

# DCDC Converter DCDC900-110-30-K3

DC Converter for Rail Applications

## Specification

### General

Electrical safety EN 60950, VDE 0805  
overload- and short-circuit protected

### Electrical Data

#### Input

Nominal voltage  $U_N = 110 (77-143) V_{DC}$

#### Output

Nominal voltage  $24V_{DC}$  factory setting  
(10–30V programmable)  
Stability  $\pm 1\%$   
Efficiency  $>88\%$   
Maximum output power  $900W (=U_{OUT}=30V \text{ and } I_{OUT}=30A)$   
Max. Output current 30A

Current limitation constant current, without shutdown,  
but temperature limited

### Environmental conditions

Ambient temperature  $-40 \text{ to } +70^\circ C$ , according to EN  
50155

Relative humidity  $<75\%$  average per year

Shock and vibration according to EN 61373 Cat. 1B

### EMC

according to EN 50121-3-2

### Isolation

Input 1500 V  
Output 500 V  
Input to output 1500 V

### Signals

Measurement output  $1/3$  Output voltage (0-10V)  
current limited by Poly-Switch  
0,1 A, RXE 010  
Alarm contact potential-free, Power Good  
contact load: 140 V / 0,4 A  
Interface RS232 interface



Picture may differ from actual device

### Mechanical Data

Case material stainless steel  
Size (W x D x H) 270 x 254 x 115 mm  
Weight approx. 6.5 kg  
Classification IP 54  
Cooling convection via heat sink on wall side. The  
cooling fins must run vertically to  
guarantee an optimal air flow.  
Connector height The extent of the connector plugs (incl.  
mating plugs) is 90 mm + bending radius  
of the connecting cables.

### Connection

Input: -X1 Harting HANQ5, male, Ag 2,5 mm<sup>2</sup>  
Signal 1: -X2 Harting HAN8U, female, Au 0,75 mm<sup>2</sup>  
Output: -X3 Harting HANQ2, female, 4-6mm<sup>2</sup>  
Signal 2: -X4 D-SUB 9-pole, female

Grounding M6 x 25 on the case's side.  
cable cross-section of at least 4 mm<sup>2</sup>

Input an output of the device are isolated  
from chassis.

### Warranty

24 months

### Order Code

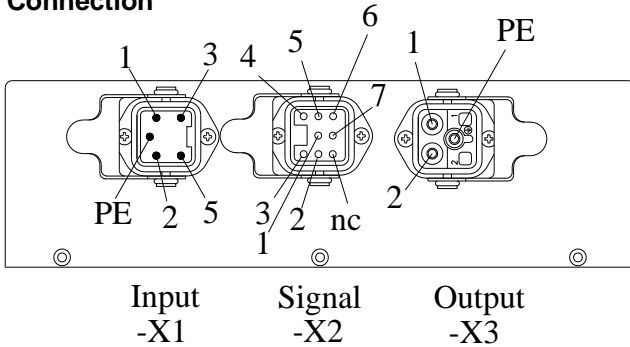
DCDC900-110-30-K3

# DCDC Konverter DCDC900-110-30-K3

DC Converter for Rail Applications

## Specification

### Connection



Input and output of the device are not connected to the case.

### Input: -X1

1	Input voltage reference 0V
2	Input voltage reference 0V
3	Input voltage positive +U <sub>IN</sub>
5	Input voltage positive +U <sub>IN</sub>

### Signal 1: -X2

2	Measurement voltage converter output reference (I<100 mA)
3	Measurement voltage converter output positive (I<100 mA)
4	Not connected
5	Not connected
6	Alarm normally closed (NC*, device off)
7	Alarm normally open (NO*, device off)
1	Alarm common (C)

\* The contact designations for the alarm contacts refer to the idle position of the currentless relay. During fault-free operation of the converter, the alarm relay is energized.

### Output: -X3

1	Output voltage reference 0V
2	Output voltage positive +U <sub>OUT</sub>

### Signal 2: -X4

RS232 interface for parameterization of the voltage thresholds.

### Mounting direction

The cooling fins must run vertically to guarantee an optimal air flow and the connections -x1, -x2 and -x3 must point downwards.

### Ground bolt

The DCDC converter has a ground bolt M6 x 25 on the case's side. A cable diameter of at least 4 mm<sup>2</sup> is recommended for the connection. The ground bolt is not connected to the negative pole of the device.

### Mechanical Data

