

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

Order No.: 2938222

<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2938222>

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

Commercial data

| | |
|--------------------------|--------------------|
| EAN | 4017918927066 |
| Pack | 1 pcs. |
| Customs tariff | 85044081 |
| Weight/Piece | 3.842 KG |
| Catalog page information | Page 567 (IF-2009) |

Product notesWEEE/RoHS-compliant since:
06/28/2006

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Technical data**Input data**

| | |
|------------------------|--|
| Nominal input voltage | 3 x 400 V AC ... 500 V AC |
| AC input voltage range | 3 x 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 | 3 x 6 A (characteristic B) |
| | 10 A (characteristic B) |
| | 16 A (characteristic B) |
| Name of protection | Transient surge protection |
| Protective circuit/component | Varistor |

Output data

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|--------------------------------------|---|
| 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 | From +60°C to 70°C: 2.5% per Kelvin |
| 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 idling | 20 W |
| Power loss nominal load max. | 90 W |

General data

| | |
|---------------------------------|---|
| Width | 240 mm |
| Height | 130 mm |
| Depth | 125 mm |
| Weight | 3.5 kg |
| Operating voltage display | LED green |
| 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 |

| | |
|--|---|
| Class of protection | I, with PE connection |
| MTBF | > 500 000 h in acc. with IEC 61709 (SN 29500) |
| 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 guideline 2004/108/EC and for low-voltage guideline 2006/95/EC |
| Emitted interference | EN 50081-2 |
| Immunity to interference | EN 61000-6-2:2005 |
| Standard - Safety of transformers | EN 61558-2-17 |
| Standard - Electrical safety | EN 60950/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

| | |
|--|---------------------|
| Type of connection | Screw connection |
| Conductor cross section solid min. | 0.2 mm ² |
| Conductor cross section solid max. | 6 mm ² |
| Conductor cross section stranded min. | 0.2 mm ² |
| Conductor cross section stranded max. | 4 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

| | |
|--------------------|------------------|
| Type of connection | 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

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| 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 | ≤ 60 V AC/DC |
| Maximum inrush current | max. 0.5 A |
| Continuous load current | ≤ 0.5 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, UL, UL Listed

Accessories

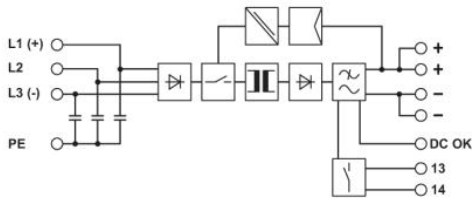
| Item | Designation | Description |
|------|-------------|-------------|
|------|-------------|-------------|

General

| | | |
|---------|------------|------------------------|
| 2938235 | UWA 182/52 | Universal wall adapter |
|---------|------------|------------------------|

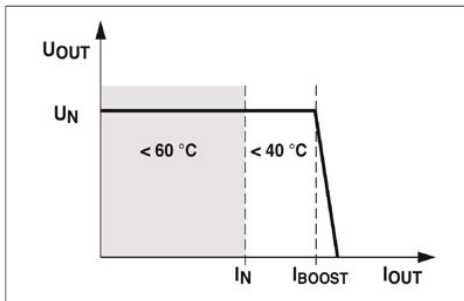
Diagrams/Drawings

Block diagram



Diagram

POWER BOOST



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