

# QUINT-PS-3X400-500AC/48DC/20


Order No.: 2938222



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DIN rail power supply unit, primary-switched mode, single-phase, output: 48 V DC / 20 A



Commercial data	
GTIN (EAN)	 4 017918 927066
sales group	H046
Pack	1 pcs.
Customs tariff	85044082
Catalog page information	Page 567 (IF-2009)

**Product notes**

WEEE/RoHS-compliant since:  
06/26/2006



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Technical data	
<b>Input data</b>	
Nominal input voltage	3x 400 V AC ... 500 V AC
AC input voltage range	3x 320 V AC ... 575 V AC (for all three phases)
DC input voltage range	450 V DC ... 800 V DC (for all three phases)
AC frequency range	45 Hz ... 65 Hz

DC frequency range	0 Hz
Current consumption	Approx. 3x 2.3 A (400 V AC)
	1.9 A (480 V AC)
Nominal power consumption	960 W
Inrush surge current	< 15 A
Power failure bypass	> 20 ms (400 V AC)
	> 30 ms (480 V AC)
Permissible backup fuse	B6
	B10
	B16
Type of protection	Transient surge protection
Protective circuit/component	Varistor
<b>Output data</b>	
Nominal output voltage	48 V DC $\pm$ 1%
Setting range of the output voltage	30 V DC ... 56 V DC (> 48 V constant capacity)
Output current	20 A (-25 °C ... 60 °C)
	22 A (with POWER BOOST, -25°C ... 40°C permanent)
Derating	60 °C ... 70 °C (2.5%/K)
Connection in parallel	Yes, for redundancy and increased capacity
Connection in series	Yes
Residual ripple	< 20 mV <sub>PP</sub>
Peak switching voltages nominal load	< 140 mV <sub>PP</sub> (20 MHz)
Maximum power dissipation idling	20 W
Power loss nominal load max.	90 W
<b>General data</b>	
Width	240 mm
Height	130 mm
Depth	125 mm
Width with alternative assembly	122 mm
Height with alternative assembly	130 mm
	243 mm
Net weight	3.5 kg
Operating voltage display	Green LED
Efficiency	> 90 % (At 230 V AC and nominal values)

Insulation voltage input/output	3 kV (type test) 1.5 kV (routine test)
Degree of protection	IP20
Protection class	I, with PE connection
MTBF (IEC 61709, SN 29500)	> 500000 h
Ambient temperature (operation)	-25 °C ... 70 °C (> 60 °C derating)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Max. permissible relative humidity (operation)	95 % (at 25 °C, no condensation)
Mounting position	horizontal DIN rail NS 35, EN 60715
Assembly instructions	Can be aligned: Horizontal 0 cm, vertical 5 cm
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 50081-2
Noise immunity	EN 61000-6-2:2005
Low Voltage Directive	Conformance with LV directive 2006/95/EC
Standard - Safety of transformers	EN 61558-2-17
Standard - Electrical safety	EN 60950-1/VDE 0805 (SELV) EN 61558-2-17
Standard – Electronic equipment for use in electrical power installations and their assembly into electrical power installations	EN 50178/VDE 0160 (PELV)
Standard - Safe isolation	DIN VDE 0100-410 DIN VDE 0106-1010
Standard – Limitation of mains harmonic currents	EN 61000-3-2
Standard – Equipment safety	GS (tested safety)
Certificate	CB Scheme
UL approvals	UL/C-UL listed UL 508 UL/C-UL Recognized UL 60950

**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 stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	4 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	10
Stripping length	8 mm

Screw thread	M3
<b>Connection data, output</b>	
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 stranded min.	0.5 mm <sup>2</sup>
Conductor cross section stranded max.	10 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	20
Conductor cross section AWG/kcmil max	6
Stripping length	10 mm
<b>Signaling</b>	
Output name	DC OK active
Output description	$U_{OUT} > 0.9 \times U_N$ : High signal
Maximum switching voltage	$\leq 24$ V
Output voltage	+ 24 V DC
Maximum inrush current	$\leq 20$ mA
Continuous load current	$\leq 20$ mA
Status display	"DC OK" LED green
Note on status display	$U_{OUT} < 0.9 \times U_N$ : LED flashing
Conductor cross section solid min.	0.5 mm <sup>2</sup>
Conductor cross section solid max.	16 mm <sup>2</sup>
Conductor cross section stranded min.	0.5 mm <sup>2</sup>
Conductor cross section stranded max.	10 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	20
Conductor cross section AWG/kcmil max	6
Screw thread	M4
Output name	DC OK 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	max. 0.5 A
Continuous load current	$\leq 1$ A
Status display	"DC OK" LED green
Note on status display	$U_{OUT} < 0.9 \times U_N$ : LED flashing

### Certificates / Approvals



Certification

CB, CUL, CUL Listed, GOST, UL, UL Listed

### Accessories

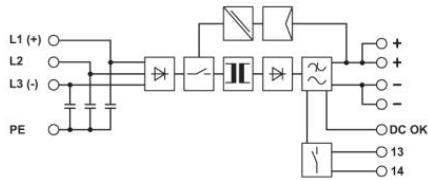
Item	Designation	Description
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#### General

2938235	UWA 182/52	Universal wall adapter
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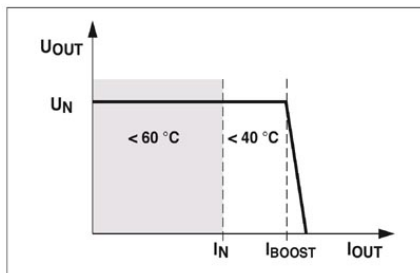
### Diagrams/Drawings

Block diagram



Diagram

POWER BOOST



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