



### Features:

- power output 3 A/12 – 15 V DC
- high efficiency 87%
- LED indication
- warranty – 2 years from production date
- protections:
  - SCP short-circuit protection
  - OVP overvoltage protection
  - overvoltage protection
  - overload protection (OLP)

## 1. Technical description.

### 1.1. General description.

The power supply unit is intended for supplying power to alarm system devices requiring 12 V DC supply voltage and current load of **I=3 A**. The design enables simple change of the output voltage, within the range of 12 V - 15 V DC, by means of a potentiometer. The power supply unit is protected against short-circuit, overload and overvoltage.

### 1.2. Specifications.

Power supply	~ 200 – 240 V; 0,5 A; 50/60 Hz
Inrush current	40 A
PSU power	36 W max.
Efficiency	87%
Output voltage	12 V DC
Output current $t_{AMB} < 30^{\circ}C$	3A
Voltage adjustment range	12V – 15 V DC
Ripple voltage	100mV p-p max.
Short circuit protection SCP	electronic, automatic recovery
Overload protection OLP	105 – 150% PSU power, automatically recovered
Surge protection	varistors
Over voltage protection OVP	>19 V (activation requires disconnecting the load or supply for about approx. 1 min.)
LED operation indication	LED green – indicates DC voltage at the power
Operating conditions	Temperature: $-10^{\circ}C \div +40^{\circ}C$ relative humidity 20%...90%, without condensation
Dimensions	L=110, W=78, H=36 [+/- 2mm]
Net / gross weight	0,21 / 0,24 [kg]
Protection class EN 62368-1	I (first) - requires a protective conductor
Connectors	power supply: $\Phi 0,63-2,50$ (AWG 22-10) outputs: $\Phi 0,63-2,50$ (AWG 22-10)
Electrical strength of insulation: - between input (network) circuit and output circuits of the PSU - between input circuit and PE protection circuit - between output circuit and PE protection circuit	2500 V AC min. 1500 V AC min. 500 V AC min.
Insulation resistance: - between input circuit and output or protection circuit	100 M $\Omega$ , 500 V DC
Storage temperature	-20°C...+60°C
Vibrations and impulse waves during transport	according to PN-83/T-42106

## 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 230 V AC and low-voltage installations. The unit should be mounted in confined spaces 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.



**Before installation, make sure that the voltage in the 230 V power-supply circuit is cut off. To switch off power use an external switch in which the distance between the contacts of all poles in the disconnection state is not less than 3mm.**

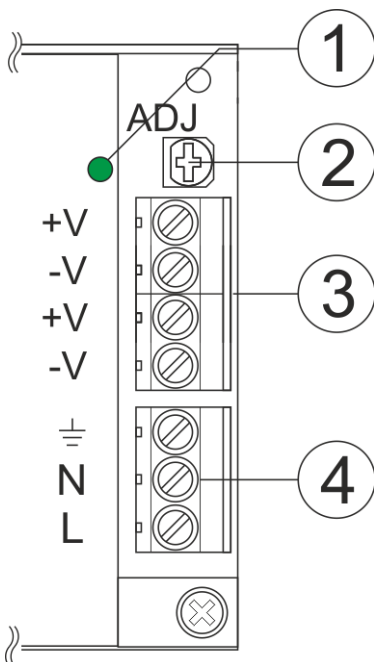
1. Mount the PSU in a selected location and connect the wires.
2. Connect the power cables (~230 V) to L-N clips of the PSU.



**The shock protection circuit shall be performed with a particular care, i.e. the yellow and green wire coat of the power cable shall stick to one side of the '⊕' terminal - in the PSU enclosure. 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.**

3. Connect the ground wire to the clip marked by the earth symbol ⊕ (connector of power supply module). Use a three-core cable (with a yellow and green protection wire ⊕) to make the connection. Lead the cables to the appropriate clips of the subplate through the insulating bushing.
4. Check the PSU output voltage, if needed correct the setting it should be by the potentiometer.
5. Connect load / loads to proper output connectors of the power supply (positive end is marked as +V, negative end as V-)
6. Once the tests and control operation have been completed, close the enclosure/cabinet.

