DC-DC CONVERTER 24/24 V DC

24/24 V DC, 10 A

CD10.241
POWER SUPPLY 24/24 VDC 10A



- Width 42mm
- 94,2% efficiency
- 20% power reserve
- Galvanically separated SELV/PELV output

PRODUCT DESCRIPTION

The CD10.241 is a DIN-rail mountable DC/DC converter of the DIMENSION series which provides a floating, stabilized and galvanically separated SELV/PELV output voltage.

The CD-Series is part of the DIMENSION power supply family. The most outstanding features of CD10.241 are the high efficiency, the small size and the wide operational temperature range.

The CD-Series includes all the essential basic functions. The devices have a power reserve of 20% included, which may even be used continuously at temperatures up to +45°C.

High immunity to transients and power surges as well as low electromagnetic emission and a large international approval package for a variety of applications makes this unit suitable for nearly every situation.

SPECIFICATIONS

Input voltage DC	24 V
Input voltage dc min	18 V DC
Input voltage dc max	35 V DC
Input Capacitance	4300 µF
Inrush current	Typ. 6 A @ 24 V DC
Max entrance tripple	5 V pp

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

Output Current	10 A
Effect	240 W

Efficiency	94.2 %
Life span	103000 h @ 24 V DC, 10 A, 40 °C
MTBF (IEC 61709)	731000 h @ 24 V DC, 10 A, 40 °C

Width	42 mm
Height	124 mm
Depth	117 mm
Weight	0.5 kg

Approvals	CE, UL
Keep time	Typ. 4 ms @ 24 V DC
IP Class	IP20
Clamp type	Screw
Material Protection	Aluminium
Ripple. max	50 mV pp
Series	Dimension C
Power Reduction Of 60 To 70 ° C	6 W/°C
Temperature Range Without Derating From	-25 °C
Temperature Range Without Derating To	60 °C
Start-Up Delay	200 ms

Type Power Supply	DC-DC

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

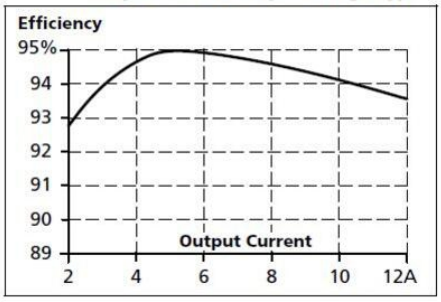
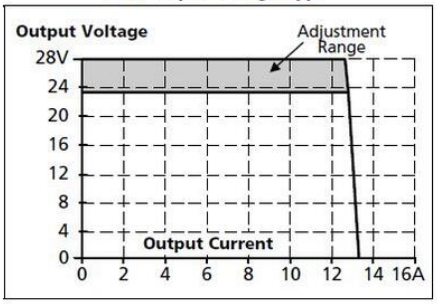
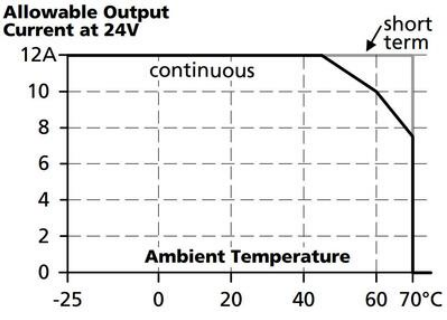


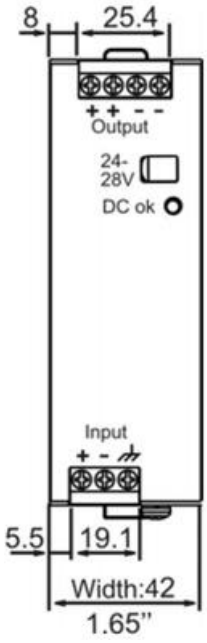
Fig. 5-1 **Output voltage vs. output current at 24Vdc input voltage, typ.**

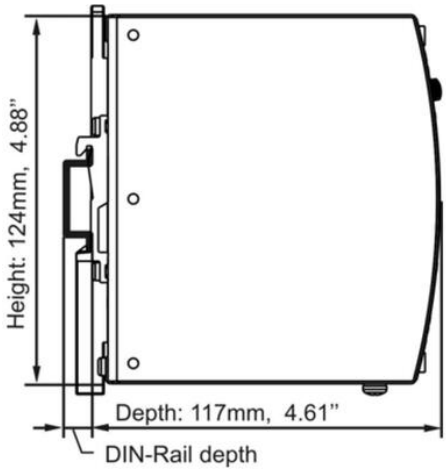


Allowable Output Current at 24V




B
+ + − −
Output DC 24V 10A
24-
28V
C
DC ok
D
PULS
DIMENSION
CD10.241
DC/DC
Input
DC 24V
Chassis
Ground
+ −
A


8
25.4
+ + - -
Output
24-
28V
DC ok
Input
+ - ⏚
5.5
19.1
Width:42
1.65”


Height: 124mm, 4.88”
Depth: 117mm, 4.61”
DIN-Rail depth