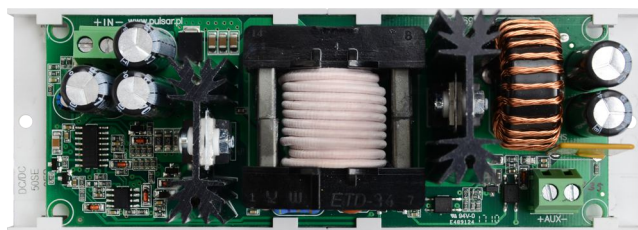
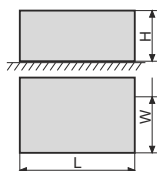


CODE: **DC/DC50SE-SEP** v.1.0/II EN  
 TYPE: **DC/DC 5A Step up / step down DC/DC converter 12V with separation**



### The module's features:

- DC/DC voltage- step up / step down converter
- Example of use: maintaining a constant 12V output regardless of battery charge level
- Input voltage range: 9,5÷16V DC
- Output voltage: 12V DC
- Maximum load current 5A (60W)
- Protections:
  - Short-circuit protection SCP
  - Overload protection OLP
  - Over voltage protection OVP
- Galvanic separation between input/output (IN-AUX)
- High efficiency: 87%
- Optical LED indication
- Warranty – 2 years from the production date
- Mounting:
  - Mounting strip with adhesive tape
  - Mounting screws

### DESCRIPTION

The **DC/DC 5A (DC/DC50SE-SEP)** voltage- step up / step down converter is used for maintaining a constant output voltage **12V DC**, regardless of the input voltage fluctuations in the range of 9,5V÷16V DC. When the input voltage at the output is lower to 12V DC, the converter increases it to the value. When the input voltage at the output is higher than needed, the converter lowers it to 12V DC. The maximum load current is **I<sub>max</sub>=5A (P<sub>max</sub>= 60W)**. The module feature galvanic isolation between input/output (IN-AUX).

<b>The input voltage range (power supply)</b>	9,5V÷16V DC
<b>The output voltage range</b>	12V DC
<b>P module power</b>	60W max.
<b>Energy efficiency</b>	85% ÷ 87%
<b>Ripple voltage</b>	50mV p-p max.
<b>Output current</b>	5A max.
<b>Current consumption by module systems</b>	45 mA max.
<b>Short-circuit protection SCP</b>	electronic, automatic recovery
<b>Overload protection OLP</b>	110-150% of the module's power, manual restart (the failure requires disconnection of the DC output circuit)
<b>Overvoltage protection OVP</b>	>16V (activation requires disconnecting the load or supply for about 20 s.)
<b>Optical indication</b> - IN LED indicating DC power status - AUX LED indicating DC supply status at the output	- red, normal status: is lit continuously - green, normal status: is lit continuously
<b>Insulation electrical strength</b> - between the input (IN), and the output circuits of the converter (AUX) (I/P-O/P)	500 V/DC min.
<b>Insulation resistance</b> - between input, output, and protective circuit	100MΩ, 500V DC
<b>Operating conditions</b>	II environmental class, -10°C ÷40°C, ensure air flow around the unit for convection cooling
<b>Dimensions</b>	150 x 50 x 60 (L x W x H)
<b>Net/gross weight</b>	0,23/0,27 kg
<b>Mounting</b>	mounting tape or mounting screw x 2
<b>Declarations, warranty</b>	CE, 2 years from the production date