

Power supply unit - QUINT-PS-3X400-500AC/48DC/10 - 2938219

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DIN rail power supply unit, primary-switched mode, single-phase, output: 48 V DC / 10 A



Key commercial data

package_quantity	1
GTIN	4017918927691

Technical data

Dimensions

Width	160 mm
Height	130 mm
Depth	125 mm
Width with alternative assembly	122 mm
Height with alternative assembly	130 mm
Depth with alternative assembly	163 mm

Ambient conditions

Degree of protection	IP20
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)
Noise immunity	EN 61000-6-2:2005

Input data

Nominal input voltage range	3x 400 V AC ... 500 V AC
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 (for all three phases)
AC frequency range	45 Hz ... 65 Hz
Frequency range DC	0 Hz
Current consumption	approx. 3x 1.2 A (400 V AC)
Current consumption	1 A (480 V AC)
Nominal power consumption	480 W
Inrush surge current	< 10 A

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Technical data

Input data

Power failure bypass	> 25 ms (400 V AC)
Power failure bypass	> 30 ms (480 V AC)
Type of protection	Transient surge protection
Protective circuit/component	Varistor

Output data

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	10 A (-25 °C ... 60 °C)
Output current	13 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 _{PP}
Peak switching voltages nominal load	< 140 mV _{PP} (20 MHz)
Maximum power dissipation NO-Load	10 W
Power loss nominal load max.	45 W

General

Net weight	2.3 kg
Efficiency	> 90 % (for 230 V AC and nominal values)
Insulation voltage input/output	3 kV (type test)
Insulation voltage input/output	1.5 kV (routine test)
Protection class	I, with PE connection
MTBF (IEC 61709, SN 29500)	> 500000 h
Mounting position	horizontal DIN rail NS 35, EN 60715
Assembly instructions	Can be aligned: Horizontally 0 mm, vertically 50 mm
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 50081-2
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)
Standard - Electrical safety	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
Standard - Safe isolation	DIN VDE 0106-1010
Standard – Limitation of mains harmonic currents	EN 61000-3-2
Standard - Equipment safety	GS (tested safety)
Information technology equipment - safety (CB scheme)	CB Scheme
UL approvals	UL/C-UL listed UL 508
UL approvals	UL/C-UL Recognized UL 60950

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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 stranded min.	0.2 mm ²
Conductor cross section stranded max.	2.5 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	10
Stripping length	8 mm
Screw thread	M3

Connection data, output

Connection method	Screw connection
Conductor cross section solid min.	0.5 mm ²
Conductor cross section solid max.	16 mm ²
Conductor cross section stranded min.	0.5 mm ²
Conductor cross section stranded max.	10 mm ²
Conductor cross section AWG/kcmil min.	20
Conductor cross section AWG/kcmil max	6
Stripping length	10 mm

Signaling

Output name	DC OK active
Output description	$U_{OUT} > 0.9 \times U_N$: High signal
Maximum switching voltage	≤ 24 V
Output voltage	+ 24 V DC
Maximum inrush current	≤ 20 mA
Continuous load current	≤ 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 ²
Conductor cross section solid max.	16 mm ²
Conductor cross section stranded min.	0.5 mm ²
Conductor cross section stranded max.	10 mm ²
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	≤ 30 V AC/DC
Maximum inrush current	max. 0.5 A
Continuous load current	≤ 1 A
Status display	"DC OK" LED green

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Signaling

Note on status display	$U_{OUT} < 0.9 \times U_N$: LED flashing
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classifications

eCl@ss

eCl@ss 4.0	27250202
eCl@ss 4.1	27250202
eCl@ss 5.0	27143114
eCl@ss 5.1	27143114
eCl@ss 6.0	27143114
eCl@ss 7.0	27143114
eCl@ss 8.0	27143114

