

Uninterruptible power supply - QUINT-UPS/ 1AC/ 1AC/500VA - 2320270

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>)



Uninterruptible power supply with IQ technology 1AC/1AC/500 VA. For 120 V AC/230 V AC applications. Provides information regarding the charging state, remaining runtime, and service life of your rechargeable battery module at all times and thereby increases system availability.

Product Description


The UPS module for 120 V AC/230 V AC delivers a pure sine curve at the output. For 400 W/500 VA of power, only one energy storage is required, the power supply is already integrated.

Your advantages

- Optimum use of the buffer time and preventive monitoring of the energy storage
- Can be used worldwide
- Maximum efficiency
- Comprehensive signaling and parameterization
- Simplified startup



Key Commercial Data

| | |
|--------------|---|
| Packing unit | 1 pc |
| GTIN |  4 046356 560078 |
| GTIN | 4046356560078 |

Technical data

Dimensions

| | |
|----------------------------------|---------------|
| Width | 125 mm |
| Height | 130 mm |
| Depth | 125 mm |
| Installation distance right/left | 5 mm / 5 mm |
| Installation distance top/bottom | 50 mm / 50 mm |

Ambient conditions

| | |
|---------------------------------|--|
| Degree of protection | IP20 |
| Ambient temperature (operation) | -25 °C ... 70 °C (> 50 °C Derating: 2.5 %/K) |

Uninterruptible power supply - QUINT-UPS/ 1AC/ 1AC/500VA - 2320270

Technical data

Ambient conditions

| | |
|--|--------------------------------|
| Ambient temperature (start-up type tested) | -40 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |
| Max. permissible relative humidity (operation) | ≤ 95 % (25 °C, non-condensing) |
| Climatic class | 3K3 (in acc. with EN 60721) |

Input data

| | |
|-------------------------|------------------------|
| Nominal input voltage | 240 V AC |
| | 100 V AC |
| | 120 V AC -20 % / +15 % |
| | 230 V AC -20 % / +15 % |
| | 100 V AC ... 240 V AC |
| Input voltage range | 184 V AC ... 264 V AC |
| | 96 V AC ... 138 V AC |
| | 96 V AC ... 264 V AC |
| AC frequency range | 45 Hz ... 65 Hz |
| Buffer period | 1 h (38 AH) |
| Permissible backup fuse | B16 230 V AC |
| Power factor (cos phi) | 0.8 |

Output data

| | |
|--|----------------------------------|
| Nominal output voltage | 120 V AC |
| | 230 V AC |
| Nominal output current (I _N) | 4.3 A (120 V AC, -25°C ... 50°C) |
| | 2.2 A (230 V AC, -25°C ... 40°C) |
| POWER BOOST (I _{Boost}) | 5.2 A (120 V AC, -25°C ... 40°C) |
| | 2.7 A (230 V AC, -25°C ... 40°C) |
| Derating | > 50 °C ... 70 °C (2.5%/K) |
| Connection in parallel | no |
| Connection in series | No |

General

| | |
|----------------------------|---|
| IQ technology | Yes |
| Net weight | 2.2 kg |
| Efficiency | > 98 % (Mains operation) |
| | > 98 % (120 V AC) |
| | > 86 % (Battery operation) |
| MTBF (IEC 61709, SN 29500) | > 240513 h (40 °C) |
| Degree of protection | IP20 |
| Protection class | I |
| Housing material | Steel sheet, zinc-plated |
| Mounting position | horizontal DIN rail NS 35, EN 60715 |
| Assembly instructions | alignable: P _N ≥ 50%, 5 mm horizontally, 15 mm next to active components, 50 mm vertically |

Uninterruptible power supply - QUINT-UPS/ 1AC/ 1AC/500VA - 2320270

Technical data

General

| | |
|--|--|
| | alignable: P _N <50%, 0 mm horizontally, 40 mm vertically top, 20 mm vertically bottom |
|--|--|

Connection data, input

| | |
|---------------------------------------|---------------------|
| Connection method | Screw connection |
| Conductor cross section solid min. | 1.5 mm ² |
| Conductor cross section solid max. | 6 mm ² |
| Conductor cross section flexible min. | 1.5 mm ² |
| Conductor cross section flexible max. | 4 mm ² |
| Conductor cross section AWG min. | 18 |
| Conductor cross section AWG max. | 10 |
| Stripping length | 8 mm |
| Screw thread | M4 |

