

PSBS series power supply unit

Buffer switched mode power supply 27,6VDC

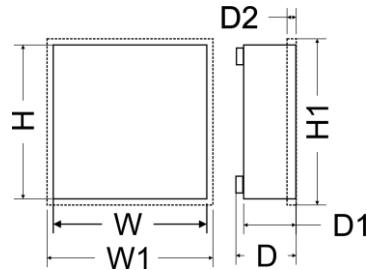


CODE:
TYPE:

PSBS 5024C v.1.0/III

PSBS 27,6V/5A/2x17Ah buffer switched mode power supply

EN



Features:

- uninterrupted voltage of 27,6VDC/5A
- high efficiency 73%
- fitting battery 2x17Ah/12V
- battery charge and maintenance control
- deep discharge battery protection (UVP)
- battery output protection against short circuit and reverse polarity connection
- battery charging current: 0,4A/1,2A/2A/2,7A jumper selectable
- START facility for manual battery connection
- fuse control of AUX, AUX1, AUX2, AUX3 outputs
- LED indication

- FAC technical output indicating 230V power loss
- FPS technical output indicating PSU failure:
 - output short circuit (SCP)
 - output overload (OLP)
 - output over voltage >33V (OVP)
 - battery disconnection <20V (UVP)
 - converter failure DC/DC
- protections:
 - SCP short-circuit protection
 - OLP overload protection
 - OVP over voltage protection
 - OHP overheat protection
 - surge protection
 - against sabotage
- warranty – 5 year from the production date

DESCRIPTION

A buffer PSU is intended for an uninterrupted supply to alarm system devices requiring stabilized voltage of 24V/DC (+/-15%). The PSU provides voltage of 27,6 V DC with current efficiency of:

1. Output current 5A (without a battery)
2. Output current 4,6A + 0,4A battery charge
3. Output current 3,8A + 1,2A battery charge
4. Output current 3,0A + 2A battery charge
5. Output current 2,3A + 2,7A battery charge

Total current of the receivers + battery: 5A max.

In case of a power loss, a battery back-up is activated immediately. The battery charging current is preset to 1,2A. The PSU is mounted in a metal enclosure (RAL 9003 colour) that accommodates a 2x17Ah/12V battery. The enclosure is equipped with a micro-switch indicating unwanted opening of the door (faceplate) or detachment from the mounting surface.

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SPECIFICATIONS

PSU type	A (EPS - External Power Source)
Mains supply	230V AC 50÷60Hz
Current consumption	1,1A
Power frequency	138W
PSU power	73%
Efficiency	22,0V ÷ 27,6V DC – buffer operation 20,0V ÷ 27,6V DC – battery-assisted operation
Output voltage	5A (without a battery) 4,6A + 0,4A battery charge 3,8A + 1,2A battery charge 3A + 2A battery charge 2,3A + 2,7A battery charge or 3 x 1,35A – outputs : +AUX1-, +AUX2-, +AUX3-
Output voltage adjustment range	12÷14,5V DC
Ripple voltage	50mV p-p max.
Battery charging current	0,4A / 1,2A / 2A / 2,7A – I_{BAT} (J1, J2) jumper selectable
Short-circuit protection SCP	200% ÷ 250% of the PSU power, hiccup mode – 13A/200ms and/or fuse damage in the battery circuit (fuse-element replacement required)
Overload protection OLP	110% ÷ 150% of the PSU power – electronic. Disconnection of the PSU outputs – automatic return after DC output circuit disconnection
Over voltage protection OVP	U>33V, disconnection of the output voltage, automatic return (AUX+ disconnection)
Battery circuit protection SCP and reverse polarity connection	5A – current limiting, F_{BAT} fuse (failure requires fuse-element replacement)
Deep discharge protection UVP	U < 20,0V ($\pm 5\%$) – battery disconnection (-BAT), P_{BAT} jumper selectable
Sabotage protection: - TAMPER output indicating enclosure opening	- micro-switches x2, NC contacts (enclosure closed and fixed to the surface), 0,5A@50V DC (max.)
Technical outputs: - FAC; output indicating AC power failure - FPS; technical output of the PSU operation status	- type OC, 50mA max. normal status: L (0V) level, failure: hi-Z level, relay: 10s. - type OC, 50mA max. normal status: L (0V) level, failure: hi-Z level (automatic return after restoration of correct operation)
LED indication	Yes - LEDs
Operating conditions	2nd environmental class, temperature: -10 °C÷40 °C
Enclosure	Steel plate DC01 1,2mm, RAL 9003
Dimensions	350 x 445 x 178 (345 x 440 x 170+8) (WxHxD) [mm] (+/- 2)
Net/gross weight	10,80kg / 11,50kg
Fitting battery	2x17Ah/12V (SLA) max.
Closing	Cheese head screw x 2 (at the front). lock assembly possible
Notes	The enclosure does not adjoin the assembly surface so that cables can be led – distance: 8mm PSU cooling: convectional

