

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.

SPECIFICATIONS

| | |
|----------------------|----------------------|
| Input voltage DC | 24 V |
| Input voltage dc min | 18 V DC |
| Input voltage dc max | 32,4 V DC |
| Input Capacitance | 3000 µF |
| Inrush current | Typ. 1,2 A @ 24 V DC |
| Max entrance tripple | 5 V pp |
| Type Power Supply | DC-DC |
| Start-Up Delay | 420 ms |
| Output voltage | 12 V DC |
| Output voltage min | 12 V DC |

| | |
|---|---------------------------------------|
| Output voltage max | 15 V DC |
| Output Current | 8 A |
| Effect | 96 W |
| Power Reduction Of 60 To 70 ° C | 2,5 W/°C |
| Ripple. max | 75 mV pp |
| Temperature Range Without Derating From | -25 °C |
| Temperature Range Without Derating To | 60 °C |
| Efficiency | 88,2 % |
| Life span | 63000 h @ 12 V DC, 8 A, 40 °C |
| MTBF (IEC 61709) | 1161000 @ 12 V DC, 8 A, 40 °C |
| Width | 32 mm |
| Height | 124 mm |
| Depth | 102 mm |
| Weight | 0,425 kg |
| Clamp type | Screw on |
| Series | Dimension C |
| Approvals | ABS, ATEX, CB, CE, CSA, GL, IECEx, UL |
| Material Protection | Aluminium |
| Keep time | Typ. 7 ms @ 24 V DC |
| IP Class | IP20 |

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

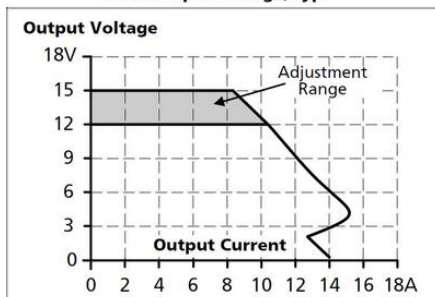


Fig. 13-1 Output current vs. ambient temp.

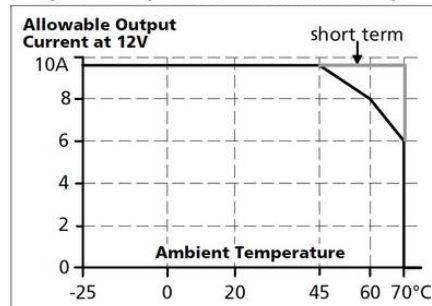


Fig. 7-1 Efficiency vs. output current at 12V output and 24Vdc input voltage, typ.

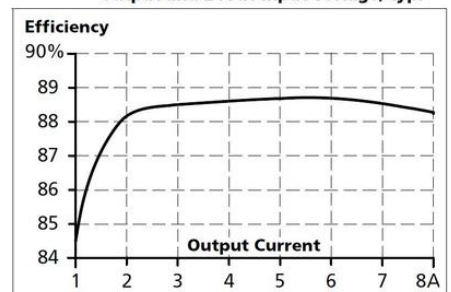


Fig. 7-2 **Losses vs. output current at 12V output and 24Vdc input voltage, typ.**

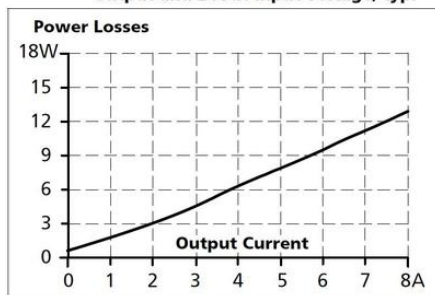


Fig. 9-1 **Front side**

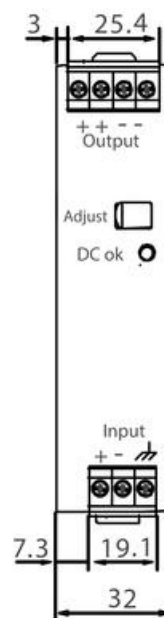


Fig. 19-2 **Side view**