Connection data, output

| | |
|---------------------------------------|---------------------|
| Connection method | Screw connection |
| Conductor cross section solid min. | 1.5 mm ² |
| Conductor cross section solid max. | 6 mm ² |
| Conductor cross section flexible min. | 1.5 mm ² |
| Conductor cross section flexible max. | 4 mm ² |
| Conductor cross section AWG min. | 18 |
| Conductor cross section AWG max. | 10 |
| Stripping length | 8 mm |
| Screw thread | M4 |

Connection data for signaling

| | |
|---------------------------------------|---------------------|
| 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. | 24 |
| Conductor cross section AWG max. | 10 |
| Stripping length | 8 mm |
| Screw thread | M4 |

Standards

| | |
|-----------------------|--------------------------------------|
| Rail applications | EN 50121-4 |
| Standard designation | Limitation of harmonic line currents |
| Standards/regulations | EN 61000-3-2 (Class A) |
| Standard designation | Uninterruptible power supply systems |
| Standards/regulations | EN 62040-1 |

EMC data

Uninterruptible power supply - QUINT-UPS/ 1AC/ 1AC/500VA - 2320270

Technical data

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 ... 3 GHz |
| Test field strength | 10 V/m |
| Frequency range | 1 GHz ... 3 GHz |
| Test field strength | 10 V/m |
| Frequency range | 2 GHz ... 3 GHz |
| Test field strength | 3 V/m |
| Comments | Criterion A |
| Fast transients (burst) | EN 61000-4-4 |
| Input | 2 kV (Test Level 3 - asymmetrical) |
| Output | 2 kV (Test Level 3 - asymmetrical) |
| Signal | 2 kV (Test Level 4 - asymmetrical) |
| Comments | Criterion A |
| Surge voltage load (surge) | EN 61000-4-5 |
| Input | 1 kV (Test Level 2 - symmetrical) |
| | 2 kV (Test Level 3 - asymmetrical) |
| Output | 1 kV (Test Level 2 - symmetrical) |
| | 2 kV (Test Level 3 - asymmetrical) |
| Comments | Criterion A |
| 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 |
| Criterion A | Normal operating behavior within the specified limits. |
| Criterion B | Temporary impairment to operational behavior that is corrected by the device itself. |

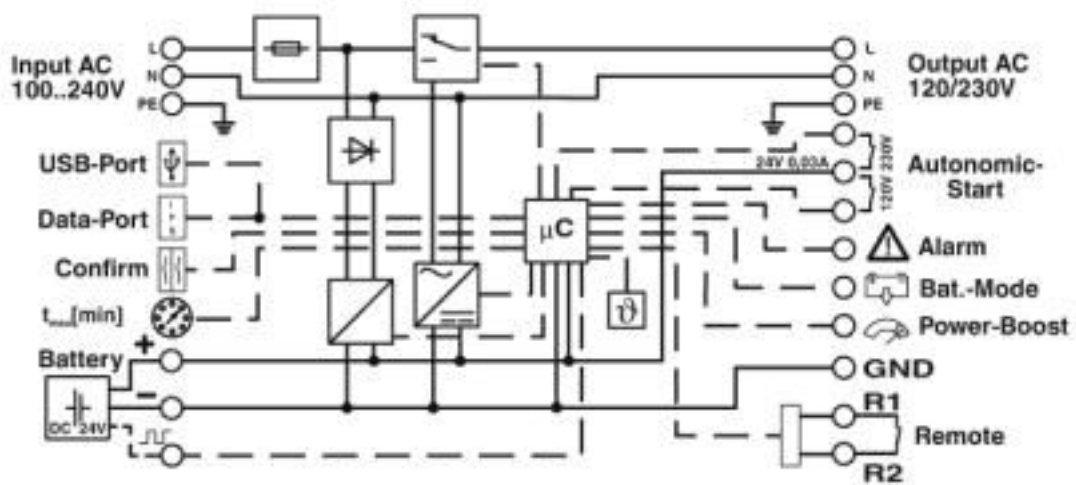
Environmental Product Compliance

| | |
|------------|---|
| REACH SVHC | Lead 7439-92-1 |
| China RoHS | Environmentally Friendly Use Period = 50 years |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

Drawings

Uninterruptible power supply - QUINT-UPS/ 1AC/ 1AC/500VA - 2320270

Block diagram



Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27040705 |
| eCl@ss 11.0 | 27040705 |
| eCl@ss 4.0 | 27040600 |
| eCl@ss 4.1 | 27040600 |
| eCl@ss 5.0 | 27040600 |
| eCl@ss 5.1 | 27040600 |
| eCl@ss 6.0 | 27040600 |
| eCl@ss 7.0 | 27040602 |
| eCl@ss 8.0 | 27040602 |
| eCl@ss 9.0 | 27040705 |