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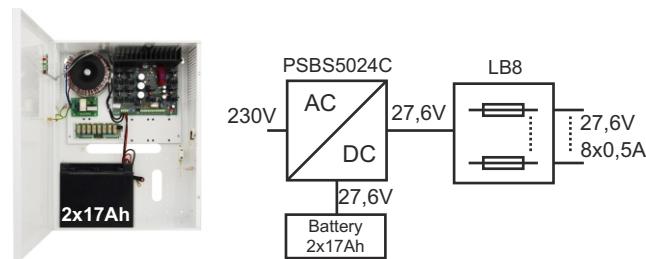
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Optional configurations with a 2x17Ah battery

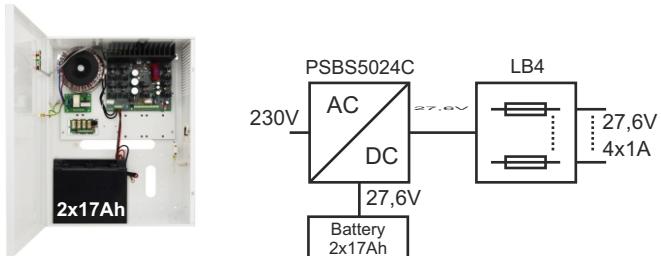
Buffer power supply unit PSBS 27,6V/8x0,5A/2x17Ah

PSBS 5024C + LB8 8x0,5A (AWZ578, AWZ580) + 2x17Ah



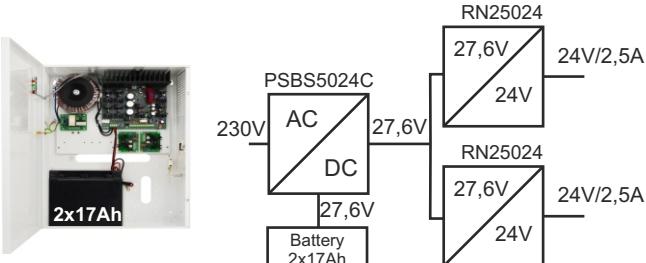
Buffer power supply unit PSBS 27,6V/4x1A/2x17Ah

PSBS 5024C + LB4 4x1A (AWZ575 lub AWZ576) + 2x17Ah



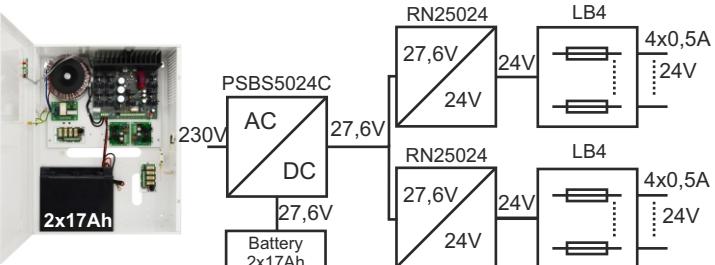
Buffer power supply unit PSBS 27,6V/2x24V/2x2,5A/2x17Ah

PSBS 5024C + 2xRN25024(27,6V/24V) + 2x17Ah



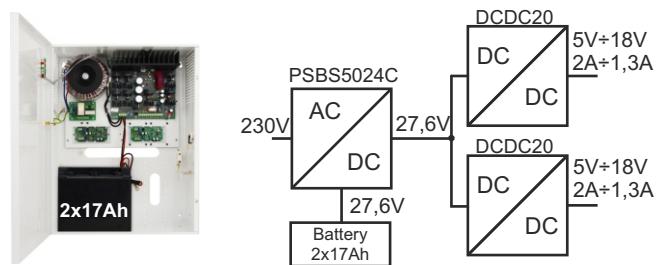
Buffer power supply unit PSBS 27,6V/2x24V/8x0,5A/2x17Ah

PSBS 5024C + 2xRN25024(27,6V/24V) + 2xLB4 8x0,5A (AWZ574 lub AWZ576) + 2x17Ah



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

PSBS 5024C + 2xDCDC20 (2x5V÷18V/2x2A÷1,3A) + 2x17Ah



Buffer power supply unit PSBS 27,6V/2x5V÷18V/2x2A÷1,3A/8x0,5A/2x17A

PSBS 5024C + 2xDCDC20 (2x5V÷18V/2x2A÷1,3A) + 2xLB4 8x0,5A (AWZ574 or AWZ576) + 2x17Ah

