

# MINI-PS- 12- 24DC/24DC/1


Order No.: 2866284



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DC-DC converter, primary switched mode, slimline design, input: 12-24 V DC, output: 24 V DC / 1 A



Commercial data	
EAN	 4 017918 960902
sales group	H051
Pack	1 Pcs.
Customs tariff	85044082
Gross weight in pieces	0.247 KG
Net weight per piece	0.2469 KG
Catalog page information	Page 610 (IF-2011)

### Product notes

WEEE/RoHS-compliant since:  
07/10/2006



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Technical data	
<b>Input data</b>	
Nominal input voltage	12 V DC ... 24 V DC
DC input voltage range	10 V DC ... 32 V DC
DC frequency range	0 Hz
Current consumption	2.6 A (12 V DC)
	1.3 A (24 V DC)

Inrush surge current	< 15 A (typical)
Power failure bypass	> 3 ms (12 V DC)
	> 20 ms (24 V DC)
Input fuse	6.3 A (slow-blow, internal)

#### Output data

Nominal output voltage	24 V DC $\pm$ 1%
Setting range of the output voltage	22.5 V DC ... 28.5 V DC (> 24 V constant capacity)
Output current	1 A (-25 °C ... 60 °C)
Derating	60 °C ... 70 °C (2.5%/K)
Connection in parallel	Yes, for assembling redundant systems and increasing efficiency
Connection in series	Yes
Residual ripple	PP (20 MHz)
Peak switching voltages nominal load	PP (20 MHz)
Maximum power dissipation NO-Load	< 1.2 W
Power loss nominal load max.	< 5 W

#### General data

Width	22.5 mm
Height	99 mm
Depth	107 mm
Net weight	0.2 kg
Operating voltage display	Green LED
Efficiency	> 83 % (at 24 V DC and nominal values)
Insulation voltage input/output	1.5 kV (type test) 1 kV (routine test)
Degree of protection	IP20
Protection class	III
MTBF (IEC 61709, SN 29500)	> 2569000 h (According to EN 29500)
Ambient temperature (operation)	-25 °C ... 70 °C (> 60 °C derating)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Max. permissible relative humidity (operation)	$\leq$ 95 % (at 25 °C, no condensation)
Mounting position	horizontal DIN rail NS 35, EN 60715
Assembly instructions	Can be aligned: Horizontally 0 mm, vertically 50 mm
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 50081-2

Noise immunity	EN 61000-6-2:2005
Low Voltage Directive	Conformance with LV directive 2006/95/EC
Standard - Electrical safety	EN 60950-1/VDE 0805 (SELV)
Shipbuilding approval	Germanischer Lloyd (EMC 2)
Standard – Electronic equipment for use in electrical power installations and their assembly into electrical power installations	EN 50178/VDE 0160 (PELV)
Standard - Safe isolation	DIN VDE 0100-410
	DIN VDE 0106-101
UL approvals	UL/C-UL listed UL 508
	UL/C-UL Recognized UL 60950
	UL ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D (Hazardous Location)

#### Connection data, input

Connection method	Pluggable 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 stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	14
Stripping length	7 mm
Screw thread	M3

#### Connection data, output

Connection method	Pluggable 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 stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	14
Stripping length	7 mm

#### Signaling

Output name	DC OK active
Output description	U <sub>OUT</sub> > 21.5 V: High signal

Maximum switching voltage	≤ 24 V DC
Output voltage	+ 24 V (Signal)
Continuous load current	≤ 20 mA
Status display	"DC OK" LED green
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 stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	14
Tightening torque, min	0.5 Nm
Tightening torque max	0.6 Nm
Screw thread	M3

**Certificates / Approvals**



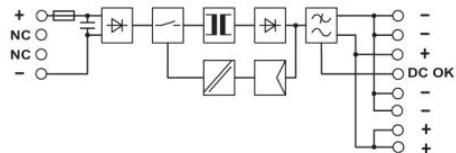
Certification cULus Listed, cULus Recognized, GL

Certification Ex: cULus Listed

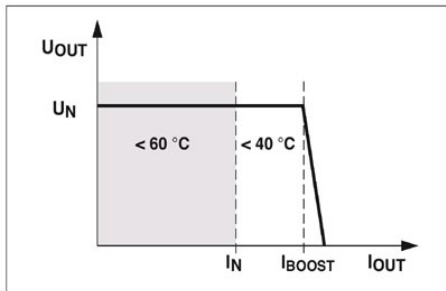
Certifications applied for:

**Drawings**

Block diagram



Diagram



POWER BOOST

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