

# HPSB series power supply unit

## Buffer, switch mode power supply unit 27,6V DC

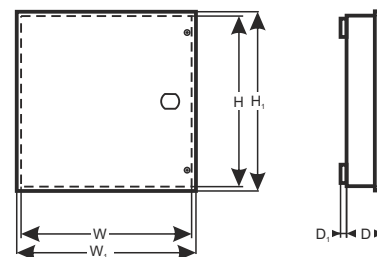


CODE: **HPSB 1824B** v.1.0/VIII  
TYPE: **HPSB 27,6V/1,5A/2x7Ah Buffer, switch mode power supply unit**

EN\*\*



GREEN POWER



### Features:

- DC 27,6V/1,5A uninterruptible power supply\*
- fitting battery: 2x 7Ah/12V
- wide range of mains supply: 176÷264V
- high efficiency 77%
- battery charging and maintenance control
- excessive discharging (UVP) protection
- battery charge current 0,3A
- battery output full protection against short-circuit and reverse polarity connection
- LED indication
- protections:
  - SCP short-circuit protection
  - OVP overvoltage protection
  - overvoltage protection (input AC)
  - against sabotage
  - overload protection (OLP)
- warranty – 2 year from the production date

### DESCRIPTION

A buffer PSU is intended for uninterrupted supply to devices that require stabilised voltage of **24V DC (+/-15%)**. The PSU provides voltage of **U=27,6V DC** with output current of **I=1,5A + 0,3A for battery charge\***. 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 two 7Ah/12V batteries. A micro switch indicates door opening (front cover).

During normal operation, the total current drawn by the equipment may not exceed **I = 1,5A\***.

Maximum battery charge current: **0,3 A\***.

Total device current + battery: **1,8 A max\***.

\* Refer to chart 1

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SPECIFICATIONS	
PSU type	A (EPS - External Power Source)
Mains supply	176÷264V AC 50÷60Hz
Current up to	0,6A@230VAC
Supply power	50W max.
Efficiency	77%
Output voltage	27,6V DC – buffer operation 19V÷27,6V DC – battery-assisted operation
<b>Output current <math>t_{AMB}&lt;30^{\circ}C</math></b>	<b>1,5A + 0,3A battery charge - refer to chart 1</b>
<b>Output current <math>t_{AMB}=40^{\circ}C</math></b>	<b>1A + 0,3A battery charge - refer to chart 1</b>
Voltage adjustment range	24÷28VDC
Ripple	150mV p-p max.
Battery charge current	0,3A max. @ 2x 7Ah ( $\pm 5\%$ )
Short-circuit protection SCP	electronic, automatic return
Overload protection OLP	105-150% of the PSU power, automatic return
Battery circuit protection SCP and reverse polarity connection	PTC polymer fuse
Surge protection	varistors
Overvoltage protection OVP	>32V (automatic recovery)
Excessive discharge protection UVP	$U<19V (\pm 5\%)$ – disconnect of connection battery
Sabotage protection: - TAMPER output indicating enclosure opening	- microswitch, NC contacts (enclosure closed), 0,5A@50V DC (max.)
LED indication	Yes
Operating conditions	2nd environmental class, $-10^{\circ}C\div 40^{\circ}C$
Enclosure	Steel plate DC01, thickness: 0,7mm, colour: RAL 9003
Dimensions	W=280 H=292 D+D <sub>1</sub> =82 + 8 [+/- 2mm] W <sub>1</sub> =285 H <sub>1</sub> =296 [+/- 2mm]
Net/gross weight	2,1 / 2,3 kg
Fitting battery	2x7Ah/12V (SLA) max. 180x155x75mm (WxHxD) max
Closing	Cheese head screw x 2 (at the front), (lock assembly possible)
Declarations, warranty	CE, RoHS, 2 year from the production date
Notes	The enclosure does not adjoin the assembly surface so that cables can be led. Convictional cooling. Connectors: Power-supply: $\Phi 0,63\div 2,5$ Battery output BAT: 6,3F-2,5.

