

# 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

package_quantity	1
GTIN	4017918927097

## 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)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Max. permissible relative humidity (operation)	95 % (at 25 °C, non-condensing)
Noise immunity	EN 61000-6-2:2005

### Input data

Input voltage range	85 V AC ... 264 V AC
Input voltage range	90 V DC ... 350 V DC
AC frequency range	45 Hz ... 65 Hz
Frequency range DC	0 Hz
Current consumption	0.5 A (85 V AC)
Current consumption	0.2 A (264 V AC)
Current consumption	approx. 0.4 A (90 V DC)
Current consumption	approx. 0.1 A (350 V DC)
Inrush surge current	< 15 A (typical)
Power failure bypass	> 20 ms (120 V AC)
Power failure bypass	> 110 ms (230 V AC)
Input fuse	1.25 A (slow-blow, internal)

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### 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 (up to 60°C)
Output current	1.3 A (with POWER BOOST)
Connection in parallel	Yes, for assembling redundant systems and increasing efficiency
Connection in series	Yes
Residual ripple	< 100 mV <sub>PP</sub>
Peak switching voltages nominal load	< 100 mV <sub>PP</sub> (20 MHz)
Maximum power dissipation NO-Load	< 1 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)
Insulation voltage input/output	3 kV (type test)
Protection class	II (in closed control cabinet)
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
Electromagnetic compatibility	Conformance with EMC directive 89/336/EC
Noise emission	EN 50081-2
Standard - Electrical safety	EN 60950-1/VDE 0805 (SELV)
Standard - Safe isolation	DIN VDE 0100-410
Standard - Safe isolation	DIN VDE 0106-1010
UL approvals	UL/C-UL Listed ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D
Surge voltage category	III

### 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
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Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	14
Stripping length	7 mm

### Signaling

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

## 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

### 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

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

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## approvals

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### Approval details

UL Listed

cUL Listed

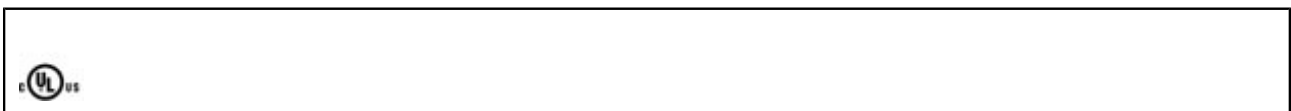
cULus Listed

UL Recognized

cUL Recognized

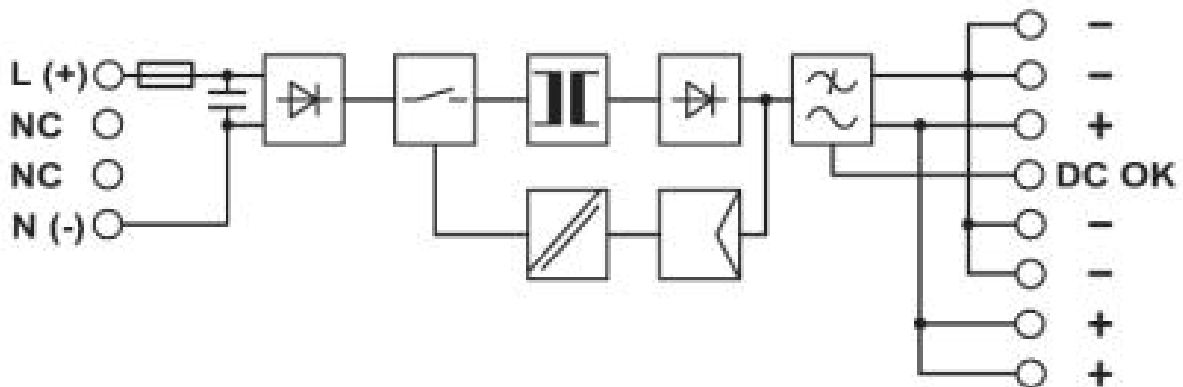
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approvals



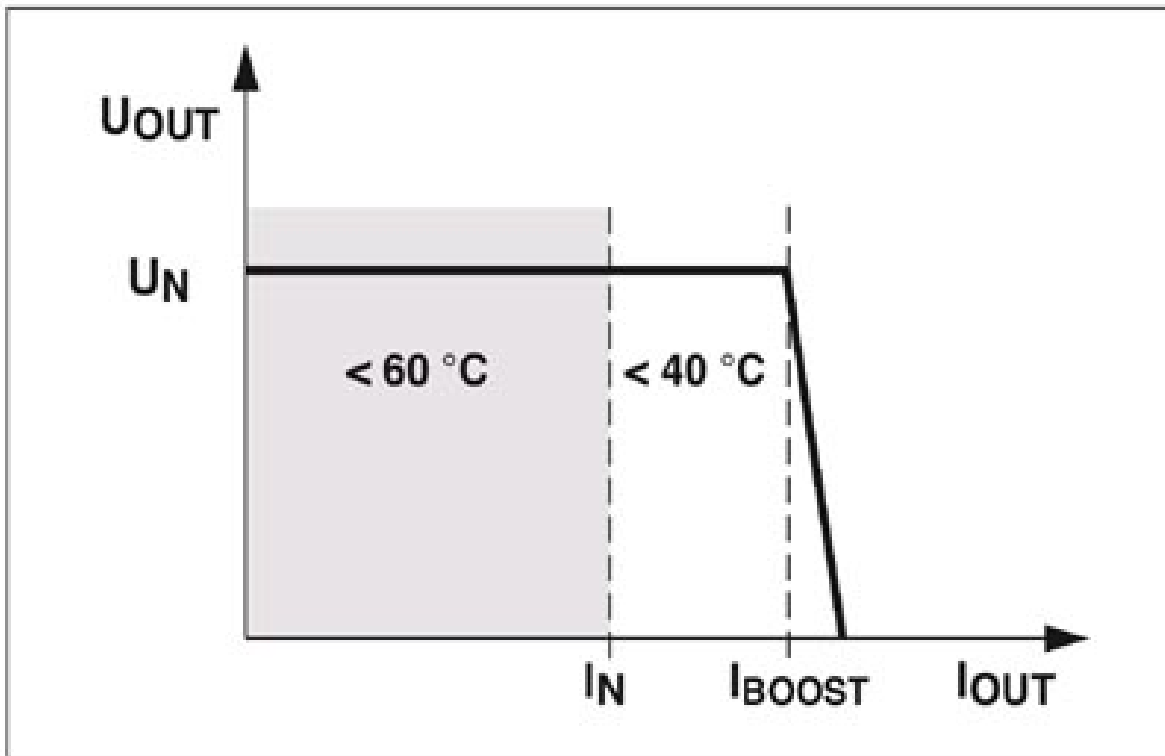
## Drawings

Block diagram



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Diagram



POWER BOOST

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