

Uninterruptible power supply - QUINT4-UPS/24DC/24DC/20/ PN - 2907073

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>)



QUINT UPS with IQ Technology, RJ45 communication interfaces (PROFINET), for DIN rail mounting, input: 24 V DC, output: 24 V DC / 20 A, charging current: 5 A

Product Description


The intelligent QUINT UPS for integration into established industrial networks: your systems continue to be supplied with uninterrupted power, even in the event of a mains failure. The battery management system with IQ Technology and a powerful battery charger ensures superior system availability.

Your advantages

- ✓ Easy integration into networks using PROFINET, EtherNet/IP, EtherCAT® and USB interfaces
- ✓ Evaluation of state of health (SOH) and state of charge (SOC), thanks to the intelligent battery management system (BMS)
- ✓ Automatic recognition of the battery capacities and technologies (VRLA-WTR, LI-ION)
- ✓ Monitoring of output current and voltage, as well as manual connection and disconnection of the system
- ✓ SFB Technology selectively trips standard miniature circuit breakers. Loads connected in parallel continue working.



Key Commercial Data

| | |
|--------------|---|
| Packing unit | 1 pc |
| GTIN |  4 0 5 5 6 2 6 1 7 1 2 9 6 |
| GTIN | 4055626171296 |

Technical data

Dimensions

| | |
|--|--------------------------------------|
| Width | 40 mm |
| Height | 130 mm |
| Depth | 125 mm |
| Width with alternative assembly | 123 mm |
| Height with alternative assembly | 130 mm |
| Depth with alternative assembly | 42 mm |
| Installation distance right/left (active, passive) | 0 mm / 0 mm (P _{Out} ≤50 %) |

Uninterruptible power supply - QUINT4-UPS/24DC/24DC/20/ PN - 2907073

Technical data

Dimensions

| | |
|--|---------------------------------------|
| Installation distance right/left (passive) | 0 mm / 0 mm ($P_{Out} \geq 50\%$) |
| Installation distance right/left (active) | 5 mm / 5 mm ($P_{Out} \geq 50\%$) |
| Installation distance top/bottom (active, passive) | 40 mm / 20 mm ($P_{Out} \leq 50\%$) |
| Installation distance top/bottom (passive) | 40 mm / 20 mm ($P_{Out} \geq 50\%$) |
| Installation distance top/bottom (active) | 50 mm / 50 mm ($P_{Out} \geq 50\%$) |

Ambient conditions

| | |
|---|--|
| Degree of protection | IP20 |
| Inflammability class in acc. with UL 94 (housing / terminal blocks) | V0 |
| Ambient temperature (operation) | -25 °C ... 70 °C (> 60 °C Derating: 2.5 %/K) |
| Ambient temperature (start-up type tested) | -40 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |
| Max. permissible relative humidity (operation) | ≤ 95 % (at 25 °C, non-condensing) |
| Climatic class | 3K3 (EN 60721) |
| Degree of pollution | 2 |
| Installation height | ≤ 4000 m |

Input data

| | |
|-----------------------------|---------------------|
| Input voltage | 24 V DC |
| Input voltage range | 18 V DC ... 30 V DC |
| Electric strength, max. | 35 V DC |
| Internal input fuse | no |
| Inrush current | ≤ 8 A (≤ 4 ms) |
| Reverse polarity protection | yes |
| Fixed backup threshold | 22 V DC |
| Switch-on time | max. 3 s |
| Voltage drop, input/output | 0.4 V DC |

Output data (general)

| | |
|--|----------------------------------|
| Short-circuit-proof | yes |
| No-load proof | yes |
| Switch-over time | 0 ms |
| UPS connection in parallel | no |
| UPS connection in series | no |
| Energy storage device connection in parallel | Yes, 5 (observe line protection) |
| Energy storage device connection in series | no |
| Efficiency | typ. 97 % |

Output data (mains operation)

| | |
|----------------------|---------------------|
| Output voltage range | 18 V DC ... 30 V DC |
| | 18 V DC ... 32 V DC |

Uninterruptible power supply - QUINT4-UPS/24DC/24DC/20/ PN - 2907073

Technical data

Output data (mains operation)

| | |
|---------------------------------------|---------------|
| Static Boost ($I_{Stat.Boost}$) | 25 A |
| Dynamic Boost ($I_{Dyn.Boost}$) | 30 A (5 s) |
| Selective Fuse Breaking (I_{SFB}) | 120 A (15 ms) |

Output data (battery operation)

| | |
|---------------------------------------|---------------------|
| Output voltage range | 19 V DC ... 32 V DC |
| Static Boost ($I_{Stat.Boost}$) | 25 A |
| Dynamic Boost ($I_{Dyn.Boost}$) | 30 A (5 s) |
| Selective Fuse Breaking (I_{SFB}) | 120 A (15 ms) |

