

Power supply unit - QUINT4-PS/1AC/24DC/10 - 2904601

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 QUINT POWER power supply for DIN rail mounting with free choice of output characteristic curve and SFB (Selective Fuse Breaking) technology, input: 1-phase, output: 24 V DC / 10 A



Key Commercial Data

Packing unit	1
GTIN	 4 046356 985338

Technical data

Dimensions

Width	50 mm
Height	130 mm
Depth	125 mm
Width with alternative assembly	122 mm
Height with alternative assembly	130 mm
Depth with alternative assembly	53 mm

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)
Maximum altitude	≤ 5000 m (> 2000 m, observe derating)

Input data

Nominal input voltage range	100 V AC ... 240 V AC
	110 V DC ... 250 V DC

Power supply unit - QUINT4-PS/1AC/24DC/10 - 2904601

Technical data

Input data

Input voltage range	100 V AC ... 240 V AC -15 % ... +10 %
	90 V DC ... 350 V DC (-18 % ... +40 %)
Dielectric strength maximum	300 V AC 30 s
AC frequency range	50 Hz ... 60 Hz -10 % ... +10 %
Discharge current to PE	< 3.5 mA
Current consumption	3.4 A (100 V AC)
	1.5 A (240 V AC)
Inrush surge current	< 20 A (at 25 °C)
Power failure bypass	≥ 35 ms (120 V AC)
	≥ 35 ms (230 V AC)
Input fuse	8 A (slow-blow, internal)
Choice of suitable circuit breakers	10 A ... 16 A (Characteristic B, C, D, K or comparable)
Type of protection	Transient surge protection
Protective circuit/component	Varistor, gas-filled surge arrester

Output data

Nominal output voltage	24 V DC
Setting range of the output voltage (U_{Set})	24 V DC ... 29.5 V DC (constant capacity)
Nominal output current (I_N)	10 A
Static Boost ($I_{Stat.Boost}$)	12.5 A
Dynamic Boost ($I_{Dyn.Boost}$)	20 A (5 s)
Selective Fuse Breaking (I_{SFB})	60 A (15 ms)
Derating	> 60 °C (2.5 %/K)
Connection in parallel	Yes, for redundancy and increased capacity
Connection in series	Yes
Control deviation	< 0.5 % (Static load change 10 % ... 90 %)
	< 4 % (Dynamic load change 10 % ... 90 %, (10 Hz))
	< 0.25 % (Input voltage change ±10%)
Residual ripple	< 80 mV _{PP} (with nominal values)
Output power	240 W
Typical response time	300 ms (according to SLEEP MODE)
Maximum power dissipation in no-load condition	< 3 W (230 V AC)
Power loss nominal load max.	< 17 W (230 V AC)

General

Net weight	0.9 kg
Efficiency	> 93 % (for 230 V AC and nominal values)
Insulation voltage input/output	3.5 kV AC (type test)

Power supply unit - QUINT4-PS/1AC/24DC/10 - 2904601

Technical data

General

	2 kV AC (routine test)
Protection class	I
MTBF (IEC 61709, SN 29500)	> 1250000 h (25 °C)
	> 783000 h (40°C)
	> 377000 h (60°C)
Mounting position	horizontal DIN rail NS 35, EN 60715
Assembly instructions	Alignable: 5 mm horizontally, 15 mm next to active components, 50 mm vertically

Connection data, input

Connection method	Screw 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.	30
Conductor cross section AWG max.	12
Stripping length	6.5 mm

Connection data, output

Connection method	Screw 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.	30
Conductor cross section AWG max.	12
Stripping length	6.5 mm

Connection data for signaling

Connection method	Push-in connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	1.5 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	1.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	16
Stripping length	8 mm

Power supply unit - QUINT4-PS/1AC/24DC/10 - 2904601

Classifications

eCl@ss

eCl@ss 5.1	27242213
eCl@ss 8.0	27049002
eCl@ss 9.0	27040701

ETIM

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

Approvals

Approvals

Approvals

EAC / UL Recognized / cUL Recognized / cULus Recognized

Ex Approvals

Approvals submitted

Approval details

EAC

UL Recognized

cUL Recognized

cULus Recognized 

Drawings

Power supply unit - QUINT4-PS/1AC/24DC/10 - 2904601

Block diagram

