

# Power supply unit - QUINT-PS-3X400-500AC/24DC/30



2938633

<https://www.phoenixcontact.com/pc/products/2938633>

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.

---

DIN rail power supply unit 24 V DC/30 A, primary switched-mode, 3-phase.



# Power supply unit - QUINT-PS-3X400-500AC/24DC/30



2938633

<https://www.phoenixcontact.com/pc/products/2938633>

## Commercial Data

Item number	2938633
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Product Key	CMPP33
Catalog Page	Page 411 (IF-2002)
GTIN	4017918910983
Weight per Piece (including packing)	3,863 g
Weight per Piece (excluding packing)	3,300 g
Customs tariff number	85044030
Country of origin	DE

## Technical Data

### Input data

#### AC operation

Nominal input voltage range	3x 400 V AC ... 500 V AC
Input voltage range	3x 320 V AC ... 575 V AC (for all three phases) 450 V DC ... 800 V DC
Input voltage range AC	3x 320 V AC ... 575 V AC (for all three phases)
Input voltage range DC	450 V DC ... 800 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 (at 3 x 400 V AC) > 20 ms (at 3 x 480 V AC)
Current consumption	approx. 3x 2.1 A (400 V AC) 3x 1.7 A (480 V AC)
Nominal power consumption	720 W
Typical response time	< 1 s
Input fuse	Externally via 3 circuit breakers 6 A, 10 A or 16 A, characteristic B

### Output data

Efficiency	> 92 %
Nominal output voltage	24 V DC $\pm$ 1 %
Setting range of the output voltage ( $U_{Set}$ )	22.5 V ... 28.5 V
Nominal output current ( $I_N$ )	30 A (up to 60 °C)
POWER BOOST ( $I_{Boost}$ )	35 A
Residual ripple	< 100 mV <sub>PP</sub>
Output power	720 W
Peak switching voltages nominal load	< 100 mV <sub>PP</sub> (20 MHz)
Maximum no-load power dissipation	< 14 W
Power loss nominal load max.	< 62 W
Connection in parallel	yes, for assembling redundant systems and increasing efficiency
Connection in series	yes

#### Signal: Active

Output description	$U_{OUT} > 0.9 \times U_N$ : High signal
Output voltage	+ 24 V DC (Signal)
Continuous load current	max. 40 mA

#### Signal: floating

Output description	Relay contact, $U_{OUT} > 0.9 \times U_N$ : Contact closed
Maximum switching voltage	$\leq 30$ V AC/DC

Maximum inrush current	$\leq 1 \text{ A}$
Continuous load current	$\leq 1 \text{ A}$

#### Signal: Active

Output description	$U_{\text{OUT}} > 0.9 \times U_{\text{N}}$ : High signal
Output voltage	+ 24 V DC (Signal)
Continuous load current	max. 40 mA

#### Signal: floating

Output description	Relay contact, $U_{\text{OUT}} > 0.9 \times U_{\text{N}}$ : Contact closed
Maximum switching voltage	$\leq 30 \text{ V AC/DC}$
Maximum inrush current	$\leq 1 \text{ A}$
Continuous load current	$\leq 1 \text{ A}$

## Connection data

#### Input

Connection method	Screw connection
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	6 mm <sup>2</sup>
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	4 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	10
Stripping length	8 mm
Screw thread	M3

#### Output

Connection method	Screw connection
Conductor cross section solid min.	0.5 mm <sup>2</sup>
Conductor cross section solid max.	16 mm <sup>2</sup>
Conductor cross section flexible min.	0.5 mm <sup>2</sup>
Conductor cross section flexible max.	10 mm <sup>2</sup>
Conductor cross section AWG min.	20
Conductor cross section AWG max.	6
Stripping length	10 mm

## LED signaling

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

#### Signal output: Active

Status display	Green LED ( $U_{\text{out}} < 0.9 \times U_{\text{N}}$ : LED flashes)
----------------	---

## Electrical properties

Insulation voltage input/output	2 kV (routine test)
	4 kV (type test)

## Product properties

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

### Insulation characteristics

Protection class	I (with PE connection)
------------------	------------------------

## Dimensions

Width	240 mm
Height	130 mm
Depth	130 mm

### Alternative assembly

Width	122 mm
Height	243 mm
Depth	243 mm

## Mounting

Assembly instructions	alignable: vertical with spacing = 5 cm
Mounting position	On horizontal DIN rail NS 35 in acc. with EN 60715

