Power Innovation
Stromversorgungstechnik GmbH

let's talk!

DCDC Converter DCDC900-110-30-K1

DC Converter for Accumulator charge in 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 Accu. charging

Nominal voltage	temperature depending charging-characteristics (programmable)
Stability	+/-1%
Efficiency	>85%
Maximum output power	900W
Output current	30A
Current limitation	constant current, without disconnection, but temperature limited
Overvoltage protection	two-stage, redundant and diverse DC_{OUT} OVP 31,8V (software) DC_{OUT} OVP 31,6V (hardware)

Environmental conditions

Ambient temperature	-40 to +70°C, according to EN50155
Relative humidity	<75% average per year
Shock and vibration	according to EN50155

EMV according to EN50121-3-2

Isolation

Input	1500 V
Output	500 V
Input to output	1500 V

Signals

Temperature sensor	PT100, for battery temperature
Alarm contact	potential free
Remote ON/OFF	bridge between pins 4 + 5 (external relay)
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. 6,5kg
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 plug) is 90 mm + bending radius of the connecting cables.

Connection

Input: -X1	Harting HANQ5, male, Ag 2,5 mm²
Signal 1: -X2	Harting HAN8U, female, Au 1 mm²
Output: -X3	Harting HANQ5, female, Ag 2,5 mm²
Signal 2: -X4	D-SUB 9-pole, female
Grounding	The DCDC converter has a ground bolt M6 x 25 on the case's side. A cable diameter of at least 4 mm^2 is recommended for the connection. The ground bolt is not connected to the negative pole of the device. Input and output of the device are isolated to chassis.
Warranty	24 months
Order code	DCDC900-110-30-K1

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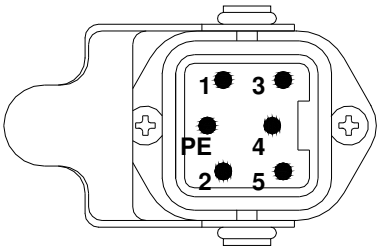
Specification

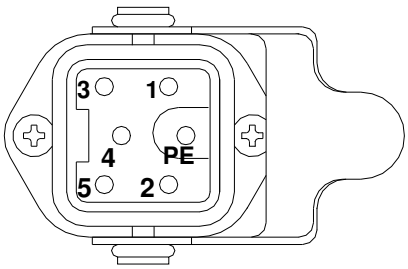
Input: -X1

1	Input voltage reference 0V
2	Input voltage reference 0V
3	Input voltage postive $+U_{IN}$
4	n.c.
5	Input voltage positive $+U_{IN}$
PE	protectiv earth



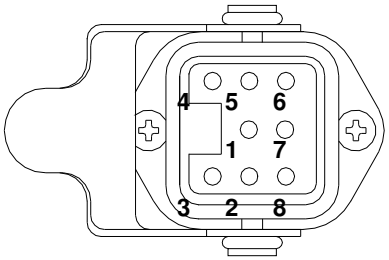
Output: -X3

1	Output voltage reference 0V
2	Output voltage reference 0V
3	Output voltage positive +24V
4	n.c.
5	Output voltage positive +24V
PE	protective earth

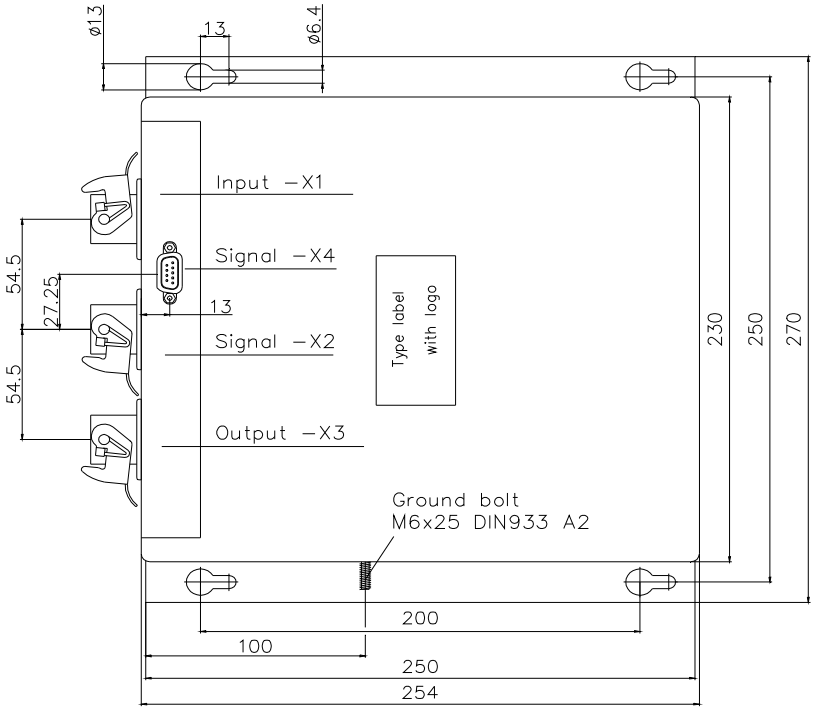


Signal 1: -X2

1	Alarm common (C)
2	Temperature sensor
3	Temperature sensor
4	Remote ON/OFF pull up (for external relay: 5V/0,5mA)
5	Remote ON/OFFreference
6	Alarm normal open (NO, converter off)
7	Alarm normal close (NC, converter on)
8	n.c.



Signal 2: -X4
Standard RS232 interface
(without figure)



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