

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



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

Phoenix Contact new UNO DC-DC converter 2906300 is able to cut installation costs and increase efficiency by supplying power to a control cabinet directly from a photovoltaic system. The converter can be installed in the field and is reliable from -25C to +70C. Thanks to a compact design and high degree of efficiency it can also be used in small control boxes. LED function monitoring allows for a simplified startup.



### Key Commercial Data

Packing unit	1 STK
GTIN	 4 055626 062648
Weight per Piece (excluding packing)	316.9 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
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)

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## Technical data

### Ambient conditions

Noise immunity	EN 61000-6-2:2005
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### 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 <sub>N</sub> )	2.5 A
Derating	55 °C ... 70 °C (2.5%/K)
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 <sub>PP</sub> (with nominal values)
Output power	60 W
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	4 kV AC (type test)
	3 kV AC (routine test)
Protection class	II
MTBF (IEC 61709, SN 29500)	> (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 <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	14
Stripping length	8 mm
Screw thread	M3

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### Technical data

#### Connection data, output

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Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
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Conductor cross section AWG min.	24
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Stripping length	8 mm
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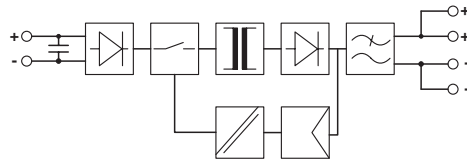
#### Standards and Regulations

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 - Electrical safety	IEC 60950-1/VDE 0805 (SELV)
Standard – Electronic equipment for use in electrical power installations and their assembly into electrical power installations	EN 50178/VDE 0160 (PELV)
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
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

### Drawings

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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
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## Approvals

### Approvals

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### Approvals

UL Recognized / cUL Recognized / EAC / cULus Recognized

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### Ex Approvals

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### Approvals submitted

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### Approval details


UL Recognized
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cUL Recognized
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EAC
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## DC/DC converters - UNO-PS/350-900DC/24DC/60W - 2906300

### Approvals

cULus Recognized  US

### 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 mm<sup>2</sup>, AWG: 16 - 4, width: 18 mm, color: Black

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#### 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.

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