

Power supply unit - MINI-PS-100-240AC/24DC/1 - 2938840

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DIN rail power supply unit 24 V DC/1 A, primary-switched mode, slim design



Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	263.6 g
Custom tariff number	85044030
Country of origin	China

Technical data

Dimensions

Width	22.5 mm
Height	99 mm
Depth	114.5 mm

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 70 °C (> 60 °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 61000-6-3:2007/A1:2011

Input data

Nominal input voltage range	100 V AC ... 240 V AC
Input voltage range	85 V AC ... 264 V AC
	90 V DC ... 350 V DC
AC frequency range	45 Hz ... 65 Hz

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Technical data

Input data

Frequency range DC	0 Hz
Inrush surge current	< 15 A (typical)
Power failure bypass	> 20 ms (120 V AC)
	> 110 ms (230 V AC)
Input fuse	1.25 A (slow-blow, internal)

Output data

Nominal output voltage	24 V DC \pm 1 %
Setting range of the output voltage (U_{Set})	22.5 V DC ... 28.5 V DC (> 24 V DC, constant capacity restricted)
Nominal output current (I_N)	1 A (up to 60°C)
POWER BOOST (I_{Boost})	1.3 A
Connection in parallel	Yes, for assembling redundant systems and increasing efficiency
Connection in series	Yes
Residual ripple	< 100 mV _{PP}
Output power	24 W
Typical response time	< 0.2 s
Peak switching voltages nominal load	< 100 mV _{PP} (20 MHz)
Maximum power dissipation in no-load condition	< 1.4 W
Power loss nominal load max.	< 4.5 W

General

Net weight	0.2 kg
Operating voltage display	Green LED
Efficiency	> 80 % (for 230 V AC and nominal values)
Insulation voltage input/output	3 kV (routine test)
	3 kV (type test)
Protection class	II (in closed control cabinet)
MTTF/ MTBF (IEC 61709, SN 29500)	> 500000 h
Mounting position	On horizontal DIN rail NS 35 in acc. with EN 60715
Assembly instructions	Can be aligned: Vertical with spacing = 5 cm, horizontal with zero spacing

Connection data, input

Connection method	Pluggable 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

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Technical data

Connection data, input

Stripping length	7 mm
Screw thread	M3

Connection data, output

Connection method	Pluggable 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	7 mm

Signaling

Output name	Active
Output description	U _{OUT} > 21.5 V: High signal
Output voltage	+ 24 V (Signal)
Continuous load current	max. 20 mA
Status display	Green LED (U _{out} > 21,5 V DC: LED permanently lit)

Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 55011 (EN 55022)
Noise immunity	EN 61000-6-3:2007/A1:2011
Connection in acc. with standard	CUL
Standard - Electrical safety	EN 60950-1/VDE 0805 (SELV)
Standard - Safe isolation	DIN VDE 0100-410
UL approvals	UL/C-UL Listed ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D

Classifications

eCl@ss

eCl@ss 4.0	27040702
eCl@ss 4.1	27040702
eCl@ss 5.0	27242213
eCl@ss 5.1	27242213
eCl@ss 6.0	27049005
eCl@ss 7.0	27049002
eCl@ss 8.0	27049002

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Classifications

eCl@ss

eCl@ss 9.0	27040701
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ETIM

ETIM 2.0	EC001039
ETIM 3.0	EC001039
ETIM 4.0	EC000599
ETIM 5.0	EC002540

UNSPSC

UNSPSC 6.01	30211502
UNSPSC 7.0901	39121004
UNSPSC 11	39121004
UNSPSC 12.01	39121004
UNSPSC 13.2	39121004

Approvals

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UL Recognized / UL Listed / cUL Recognized / cUL Listed / EAC / EAC / UL Recognized / UL Listed / cUL Recognized / cUL Listed / cULus Recognized / cULus Listed

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approvals submitted

Approval details

UL Recognized

UL Listed

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Approvals

cUL Recognized

cUL Listed

EAC

EAC

UL Recognized

UL Listed

cUL Recognized

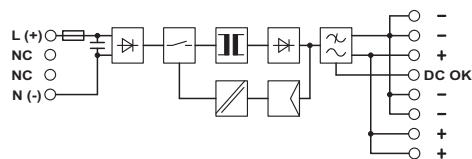
cUL Listed

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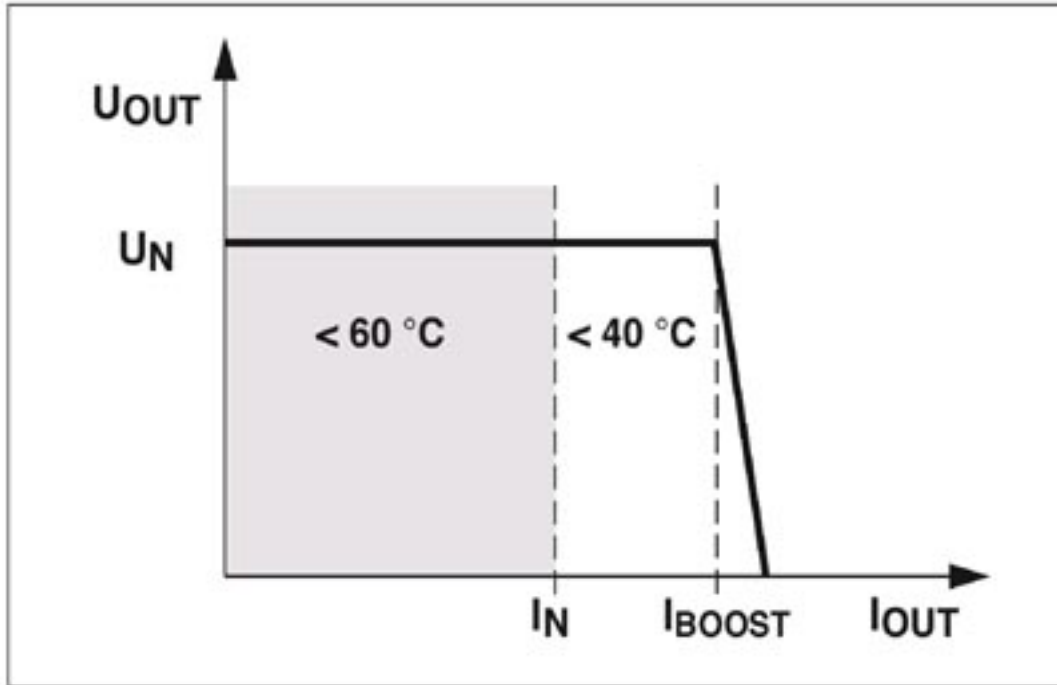
Drawings

Block diagram



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Diagram



POWER BOOST