

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

RoHS

Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 927097
GTIN	4017918927097
Weight per Piece (excluding packing)	260.000 g
Custom tariff number	85044030
Country of origin	China

Technical data

Dimensions

Width	22.5 mm
Height	99 mm
Depth	114.5 mm
Installation distance right/left	0 mm / 0 mm
Installation distance top/bottom	50 mm / 50 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)

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Input data

Nominal input voltage range	100 VAC ... 240 VAC
Input voltage range	85 VAC ... 264 VAC
	90 VDC ... 350 VDC
AC frequency range	45 Hz ... 65 Hz
Frequency range DC	0 Hz
Current consumption	0.5 A (85 V AC)
	0.2 A (264 V AC)
	approx. 0.4 A (90VDC)
	approx. 0.1 A (350 V DC)
Nominal power consumption	45 VA
Inrush current	< 15 A (typical)
Mains buffering time	> 20 ms (120VAC)
	> 110 ms (230 V AC)
Input fuse	1.25 A (slow-blow, internal)

Output data

Nominal output voltage	24 VDC $\pm 1\%$
Setting range of the output voltage (U_{Set})	22.5 VDC ... 28.5 VDC (> 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} (20MHz)
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)
MTBF (IEC 61709, SN 29500)	> 500000 h
Insulation voltage input/output	3 kV (routine test)
	3 kV (type test)
Degree of protection	IP20
Protection class	II (in closed control cabinet)

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

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General

Mounting position	On horizontal DIN rail NS 35 in acc. with EN 60715
Assembly instructions	alignable: 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
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 2014/30/EU
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

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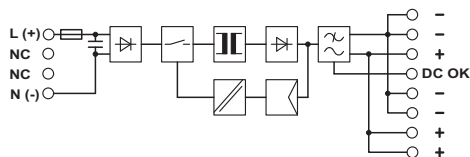
Technical data

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 25;
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Block diagram



Classifications

eCl@ss

eCl@ss 10.0.1	27040701
eCl@ss 11.0	27040701
eCl@ss 4.0	27040700
eCl@ss 4.1	27040700
eCl@ss 5.0	27242200
eCl@ss 5.1	27242200
eCl@ss 6.0	27049000
eCl@ss 7.0	27049002
eCl@ss 8.0	27049002
eCl@ss 9.0	27040701

ETIM

ETIM 2.0	EC001039
ETIM 3.0	EC001039
ETIM 4.0	EC000599
ETIM 5.0	EC002540
ETIM 6.0	EC002540
ETIM 7.0	EC002540

UNSPSC

UNSPSC 6.01	30211502
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Classifications

UNSPSC

UNSPSC 7.0901	39121004
UNSPSC 11	39121004
UNSPSC 12.01	39121004
UNSPSC 13.2	39121004
UNSPSC 18.0	39121004
UNSPSC 19.0	39121004
UNSPSC 20.0	39121004
UNSPSC 21.0	39121004

Approvals

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

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approval details

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 211944
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UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 123528
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cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 123528
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cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 211944
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cUL Recognized		http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm	FILE E 211944
cUL Listed		http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm	FILE E 123528
EAC			EAC-Zulassung
EAC			RU*DE*08.B.01873/19

Accessories

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Device protection

Type 3 surge protection device - PLT-SEC-T3-230-FM-UT - 2907919



Type 2/3 surge protection, consisting of protective plug and base element with screw connection. For single-phase power supply network with integrated status indicator and remote signaling. Nominal voltage 230 V AC/DC.

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Accessories

Type 3 surge protection device - TTC-6P-T3-24DC-PT-I - 1027586



Type 3 surge protection, consisting of protective plug and base element, with integrated status indicator for 24 V DC power supplies.