PS-1001270
PS 12V/7A enclosed switch mode power supply

Edition: 10 from 01.03.2018
Supersedes: 9 from 27.05.2014

EN

Features:

- power output 7A/12÷15V DC*
- wide range of mains supply: 176÷264V
- high efficiency 83%
- LED indication
- protections:
  - SCP short-circuit protection
  - OVP overvoltage protection
  - overvoltage protection
  - overload protection (OLP)
- warranty – 2 year from the production date

1. Technical description.

1.1. General description.

The power supply unit is intended for supplying power to alarm system devices requiring 12V DC supply voltage and current load of **I=7A**. The design enables simple change of the output voltage, within the range of 12V÷15V DC, by means of a potentiometer. The power supply unit is protected against short-circuit, overload and overvoltage.

1.2. Specifications.

Mains supply	176 ÷ 264V AC; 50÷60Hz
Current consumption	0,8A@230V AC max.
Supply power	100W max.
Efficiency	83%
Output voltage	12V DC
Output current t_{AMB}<30°C	**7A - see chart 1.**
Output current t_{AMB}=40°C	**5A - see chart 1.**
Voltage adjustment range	12V ÷ 15V DC
Ripple	100mV p-p max.
Short-circuit protection SCP	electronic, automatic recovery
Overload protection OLP	105-150% of power supply, automatic recovery
Surge protection	varistors
Overvoltage protection OVP	>16V (automatic return)
LED indication	green LED – indicates DC voltage
Operating conditions	2-nd enviromental class, temperature: -10°C ÷ +40°C relative humidity 20%...90%, without condensation
Dimensions	L=199, W=98, H=38 [+/- 2mm]
Net/gross weight	0,57kg / 0,62kg
Protection class PN-EN 60950-1:2007	I (first) – requires a protective conductor (PE)
Connectors	power-supply: Φ0,63-2,50 (AWG 22-10) outputs: Φ0,63-2,50 (AWG 22-10)
Electrical strength of insulation: - between input (network) circuit and output circuits of the PSU (I/PO/P) - between input circuit and PE protection circuit (I/P-FG) - between output circuit and PE protection circuit (O/P-FG)	 3000 V/AC min. 1500 V/AC min. 500 V/AC min.
Insulation resistance: - between input circuit and output or protection circuit	 100 MΩ, 500V/DC
Storage temperature	-20ºC...+60ºC
Vibrations and impulse waves during transport	according to PN-83/T-42106

* In order to extend the life of the power supply, the load current of 5A is recommended.

* See graph 1.

1.3. Temperature characteristics.

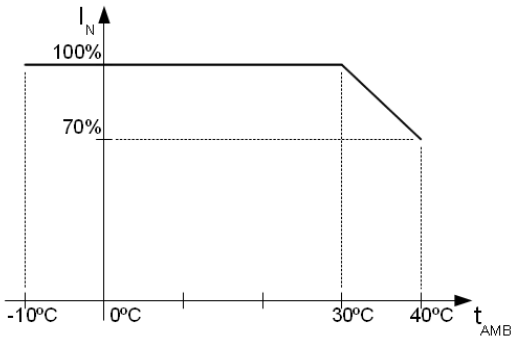

Chart 1.
Acceptable output current from the PSU depending on ambient temperature (instantaneous load).

2. Installation.

2.1. Requirements.

The PSU is to be mounted by a qualified installer, holding relevant permits and licenses (applicable and required for a given country) for 230V AC and low-voltage installations. The unit should be mounted in confined spaces, in accordance with the II-nd environmental class, with normal relative humidity (RH=90% maximum, without condensing) and temperature from -10°C to +40°C.

The device shall be mounted in a metallic enclosure (a cabinet, a final case). In order to fulfill LVD and EMC requirements, the rules for: power-supply, encasing and screening shall be followed, according to application.

It is crucial to connect the PE wire to the corresponding connector of the supply unit.

2.2. Installation procedure.

1. Before installation of the power supply unit, make sure that 230V AC power if cut off.
2. Mount the unit in the previously selected location.
3. Connect the 230V AC power cables. Connect the PE cable (yellow-green) to an appropriate PSU terminal (marked with ⏚ - earth symbol).

The shock protection circuit shall be performed with a particular care: the yellow and green wire coat of the power cable shall stick to one side of the appropriate PSU terminal.

Operation of the PSU without a properly made and fully operational shock protection circuit is UNACCEPTABLE! It can cause a device failure or an electric shock.

---

4. Connect load/loads to proper output connectors of the power supply (positive pole is marked as +V, negative pole as COM).
5. Once the tests and operation control have been completed, lock the enclosure/cabinet, etc.

