

# MINI-PS-48-60DC/24DC/1

Order No.: 2866271

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DC-DC converter, primary switched mode, slimline design, input: 48 - 60 V DC, output: 24 V DC / 1 A

## Commercial data

EAN	4017918960919
Pack	1 Pcs.
Customs tariff	85044081
Weight/Piece	0.2401 KG
Catalog page information	Page 507 (IF-2007)

## Product notes

WEEE/RoHS-compliant since:  
10/01/2006



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## Technical data

### Input data

Nominal input voltage	48 V DC ... 60 V DC
DC input voltage range	36 V DC ... 75 V DC
DC frequency range	0 Hz
Current consumption	Approx. 0.8 A (36 V DC) 0.4 A (75 V DC)
Inrush surge current	< 15 A (typical)

Power failure bypass	> 15 ms (48 V DC)
	> 20 ms (60 V DC)
Input fuse	3.15 A (slow-blow, internal)
<b>Output data</b>	
Nominal output voltage	24 V DC $\pm$ 1%
Setting range of the output voltage	22.5 V DC ... 28.5 V DC
Output current	1 A (up to 60°C)
	1.5 A (with POWER BOOST)
Connection in parallel	Yes, for assembling redundant systems and increasing efficiency
Connection in series	No
Residual ripple	< 40 mVPP
Peak switching voltages nominal load	< 50 mVPP (20 MHz)
Maximum power dissipation idling	1.2 W
Power loss nominal load max.	5 W
<b>General data</b>	
Width	22.5 mm
Height	99 mm
Depth	107 mm
Weight	0.2 kg
Operating voltage display	LED green
Efficiency	> 85 % (at 60 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
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 – 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	COMBICON screw/plug 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	M 3

#### Connection data, output

Type of connection	COMBICON screw/plug 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
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	12
Tightening torque, min	0.5 Nm
Tightening torque max	0.6 Nm
Screw thread	M 3

**Certificates / Approvals**

Approval logo

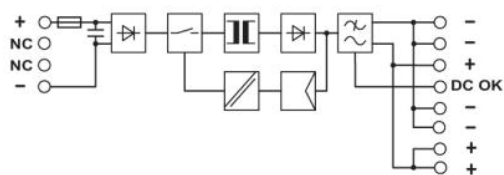


**requested approbations**

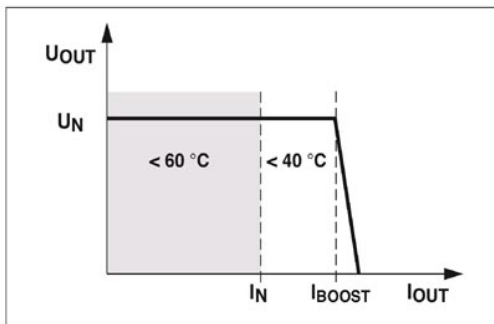
Certification	CUL, CUL Listed, UL, UL Listed
Certification Ex:	CUL-EX LIS, UL-EX LIS

**Drawings**

Block diagram



Diagram



POWER BOOST

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