### 2.3. Description of the connectors.



Elements/connectors [Fig.1]	Description
[1]	LED for DC output voltage
[2]	Potentiometer - output voltage adjust
[3]	The output of the PSU (V+, V-)
[4]	L-N – input voltage connectors 230 V AC, ⊕ – protective conductor connector

Fig 1. Description of the connectors.

## 2.4. Dimensions and fitting of the PS-12V3A power supply.

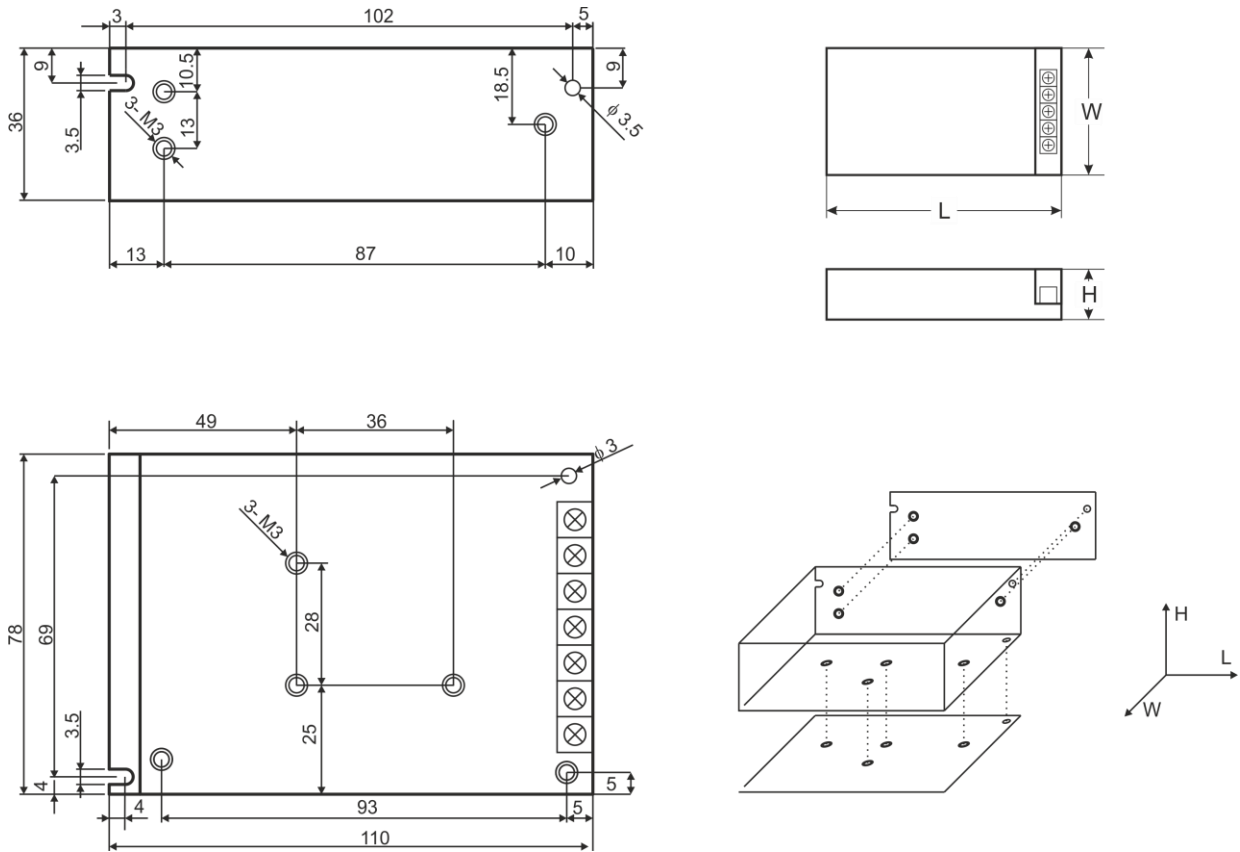


Fig. 2. Dimensions of the PSU.

## 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 LABEL

**Waste electrical and electronic equipment must not be disposed of with normal household waste. According to the European Union WEEE Directive, waste electrical and electronic equipment should be disposed of separately from normal household waste.**

### Pulsar sp. j.

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