ETIM

ETIM 2.0	EC001039
ETIM 3.0	EC001039
ETIM 4.0	EC000599
ETIM 5.0	EC002540

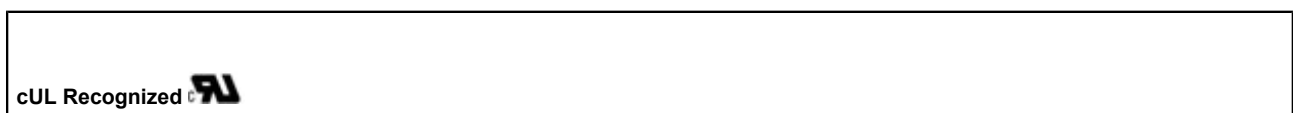
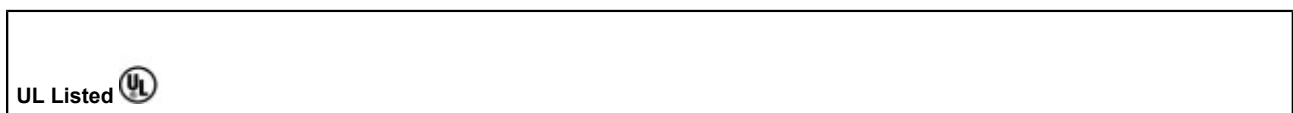
UNSPSC

UNSPSC 6.01	30211502
UNSPSC 7.0901	39121004
UNSPSC 11	39121004
UNSPSC 12.01	39121004
UNSPSC 13.2	39121004

approvals

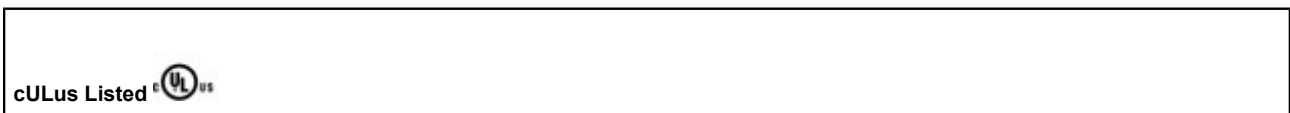
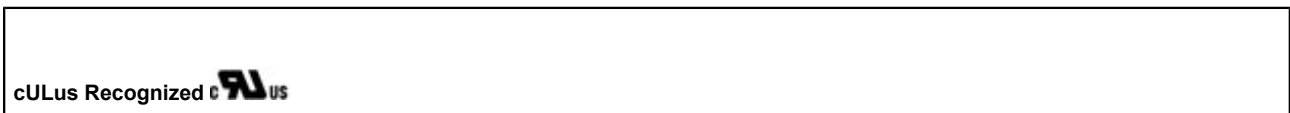
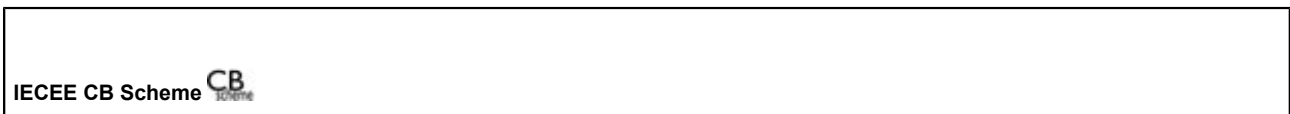
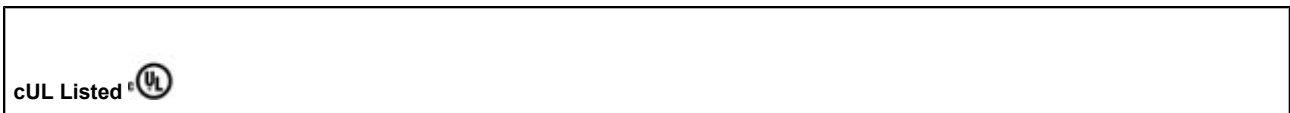
UL Recognized / UL Listed / cUL Recognized / GOST / cUL Listed / IEC/CE CB Scheme / cULus Recognized / cULus Listed /

