

DC/DC converters - UNO-PS/350-900DC/24DC/60W - 2906300

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Primary-switched UNO DC/DC converter with wide range input, for DIN rail mounting, input: 350 ... 900 V DC, output: 24 V DC/60 W

Product Description

UNO DC/DC converters with basic functionality

With the DC/DC converters from the UNO POWER range, the control cabinet is supplied directly from the photovoltaic system. This saves installation costs and increases the efficiency of the system.

Why buy this product

- ☒ Wide input voltage range
- ☒ Direct field installation
- ☒ UL 1741-certified DC/DC converter
- ☒ Minimal space required in the control box
- ☒ Simplified startup

RoHS

Key Commercial Data

Packing unit	1 STK
GTIN	 4 055626 062648
GTIN	4055626062648
Weight per Piece (excluding packing)	316.900 g
Custom tariff number	85044030
Country of origin	Germany

Technical data

Dimensions

Width	55 mm
Height	90 mm
Depth	84 mm

Ambient conditions

Degree of protection	IP20
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Technical data

Ambient conditions

Ambient temperature (operation)	-25 °C ... 70 °C (> 55° C derating : 2.5%/K)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Max. permissible relative humidity (operation)	≤ 95 % (at 25 °C, non-condensing)
Noise immunity	EN 61000-6-2:2005

Input data

Nominal input voltage range	350 V DC ... 900 V DC
Input voltage range	300 V DC ... 1000 V DC
Dielectric strength maximum	≤ 1050 V DC
Current consumption	0.19 A (350 V DC)
	0.07 A (1000 V DC)
Inrush surge current	< 1 A (typical)
Choice of suitable circuit breakers	1 A (Characteristic gPV or comparable)

Output data

Nominal output voltage	24 V DC ±1 %
Nominal output current (I _N)	2.5 A (-25°C ... 55°C)
Derating	55 °C ... 70 °C (2.5%/K)
Connection in parallel	Yes, for redundancy and increased capacity
Connection in series	No
Control deviation	< 1 % (change in load, static 10 % ... 90 %)
	< 3 % (Dynamic load change 10 % ... 90 %, 10 Hz)
	< 0.1 % (change in input voltage ±10 %)
Residual ripple	< 20 mV _{PP} (with nominal values)
Output power	60 W
Typical response time	< 1 s
Maximum power dissipation in no-load condition	< 0.5 W
Power loss nominal load max.	< 6.5 W

General

Net weight	0.3 kg
Efficiency	> 90 %
Insulation voltage input/output	8 kV DC (type test)
	3 kV DC (routine test)
Protection class	II
MTBF (IEC 61709, SN 29500)	> 1160000 h (40°C)
Mounting position	horizontal DIN rail NS 35, EN 60715
Assembly instructions	Alignable: 0 mm horizontally, 30 mm vertically

Connection data, input

Connection method	Screw connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²

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Technical data

Connection data, input

Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	14
Stripping length	8 mm
Screw thread	M3

Connection data, output

Connection method	Screw connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	14
Stripping length	8 mm
Screw thread	M3

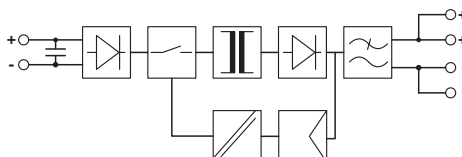
Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Shock	18 ms, 30g, in each space direction (according to IEC 60068-2-27)
Noise immunity	EN 61000-6-2:2005
Standards/regulations	EN 61000-4-2
	EN 61000-4-3
	EN 61000-4-4
	EN 61000-4-5
	EN 61000-4-6
	EN 61000-4-11
Standard -	IEC 62109-1
Standard - Safety extra-low voltage	IEC 60950-1 (SELV) and EN 60204-1 (PELV)
Standard - Safe isolation	DIN VDE 0100-410
Standard - Limitation of mains harmonic currents	EN 61000-3-2
UL approvals	UL 1741
	IEC 62109-1
Vibration (operation)	< 15 Hz, amplitude ±2.5 mm (according to IEC 60068-2-6)
	15 Hz ... 150 Hz, 2.3g, 90 min.
Low Voltage Directive	Conformance with LV directive 2006/95/EC
Approval - requirement of the semiconductor industry with regard to mains voltage dips	EN 61000-4-11
Information technology equipment - safety (CB scheme)	CB Scheme
Overvoltage category (IEC 62109-1)	II

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Drawings

Block diagram



Classifications

eCl@ss

eCl@ss 5.1	27242213
eCl@ss 6.0	27049005
eCl@ss 8.0	27049002
eCl@ss 9.0	27040701

ETIM

ETIM 5.0	EC002540
ETIM 6.0	EC002540

UNSPSC

UNSPSC 13.2	39121004
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Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / EAC / IECEE CB Scheme / cULus Recognized

Ex Approvals

Approval details

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 476951
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cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 476951
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Approvals

EAC		7500651.22.01.00242
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IECEE CB Scheme		http://www.iecee.org/	US-27376-M1-UL
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cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm
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Accessories

Accessories

Fuse terminal block

Fuse modular terminal block - UK 10,3-HESI 1000V - 3211236



Fuse terminal block, for cartridge fuse insert 10.3 x 38 mm, cross section: 1.5 - 25 mm², AWG: 16 - 4, width: 18 mm, color: Black

Redundancy module

Redundancy module - UNO-DIODE/5-24DC/2X10/1X20 - 2905489



Redundancy module, 5 V - 24 V DC, 2 x 10 A, 1 x 20 A.