

## DC-DC CONVERTER 24/24 V DC

24/24 V DC, 10 A

CD10.241  
 PSU 24V dc I/P 24V dc 10A 240W O/P

- 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.

### TECHNICAL DATA

#### INPUT DATA

<b>Input voltage dc</b>	24 V
<b>Input voltage dc min</b>	18 V DC
<b>Input voltage dc max</b>	35 V DC
<b>Input capacitance</b>	4300 µF
<b>Inrush current</b>	Typ. 6 A @ 24 V DC
<b>Max entrance tripole</b>	5 V pp

#### OUTPUT DATA

<b>Output voltage</b>	24 V DC
<b>Output voltage min</b>	24 V DC

<b>Output voltage max</b>	28 V DC
<b>Output current</b>	10 A
<b>Power</b>	240 W

## EFFICIENCY / LIFETIME / MTBF

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

## DIMENSIONS

<b>Width</b>	42 mm
<b>Height</b>	124 mm
<b>Depth</b>	117 mm
<b>Weight</b>	0.5 kg

## OTHER

<b>Approvals</b>	CE, UL
<b>Keep time</b>	Typ. 4 ms @ 24 V DC
<b>IP class</b>	IP20
<b>Clamp type</b>	Screw
<b>Material protection</b>	Aluminium
<b>Ripple max</b>	50 mV pp
<b>Series</b>	Dimension C
<b>Power drop from +60 °C to + 70 °C</b>	6 W/°C
<b>Temperature min without derating</b>	-25 °C
<b>Temperature max without derating</b>	60 °C
<b>Startup delay</b>	200 ms
<b>Type Power Supply</b>	DC-DC

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

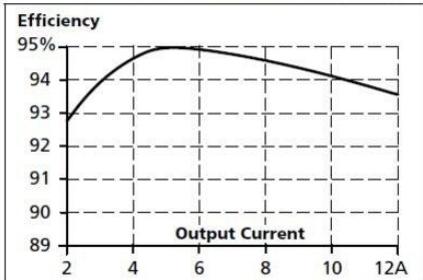
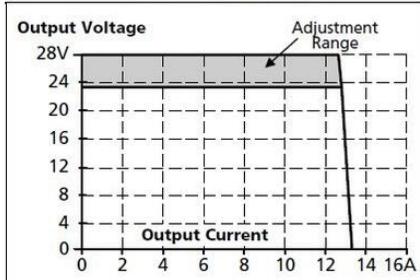


Fig. 5-1 Output voltage vs. output current at 24Vdc input voltage, typ.



Allowable Output Current at 24V