2.3. Description of the connectors.

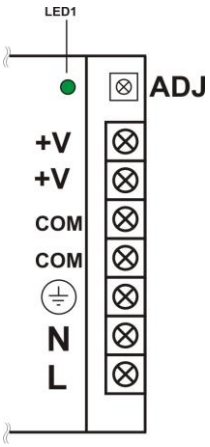

Fig.1. Description of the connectors.

Elements/connectors [Fig.1]	Description
L, N, ⏚	**L-N** - 230V AC voltage connector, ⏚ – connector for protective conductor
COM	Power supply output (0V)
+V	Power supply output (+12V)
LED1	LED indicating voltage at the PSU output
ADJ	Potentiometer - output voltage adjustment

2.4. Dimensions and fitting of the PS-1001270 power supply.

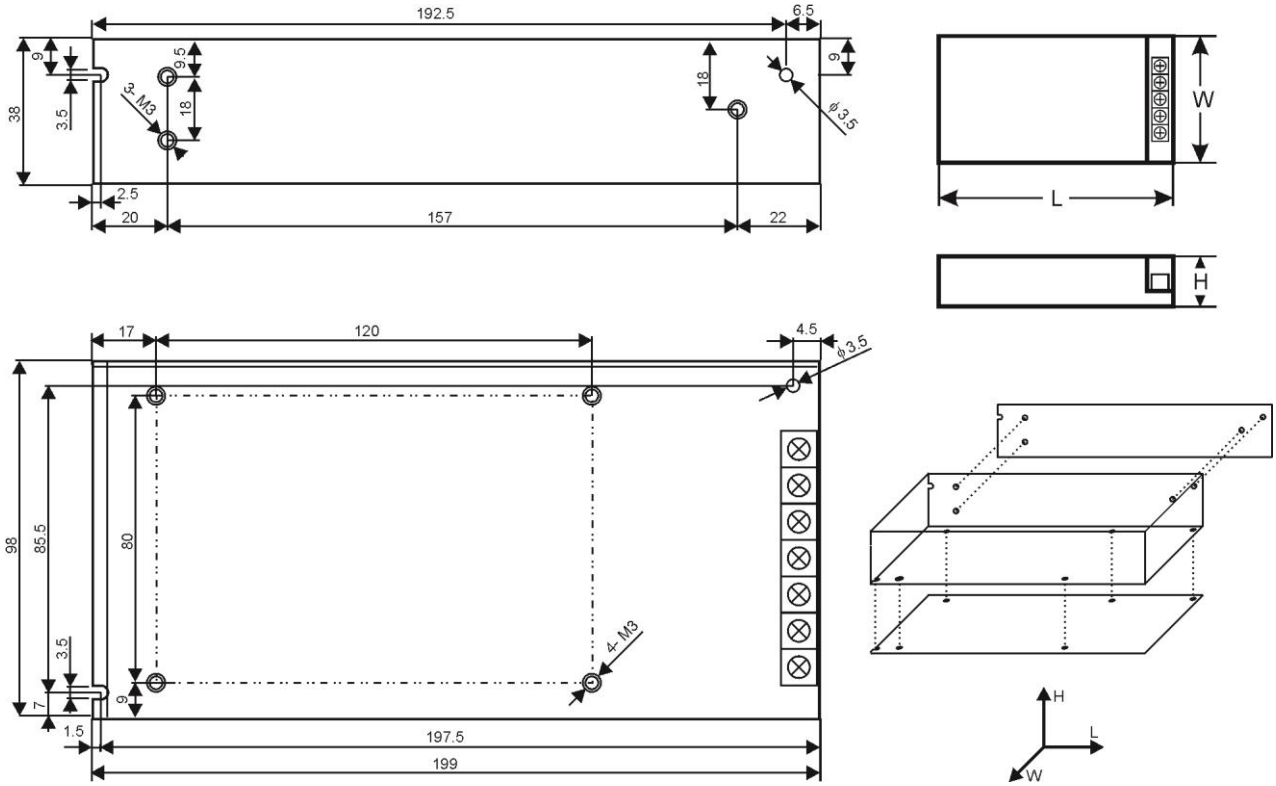

Fig. 2. Dimensions of the PSU.

3. Maintenance.

Any and all maintenance operations may be performed following the disconnection of the PSU from the power supply network. The PSU does not require performing any specific maintenance measures, however, in the case of significant dust rate, it is recommended to clean its interior with compressed air.

WEEE MARK

According to the EU WEE Directive – It is required not to dispose of electric or electronic waste as unsorted municipal waste and to collect such WEEE separately.

Pulsar
Siedlec 150, 32-744 Łapczyca, Poland
Tel. (+48) 14-610-19-40, Fax. (+48) 14-610-19-50
e-mail: biuro@pulsar.pl, sales@pulsar.pl
http:// www.pulsar.pl, www.zasilacze.pl