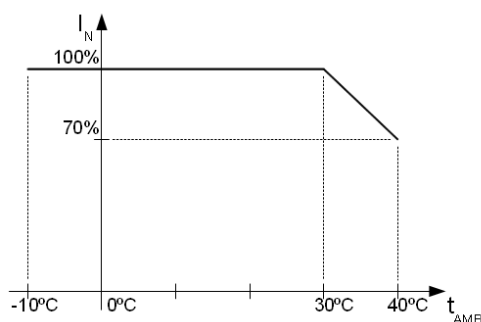


CHART 1. Acceptable output current from the PSU depending on ambient temperature.

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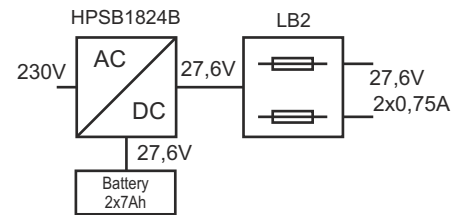
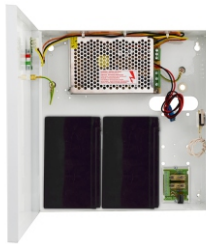
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### Optional configurations:

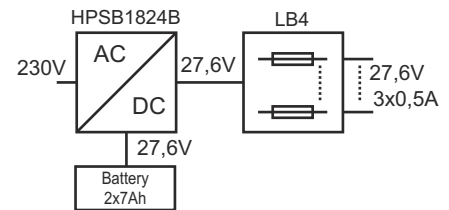
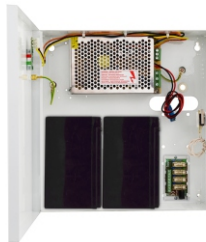
#### Buffer power supply unit HPSB 27,6V/2x0,75A/2x7Ah.

- HPSB1824B + LB2 2x0,75A (AWZ586) + 2x7Ah



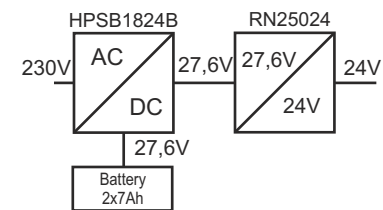
#### Buffer power supply unit HPSB 27,6V/3x0,5A/2x7Ah.

- HPSB1824B + LB4 3x0,5A (AWZ574 or AWZ576) + 2x7Ah



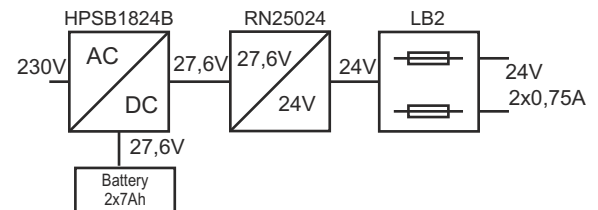
#### Buffer power supply unit HPSB 27,6V/24V/1,5A/2x7Ah.

- HPSB1824B + RN25024 (27,6V/24V) + 2x7Ah



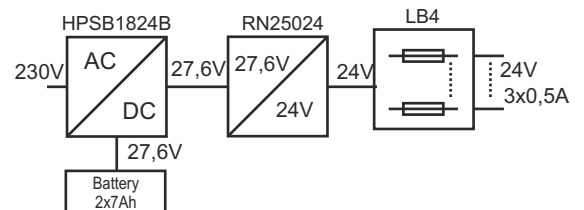
#### Buffer power supply unit HPSB 27,6V/24V/2x0,75A/2x7Ah.

- HPSB1824B + RN25024 (27,6V/24V) + LB2 2x0,75A (AWZ586) + 2x7Ah



#### Buffer power supply unit HPSB 27,6V/24V/3x0,5A/2x7Ah.

- HPSB1824B + RN25024 (27,6V/24V) + LB4 3x0,5A (AWZ574 or AWZ576) + 2x7Ah



#### Buffer power supply unit HPSB 27,6V/5V±18V /2A±1,3A/2x7Ah.

- HPSB1824B + DCDC20 (5V±18V/2A±1,3A) + 2x7Ah