Energy storage (battery)

| | |
|---|------------------------|
| Battery technology | VRLA, VRLA-WTR, LI-ION |
| End-of-charge voltage (temperature-compensated) | 25 V DC ... 32 V DC |
| End-of-charge voltage | 32 V DC |
| Max. capacity | 135 Ah |
| Nominal capacity (without additional charger) | 3 Ah ... 100 Ah |
| Charging current (configurable) | 5 A |
| Charging time | 202.5 h |
| Buffer time | 19 min. (12 Ah) |
| Temperature compensation (configurable) | 42 mV/K |
| Charge characteristic curve | IU ₀ U |
| Deep discharge protection | 19.2 V DC |
| Temperature sensor | yes |
| IQ-Technology | yes |

General data

| | |
|---|---------------------|
| Inflammability class in acc. with UL 94 (housing / terminal blocks) | V0 |
| MTBF (IEC 61709, SN 29500) | > 1172000 h (25 °C) |
| | > 732500 h (40 °C) |
| | > 373400 h (60 °C) |
| Life expectancy (electrolytic capacitors) | 192072 h |
| Weight | 0.6 kg |
| Environmental protection directive | RoHS |
| | WEEE |
| | Reach |

Connection data, input

| | |
|---------------------------------------|---------------------|
| Connection method | Screw connection |
| Conductor cross section solid min. | 0.2 mm ² |
| Conductor cross section solid max. | 6 mm ² |
| Conductor cross section flexible min. | 0.2 mm ² |

Uninterruptible power supply - QUINT4-UPS/24DC/24DC/20/ PN - 2907073

Technical data

Connection data, input

| | |
|---|---------------------|
| Conductor cross section flexible max. | 4 mm ² |
| Single conductor/terminal point, stranded, with ferrule, min. | 0.2 mm ² |
| Single conductor/terminal point, stranded, with ferrule, max. | 4 mm ² |
| Conductor cross section AWG min. | 30 |
| Conductor cross section AWG max. | 10 |
| Stripping length | 8 mm |
| Tightening torque, min | 0.5 Nm |
| Tightening torque max | 0.6 Nm |

Connection data output

| | |
|---|---------------------|
| Connection method | Screw connection |
| Conductor cross section solid min. | 0.2 mm ² |
| Conductor cross section solid max. | 6 mm ² |
| Conductor cross section flexible min. | 0.2 mm ² |
| Conductor cross section flexible max. | 4 mm ² |
| Single conductor/terminal point, stranded, with ferrule, min. | 0.2 mm ² |
| Single conductor/terminal point, stranded, with ferrule, max. | 4 mm ² |
| Conductor cross section AWG min. | 30 |
| Conductor cross section AWG max. | 10 |
| Stripping length | 8 mm |
| Tightening torque, min | 0.5 Nm |
| Tightening torque max | 0.6 Nm |

Connection data for battery

| | |
|---------------------------------------|---------------------|
| 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 |
| Tightening torque, min | 0.5 Nm |
| Tightening torque max | 0.6 Nm |

Standards

| | |
|-------------------------------------|--------------------------|
| EMC requirements for noise immunity | EN 61000-6-1 |
| | EN 61000-6-2 |
| EMC requirements for noise emission | EN 61000-6-3 |
| | EN 61000-6-4 |
| Standard designation | Safety extra-low voltage |

Uninterruptible power supply - QUINT4-UPS/24DC/24DC/20/ PN - 2907073

Technical data

Standards

| | |
|-----------------------|------------------------|
| Standards/regulations | IEC 61010-1 (SELV) |
| | IEC 61010-2-201 (PELV) |

Conformance/approvals

| | |
|----------------|---|
| Designation | UL approval |
| Identification | UL/C-UL Listed UL 61010-1 |
| Designation | UL approval |
| Identification | UL/C-UL Listed UL 61010-2-201 |
| Designation | UL approval |
| Identification | UL/C-UL Listed ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D T4 (Hazardous Location) |
| Designation | CSA |
| Identification | CAN/CSA-C22.2 No. 61010-1-12 |
| Designation | CSA |
| Identification | CAN/CSA-IEC 61010-2-201 |
| Designation | CSA |
| Identification | CAN/CSA-C22.2 No. 213 Class I, Division 2, Groups A, B, C, D T4 (Hazardous Location) |
| Designation | CB scheme |
| Identification | IEC 61010-1 |
| | IEC 61010-2-201 |

