HPSBOC series power supply unit

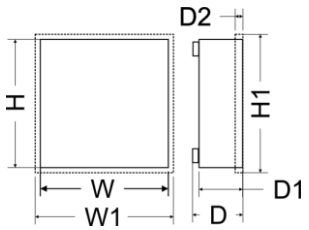
Buffer, switch mode power supply unit 54V DC with technical outputs.

EN

CODE: **HPSBOC 2548B** v.1.0/II

TYPE: **HPSBOC 54V/2,5A/4x7Ah/OC** **Buffer, switch mode power supply unit with technical outputs.**

GREEN POWER plus



CE

Features:

- DC 54V/2A uninterruptible power supply*
- fitting battery: 4x7Ah/12V
- wide range of mains supply: 176÷264V
- high efficiency 86%
- battery charging and maintenance control
- excessive discharging (UVP) protection
- jumper selectable battery charge current 0,5A/1A
- battery output full 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 overvoltage protection
  - overvoltage protection
  - against sabotage
  - overload protection (OLP)
- warranty – 2 year from the production date

DESCRIPTION

A buffer PSU is intended for an uninterrupted supply to devices requiring stabilised voltage of **48V DC (+/-15%)**. The PSU provides voltage of **U=54V DC**. Current efficiency:

1. Output current 2A + 0,5A battery charge*

2. Output current 1,5A + 1A battery charge*

Total device current + battery: 2,5A max*.

In case of power decay, a battery back-up is activated immediately. The PSU is constructed based on the switch mode PSU, with high energy efficiency. The PSU is housed in a metal enclosure (colour RAL 9003) which can accommodate a 4x7Ah/12V battery. A micro switch indicates door opening (front cover).

* See chart 1

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SPECIFICATIONS	
PSU type	A (EPS - External Power Source)
Mains supply	176÷264V AC 50÷60Hz
Current up to	1,4A@230VAC
Supply power	135W max.
Efficiency	86%
Output voltage	44V÷54V DC – buffer operation 38V÷54V DC – battery-assisted operation
Output current t_{AMB}<30°C	**2A + 0,5A battery charge - see chart 1** **1,5A + 1A battery charge - see chart 1**
Output current t_{AMB}=40°C	**1,5A + 0,5A battery charge - see chart 1** **1A + 1A battery charge - see chart 1**
Voltage adjustment range	48÷56VDC
Ripple	150mV p-p max.
Current consumption by PSU systems	75 mA
Battery charge current	0,5A or 1A max. @ 4x7Ah (± 5%) – 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
Overvoltage protection OVP	>62V (automatic recovery)
Excessive discharge protection UVP:	U<38V (± 5%) – disconnection of battery terminal
Tampering protection system: - TAMPER – indicating unwanted opening of the PSU's enclosure	- a microswitch, NC contacts (enclosure closed) 0,5A@50V DC (max.)
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} >46V): L (0V) level, failure: (U_{BAT} <46V): hi-Z level The power supply unit does not feature a battery detection function.
LED indication	Yes
Operating conditions	2nd environmental class, -10 °C÷40 °C
Enclosure	Steel plate, DC01 0,7mm colour: RAL 9003
Enclosure dimensions	400 x 350 x 90+8 [mm] (WxHxD)
Net/gross weight	3,70kg/ 3,90kg
Fitting battery	4x7Ah/12V (SLA) max. 395x160x65 mm (WxHxD) max
Closing	Cheese head screw x 2 (at the front), (lock assembly possible)
Deklarations, warranty	CE, 2 year from the production date
Notes	The enclosure does not adjoin the assembly surface so that cables can be led. Convectional cooling.

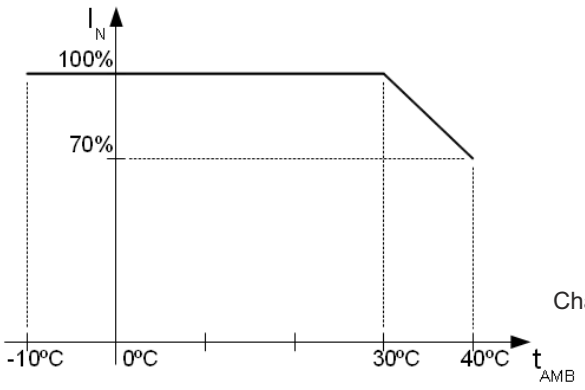

Chart 1. Acceptable output current from the PSU depending on ambient temperature.

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