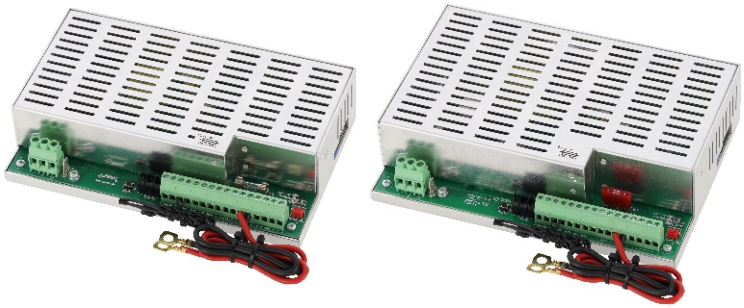
CODE: **PSG3** v.1.0/I **EN**

TYPE: **Enclosed switch mode power supply unit with battery backup Grade 3**



Features:

- built-in power supply module
- compliance with norm EN 50131-6:2017 in grade 1, 2, 3 and II environmental class
- compliance with norm EN60839-11-2:2015+AC:2015 and I environmental class
- supply voltage ~200-240 V
- DC 13,8 V or 27,6 V uninterruptible power supply
- powered by **7Ah - 65Ah** batteries
- high efficiency
- available versions with current efficiencies
  13,8V: 2A, 3A, 5A, 10A
  27,6V: 2A, 5A
- low ripple voltage
- microprocessor-based automation system
- measurement of resistance of battery circuit
- automatic temperature-compensated charging
- automatic battery test
- output voltage control
- battery circuit continuity control
- battery voltage control
- battery charging and maintenance control
- deep discharge battery protection (UVP)
- battery overcharge protection
- battery output protection against short circuit and reverse connection
- function START allows running PSU from battery power
- optical indication
- technical outputs OC type (open collector)
- collective failure input EXT IN
- EPS technical output indicating AC power loss
- PSU technical output indicating PSU failure
- APS technical output indicating battery failure
- protections:
  - SCP short circuit protection
  - OLP overload protection
  - OVP overvoltage protection
  - surge protection
- convectional cooling
- warranty - 3 years from production date
- optional equipment (PKAZ168, DIN4, AWZ642)

DESCRIPTION

Power supply modules are intended for installation in an additional enclosure. In order to meet the requirements of IDS and AC standards, enclosure must be designed in accordance to security level with which compliance is established.

Buffer power supplies have been designed in accordance with requirements of the (I&HAS) EN50131-6:2017 grade 1-3 and II environmental class and (KD) EN60839-11-2:2015+AC:2015 standard and I environmental class. Power supplies units are intended for an uninterrupted supply of alarm system devices requiring stabilized voltage of 12 or 24 V DC (±15%).

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:

Power supply model	Battery/charging current	Output current [A] depending on application PSU (according to EN50131-6)		
		Grade 1, 2 - standby time 12 h	* Grade 3 standby time 30 h	** Grade 3 standby time 60 h
PSG3-12V2A-B	**7Ah / 0,4 A**	0,55 A	0,2 A	0,09 A
PSG3-12V3A-C	**17Ah / 0,8 A**	1,39 A	0,54 A	0,25 A
PSG3-12V5A-C	**17Ah / 0,8 A**	1,39 A	0,54 A	0,25 A
PSG3-12V5A-D	**40Ah / 1,8 A**	3,3 A	1,30 A	0,64 A
PSG3-12V10A-E	**65Ah / 2,6 A**	5,4 A	2,1 A	1,0 A
PSG3-24V2A-C	**17Ah (x2) / 0,8 A**	1,4 A	0,5 A	0,24 A
PSG3-24V5A-D	**40Ah (x2) / 1,8 A**	3,3 A	1,3 A	0,63 A

** if faults of primary source are reported to the ARC alarm receiving centre (in accordance with 9.2 EN50131-6)*

*** if faults of primary source are not reported to the ARC alarm receiving centre (in accordance with 9.2 EN50131-6)*

TECHNICAL DATA	PSG3-12V	PSG3-24V
PSU type EN50131-6	A, degree of protection 1 – 3, II environmental class	
Supply voltage	~200 – 240 V	
Output voltage at 20ºC	11 V-13,8 V DC – buffer operation 10 V-13,8 V DC – battery-assisted operation	22 V-27,6 V DC – buffer operation 20 V-27,6 V DC – battery-assisted operation
Current consumption by PSU during battery-assisted operation	30 mA	40 mA
Coefficient of temperature compensation of battery voltage	-18 mV/ ºC (-5ºC -40ºC)	-36 mV/ ºC (-5ºC- 40ºC)
Low battery voltage indication	Ubat < 11,5 V, during battery operation	Ubat < 23 V, during battery operation
Over voltage protection OVP	U>16 V±1 V, automatic recovery	U>32 V±2 V, automatic recovery
Short-circuit protection SCP	Glass fuse F_{BAT} (in case of a failure, fuse-element replacement required)	
Overload protection OLP	105-150% power, automatically recovered	
Battery circuit protection SCP and reverse polarity connection	Glass fuse F_{BAT} (in case of a failure, fuse-element replacement required)	
Deep discharge protection UVP	10 V +/- 0,3 V	20 V +/- 0,6 V
Technical outputs: **- EPS; output indicating AC power failure**	- OC type: 50 mA max. normal status: L (0 V) level, failure: hi-Z level, time lag: 11 s.	
Technical outputs: **- APS; output indicating battery failure** **- PSU; output indicating PSU failure**	- OC type: 50 mA max. normal status: L (0 V) level, failure: hi-Z level.	
Technical outputs: **- EXTi; input of external failure**	Closed input – no indication Open input – alarm	
Protection class EN 62368-1	I (first)	
Declarations, warranty	CE, 3 years from production date	
Notes	Convectional cooling	