EMC data

| | |
|-------------------------------|---|
| Electromagnetic compatibility | Conformance with EMC Directive 2014/30/EU |
| Low Voltage Directive | Conformance with Low Voltage Directive 2014/35/EC |
| Electrostatic discharge | EN 61000-4-2 |
| Contact discharge | 8 kV (Test Level 4) |
| Discharge in air | 15 kV (Test Level 4) |
| Electromagnetic HF field | EN 61000-4-3 |
| Frequency range | 80 MHz ... 1 GHz |
| Test field strength | 20 V/m (Test Level 3) |
| Frequency range | 1 GHz ... 6 GHz |
| Test field strength | 10 V/m (Test Level 3) |
| Frequency range | 1 GHz ... 6 GHz |
| Test field strength | 10 V/m (Test Level 3) |
| Comments | Criterion A |
| Fast transients (burst) | EN 61000-4-4 |
| Input | 4 kV (Test Level 4 - asymmetrical) |
| Output | 4 kV (Test Level 4 - asymmetrical) |
| Signal | 4 kV (Test Level 4 - asymmetrical) |
| Comments | Criterion B |

Uninterruptible power supply - QUINT4-UPS/24DC/24DC/20/ PN - 2907073

Technical data

EMC data

| | |
|--------------------------------|--|
| Surge voltage load (surge) | EN 61000-4-5 |
| Input | 1 kV (Test Level 3 - symmetrical) |
| | 2 kV (Test Level 3 - asymmetrical) |
| Output | 1 kV (Test Level 3 - symmetrical) |
| | 2 kV (Test Level 3 - asymmetrical) |
| Signal | 1 kV (Test Level 2 - asymmetrical) |
| Comments | Criterion B |
| Conducted interference | EN 61000-4-6 |
| I/O/S | asymmetrical |
| Frequency range | 0.15 MHz ... 80 MHz |
| Voltage | 10 V (Test Level 3) |
| Comments | Criterion A |
| Power frequency magnetic field | EN 61000-4-8 |
| Frequency | 16.67 Hz |
| | 50 Hz |
| | 60 Hz |
| Test field strength | 100 A/m |
| Additional text | 60 s |
| Comments | Criterion A |
| Frequency | 50 Hz |
| | 60 Hz |
| Frequency range | 50 Hz ... 60 Hz |
| Test field strength | 1 kA/m |
| Additional text | 3 s |
| Frequency | 0 Hz |
| Test field strength | 300 A/m |
| Additional text | DC, 60 s |
| Criterion A | Normal operating behavior within the specified limits. |
| Criterion B | Temporary impairment to operational behavior that is corrected by the device itself. |

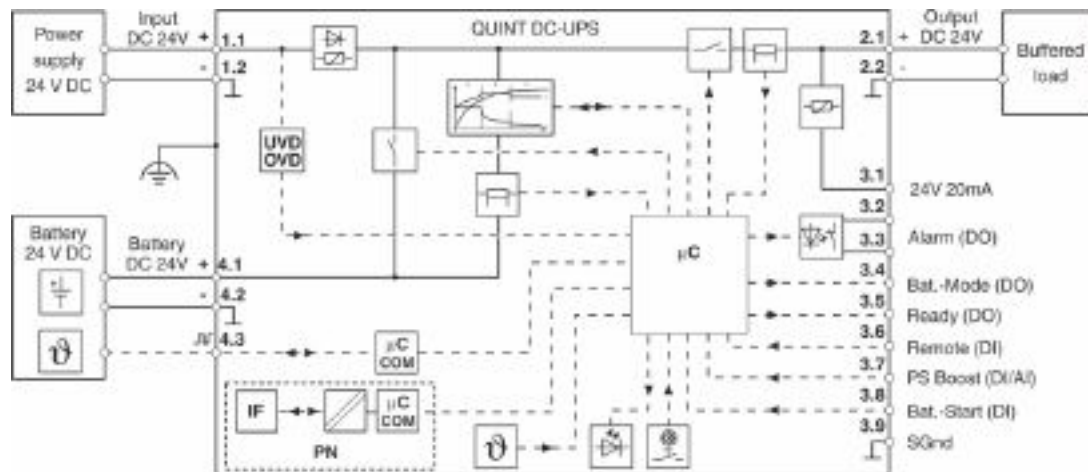
Environmental Product Compliance

| | |
|------------|----------------|
| REACH SVHC | Lead 7439-92-1 |
|------------|----------------|

Drawings

Uninterruptible power supply - QUINT4-UPS/24DC/24DC/20/ PN - 2907073

Block diagram



Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27040705 |
| eCl@ss 5.1 | 27242213 |
| eCl@ss 8.0 | 27242209 |
| eCl@ss 9.0 | 27040705 |

