

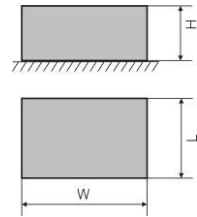
# PSBOC series power supply unit

Enclosed buffer switch mode power supply unit 54V DC with technical outputs



EN\*\*

CODE **PSBOC754813** v.1.0/II  
TYPE: **PSBOC 54V/1,3A/OC** Enclosed buffer switch mode power supply unit with technical outputs.



## Features:

- 54VDC/1,3A uninterrupted supply\*
- wide range of supply voltage 176÷264VAC
- high efficiency 88%
- battery charge and maintenance control
- deep discharge battery protection (UVP)
- battery charging current 0,3A
- 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 **48V DC (+/-15%)**. The PSU provides voltage of **U=54V DC** with output current of **I=1A + 0,3A for battery charging\***. In case of power decay, a battery back-up is activated immediately.

**During normal operation, the total current drawn by the equipment may not exceed I=1A. Maximum battery charging current: 0,3A. Total device current + battery: 1,3A max \*.**

\* See chart 1

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SPECIFICATIONS	
Mains supply	176 ÷ 264V AC
Current consumption	0,72A@230VAC max.
PSU power	75W max.
Efficiency	88%
Output voltage	44V÷ 54V DC – buffer operation 38V÷ 54V DC – battery-assisted operation
<b>Output current <math>t_{AMB}&lt;30^{\circ}\text{C}</math></b>	<b>1A + 0,3A battery charge – see chart 1</b>
<b>Output current <math>t_{AMB}=40^{\circ}\text{C}</math></b>	<b>0,6A + 0,3A battery charge - see chart 1</b>
Voltage adjustment range	48÷56V DC
Ripple voltage	150 mV p-p max.
Current consumption by PSU systems	70 mA
Battery charging current	0,3A
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	>62V (automatic recovery)
Deep discharge protection UVP	$U<38\text{V} (\pm 5\%)$ – 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: ( $U_{BAT} >46\text{V}$ ): L (0V) level, failure: ( $U_{BAT} <46\text{V}$ ): 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	159 x 97 x 42 +23 [mm] (LxWxH) (+/- 2)
Net/gross weight	0,59kg / 0,65kg
Declarations, warranty	CE, RoHS, 2 year from the production date

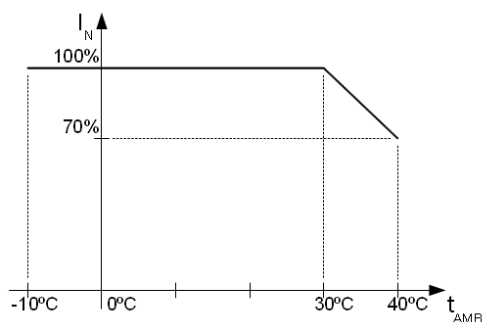


Chart 1.  
Acceptable output current from the PSU depending on ambient temperature.