

HPSBOC series power supply unit



Buffer, switch mode power supply unit 27,6V DC, with automatic operation control

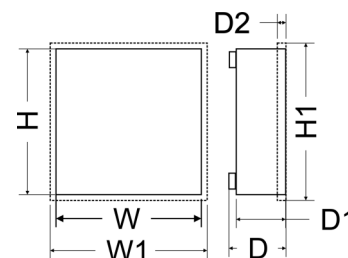
CODE: **HPSBOC 5524C** v.1.1/V

EN

TYPE: **HPSBOC 27,6V/5A/2x17Ah/OC** Buffer, switch mode power supply unit
with automatic operation control.



GREEN POWER plus



Features:

- DC 27,6V/5A uninterruptible power supply*
- fitting battery: 2x17Ah/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/2A
- battery output full protection against short-circuit and reverse polarity connection
- LED indication
- FAC technical output indicating AC power loss – OC and relay type
- FPS technical output indicating PSU failure – OC and relay type
- FLB 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 **24V DC (+/-15%)**. The PSU provides voltage of **U=27,6 V DC**. Current efficiency:

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

2. Output current 3,5A + 2A battery charge*

Total device current + battery: 5,5A 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).

* See chart 1

HPSB series power supply unit



Buffer, switch mode power supply unit 27,6V DC, with automatic operation control

SPECIFICATIONS	
PSU type	A (EPS - External Power Source)
Mains supply	176÷264V AC
Current up to	1,4A@230VAC
Supply power	155W max.
Efficiency	83%
Output voltage	22V÷27,6V DC – buffer operation 19V÷27,6V DC – battery-assisted operation
Output current $t_{AMB}<30^{\circ}\text{C}$	5A + 0,5A battery charge - see chart 1 3,5A + 2A battery charge - see chart 1
Output current $t_{AMB}=40^{\circ}\text{C}$	3,3A + 0,5A battery charge - see chart 1 1,8A + 2A battery charge - see chart 1
Voltage adjustment range	24÷28V DC
Ripple	150mV p-p max.
Battery charge current	0,5A or 2A max. @ 2x17Ah ($\pm 5\%$)– 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	>32V (automatic recovery)
Excessive discharge protection UVP:	$U<19\text{V} (\pm 5\%)$ – 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: - FAC; output indicating AC power failure - FPS; output indicating DC absence/PSU failure -FLB output indicating battery low voltage	- relay type: 1A@ 30VDC/50VAC, time lag: approx. 10s. - OC type, 50mA max., normal status: L (0V) level, failure: hi-Z level, time lag: 10s. - 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
LED indication	Yes
Operating conditions	2nd environmental class, $-10^{\circ}\text{C}\div 40^{\circ}\text{C}$
Enclosure	Steel plate, DC01 0,7mm colour: RAL 9003
Enclosure dimensions	405 x 355 x 90+8 [mm] (WxHxD)
Net/gross weight	3,70kg / 4,00kg
Fitting battery	2x 17Ah/12V (SLA) max.
Closing	Cheese head screw x 2 (at the front), (lock assembly possible)
Deklarations, warranty	CE, RoHS, 2 year from the production date
Notes	The enclosure does not adjoin the assembly surface so that cables can be led. PSU cooling: convection. Power-supply: $\Phi 0,63\text{-}2,50$ (AWG 22-10) Outputs: $\Phi 0,63\text{-}2,50$ (AWG 22-10) Battery output BAT: 6,3F-2,5

HPSBOC series power supply unit



Buffer, switch mode power supply unit 27,6V DC, with automatic operation control

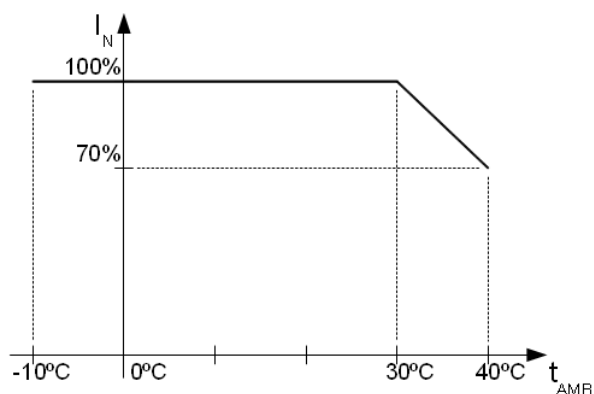
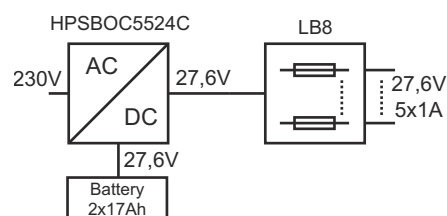


CHART 1. Acceptable output current from the PSU depending on ambient temperature.

Optional configurations:

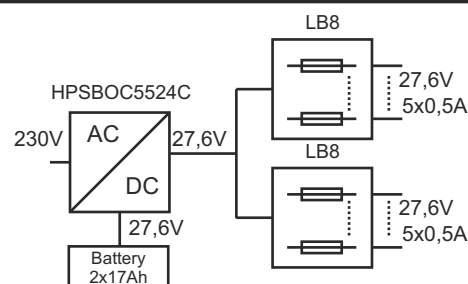
Buffer power supply unit HPSBOC 27,6V/5x1A/2x17Ah.

