

Power supply unit - QUINT4-PS/1AC/12DC/7.5/PT - 2904607

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




Primary-switched power supply unit, QUINT POWER, Push-in connection, DIN rail mounting, input: 1-phase, output: 12 V DC / 7.5 A

Your advantages

- ✓ Starting of heavy loads with dynamic boost
- ✓ Preventive function monitoring indicates critical operating states before errors occur
- ✓ High efficiency and long service life, with low power dissipation and low heating
- ✓ Space savings in the control cabinet, thanks to a narrow, slim-line design
- ✓ Fast and easy startup, thanks to tool-free Push-in connection technology



Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 255767
GTIN	4055626255767
Weight per Piece (excluding packing)	370.700 g
Custom tariff number	85044030
Country of origin	Germany

Technical data

Dimensions

Width	45 mm
Height	106 mm
Depth	90 mm

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 70 °C (> 60 °C Derating: 2.5 %/K)
Ambient temperature (start-up type tested)	-40 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Power supply unit - QUINT4-PS/1AC/12DC/7.5/PT - 2904607

Technical data

Ambient conditions

Max. permissible relative humidity (operation)	≤ 95 % (at 25 °C, non-condensing)
Climatic class	3K3 (in acc. with EN 60721)
Degree of pollution	2
Installation height	≤ 5000 m (> 2000 m, observe derating)

Input data

Input voltage range	100 V AC ... 240 V AC -15 % ... +10 % 110 V DC ... 250 V DC -20 % ... +40 %
Dielectric strength maximum	300 V AC 60 s
Discharge current to PE	< 0.25 mA (264 V AC, 60 Hz)
Current consumption	1 A (100 V AC) 0.85 A (120 V AC) 0.46 A (230 V AC) 0.44 A (240 V AC)
Nominal power consumption	96.3 VA
Inrush surge current	typ. 11.4 A (at 25 °C)
Mains buffering	typ. 48 ms (120 V AC) typ. 48 ms (230 V AC)
Input fuse	3.15 A (slow-blow, internal)
Choice of suitable circuit breakers	6 A ... 16 A (Characteristic B, C or comparable)
Type of protection	Transient surge protection
Protective circuit/component	Varistor

Output data

Nominal output voltage	12 V
Setting range of the output voltage (U_{Set})	12 V DC ... 15 V DC (constant capacity)
Nominal output current (I_N)	7.5 A
Dynamic Boost ($I_{Dyn.Boost}$)	12.75 A (≤ 60 °C (5 s))
Connection in parallel	Yes, for redundancy and increased capacity
Connection in series	yes
Feedback resistance	≤ 25 V DC
Output overvoltage protection	≤ 18 V DC
Control deviation	< 0.3 % (Static load change 10 % ... 90 %) < 3 % (Dynamic load change 10 % ... 90 %, (10 Hz)) < 0.1 % (change in input voltage ±10 %)
Residual ripple	< 35 mV _{PP} (with nominal values)
Output power	90 W
Typical response time	300 ms
Maximum power dissipation in no-load condition	< 0.6 W (230 V AC) < 0.6 W (120 V AC)
Power loss nominal load max.	< 7.1 W (120 V AC)

Power supply unit - QUINT4-PS/1AC/12DC/7.5/PT - 2904607

Technical data

Output data

	< 8.1 W (230 V AC)
--	--------------------

General

Net weight	0.3 kg
Efficiency	typ. 91.5 % (120 V AC)
	typ. 92.5 % (230 V AC)
Insulation voltage input/output	4 kV AC (type test)
	3 kV AC (routine test)
Protection class	II
Degree of protection	IP20
MTBF (IEC 61709, SN 29500)	> 1221000 h (25 °C)
	> 671000 h (40 °C)
	> 248000 h (60 °C)

Connection data, input

Connection method	Push-in 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.	14
Stripping length	10 mm

Connection data, output

Connection method	Push-in 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.	14
Stripping length	10 mm

Connection data for signaling

Connection method	Push-in 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.	14
Stripping length	10 mm

Power supply unit - QUINT4-PS/1AC/12DC/7.5/PT - 2904607

Technical data

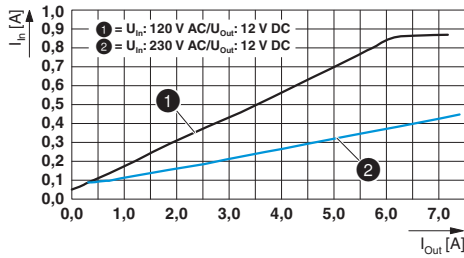
Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Standards/regulations	EN 61000-4-2
Contact discharge	4 kV (Test Level 2)
Standards/regulations	EN 61000-4-3
Frequency range	80 MHz ... 1 GHz
Test field strength	10 V/m (Test Level 3)
Frequency range	1.4 GHz ... 2 GHz
Test field strength	3 V/m (Test Level 2)
Standards/regulations	EN 61000-4-4
Comments	Criterion B
Standards/regulations	EN 61000-4-6
Frequency range	0.15 MHz ... 80 MHz
Voltage	10 V (Test Level 3)
Conducted noise emission	EN 55016 EN 61000-6-4 (Class A)
Standards/regulations	EN 61000-4-8
	EN 61000-4-11
	EN 61000-4-9
	EN 61000-4-12
	EN 61000-4-16
	EN 61000-4-18
Standard - Safety of transformers	EN 61558-2-16
Standard - Electrical safety	IEC 61010-2-201 (SELV)
Standard - Safety extra-low voltage	IEC 61010-1 (SELV)
	IEC 61010-2-201 (PELV)
Standard - Safe isolation	IEC 61558-2-16
	IEC 61010-2-201
Standard - Limitation of mains harmonic currents	EN 61000-3-2
UL approvals	UL Listed UL 61010-1
	UL Listed UL 61010-2-201
	UL 1310 Class 2 Power Units
	ANSI/UL 121201 Class I, Division 2, Groups A, B, C, D (Hazardous Location)
Shock	18 ms, 30g, in each space direction (according to IEC 60068-2-27)
Vibration (operation)	< 15 Hz, ±2.5 mm amplitude; 15 Hz ... 100 Hz: 2.3 g 90 Min. (in accordance with IEC 60068-2-6)
Overvoltage category (EN 61010-1)	II (≤ 5000 m)
Overvoltage category (EN 62477-1)	III (≤ 2000 m)

