

STEP-PS/1AC/24DC/4.2/CO - Power supply



1483707

<https://www.phoenixcontact.com/pc/products/1483707>

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.



Primary-switched STEP POWER power supply for DIN rail mounting, input: 1-phase, output: 24 V DC/4.2 A

Product description

STEP POWER power supplies for distribution boards

The STEP POWER power supply range was developed especially for building automation. The low idling losses and high degree of efficiency ensure maximum energy efficiency. They allow flexible use and can be snapped onto the DIN rail or screwed onto an even surface.

Commercial data

Item number	1483707
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	CMPS13
GTIN	4063151911515
Weight per piece (including packing)	393.4 g
Weight per piece (excluding packing)	385 g
Customs tariff number	85044095
Country of origin	VN

1483707

<https://www.phoenixcontact.com/pc/products/1483707>

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 95 V DC ... 250 V DC
Input voltage range AC	85 V AC ... 264 V AC
Input voltage range DC	95 V DC ... 250 V DC
Voltage type of supply voltage	AC
Inrush current	< 15 A (typical)
Inrush current integral (I^2t)	< 1 A ² s
AC frequency range	45 Hz ... 65 Hz
Frequency range DC	0 Hz
Mains buffering time	typ. 20 ms (120 V AC) typ. 100 ms (230 V AC)
Current consumption	1.3 A (120 V AC) 0.8 A (230 V AC)
Nominal power consumption	196.7 VA
Protective circuit	Transient surge protection; Varistor
Power factor (cos phi)	0.58
Typical response time	< 0.5 s
Input fuse	4 A (slow-blow, internal)
Recommended breaker for input protection	6 A ... 16 A (Characteristics B, C, D, K)

Output data

Efficiency	> 88 % (for 230 V AC and nominal values)
Output characteristic	U/I
Nominal output voltage	24 V DC
Output current I_{max}	6.5 A
Nominal output current (I_N)	4.2 A (-25 °C ... 55 °C) 4.4 A (-25 °C ... 40 °C permanent)
Derating	55 °C ... 70 °C (2.5 %/K)
Feedback voltage resistance	≤ 35 V DC
Protection against overvoltage at the output (OVP)	< 35 V DC
Control deviation	< 1 % (change in load, static 10 % ... 90 %) < 2 % (change in load, dynamic 10 % ... 90 %) < 0.1 % (change in input voltage ±10 %)
Residual ripple	< 40 mV _{PP} (20 MHz)
Output power	100.8 W
Peak switching voltages nominal load	< 30 mV _{PP} (20 MHz)
Maximum no-load power dissipation	< 0.7 W
Power loss nominal load max.	13.2 W

STEP-PS/1AC/24DC/4.2/CO - Power supply



1483707

<https://www.phoenixcontact.com/pc/products/1483707>

Rise time	< 0.5 s (U_{OUT} (10 % ... 90 %))
Connection in parallel	yes, for redundancy and increased capacity
Connection in series	yes

Connection data

Input

Connection method	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.	12
Stripping length	6.5 mm
Screw thread	M3
Tightening torque, min	0.5 Nm
Tightening torque max	0.6 Nm

Output

Connection method	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.	12
Stripping length	6.5 mm
Screw thread	M3
Tightening torque, min	0.5 Nm
Tightening torque max	0.6 Nm

Signaling

Types of signaling	LED
Operating voltage display	Green LED

Signal output: LED status indicator

Status display	"DC OK" LED green
Note on status display	$U_{OUT} > 21.5$ V: LED lights up

Electrical properties

Number of phases	1
Insulation voltage input/output	4 kV AC (type test)
	3.75 kV AC (routine test)
	3.75 kV AC (routine test)
	4 kV AC (type test)

1483707

<https://www.phoenixcontact.com/pc/products/1483707>

Product properties

Product type	Power supply
Product family	STEP POWER
MTBF (IEC 61709, SN 29500)	> 897000 h (40 °C)

Insulation characteristics

Protection class	II (in closed control cabinet)
Overvoltage category	III
Degree of pollution	2

Dimensions

Width	90 mm
Height	90 mm
Depth Device depth (DIN rail mounting)	55 mm (Device depth (DIN rail mounting))
Horizontal pitch	5 Div.

Installation dimensions

Installation distance right/left	0 mm / 0 mm
Installation distance top/bottom	30 mm / 30 mm

Mounting

Mounting type	DIN rail mounting
Assembly note	alignable: 0 mm horizontally, 30 mm vertically
Mounting position	horizontal DIN rail NS 35, EN 60715
With protective coating	yes

Material specifications

Housing material	Plastic
Type of housing	Polycarbonate

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 70 °C (> 55° C derating : 2.5%/K)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Climatic class	3K3 (in acc. with EN 60721)
Max. permissible relative humidity (operation)	≤ 95 % (at 25 °C, non-condensing)
Shock	18 ms, 30g, in each space direction (according to IEC 60068-2-27)
Vibration (operation)	< 15 Hz, amplitude ±2.5 mm (according to IEC 60068-2-6) 15 Hz ... 150 Hz, 2.3g, 90 min.
Temp code	T4A (60 °C)

Standards and regulations

Rail applications	EN 50121-4
-------------------	------------

STEP-PS/1AC/24DC/4.2/CO - Power supply



1483707

<https://www.phoenixcontact.com/pc/products/1483707>

Standard – Electronic equipment for use in electrical power installations and their assembly into electrical power installations	EN 50178/VDE 0160 (PELV)
Standard – Limitation of mains harmonic currents	EN 61000-3-2
Standard - Electrical safety	IEC 62368-1 (SELV)
Standard – Protection against shock currents, basic requirements for protective separation in electrical equipment	EN 50178
Standard – Safety extra-low voltage	IEC 62368-1 (SELV) und EN 60204-1 (PELV)
Standard - Safe isolation	DIN VDE 0100-410
Standard - Safety of transformers	EN 61558-2-16

Approvals

CSA	CSA-C22.2 No. 107.1-01
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 T4A (Hazardous Location)

STEP-PS/1AC/24DC/4.2/CO - Power supply



1483707

<https://www.phoenixcontact.com/pc/products/1483707>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/1483707>



IECEE CB Scheme

Approval ID: NL2-021193

STEP-PS/1AC/24DC/4.2/CO - Power supply



1483707

<https://www.phoenixcontact.com/pc/products/1483707>

Classifications

ECLASS

ECLASS-13.0	27040701
ECLASS-15.0	27040701

ETIM

ETIM 10.0	EC002540
-----------	----------

UNSPSC

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

1483707

<https://www.phoenixcontact.com/pc/products/1483707>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c), 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)
-------------------------------------	----------------------

EF3.1 Climate Change

CO2e kg	10.197 kg CO2e
---------	----------------

Phoenix Contact 2026 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstraße 8
D-32825 Blomberg
+49 (0) 5235-3 00
info@phoenixcontact.com