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

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

CD5.242
DC-DC converter 48/24 VDC. 5A

PULS

- 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

Max entrance tripple	5 V pp
Type Power Supply	DC-DC
Start-Up Delay	670 ms
Inrush current	Typ. 0,6 A @ 48 V DC
Input voltage dc max	60 V DC
Input voltage DC	48 V
Input Capacitance	800 µF
Input voltage dc min	36 V DC
Ripple. max	50 mV pp
Output voltage min	24 V DC

Power Reduction Of 60 To 70 ° C	3 W/°C
Temperature Range Without Derating From	-25 °C
Output voltage	24 V DC
Output voltage max	28 V DC
Effect	120 W
Output Current	5 A
Temperature Range Without Derating To	60 °C
Life span	64000 h @ 24 V DC, 5 A, 40 °C
Efficiency	90,3 %
MTBF (IEC 61709)	951000 h @ 24 V DC, 5 A, 40 °C
Weight	0,425 kg
Depth	102 mm
Width	32 mm
Height	124 mm
Clamp type	Screw on
IP Class	IP20
Series	Dimension C
Keep time	Typ. 5,6 ms @ 48 V DC
Approvals	ABS, ATEX, CB, CE, CSA, GL, IECEx, UL
Material Protection	Aluminium

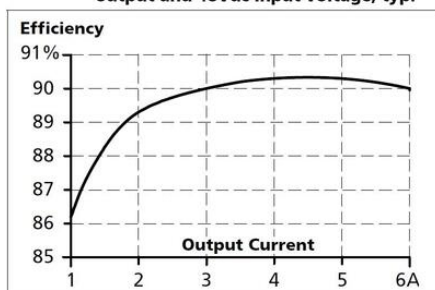Fig. 7-1 **Efficiency vs. output current at 24V output and 48Vdc input voltage, typ.**

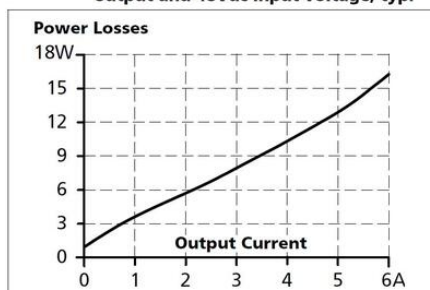Fig. 7-2 **Losses vs. output current at 24V output and 48Vdc input voltage, typ.**

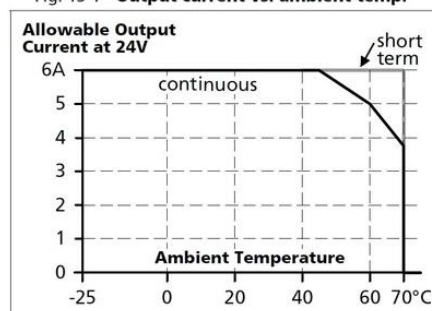Fig. 13-1 **Output current vs. ambient temp.**

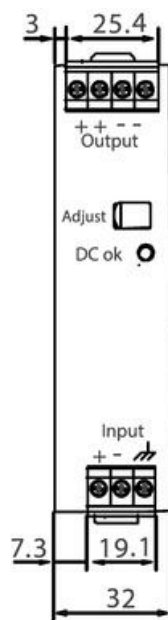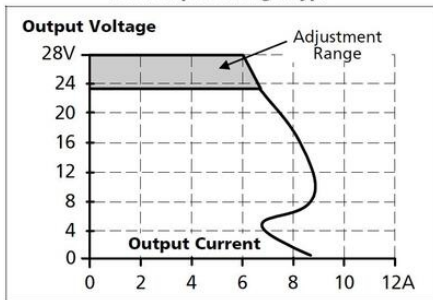Fig. 5-1 **Output voltage vs. output current, at 48Vdc input voltage, typ.**

Output Voltage
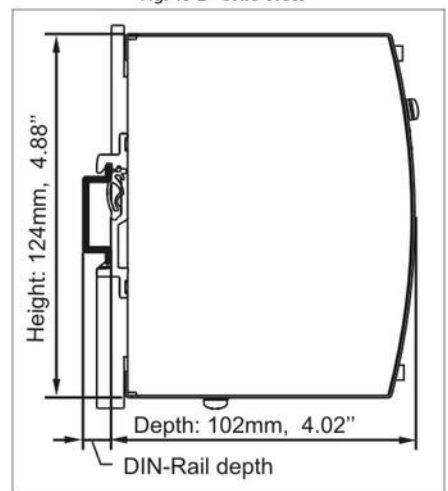
28V — 24 — 20 — 16 — 12 — 8 — 4 — 0

Adjustment Range

Output Current

0 2 4 6 8 10 12A

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3 25.4

Output
+ + - -

Adjust

DC ok

Input
+ - ⏚

7.3 19.1

32

Fig. 19-2 **Side view**

Height: 124mm, 4.88"

Depth: 102mm, 4.02"

DIN-Rail depth

Fig. 9-1 **Front side**

Output DC 24V 5A
+ + - -

Ⓑ

24 - 28V Ⓒ

DC ok Ⓓ

PULS

DIMENSION

CD5
DC/DC

Input
DC 48V
+ - ⏚ Chassis Ground

Ⓐ