

## DC-DC CONVERTER 24/12 V DC & 24/24 V DC

CD5.121  
 POWER SUPPLY 24/12VDC 8A

- 32 mm wide
- Isolated output voltage
- Wide input voltage range
- 20 % power boost



### PRODUCT DESCRIPTION

The Puls Dimension DC-DC converter features high efficiency, very compact dimensions and mounting on DIN rail. The input voltage can come from, for example, a power supply unit, batteries or solar panels. The output is galvanically isolated from the input. Examples of fields application are installation at the end of a long cable to stabilize voltage, conversion of one voltage to another or for isolation of specific loads. The DC-DC converters are equipped with a soft-start function, entailing that the current gradually rises to the nominal value. In this way, high starting currents are avoided that can cause voltage drops on the primary side and produce start-up problems. A 20 % power boost provides additional power resources during temporary current peaks. Article CD5.241-S1 is equipped with status outputs for controlling both the output voltage and the input voltage.

We recommend free space of 40 mm above the unit, 20 mm under and 5 mm at the sides.

## TECHNICAL DATA

### INPUT DATA

Max entrance tripple	5 V pp
Inrush current	Typ. 1,2 A @ 24 V DC
Input voltage dc max	32,4 V DC
Input voltage dc	24 V
Input capacitance	3000 µF
Input voltage dc min	18 V DC

### OUTPUT DATA

Output voltage min	12 V DC
Output voltage	12 V DC
Output voltage max	15 V DC

Power	96 W
Output current	8 A

## EFFICIENCY / LIFETIME / MTBF

Life span	63000 h @ 12 V DC, 8 A, 40 °C
Efficiency	88,2 %
MTBF (IEC 61709)	1161000 @ 12 V DC, 8 A, 40 °C

## DIMENSIONS

Weight	0,425 kg
Depth	102 mm
Width	32 mm
Height	124 mm

## OTHER

IP class	IP20
Startup delay	420 ms
Ripple max	75 mV pp
Power drop from +60 °C to +70 °C	2,5 W/°C
Clamp type	Screw on
Temperature min without derating	-25 °C
Series	Dimension C
Keep time	Typ. 7 ms @ 24 V DC
Approvals	ABS, ATEX, CB, CE, CSA, GL, IECEX, UL
Temperature max without derating	60 °C
Material protection	Aluminium
Type Power Supply	DC-DC

Fig. 5-1 Output voltage vs. output current at 24Vdc input voltage, typ.

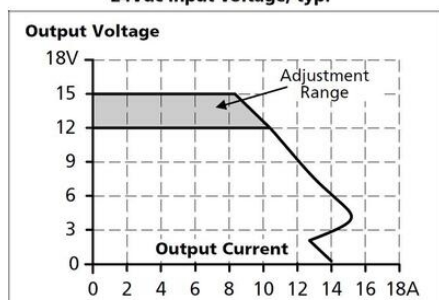


Fig. 13-1 Output current vs. ambient temp.

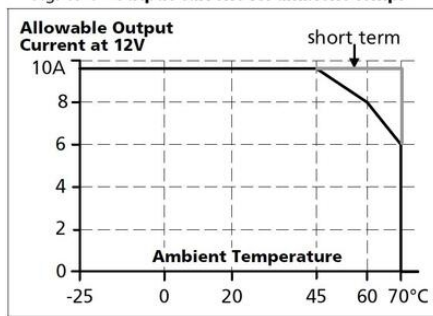


Fig. 7-1 Efficiency vs. output current at 12V output and 24Vdc input voltage, typ.

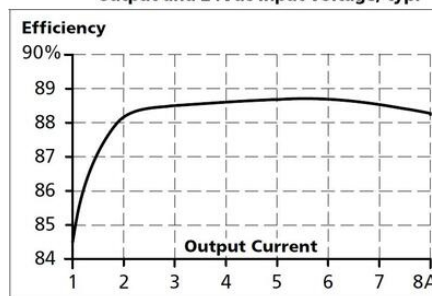


Fig. 7-2 Losses vs. output current at 12V output and 24Vdc input voltage, typ.

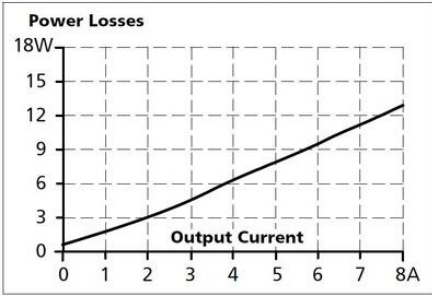


Fig. 9-1 Front side

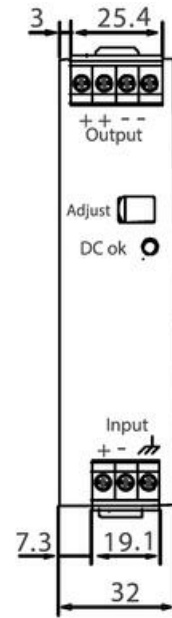


Fig. 19-2 Side view