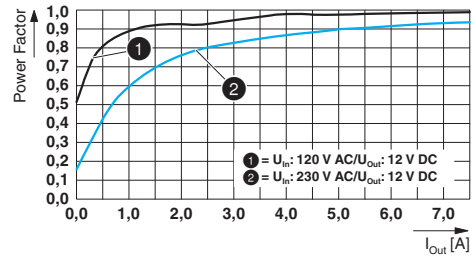
Drawings

Power supply unit - QUINT4-PS/1AC/12DC/7.5/PT - 2904607

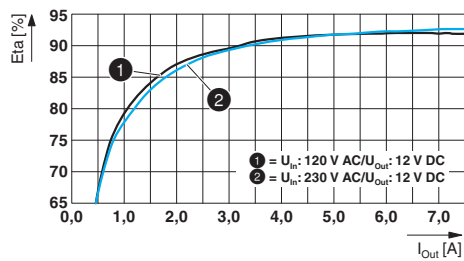
Diagram



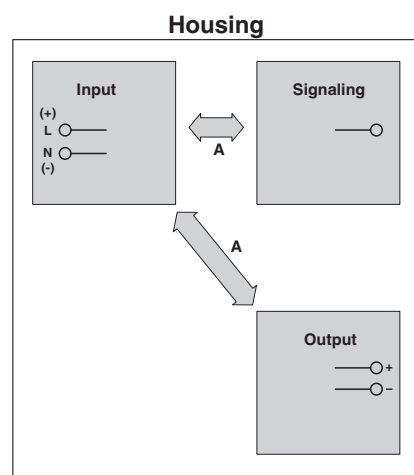
Diagram



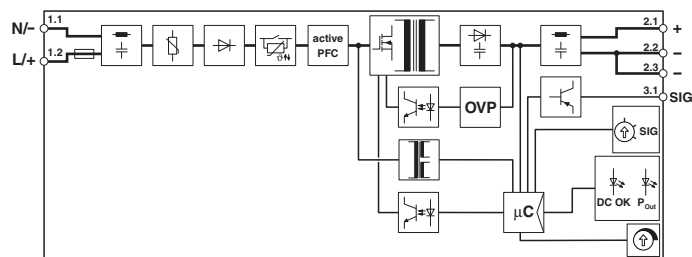
Diagram



Schematic diagram



Block diagram



Classifications

eCl@ss

eCl@ss 5.1	27242213
eCl@ss 6.0	27049000
eCl@ss 7.0	27049002
eCl@ss 8.0	27049002
eCl@ss 9.0	27040701

ETIM

ETIM 5.0	EC002540
----------	----------

Power supply unit - QUINT4-PS/1AC/12DC/7.5/PT - 2904607

Classifications

ETIM

ETIM 6.0	EC002540
----------	----------

UNSPSC

UNSPSC 13.2	39121004
-------------	----------

Approvals

Approvals

Approvals

UL Listed / IECCE CB Scheme / cUL Listed / EAC / cULus Listed

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 123528
-----------	--	---	---------------

IECEE CB Scheme		http://www.iecee.org/	SI-7008
-----------------	--	---	---------

cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 123528
------------	--	---	---------------

EAC			RU C- DE.A*30.B.01082
-----	--	--	--------------------------

cULus Listed			
--------------	--	--	--

Accessories

Accessories

Device protection

Power supply unit - QUINT4-PS/1AC/12DC/7.5/PT - 2904607

Accessories

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 integrated status indicator and remote signaling for single-phase power supply networks. Nominal voltage 230 V AC/DC.

Type 3 surge protection device - PLT-SEC-T3-24-FM-UT - 2907916



Type 3 surge protection, consisting of protective plug and base element, with integrated status indicator and remote signaling for single-phase power supply networks. Nominal voltage 24 V AC/DC.

Type 3 surge protection device - PLT-SEC-T3-230-FM-PT - 2907928



Type 2/3 surge protection, consisting of protective plug and base element, with integrated status indicator and remote signaling for single-phase power supply networks. Nominal voltage 230 V AC/DC.

Type 3 surge protection device - PLT-SEC-T3-24-FM-PT - 2907925



Type 3 surge protection, consisting of protective plug and base element, with integrated status indicator and remote signaling for single-phase power supply networks. Nominal voltage 24 V AC/DC.

Screwdriver tools

Screwdriver - SF-SL 0,4X2,0-60 - 1212546



Screwdriver, flat bladed, size: 0.4 x 2.0 x 60 mm, 2-component grip, with non-slip grip