ETIM

| | |
|----------|----------|
| ETIM 3.0 | EC001039 |
| ETIM 4.0 | EC000382 |
| ETIM 5.0 | EC000382 |
| ETIM 6.0 | EC000382 |
| ETIM 7.0 | EC000382 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211510 |
| UNSPSC 7.0901 | 39121011 |
| UNSPSC 11 | 39121011 |
| UNSPSC 12.01 | 39121011 |
| UNSPSC 13.2 | 39121011 |
| UNSPSC 18.0 | 39121011 |
| UNSPSC 19.0 | 39121011 |

Uninterruptible power supply - QUINT-UPS/ 1AC/ 1AC/500VA - 2320270

Classifications

UNSPSC

| | |
|-------------|----------|
| UNSPSC 20.0 | 39121011 |
| UNSPSC 21.0 | 39121011 |

Approvals

Approvals

| |
|-----------|
| Approvals |
|-----------|

UL Recognized / cUL Recognized / EAC / EAC / IECCE CB Scheme

| |
|--------------|
| Ex Approvals |
|--------------|

UL Recognized / cUL Recognized

Approval details

| | | | |
|---------------|--|---|---------------|
| UL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 342453 |
|---------------|--|---|---------------|

| | | | |
|----------------|--|---|---------------|
| cUL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 342453 |
|----------------|--|---|---------------|

| | | | |
|-----|--|--|---------------|
| EAC | | | EAC-Zulassung |
|-----|--|--|---------------|

| | | | |
|-----|--|--|---------------------|
| EAC | | | RU*DE*08.B.01873/19 |
|-----|--|--|---------------------|

| | | | |
|-----------------|--|---|---------|
| IECEE CB Scheme | | http://www.iecee.org/ | SI-7771 |
|-----------------|--|---|---------|

Accessories

Accessories

Assembly adapter

Uninterruptible power supply - QUINT-UPS/ 1AC/ 1AC/500VA - 2320270

Accessories

Assembly adapters - UWA 130 - 2901664



2-piece universal wall adapter for securely mounting the device in the event of strong vibrations. The profiles that are screwed onto the side of the device are screwed directly onto the mounting surface. The universal wall adapter is attached on the left/right.

Assembly adapters - UWA 182/52 - 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.

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

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

Uninterruptible power supply - QUINT-UPS/ 1AC/ 1AC/500VA - 2320270

Accessories

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

Energy storage - UPS-CAP/24DC/20A/20KJ - 2320380



Maintenance-free energy storage based on double-layer capacitor, 24 V DC, 20 kJ, automatic detection and communication with QUINT UPS-IQ

Data cable preassembled

Uninterruptible power supply - QUINT-UPS/ 1AC/ 1AC/500VA - 2320270

Accessories

Data cable - IFS-MINI-DIN-DATACABLE - 2320487



Data cable for communication, e.g., between Phoenix Contact type ILC 1xx Inline controllers and Phoenix Contact devices with the 12-pos. IFS data port, such as QUINT UPS-IQ UPS or TRIO UPS

Data cable - IFS-RS232-DATACABLE - 2320490



Data cable for communication between devices with a D-SUB 9 RS-232 connection and Phoenix Contact devices with the 12-pos. IFS data port such as QUINT UPS-IQ or TRIO UPS.

Data cable - IFS-USB-DATACABLE - 2320500



Used for communicating between industrial PCs and Phoenix Contact devices with the 12-pos. IFS data port, such as QUINT UPS or TRIO UPS.

Fuse

Fuse - FUSE 10A/400V GRL - 2908358



Fuse, nominal current: 10 A, length: 31.8 mm, diameter: 6.35 mm

Memory block

Memory block - IFS-CONFSTICK-L - 2901103



Multi-functional memory block with handle for the INTERFACE system; for easy storage and back up of the configuration.

Uninterruptible power supply - QUINT-UPS/ 1AC/ 1AC/500VA - 2320270

Accessories

Memory block - IFS-CONFSTICK-L - 2901103



Multi-functional memory block with handle for the INTERFACE system; for easy storage and back up of the configuration.

Programming cable

USB cable - CABLE-USB/MINI-USB-3,0M - 2986135



USB connecting cable: USB plug type A to USB plug type Mini-B; length: 3 m

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>