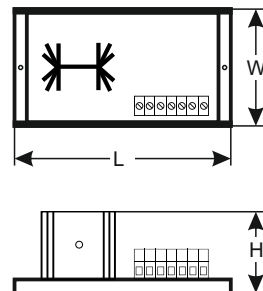
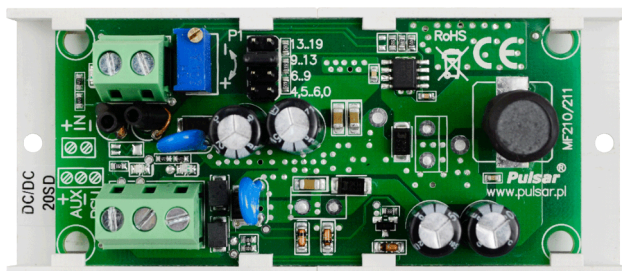


CODE: **DC/DC20SD** v.1.0/IV

TYPE: **DC/DC 2A Step down DC/DC converter with adjustable output voltage.**



**The module's features:**

- Step down DC/DC converter with adjustable output voltage
- Example of use: step down from 24V to 12V DC
- The input voltage range: 8÷28V DC
- The output voltage range: 4,5÷19V DC
- The minimum difference between input (lowered) and output voltage: 3V
- The maximum load current 2A (24W)
- The PSU technical output indicating converter failure triggered by:
  - Short-circuit of the output
  - Output overload
- Protections:
  - Short-circuit protection SCP
  - Overload protection OLP
  - OHP overheating protection
- High efficiency: 80÷90%
- Optical LED indication
- Warranty – 2 years from the production date
- Mounting:
  - Mounting strip with adhesive tape
  - Mounting screws

**DESCRIPTION**

The step down converter **DC/DC 2A (DC/DC20SD)** is used for step down the input voltage from the range between 8V÷28V DC to the voltage range of 4,5V÷24V DC at the output, adjusted with the P1 potentiometer. The maximum load current is **I<sub>max</sub>=2A (P<sub>max</sub>=24W)**. The 3V difference between the input (lowered) and output voltage is required for the proper operation of the converter. The module does not feature galvanic isolation between input/output (IN-AUX) and operates on common "ground" (0V) potential (IN- and AUX- terminals are galvanically connected = common terminal).

|   |  |
|---|--|
| <b>The input voltage range (power supply)</b>   | 8V÷28V DC<br>depending on the range set by the jumper  |
| <b>The output voltage range</b>   | 4,5V÷6V, 6V÷9V, 9V÷13V, 13V÷19V<br>Jumper adjustable.<br>Factory setting: 12V.   |
| <b>The minimum difference between the input and output voltage</b>  | 3V   |
| <b>P module power</b>   | 24W max.   |
| <b>Energy efficiency</b>  | 80%÷ 90% for full range of power and loads   |
| <b>Ripple voltage</b>   | 20mV p-p...50mV p-p  |
| <b>Output current</b>   | 2A max.  |
| <b>Current consumption by module systems</b>  | 10 mA max.   |
| <b>Short-circuit protection SCP and overload protection OLP</b>   | 180% - 200% of module power - output power limit, automatic return after elimination of short circuit  |
| <b>Technical outputs</b><br>- PSU output indicating failure   | - OC type, 50mA max. Failure status: hi-Z state (high impedance), normal status: L level (0V)  |
| <b>Optical indication</b><br>- IN LED indicating DC power status<br>- AUX LED indicating DC supply status at the output<br>- PSU LED indicating failure | - red, normal status: is lit continuously<br>- green, normal status: is lit continuously<br>- red, normal status: does not lit, failure: is lit continuously |
| <b>Operating conditions</b>   | II environmental class, -10°C +40°C, ensure air flow around the unit for convection cooling  |
| <b>Dimensions</b>   | L=100, W=43, H=27 [+/- 2mm]  |
| <b>Net/gross weight</b>   | 0,05/0,08 kg   |
| <b>Mounting</b>   | mounting tape or mounting screw x 2  |
| <b>Declarations, warranty</b>   | CE, 2 years from the production date   |