – see chart 1
Output current $t_{AMB}=40^{\circ}\text{C}$	6,7A + 1A battery charge - see chart 1 3,7A + 4A battery charge - see chart 1
Voltage adjustment range	12÷14V DC
Ripple voltage	120 mV p-p max.
Current consumption by PSU systems	60 mA
Battery charging current	1A/4A 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: $-10^{\circ}\text{C}+40^{\circ}\text{C}$
Dimensions	199 x 110 x 50 +23 [mm] (LxWxH) (+/- 2)
Net/gross weight	0,91kg / 0,95kg
Declarations, warranty	CE, RoHS, 2 year from the production date

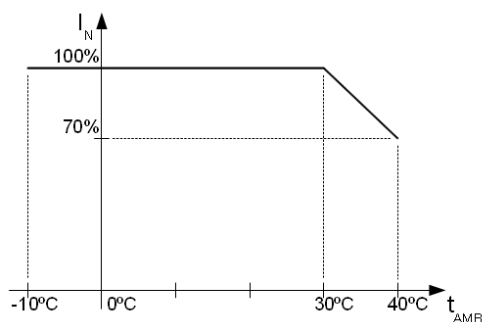


Chart 1.
Acceptable output current from the PSU depending on ambient temperature.