

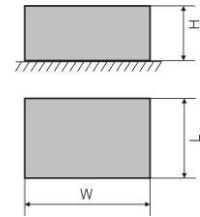
# PSBOC series power supply unit

Enclosed buffer switch mode power supply unit 27,6V DC with technical outputs



EN\*\*

CODE: **PSBOC1552455** v.1.1/VIII  
TYPE: **PSBOC 27,6V/5,5A/OC** Enclosed buffer switch mode power supply unit with technical outputs.



## Features:

- 27,6VDC/5,5A uninterrupted supply\*
- wide range of supply voltage 176÷264VAC
- high efficiency 84%
- battery charge and maintenance control
- deep discharge battery protection (UVP)
- battery charging current 0,5/2A, 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 – OC and relay type voltage
- 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 **24V DC (+/-15%)**. The PSU provides voltage of **U=27,6V DC** current efficiency:

1. Output current **5A + 0,5A battery charging\***
2. Output current **3,5A + 2A battery charging\***

**Total device current + battery: 5,5A 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	84%
Output voltage	22V÷ 27,6V DC – buffer operation 19V÷27,6V DC – battery-assisted operation
Output current $t_{AMB}<30^{\circ}\text{C}$	<b>5A + 0,5A battery charge – see chart 1</b> <b>3,5A + 2A battery charge – see chart 1</b>
Output current $t_{AMB}=40^{\circ}\text{C}$	<b>3,3A + 0,5A battery charge - see chart 1</b> <b>1,8A + 2A battery charge - see chart 1</b>
Voltage adjustment range	24÷28V DC
Ripple voltage	150 mV p-p max.
Current consumption by PSU systems	50 mA
Battery charging current	0,5A/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	>32V (automatic recovery)
Deep discharge protection UVP	$U<19\text{V} (\pm 5\%)$ – 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: ( $U_{BAT} >23\text{V}$ ): L (0V) level, failure: ( $U_{BAT} <23\text{V}$ ): 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	0,89kg / 0,94kg
Declarations, warranty	CE, RoHS, 2 year from the production date

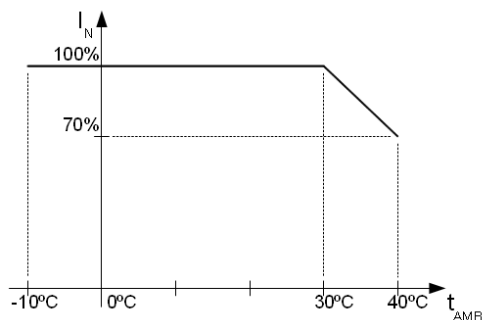


Chart 1.  
Acceptable output current from the PSU depending on ambient temperature.