

Power supply unit - MINI-PS-100-240AC/10-15DC/2 - 2938756

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Primary-switched MINI POWER power supply for DIN rail mounting, input: 1-phase, output: 10 V DC ... 15 V DC/2 A

Product Description

MINI POWER power supplies for MCR technology

In measurement and control technology (MCR), modular electronics housing has become the industry standard. MINI POWER is the power supply unit to go with it. The devices are flexible, thanks to special voltages and special versions.

Your advantages

- ✓ Easy-maintenance connection technology thanks to keyed COMBICON connectors
- ✓ Remote monitoring of output voltage via switching output

RoHS

Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 925192
GTIN	4017918925192
Weight per Piece (excluding packing)	250.600 g
Custom tariff number	85044030
Country of origin	Poland

Technical data

Dimensions

Width	45 mm
Height	99 mm
Depth	107 mm
Installation distance right/left	0 mm / 0 mm

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Dimensions

Installation distance top/bottom	50 mm / 50 mm
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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)

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
Current consumption	0.4 A (120VAC)
	0.2 A (230 V AC)
	0.4 A (90VDC)
	0.1 A (350 V DC)
Nominal power consumption	44 VA
Inrush current	< 15 A (typical)
Mains buffering time	> 20 ms (120VAC)
	> 120 ms (230 V AC)
Input fuse	2 A (slow-blow, internal)
Recommended breaker for input protection	6 A ... 16 A (Characteristics B, C, D, K)

Output data

Nominal output voltage	12 VDC ±1%
	10 VDC ±1%
	15 VDC ±1%
Setting range of the output voltage (U _{Set})	10 VDC ... 15 VDC (> 12 V DC, constant capacity restricted)
Nominal output current (I _N)	2 A (-25°C ... 60°C)
POWER BOOST (I _{Boost})	2.3 A (-25°C ... 40°C permanent)
Derating	60 °C ... 70 °C (2.5%/K)
Connection in parallel	Yes, for assembling redundant systems and increasing efficiency
Connection in series	yes
Residual ripple	< 20 mV _{PP} (20MHz)
Output power	30 W
Typical response time	< 1 s
Peak switching voltages nominal load	< 100 mV _{PP} (20MHz)
Maximum power dissipation in no-load condition	< 1 W

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Output data

Power loss nominal load max.	< 7 W
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General

Net weight	0.25 kg
Operating voltage display	Green LED
Efficiency	> 86 % (for 230 V AC and nominal values)
MTBF (IEC 61709, SN 29500)	> 507000 h (40°C)
Insulation voltage input/output	4 kV (type test)
	3 kV (routine test)
Degree of protection	IP20
Protection class	II (in closed control cabinet)
Mounting position	horizontal DIN rail NS 35, EN 60715
Assembly instructions	alignable: horizontally 0 mm, vertically 50 mm

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.	12
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.	12
Stripping length	7 mm
Screw thread	M3

Connection data for signaling

Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²

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Connection data for signaling

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Conductor cross section AWG min.	24
Conductor cross section AWG max.	12
Screw thread	M3

Standards

EMC requirements for noise immunity	EN61000-6-2
Standard - Electrical safety	EN 60950-1/VDE 0805 (SELV)
Standard – Electronic equipment for use in electrical power installations and their assembly into electrical power installations	EN50178/VDE0160 (PELV)
Standard – Safety extra-low voltage	EN 60950-1 (SELV)
	EN 60204 (PELV)
Standard - Safe isolation	DINVDE0100-410
Standard – Limitation of mains harmonic currents	EN61000-3-2
Rail applications	EN50121-4

Conformance/approvals

UL approvals	UL/C-UL listed UL 508
	UL/C-UL Recognized UL 60950-1
	UL ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D (Hazardous Location)

EMC data

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Low Voltage Directive	Conformance with Low Voltage Directive 2014/35/EC

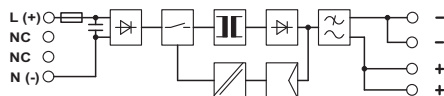
Environmental Product Compliance

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

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Block diagram



Classifications

eCl@ss

eCl@ss 10.0.1	27040701
eCl@ss 11.0	27040701
eCl@ss 4.0	27143100
eCl@ss 4.1	27143100
eCl@ss 5.0	27143100
eCl@ss 5.1	27143100
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
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

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Approvals

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

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm	FILE E 123528
UL Recognized		http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm	FILE E 214596
cUL Recognized		http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm	FILE E 214596
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
cULus Recognized			

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Approvals

cULus Listed



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.

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.