

2938840

<https://www.phoenixcontact.com/us/products/2938840>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Please use the following items in new systems: 2904597 or 2909575
DIN rail power supply, 24 V DC/1 A, primary-switched, narrow design

Commercial data

Item number	2938840
Packing unit	1 pc
Sales key	CM11
Product key	CMPM13
GTIN	4017918927097
Weight per piece (including packing)	247.5 g
Weight per piece (excluding packing)	200 g
Customs tariff number	85044095
Country of origin	CN

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



2938840

<https://www.phoenixcontact.com/us/products/2938840>

Technical data

Input data

AC operation

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
Input voltage range AC	85 V AC ... 264 V AC
Input voltage range DC	90 V DC ... 350 V DC
Voltage type of supply voltage	AC/DC
Inrush current	< 15 A (typical)
AC frequency range	45 Hz ... 65 Hz
Frequency range DC	0 Hz
Mains buffering time	> 20 ms (120 V AC)
	> 110 ms (230 V AC)
Current consumption	0.5 A (85 V AC)
	0.2 A (264 V AC)
	approx. 0.4 A (90 V DC)
	approx. 0.1 A (350 V DC)
Nominal power consumption	45 VA
Typical response time	< 0.2 s
Input fuse	1.25 A (slow-blow, internal)

Output data

Efficiency	> 80 % (for 230 V AC and nominal values)
Output characteristic	U/I
Nominal output voltage	24 V DC ± 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
Residual ripple	< 100 mV _{PP}
Output power	24 W
Peak switching voltages nominal load	< 100 mV _{PP} (20 MHz)
Maximum no-load power dissipation	< 1.4 W
Power loss nominal load max.	< 4.5 W
Connection in parallel	yes, for assembling redundant systems and increasing efficiency
Connection in series	yes

Signal: Active

Output description	$U_{OUT} > 21.5$ V: High signal
Output voltage	+ 24 V (Signal)
Continuous load current	max. 20 mA

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



2938840

<https://www.phoenixcontact.com/us/products/2938840>

Connection data

Input

Connection method	Pluggable screw connection
Conductor cross-section, rigid min.	0.2 mm ²
Conductor cross-section, rigid 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

Output

Connection method	Pluggable screw connection
Conductor cross-section, rigid min.	0.2 mm ²
Conductor cross-section, rigid 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

Operating voltage display	Green LED
---------------------------	-----------

Signal output: Active

Status display	Green LED ($U_{out} > 21,5 \text{ V DC}$: LED permanently lit)
----------------	--

Electrical properties

Number of phases	1
Insulation voltage input/output	3 kV (routine test)
	3 kV (type test)

Product properties

Product type	Power supply
Product family	MINI POWER
MTBF (IEC 61709, SN 29500)	> 500000 h

Insulation characteristics

Protection class	II (in closed control cabinet)
Overvoltage category	III

Dimensions

Width	22.5 mm
Height	99 mm

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



2938840

<https://www.phoenixcontact.com/us/products/2938840>

Depth	114.5 mm
-------	----------

Installation dimensions

Installation distance right/left	0 mm / 0 mm
Installation distance top/bottom	50 mm / 50 mm

Mounting

Assembly note	alignable: vertical with spacing = 5 cm, horizontal with zero spacing
Mounting position	on horizontal DIN rail NS 35 in acc. with EN 60715
With protective coating	no

Material specifications

Housing material	Plastic
Type of housing	Polyamide PA, color: green

Environmental and real-life conditions

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)
Temp code	T3A ≤ 60 °C

Standards and regulations

Standard - Electrical safety	EN 60950-1/VDE 0805 (SELV)
Standard - Safe isolation	DIN VDE 0100-410

Approvals

UL approvals	UL/C-UL Listed ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D
--------------	---

