

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

Order No.: 2866284



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

**Commercial data**

EAN	4017918960902
Pack	1 Pcs.
Customs tariff	85044081
Weight/Piece	0.2561 KG
Catalog page information	Page 507 (IF-2007)

**Product notes**

WEEE/RoHS-compliant since:  
02/27/2007

**Technical data****Input data**

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	Approx. 3.2 A (10 V DC)
	1 A (32 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 ... 70°C)
Connection in parallel	Yes, for assembling redundant systems and increasing efficiency
Connection in series	No
Residual ripple	< 30 mVPP
Peak switching voltages nominal load	< 30 mVPP (20 MHz)
Maximum power dissipation idling	2.5 W
Power loss nominal load max.	7.5 W

**General data**

Width	22.5 mm
Height	99 mm
Depth	107 mm
Weight	0.2 kg
Operating voltage display	LED green
Efficiency	> 78 % (at 24 V DC and nominal values)
Insulation voltage input/output	1 kV (routine test)
	1.5 kV (type test)
Degree of protection	IP20
Class of protection	II
MTBF	> 500 000 h in acc. with IEC 61709 (SN 29500)
Ambient temperature (operation)	-25 °C ... 70 °C (> 60°C derating)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Max. permissible relative humidity (operation)	95 % (at 25°C, no condensation)
Mounting position	Horizontal DIN rail NS 35, EN 60715
Assembly instructions	Can be aligned: Horizontal 0 cm, vertical 5 cm
Electromagnetic compatibility	Conformance with EMC directive 89/336/EEC

Emitted interference	EN 50081-2
Immunity to interference	EN 61000-6-2
Standard – Safety transformers for switched-mode power supply units	EN 61558-2-17
Standard - Electrical safety	EN 60950/VDE 0805 (SELV)
Standard – Shipbuilding	Germanischer Lloyd
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 0106-1010
UL approvals	UL/C-UL listed UL 508
	UL/C-UL Recognized UL 60950
	UL/C-UL Listed UL 1604 Class I, Division 2, Groups A, B, C, D

**Connection data, input**

Type of connection	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	12
Stripping length	7 mm
Screw thread	M3

**Connection data, output**

Type of connection	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	12
Stripping length	7 mm

**Signaling**

Output name	DC OK active
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Output description	$U_{OUT} > 21.5 \text{ V}$ : High signal
Maximum switching voltage	$\leq 24 \text{ V DC}$
Output voltage	+ 24 V (signal)
Continuous load current	$\leq 20 \text{ mA}$
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	12
Tightening torque, min	0.5 Nm
Tightening torque max	0.6 Nm
Screw thread	M3

**Certificates / Approvals**

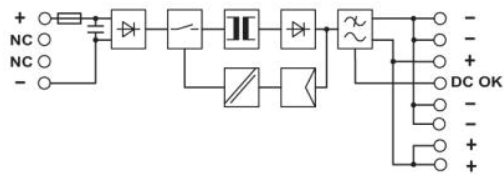


Certification CUL, CUL Listed, GL, UL, UL Listed

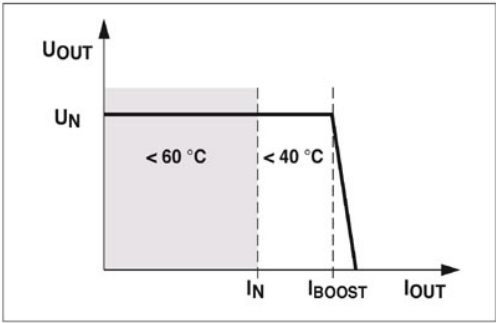
Certification Ex: CUL-EX LIS, UL-EX LIS

**Drawings**

Block diagram



Diagram



POWER BOOST