

DC-DC CONVERTER 48/24 V DC & 12/24 V DC

48/24 V DC, 5 A & 12/24V DC, 4A

CD5.243
POWER SUPPLY 12/24V 5A

- Only 32 mm wide
- Isolated output voltage
- Wide input voltage range
- 20% Power Reserve



PRODUCT DESCRIPTION

Puls Dimension DC-DC converters have a high efficiency, very compact and mounted on a DIN rail.

The input voltage can for example. come from power supplies, batteries, solar panels, etc.. The output is galvanically isolated from the input. Typical applications are mounting at the end of a long cable to stabilize the voltage, convert one voltage to another or to isolate specific loads. Can also be used in conjunction with batteries to get a constant output voltage even though the battery voltage drops.

DC-DC converters are equipped with a soft start function which means that the stream gradually rises to the nominal value. This is avoided with high starting currents that can cause a voltage drop on the primary side and give boot problems.

A power reserve of 20% gives additional power resources at the temporary power peaks.

SPECIFICATIONS

Input voltage DC	12 V
Input voltage dc min	10.8 V DC
Input voltage dc max	16.2 V DC
Input Capacitance	3600 µF
Inrush current	Typ. 1,0 A @ 12 V DC
Max entrance tripple	5 V pp
Type Power Supply	DC-DC
Start-Up Delay	450 ms
Output voltage	24 V DC
Output voltage min	24 V DC

Output voltage max	28 V DC
Output Current	4 A
Effect	96 W
Power Reduction Of 60 To 70 ° C	2.5 W/°C
Ripple. max	50 mV pp
Temperature Range Without Derating From	-25 °C
Temperature Range Without Derating To	60 °C
Efficiency	87.7 %
Life span	73000 h @ 24 V DC, 4 A, 40 °C
MTBF (IEC 61709)	1056000 h @ 24 V DC, 4 A, 40 °C
Width	32 mm
Height	124 mm
Depth	102 mm
Weight	0.435 kg
Clamp type	Screw on
Series	Dimension C
Approvals	ABS, ATEX, CB, CE, CSA, GL, IECEx, UL
Material Protection	Aluminium
Keep time	Typ. 3 ms @ 12 V DC
IP Class	IP20

Fig. 5-1 Output voltage vs. output current at 12Vdc input voltage, typ.

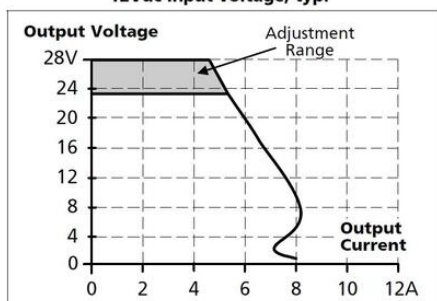


Fig. 13-1 Output current vs. ambient temp.

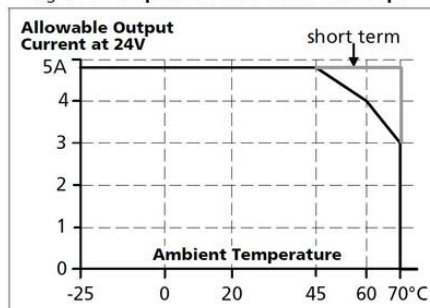


Fig. 7-1 Efficiency vs. output current at 24V output and 12Vdc input voltage, typ.

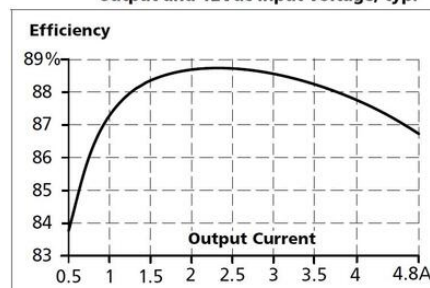


Fig. 7-2 **Losses vs. output current at 24V output and 12Vdc input voltage, typ.**

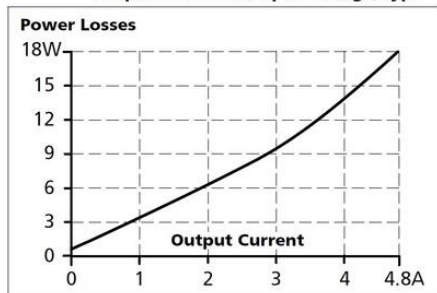


Fig. 9-1 **Front side**

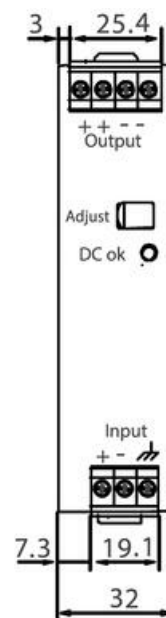


Fig. 19-2 **Side view**

