

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



2938840

<https://www.phoenixcontact.com/pc/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
Minimum order quantity	1 pc
Product key	CMPM13
Catalog page	Page 38 (IF-2005)
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 unit



2938840

<https://www.phoenixcontact.com/pc/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 $\pm$ 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 <sub>PP</sub>
Output power	24 W
Peak switching voltages nominal load	< 100 mV <sub>PP</sub> (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 unit



2938840

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

## Connection data

### Input

Connection method	Pluggable screw connection
Conductor cross section, rigid min.	0.2 mm <sup>2</sup>
Conductor cross section, rigid max.	2.5 mm <sup>2</sup>
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
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 <sup>2</sup>
Conductor cross section, rigid max.	2.5 mm <sup>2</sup>
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
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 ( $U_{out} > 21,5$ V DC: LED permanently lit)
----------------	---------------------------------------------------------

## Electrical properties

Number of phases	1.00
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