- HPSBOC5524C + LB8 5x1A (AWZ579 or AWZ580) + 2x17Ah



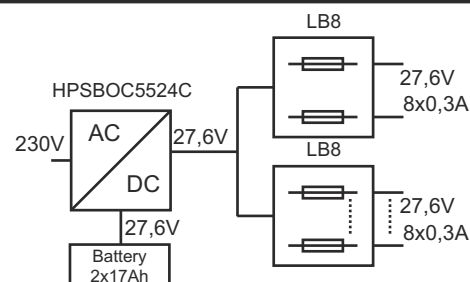
Buffer power supply unit HPSBOC 27,6V/10x0,5A/2x17Ah.

- HPSBOC5524C + 2xLB8 10x0,5A (AWZ578 or AWZ580) + 2x17Ah



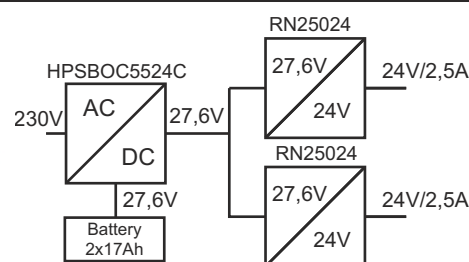
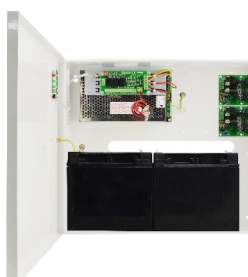
Buffer power supply unit HPSBOC 27,6V/16x0,3A/2x17Ah.

- HPSBOC5524C + 2xLB8 16x0,3A (AWZ577 or AWZ580) + 2x17Ah



Buffer power supply unit HPSBOC 27,6V/2x24V/2x2,5A/2x17Ah.

- HPSBOC5524C + 2 x RN25024(27,6V/24V) + 2x17Ah



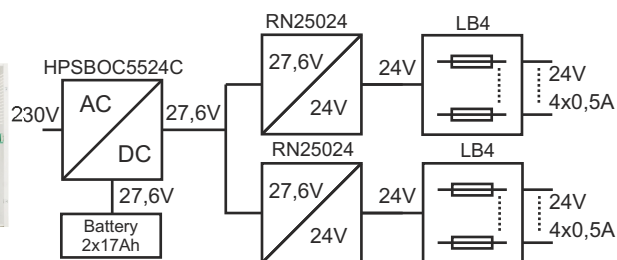
HPSB series power supply unit



Buffer, switch mode power supply unit 27,6V DC, with automatic operation control

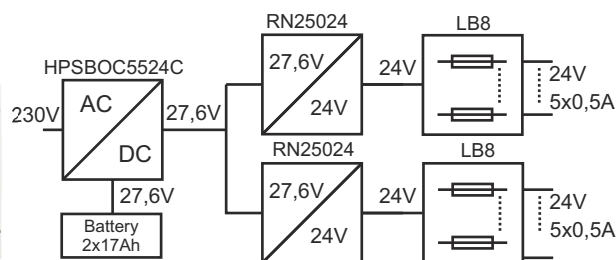
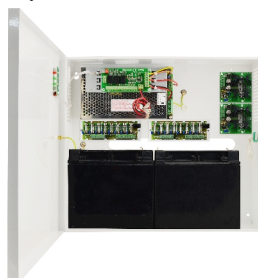
Buffer power supply unit HPSBOC 27,6V/2x24V/8x0,5A/2x17Ah.

- HPSBOC5524C + 2 x RN25024(27,6V/24V)
- + 2xLB4 8x0,5A (AWZ574 or AWZ576) + 2x17Ah



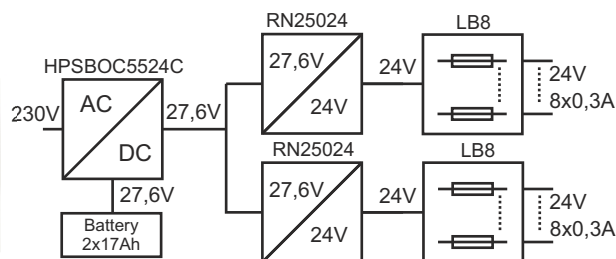
Buffer power supply unit HPSBOC 27,6V/2x24V/10x0,5A/2x17Ah.

- HPSBOC5524C + 2 x RN25024(27,6V/24V)
- + 2xLB8 10x0,5A (AWZ578 or AWZ580) + 2x17Ah



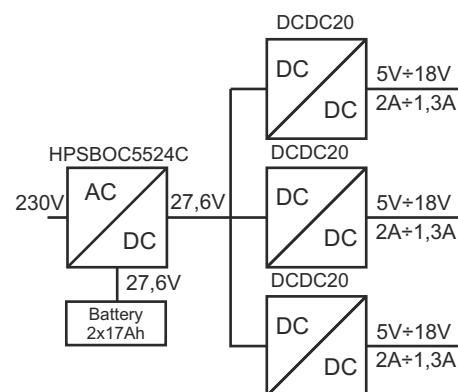
Buffer power supply unit HPSBOC 27,6V/2x24V/16x0,3A/2x17Ah.

- HPSBOC5524C + 2 x RN25024(27,6V/24V)
- + 2xLB8 16x0,3A (AWZ577 or AWZ580) + 2x17Ah



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

- HPSBOC5524C + 3xDCDC20 (3x5V±18V) + 2x17Ah



Buffer power supply unit HPSBOC 27,6V/3x5V±18V/3x2A±1,3A/12x0,5A/2x17Ah.

- HPSBOC5524C + 3xDCDC20 (3x5V±18V)
- + 3xLB4 12x0,5A (AWZ574 or AWZ576) + 2x17Ah