Conformity/Approvals

SIL in accordance with IEC 61508	0
----------------------------------	---

EMC data

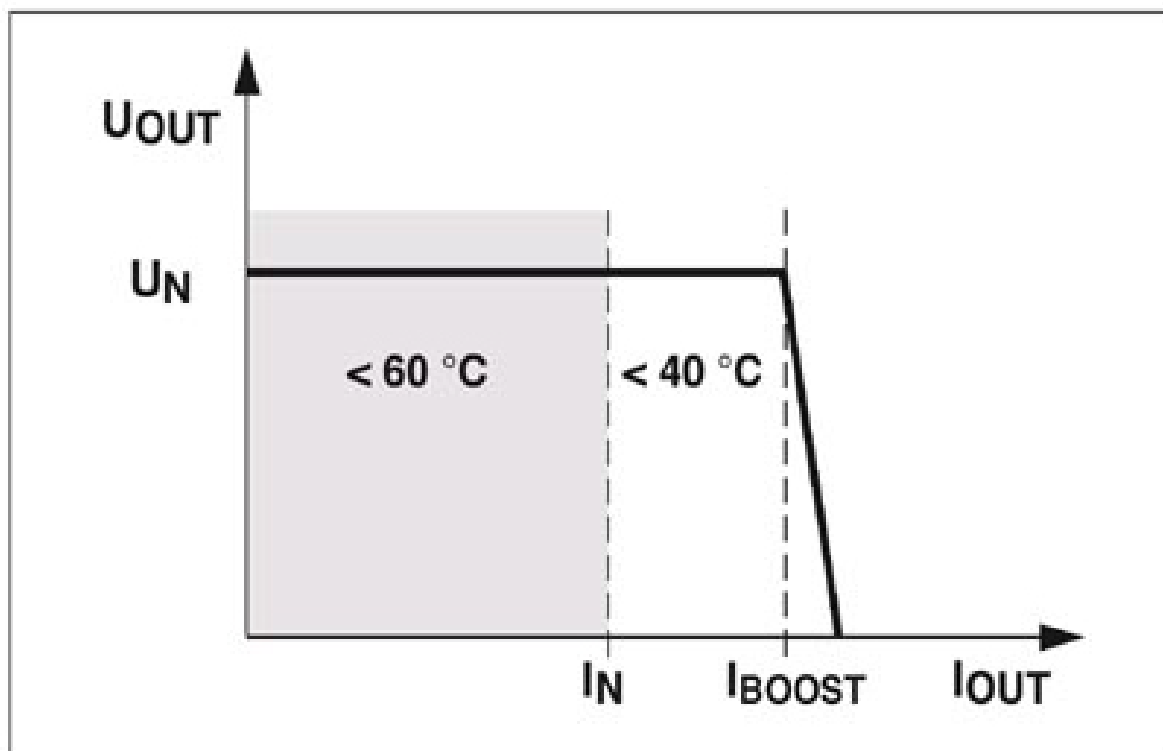
Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
EMC requirements for noise emission	EN 61000-6-3
	EN 61000-6-4
EMC requirements for noise immunity	EN 61000-6-1
	EN 61000-6-2

Noise emission

Standards/regulations	EN 55011 (EN 55022)
-----------------------	---------------------

Drawings

Diagram



POWER BOOST

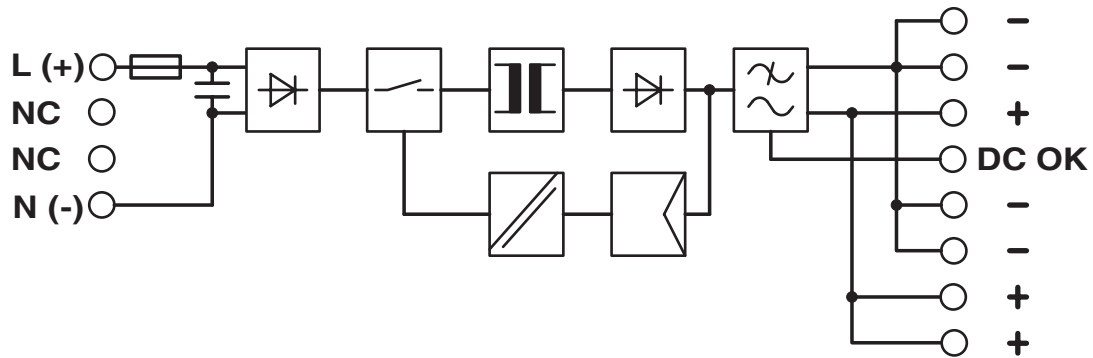
MINI-PS-100-240AC/24DC/1 - Power supply

2938840

<https://www.phoenixcontact.com/us/products/2938840>



Block diagram



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



2938840

<https://www.phoenixcontact.com/us/products/2938840>

Classifications

UNSPSC

UNSPSC 21.0	39121000
-------------	----------

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



2938840

<https://www.phoenixcontact.com/us/products/2938840>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-25
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	7d38469f-1fcf-41dd-9821-03d6a666da89

Phoenix Contact 2026 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com