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

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

CD5.242
PSU 48V dc I/P 24V dc 5A 120W O/P



- 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.

TECHNICAL DATA

INPUT DATA

Input voltage dc	48 V
Input voltage dc min	36 V DC
Input voltage dc max	60 V DC
Input capacitance	800 µF
Inrush current	Typ. 0,6 A @ 48 V DC
Max entrance tripple	5 V pp

OUTPUT DATA

Output voltage	24 V DC
Output voltage min	24 V DC
Output voltage max	28 V DC

Output current	5 A
Power	120 W

EFFICIENCY / LIFETIME / MTBF

Efficiency	90.3 %
Life span	64000 h @ 24 V DC, 5 A, 40 °C
MTBF (IEC 61709)	951000 h @ 24 V DC, 5 A, 40 °C

DIMENSIONS

Width	32 mm
Height	124 mm
Depth	102 mm
Weight	0.425 kg

OTHER

Approvals	ABS, ATEX, CB, CE, CSA, GL, IECEx, UL
Keep time	Typ. 5,6 ms @ 48 V DC
IP class	IP20
Clamp type	Screw on
Material protection	Aluminium
Ripple max	50 mV pp
Series	Dimension C
Power drop from +60 °C to + 70 °C	3 W/°C
Temperature min without derating	-25 °C
Temperature max without derating	60 °C
Startup delay	670 ms

Type Power Supply	DC-DC

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

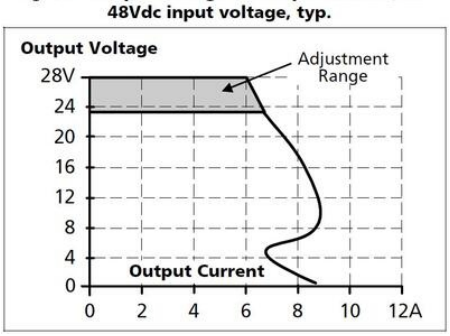

Fig. 13-1 **Output current vs. ambient temp.**

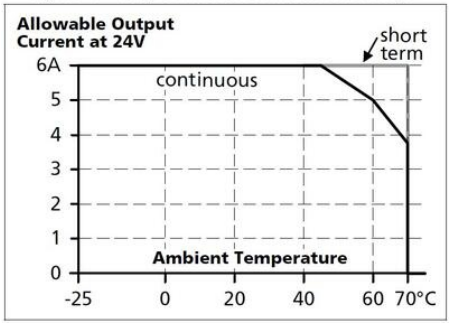

Fig. 7-1 **Efficiency vs. output current at 24V output and 48Vdc input voltage, typ.**

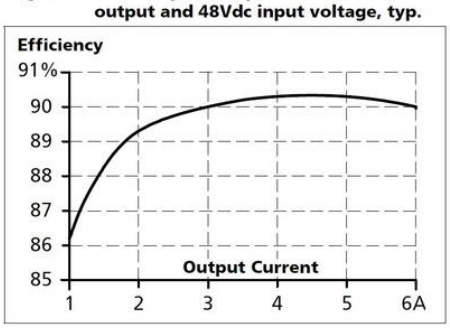

Fig. 7-2 **Losses vs. output current at 24V output and 48Vdc input voltage, typ.**

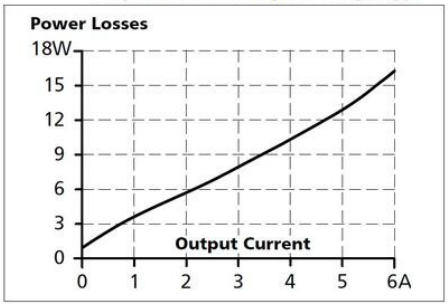

Fig. 9-1 **Front side**



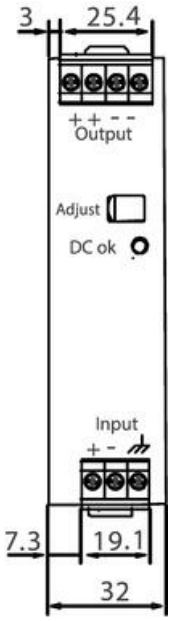

Fig. 19-2 **Side view**

