

# HPSB series power supply unit

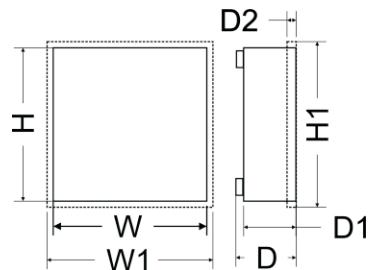


Buffer, switch mode power supply unit 27,6V/DC, without automatic operation control

CODE:  
TYPE:

**HPSB 3524C** v.1.0  
**HPSB 27,6V/3A/2x17Ah buffer, switch mode**  
**power supply unit**

EN\*



## Features:

DC 27,6V/3A uninterruptible power supply  
fitting battery: 2x 17Ah/12V  
wide range of mains supply: 176÷264V  
high efficiency 83%  
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  
protections:  
SCP short-circuit protection  
OVP overvoltage protection  
overvoltage protection (AC input)  
against sabotage  
overload protection (OLP)

## DESCRIPTION

A buffer PSU is intended for an uninterrupted supply to devices requiring stabilised voltage of **24 V DC** (+/-15%). The PSU provides voltage of **U=27,6 V DC**. Current efficiency:

1. Output current 3,0A + 0,5A battery charge
  2. Output current 2,5A + 1,0A battery charge
- Total device current + battery: 3,5A 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 two 17Ah/12V batteries. A micro switch indicates door opening (front cover).

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## SPECIFICATIONS

PSU type	A (EPS - External Power Source)
Mains supply	176÷264V AC 50÷60Hz
Current up to	0,9A@230VAC
Supply power	100W max.
Efficiency	83%
Output voltage	27,6V DC – buffer operation 19V÷27,0V DC – battery-assisted operation
Output current	<b>3 A + 0,5A battery charge</b> <b>2,5 A + 1A battery charge</b>
Output current $t_{AMB} < 30^{\circ}\text{C}$	3,0 A + 0,5A battery charge - refer to chart 1 2,5 A + 1,0A battery charge - refer to chart 1
Output current $t_{AMB} = 40^{\circ}\text{C}$	2,0 A + 0,5A battery charge - refer to chart 1 1,5 A + 1,0A battery charge - refer to chart 1
Voltage adjustment range	24÷28VDC
Ripple	150mV p-p max.
Battery charge current	0,5A or 1A max. @ 2x 17Ah ( $\pm 5\%$ ) – jumper selectable
Short-circuit protection SCP	electronic
Overload protection OLP	PTC polymer fuse
Ovvervoltage protection OVP	U>115% ÷ 150% of the output voltage (set), power cut off, automatic return
Excessive discharge protection UVP	U<19 V ( $\pm 5\%$ ) – disconnection of battery terminal
LED indication	Yes
Operating conditions	2nd environmental class, -10 °C÷40 °C
Enclosure	Metal, IP20, colour RAL9003
Enclosure dimensions	405 x 355 x 90+8 (400 x 350 x 90) (WxHxD)
Net/gross weight	3,53kg / 3,85kg
Fitting battery	2x 17Ah/12V (SLA) max.
Closing:	Cheese head screw x 2 (at the front), (lock assembly possible)
Sabotage protection	1x microswitch: opening the enclosure 0.5 A@50 V/DC max. NC
Notes	Space between the device and the wall (ground) 8 mm PSU cooling: convection, Connectors: Power-supply: $\Phi 0,63 \div 2,5$ I/O PCB: $\Phi 0,41 \div 1,63$ , Battery output BAT: 6,3F-2,5/40cm.

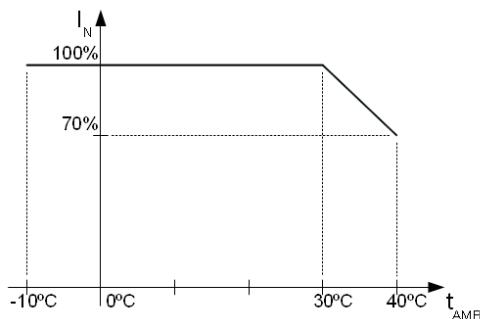


CHART 1. Acceptable output current from the PSU depending on ambient temperature.