## Material specifications

Color	aluminium
Housing material	Metal
Type of housing	AluNox (AlMg1)

## 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)

## Standards and regulations

Standard - Electrical safety	EN 60950-1/VDE 0805 (SELV)
	EN 61558-2-17
Standard - Safe isolation	DIN VDE 0100-410

## Approval data

### Conformity/Approvals

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

## EMC data

Electromagnetic compatibility	Conformance with EMC directive 89/336/EC
-------------------------------	--

# Power supply unit - QUINT-PS-3X400-500AC/24DC/30



2938633

<https://www.phoenixcontact.com/pc/products/2938633>

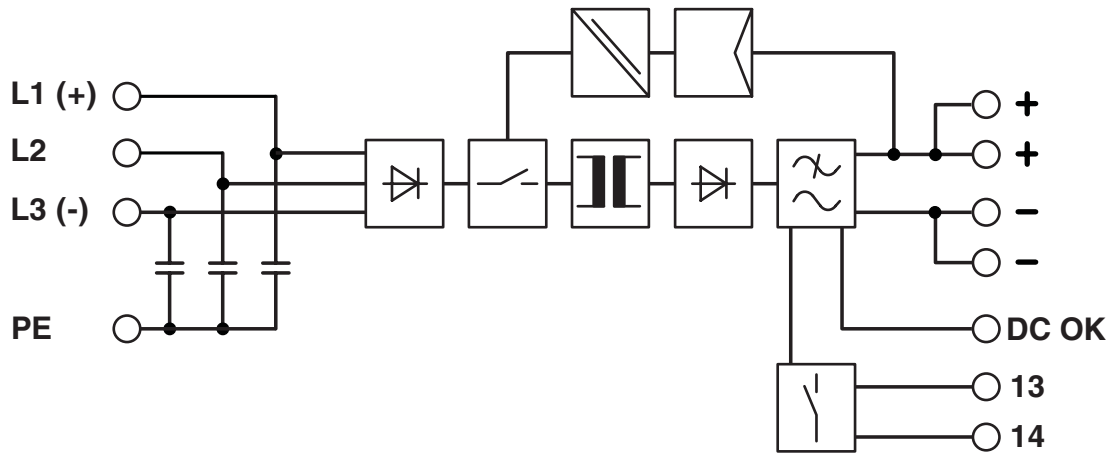
EMC requirements for noise immunity	EN 61000-6-2
Noise emission	EN 55011 (EN 55022)
Noise immunity	EN 61000-6-2:2005

2938633

<https://www.phoenixcontact.com/pc/products/2938633>

## Drawings

Block diagram



# Power supply unit - QUINT-PS-3X400-500AC/24DC/30



2938633

<https://www.phoenixcontact.com/pc/products/2938633>

## Classifications

### ECLASS

ECLASS-9.0	27040701
ECLASS-10.0.1	27040701

### ETIM

ETIM 7.0	EC002540
----------	----------

### UNSPSC

UNSPSC 21.0	39121004
-------------	----------



# Power supply unit - QUINT-PS-3X400-500AC/24DC/30



2938633

<https://www.phoenixcontact.com/pc/products/2938633>

## Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50 years For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"
------------	--

2938633

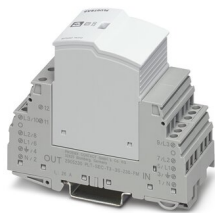
<https://www.phoenixcontact.com/pc/products/2938633>

## Accessories

### Type 3 surge protection device

Type 3 surge protection device - PLT-SEC-T3-3S-230-FM - 2905230

<https://www.phoenixcontact.com/pc/products/2905230>



Plug-in device protection, according to type 3/class III, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE), with integrated surge-proof fuse and remote indication contact.

---

### Type 3 surge protection device

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

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

# Power supply unit - QUINT-PS-3X400-500AC/24DC/30



2938633

<https://www.phoenixcontact.com/pc/products/2938633>

## Mounting adapter

Mounting adapter - UWA 182/52 - 2938235

<https://www.phoenixcontact.com/pc/products/2938235>



Universal wall adapter for securely mounting the device in the event of strong vibrations. The device is screwed directly onto the mounting surface. The universal wall adapter is attached on the top/bottom.

---

Phoenix Contact 2022 © - all rights reserved  
<https://www.phoenixcontact.com>

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