Approval details



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approvals



accessories

Assembly adapter

UWA 182/52 - 2938235

Mounting rail adapter

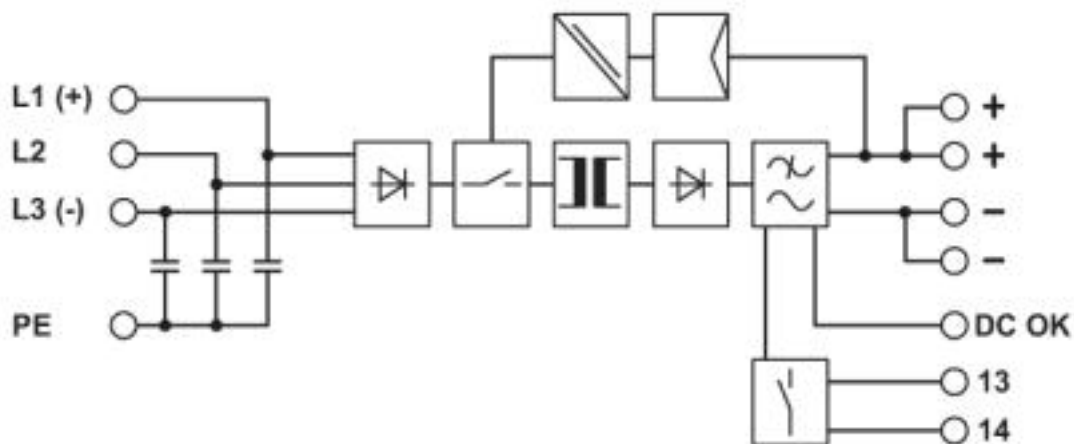
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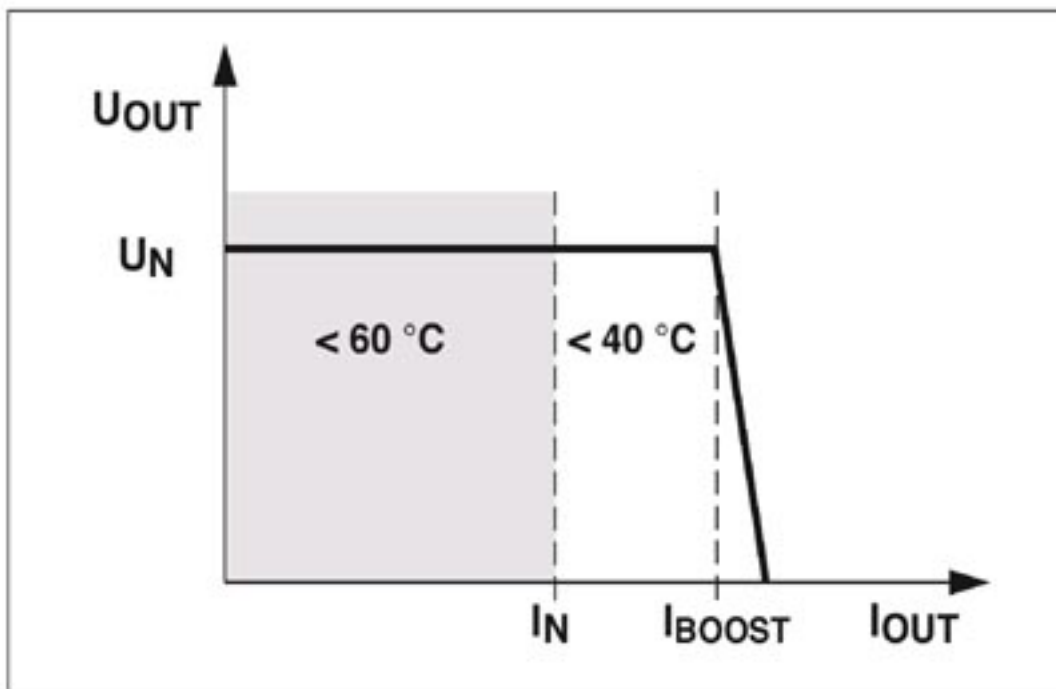
Drawings

Power supply unit - QUINT-PS-3X400-500AC/48DC/10 - 2938219

Block diagram



Diagram



POWER BOOST

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