

MINI-PS-100-240AC/24DC/2


Order No.: 2938730



<http://eshop.phoenixcontact.se/phoenix/treeViewClick.do?UID=2938730>

DIN rail power supply unit 24 V DC/2 A, primary-switched mode, slim design



Commercial data	
EAN	 4 017918 899554
E-number	5246014
Pack	1
Customs tariff	85044082
Catalog page information	Page 597 (IF-2011)

Product notes

WEEE/RoHS-compliant since:
2006-03-01



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Product description

MINI POWER is an extra slim power supply unit available in design widths of 22.5 mm, 45 mm, and 67.5 mm.

In addition to a 24 V DC version with output currents of 1.3 A, 2 A, and 4 A, special voltages with 5 V/3 A, ± 15 V/1 A, and 10 V ... 15 V/2 A are also available.

Reliable startup of heavy loads is ensured by a power reserve of up to 100%: the POWER BOOST.

The high level of operational reliability is reliably ensured even on complex global networks. MINI POWER can also be used in applications where static voltage dips, transient supply voltage failures or phase failure are to be expected.

Generously dimensioned capacitors ensure mains buffering of over 20 ms at full load.

Technical data

Input data

Nominal input voltage	100 V AC ... 240 V AC
AC input voltage range	85 V AC ... 264 V AC
DC input voltage range	90 V DC ... 350 V DC
AC frequency range	45 Hz ... 65 Hz
DC frequency range	0 Hz
Current consumption	Approx. 0.7 A (120 V AC)
	0.4 A (230 V AC)
	Approx. 0.65 A (90 V DC)
	Approx. 0.2 A (350 V DC)
Inrush surge current	< 15 A (typical)
Power failure bypass	> 35 ms (120 V AC)
	> 170 ms (230 V AC)
Input fuse	2.5 A (slow-blow, internal)
Permissible backup fuse	B6
	B10
	B16

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	2 A (-25 °C ... 60 °C)
	2.9 A (with POWER BOOST, -25°C ... 40°C permanent)
Derating	60 °C ... 70 °C (2.5%/K)
Connection in parallel	Yes, for redundancy and increased capacity
Connection in series	Yes
Starting delay with capacitive load	(Unrestricted)
Max. capacitive load	Unlimited
Control deviation	< 1 % (change in load, static 10% ... 90%)
	< 3 % (change in load, dynamic 10% ... 90%)
	< 0.1 % (change in input voltage \pm 10%)
Residual ripple	PP (20 MHz)
Peak switching voltages nominal load	PP (20 MHz)
Maximum power dissipation NO-Load	2 W
Power loss nominal load max.	7 W

General data

Width	45 mm
Height	99 mm
Depth	107 mm
Net weight	0.25 kg
Operating voltage display	Green LED
Efficiency	> 88 % (for 230 V AC and nominal values)
Insulation voltage input/output	4 kV (type test) 3 kV (Routine test)
Degree of protection	IP20
Protection class	II (in an enclosed control cabinet)
MTBF (IEC 61709, SN 29500)	> 500000 h ()
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, no condensation)
Mounting position	horizontal DIN rail NS 35, EN 60715
Assembly instructions	Can be aligned: Horizontally 0 mm, vertically 50 mm
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 50081-2
Noise immunity	EN 61000-6-2:2005
Low Voltage Directive	Conformance with LV directive 2006/95/EC
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	EN 50178/VDE 0160 (PELV)
Standard - Safe isolation	DIN VDE 0100-410 DIN VDE 0106-1010
Standard – Limitation of mains harmonic currents	EN 61000-3-2
Standard – Equipment safety	GS (tested safety)
UL approvals	UL/C-UL listed UL 508 UL/C-UL Recognized UL 60950 UL/C-UL Listed ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D NEC Class 2 as per UL 1310
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 stranded min.	0.2 mm ²
Conductor cross section stranded max.	2.5 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil 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 stranded min.	0.2 mm ²
Conductor cross section stranded max.	2.5 mm ²
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 _{OUT} > 21.5 V: High signal
Maximum switching voltage	≤ 24 V
Output voltage	+ 24 V
Continuous load current	≤ 20 mA
Status display	"DC OK" LED green
Note on status display	U _{OUT} > 21.5 V: LED lights up
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	2.5 mm ²
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	M3

Certificates



Certification

CUL, CUL Listed, GOST, UL, UL Listed

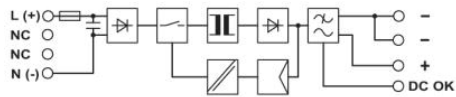
Certification Ex:

CUL-EX LIS, UL-EX LIS

Certifications applied for:

Drawings

Block diagram



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