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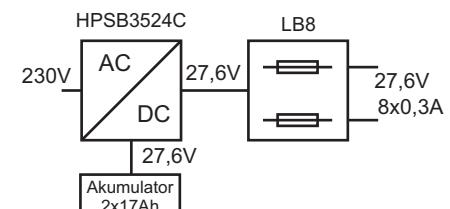


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## Optional configurations:

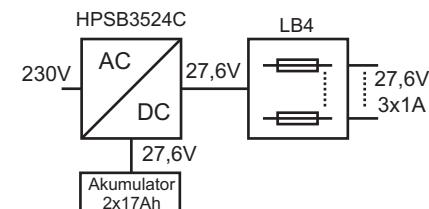
**Buffer power supply unit HPSB 27,6V/8x0,3A/2x17Ah.**

- HPSB3524C + LB 8x0,3A (AWZ577 lub AWZ580) + 2x17Ah



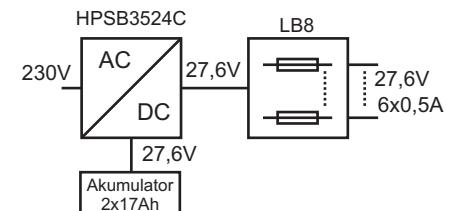
**Buffer power supply unit HPSB 27,6V/3x1A/2x17Ah.**

- HPSB3524C + LB4 3x1A (AWZ575 lub AWZ576) + 2x17Ah



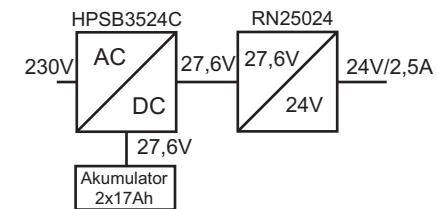
**Buffer power supply unit HPSB 27,6V/6x0,5A/2x17Ah.**

- HPSB3524C + LB8 6x0,5A (AWZ578 lub AWZ580) + 2x17Ah



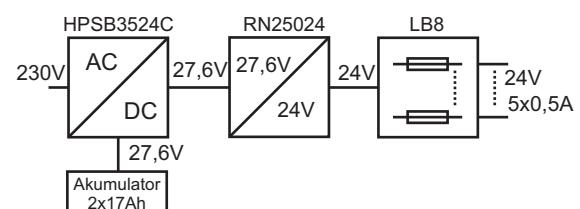
**Buffer power supply unit HPSB 27,6V/24V/2,5A/2x17Ah.**

- HPSB3524C + RN25024 (27,6V/24V) + 2x17Ah



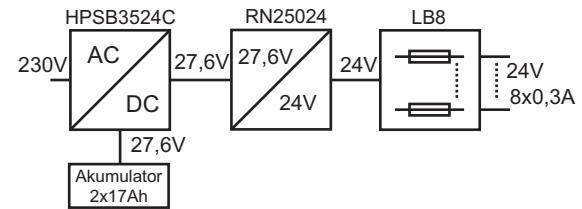
**Buffer power supply unit HPSB 27,6V/24V/5x0,5A/2x17Ah.**

- HPSB3524C + RN25024 (27,6V/24V) + LB8 5x0,5A (AWZ578 lub AWZ580) + 2x17Ah



**Buffer power supply unit HPSB 27,6V/24V/8x0,3A/2x17Ah.**

- HPSB3524C + RN25024 (27,6V/24V) + LB8 8x0,3A (AWZ577 lub AWZ580) + 2x17Ah



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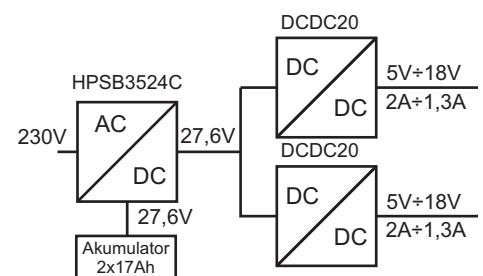


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## Optional configurations:

Buffer power supply unit HPSB 27,6V/2x5V÷18V/2x2A ÷1,3A/2x17Ah.

- HPSB3524C + 2xDCDC20 (2x5V÷18V/2A÷1,3A) + 2x17Ah



Buffer power supply unit HPSB 27,6V/2x5V÷18V/2x2A ÷1,3A/8x0,5A/2x17Ah.

- HPSB3524C + 2xDCDC20 (2x5V÷18V/2A÷1,3A)  
+ 2xLB4 8x0,5A (AWZ574 lub AWZ576) + 2x17Ah

