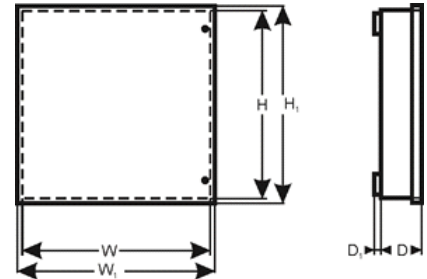


CODE: **AWZ 230** v.2.4/X  
TYPE: **AWZ 13,8V/2A/7Ah/LM Linear buffer power supply unit Grade 2.**



**GREY POWER plus**



### Features:

- EN50131-6 compliance, 1+2 grades and II environmental class
- mains supply ~230 V
- 13,8 V DC uninterrupted supply
- fitting battery: 7 Ah/12 V
- PSU current efficiency:
  - 0,58 A – for grades 1, 2 \*
  - 2 A – for general use \*\*(see: chapter 1.1)
- linear voltage regulator
- microprocessor-based automation system
- output voltage control
- dynamic battery test
- battery electrical continuity control
- battery voltage control
- battery fuse status control
- battery charge and maintenance control
- deep discharge battery protection (UVP)
- battery output protection against short-circuit and reverse polarity connection
- battery charging current 0,4 A/0,9 A jumper selectable
- START function of manual switch to battery power
- STOP facility for manual disconnection during battery - assisted operation
- LED indication
- acoustic indication
- EPS technical output of power failure - OC type
- PSU technical output indicating PSU and battery failure - OC type
- APS technical output indicating battery failure - OC type
- Optional installation of the MPSBS relay module changing technical outputs of the OC type to relay type
- adjustable times indicating AC power failure
- protections:
  - SCP short-circuit protection
  - OLP overload protection
  - over voltage protection
  - surge protection
  - against sabotage
- warranty – 5 years from the production date

### DESCRIPTION

The buffer power supply is designed in accordance with the requirements of the EN 50131-6 standard, grade 1+2 and II environmental class. It is intended for an uninterrupted supply of alarm system devices requiring stabilized voltage of **12 V DC (+/-15%)**. A linear stabilizing system, which has been used in the unit, provides voltage with a lower level of noise and a quicker response to interference when compared to a switched-mode regulator.

Depending on a required protection level of the alarm system in the installation place, the PSU efficiency and the battery charging current should be set as follows:

\* Grade 1, 2 - standby time 12h

**Output current 0,58 A + battery charging current 0,9 A**

\*\* General use – if the PSU is not mounted in an installation compliant with the EN-50131 standard, the acceptable current efficiency amounts to:

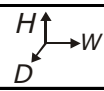
**1. Output current 2 A (without a battery)**

**2. Output current 1,6 A + 0,4 A battery charging current**

**3. Output current 1,1 A + 0,9 A battery charging current**

**Total current of the receivers + battery charging current is max. 2 A.**

In case of power decay, a battery back-up is activated immediately. The PSU is housed in a metal enclosure with battery space for a 7 Ah/12 V battery. It is fitted with micro switches indicating unwanted door opening (front panel).

<b>SPECIFICATIONS</b>	
PSU type	A (EPS - External Power Source), protection class 1+2, II environmental class
Mains supply	~230 V; 50 Hz
Current consumption	0,29 A
PSU power	28 W
Output voltage	11 - 13,8 V DC – buffer operation 10 - 13,8 V DC – battery-assisted operation
Output current	- for grades 1, 2: <b><math>I_o = 0,58 \text{ A} + 0,9 \text{ A}</math> battery charging current</b> - for general use: <b><math>I_o = 2 \text{ A}</math> (without a battery)</b> <b><math>I_o = 1,6 \text{ A} + 0,4 \text{ A}</math> battery charging current</b> <b><math>I_o = 1,1 \text{ A} + 0,9 \text{ A}</math> battery charging current</b>
Output voltage adjustment range	13 - 14 V DC
Ripple voltage	20mVp-p
Battery charging current	0,4 A/0,9 A jumper selectable
Short-circuit protection SCP	200% ÷ 250% of PSU power - current limitation and/or fuse $F_{BAT}$ damage in the battery circuit (fuse-element replacement required) Automatic return
Overload protection OLP	110% ÷ 150% (@25°C+65°C) of PSU power - limitation by the PTC resettable fuse, manual restart (disconnection of the DC output circuit)
Overvoltage protection OVP	$U > 16,5 \text{ V}$ disconnection of the output voltage (AUX+ disconnection), automatic return $U > 14,5 \text{ V}$ fault indication
Battery circuit protection SCP and reverse polarity connection	$F3,15 \text{ A}$ - current limitation, $F_{BAT}$ fuse (in case of a failure, fuse-element replacement required)
Deep discharge battery protection UVP	$U < 10 \text{ V}$ ( $\pm 0,5 \text{ V}$ ) – disconnection of battery terminal
Tamper protection: - TAMPER - indicates unwanted opening of the enclosure	- microswitch, NC contacts (enclosure closed), 0,5 A@50 V DC (max.)
Technical outputs: - EPS; output indicating AC power failure  - PSU; output indicating no DC power/PSU failure  - APS; output indicating battery failure	- OC type: 50mA max. Normal operation: L state (0V), failure: hi-Z state, - delay time 0s÷1h (+/-20%) – jumper selectable $T_{Ac}$  - OC type: 50mA max. Normal operation: L state (0V), failure: hi-Z state,  - OC type, 50mA max. Normal operation: L state (0V), failure: hi-Z state
LED indication	LEDs: AC/DC power status, failure
Acoustic indication	piezoelectric indicator 75dB/0,3m, switchable via jumper
Operating conditions	II environmental class, -10 °C÷+40 °C
Enclosure	Steel plate DC01, thickness: 0,7mm, colour: RAL 9003
Dimensions	$W=230 \text{ H}=230 \text{ D}+D_1=82+8 \text{ mm}$ [ $\pm 2 \text{ mm}$ ] $W_1=235, H_1=235$ [ $\pm 2 \text{ mm}$ ]
Net/gross weight	2,7 / 2,8kg
Fitting battery	7 Ah/12 V (SLA) max. 175x105x78mm (WxHxD) max 
Closing:	2x cheese head screw (at the front),
Declarations, warranty	CE, 5 year from the production date
Notes:	The enclosure does not adjoin the assembly surface so that cables can be led. Convictional cooling.