ETIM

| | |
|----------|----------|
| ETIM 5.0 | EC000599 |
| ETIM 6.0 | EC000382 |
| ETIM 7.0 | EC000382 |

UNSPSC

| | |
|-------------|----------|
| UNSPSC 13.2 | 39121004 |
| UNSPSC 18.0 | 39121011 |
| UNSPSC 19.0 | 39121011 |
| UNSPSC 20.0 | 39121011 |
| UNSPSC 21.0 | 39121011 |

Approvals

Approvals

Approvals

UL Listed / cUL Listed / PROFINET / EAC / cULus Listed

Uninterruptible power supply - QUINT4-UPS/24DC/24DC/20/ PN - 2907073

Approvals

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approval details

| | | | |
|--------------|--|---|---------------------|
| UL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 123528 |
| cUL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 123528 |
| PROFINET | | | Z12095 |
| EAC | | | RU*DE*08.B.01873/19 |
| cULus Listed | | | |

Accessories

Accessories

Battery unit

Energy storage - UPS-BAT/VRLA/24DC/3.4AH - 2320306



Energy storage device, lead AGM, VRLA technology, 24 V DC, 3.4 Ah, tool-free battery replacement, automatic detection, and communication with QUINT UPS-IQ

Energy storage - UPS-BAT/VRLA/24DC/7.2AH - 2320319



Energy storage device, lead AGM, VRLA technology, 24 V DC, 7.2 Ah, tool-free battery replacement, automatic detection, and communication with QUINT UPS-IQ

Uninterruptible power supply - QUINT4-UPS/24DC/24DC/20/ PN - 2907073

Accessories

Energy storage - UPS-BAT/VRLA/24DC/12AH - 2320322



Energy storage device, lead AGM, VRLA technology, 24 V DC, 12 Ah, tool-free battery replacement, automatic detection, and communication with QUINT UPS-IQ

Energy storage - UPS-BAT/VRLA/24DC/38AH - 2320335



Energy storage device, lead AGM, VRLA technology, 24 V DC, 38 Ah, automatic detection, and communication with QUINT UPS-IQ

Energy storage - UPS-BAT/VRLA-WTR/24DC/13AH - 2320416



Energy storage device, lead AGM, VRLA technology, 24 V DC, 13 Ah, tool-free battery replacement, automatic detection, and communication with QUINT UPS-IQ

Energy storage - UPS-BAT/VRLA-WTR/24DC/26AH - 2320429



Energy storage device, lead AGM, VRLA technology, 24 V DC, 26 Ah, tool-free battery replacement, automatic detection, and communication with QUINT UPS-IQ

Energy storage - UPS-BAT/LI-ION/24DC/120WH - 2320351



Energy storage device, LI-ION technology, 24 V DC, 120 Wh, for ambient temperatures of -20°C ... 60°C, automatic detection and communication with QUINT UPS-IQ

Uninterruptible power supply - QUINT4-UPS/24DC/24DC/20/ PN - 2907073

Accessories

Energy storage - UPS-BAT/LI-ION/24DC/924WH - 2908232



Energy storage device, LI-ION technology, 24 V DC, 924 Wh, for ambient temperatures of -25 °C ... 60 °C, automatic detection and communication with QUINT UPS-IQ

Phoenix Contact 2020 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [UPS - Uninterruptible Power Supplies](#) category:

Click to view products by [Phoenix Contact](#) manufacturer:

Other Similar products are found below :

[SMART-1400-RM](#) [UPS1500ITSIT](#) [UPS12438](#) [UPS12434](#) [UPS25512](#) [UPS1024746](#) [UPS23916EBM](#) [UPSITSNMP](#) [TRIO-UPS-2G/1AC/24DC/5](#) [TRIO-UPS-2G/1AC/24DC/10](#) [QUINT4-UPS/24DC/24DC/20/EI](#) [QUINT4-UPS/24DC/24DC/5/USB](#) [QUINT4-UPS/24DC/24DC/20/US](#) [SLNSPSPMBRK](#) [MINI-BAT/12DC/2.6AH](#) [TSPC 240-124UPS](#) [AKKUTEC2440](#) [DR-UPS40](#) [UPS003LSM](#)
[1081430](#) [1082548](#) [1094596](#) [2320212](#) [2320225](#) [2320238](#) [2320241](#) [2320254](#) [2320267](#) [2320270](#) [2320377](#) [2320380](#) [2320393](#) [2320461](#)
[2866213](#) [2866226](#) [2866239](#) [2866242](#) [2866349](#) [2866352](#) [2866365](#) [2866417](#) [2866569](#) [2866572](#) [2866598](#) [2866611](#) [2866666](#) [2868703](#)
[2905907](#) [2905908](#) [2905909](#)