



**Features:**

- Power output 1,5 A/12 V DC\*
- DC power supply range 18÷40 V DC
- high efficiency 86 %
- IP 67 enclosure
- protections:
  - against short circuit protection
  - overload protection OLP
  - against reverse input voltage polarity
- warranty – 2 year from the production date

**1. Technical description.**

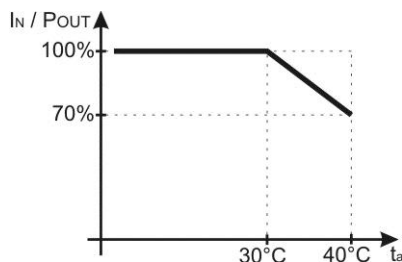
**1.1. General description.**

The DCDC converter is used for powering devices that require stabilized voltage of **12 V DC**. The maximum current load is **1,5 A\* (Pmax= 18W)**. This module does not have galvanic insulation between the input and output (IN-AUX), and operates on a common ground potential. The unit is protected against short circuit, overload and against reverse input voltage polarity.

**1.2. Specifications.**

Supply voltage	18 ÷ 40 V DC
Supply power	18 W max.
Efficiency	86 %
Current consumption by PSU systems	5 mA max.
Output voltage	12 V DC
<b>Output current <math>t_{AMB}&lt;30\text{ }^{\circ}\text{C}</math></b>	<b>1,5 A - refer to graph 1.</b>
<b>Output current <math>t_{AMB}=40\text{ }^{\circ}\text{C}</math></b>	<b>1 A - refer to graph 1.</b>
Ripple voltage	100 mV p-p max.
Protection against short circuits (SCP) and overloads (OLP)	200 % ÷ 250 % of module power – output power limit, automatic return after elimination of short circuit
IP protection class	IP67
Operation conditions	temperature $-10\text{ }^{\circ}\text{C}\div 40\text{ }^{\circ}\text{C}$ relative humidity 20 %...90 %
Dimensions (LxWxH)	58 x 58 x 28 [mm]
Net/gross weight	0,16 kg / 0,19 kg
Protection class PN-EN 60950-1:2007	II (second)
Length of DC input cable	0,3 m
Length of DC output cable	0,5 m + plug DC5,5/2,1 female
Storage temperature	$-20\text{ }^{\circ}\text{C}\dots +60\text{ }^{\circ}\text{C}$

\* In order to extend the life of the converter, the load current of 1 A is recommended.



Graph 1.  
Relation between output current and ambient temperature (instantaneous load).

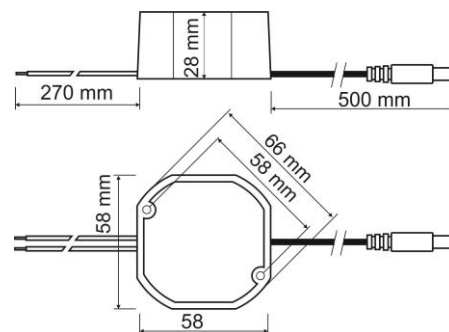


Fig.1. Mechanical view and dimensions of the converter.

\* Refer to chart 1

### 1.3. Accessories.

For the converters are available accessories - cable adapter. For details –visit [www.pulsar.pl](http://www.pulsar.pl).

## 2. Installation.

### 2.1. Requirements.

The converter shall be mounted by the qualified installer having appropriate (required and necessary for a given country) permissions and qualifications for connecting (operating) low-voltage installations. The unit should be mounted in confined spaces, in accordance with the 2nd environmental class, with normal relative humidity (RH=90 % maximum, without condensation) and temperature from -10 °C to +40 °C.

In order to meet the LVD and EMC requirements, the rules concerning: supply, development and shielding ought to be followed - accordingly to the application.

### 2.2. Installation procedure.

1. Fit the converter inside the device.
2. Connect the converter input cables to the DC voltage source, according to polarity.
3. Connect the converter output cables to the load.
4. After the performance of test and function checks, close the case, cabinet, etc.

## 3. Maintenance.

Any and all maintenance operations may be performed following the disconnection of the converter from the power network. The converter does not require any specific maintenance procedures, however, in the case of significant level of dust, it should be cleaned with the compressed air.



### WEEE designation

The waste electric and electronic equipment worn out may not be disposed of together with standard household waste. According to the WEEE directive, applicable in the EU, the separate neutralization methods should be used for electric and electronic equipment.

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### 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)