APS-1412

BACKUP POWER SUPPLY

APS–1412 is a switch–mode backup power supply for devices requiring 12 V DC, included in the alarm system or other installations.

The power supply is characterized by a high output current of 14 A, which determines the maximum current delivered by the power supply connected to the load. When the battery is being charged, this value is reduced by the maximum battery charging current: 12 A (powering devices) + 2 A (charging battery). Energy efficiency of the APS–1412 power supply is up to 92%.

The system complies with EN 55011 Class B in terms of the level of conducted and radiated EMI. It also meets the requirements of EN50131–3 Grade 2 standard as well as EN 60950–1 safety standard.

Indisputable advantages of its structure include: a built–in interference suppression filter and an active system for power factor correction (PFC) – up to 0.99. This ensures very good and stable operating parameters, also in the presence of high fluctuations in the supply voltage.

Lead–acid batteries or other battery types with similar charging characteristics can be connected to the device. This enables uninterrupted operation of the system to be maintained – even for several hours – when the primary power source fails.

Additionally, APS–1412 comes with:

- battery charge status control (including internal resistance measurement)
- battery deep discharge protection.

The power supply is provided with 4 OC type fault signaling outputs. The LEDs located on the anodized aluminum enclosure indicate:

- power output status
- battery status
- AC status
- too high temperature of the power supply.

Audible signaling of troubles is also available.

The system is provided with over–current and short–circuit protection. The power cable is connected to the IEC C14 connector.

Features:

- 12 V DC switch–mode power supply
- output current: 14 A or 12 A (powering devices) + 2 A (charging battery)
- compliant with of EN 50131–3 Grade 2 requirements
- compliant with EN 60950–1 safety standard requirements
- compliant with EN 55011 Class B standard regarding the level of conducted and radiated EMI
- active power factor correction system (up to 0.99)
- energy efficiency up to 92%
- short–circuit and over–current protection
- designed for use with sealed lead–acid battery
- battery deep discharge protection
- 4 OC outputs for trouble indication
- optical indication of power output status, battery status, AC status and too high temperature of power supply
- audible indication of troubles
- anodized aluminum enclosure
- IEC C14 power cable connector

TECHNICAL DATA

Environmental class	II
Enclosure dimensions	101 x 68 x 291 mm
Operating temperature range	-10°C...+55°C
Battery failure voltage threshold (±10%)	11,5 V
Battery cut-off voltage (±10%)	10,5 V
Security grade according to EN 50131	Grade 2
Energy efficiency	up to 91%
Actual output voltage	13,8 V DC
Nominal output voltage (according to IEC 38)	12 V DC
PF (Power Factor Correction)	up to 0,98
Power supply type (according to EN50131)	A
Supply voltage	230 V AC
Output current (operation without battery connected)	14 A
Output current (operation with battery connected)	12 A
Battery charging current	2 A
OC type outputs (WS, WB, WP, WT)	50 mA / 12 V DC
Common ground	1,37 kg
Current consumption by power supply circuits	82,5 mA