

CODE: **PSG2** v.1.0/II

EN

NAME: **Enclosed buffer switch mode power supply unit Grade 2**

Features:

- compliance with norm EN50131-6:2017 in grade 1, 2 and II environment class
- compliance with norm EN60839-11:2013 in grade 1, 2 and II environment class
- supply voltage ~200 - 240 V
- DC 13,8 V or 27,6 V uninterruptible power supply
- available versions with current efficiencies:
13,8 V: 2A/3A/5A/7A/10A/20A
27,6 V: 2A/3A/5A/10A
- high efficiency (up to 89%)
- battery charging current jumper selectable
- deep discharge battery protection (UVP)
- optional equipment: set of external LED indicators: PKAZ168, mounting plate DIN1-4
- START function of manual switch to battery power
- LED optical indication
- dynamic battery test
- battery circuit continuity control
- battery voltage control
- battery charging and maintenance control
- EPS technical output indicating AC power loss – relay
- APS technical output indicating battery failure – relay
- battery output protection against short circuit and reverse connection
- protections:
 - SCP short circuit protection
 - OLP overload protection
 - OVP overvoltage protection
 - surge protection
- warranty – 2 years from production date

Description

The buffer power supply is designed in accordance with the requirements of the (I&HAS) EN50131-6:2017 and (KD) EN60839-11:2013 standard, grade 1, 2 and II environmental class. The power supplies units are intended for an uninterrupted supply of I&HAS and KD devices requiring stabilized voltage of 12 or 24 V DC ($\pm 15\%$).

DISPLAYING PARAMETERS OF THE POWER SUPPLY:

PSU's name	Output voltage	Output current max.	Charging current
PSG2-12V1A	13,8 V	1,2 A	0,2 A
PSG2-12V2A	13,8 V	2,5 A	0,5 / 1 A
PSG2-12V3A	13,8 V	3,5 A	0,5 / 1 A
PSG2-12V5A	13,8 V	5 A	1 / 2 A
PSG2-12V7A	13,8 V	7 A	1 / 2 A
PSG2-12V10A	13,8 V	10 A	1 / 4 A
PSG2-12V20A	13,8 V	20 A	2 / 4 / 8 A
PSG2-24V2A	27,6 V	2,5 A	0,5 / 1 A
PSG2-24V3A	27,6 V	3,5 A	0,5 / 1 A
PSG2-24V5A	27,6 V	5 A	1 / 2 A
PSG2-24V10A	27,6 V	10 A	1 / 2 / 4 A

Total current of the receivers + battery charging current mustn't cross maximum current of power supply.

TECHNICAL DATA	PSG2-12V	PSG2-24V
PSU type:	A (EPS - External Power Source), II environmental class	
Power supply:	~ 200 - 240 V	
Output voltage:	11 - 13,8 V – buffer operation 10 - 13,8 V – battery-assisted operation	22 - 27,6 V – buffer operation 20 - 27,6 V – battery-assisted operation
Current consumption by the PSU systems during battery-assisted operation:	30 - 50mA	20 - 40mA
Battery circuit protection SCP and reverse polarity connection:	F _{BAT} fuse (in case of a failure, fuse-element replacement required)	
Overload protection OLP:	105-150% PSU power, automatically recovered	
Overvoltage protection OVP:	>19 V (activation requires disconnecting the load or supply for about approx. 1 min)	>37V (activation requires disconnecting the load or supply for about approx. 1 min)
Deep discharge battery protection UVP:	U<9,5 V (± 0,5V) – disconnection of battery terminal	U<19 V (± 0,5V) – disconnection of battery terminal
Optical indication:	- LEDs on PCB of power supply unit	
LED optical indication output (intended for optional indication set PKAZ168):	LED AC – presence of AC voltage LED DC – presence of DC voltage in the output of the PSU APS FLT – battery failure	
Operating conditions:	II environmental class, temperature: -10°C ÷ +40°C relative humidity 20%...90%, without condensation	
Protection class EN 62368-1:	I (first)	
Degree of Protection EN 60529:	IP20	
Operating temperature:	-10°C...+40°C	
Storage temperature:	-20°C...+60°C	
Operating temperature:	According to PN-83/T-42106	
Declarations, warranty:	CE, 2 years from production date	
Optional equipment:	A set for optical indication LED PKAZ168, mounting plate DIN1-4	
Notes:	Cooling: convectional / forced	