

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

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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
Weight per Piece (excluding packing)	2,201.000 g
Custom tariff number	85371091
Country of origin	Germany

Technical data

Dimensions

Width	125 mm
Height	130 mm
Depth	125 mm

Ambient conditions

Degree of protection	IP20
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Technical data

Ambient conditions

Ambient temperature (operation)	-25 °C ... 70 °C (> 50 °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 % (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 %
	> 86 %
Protection class	I
Degree of protection	IP20
	> (40 °C)
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

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Technical data

General

	alignable: $P_N < 50\%$, 0 mm horizontally, 40 mm vertically top, 20 mm vertically bottom
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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 and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Connection in acc. with standard	CUL
Standards/regulations	EN 62040-2
Contact discharge	4 kV (Test Level 2)
Standards/regulations	EN 61000-4-3
Frequency range	80 MHz ... 1 GHz

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Technical data

Standards and Regulations

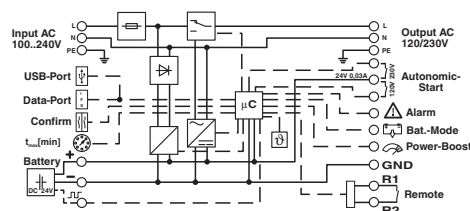
Test field strength	10 V/m
Frequency range	1.4 GHz ... 2 GHz
Test field strength	3 V/m
Standards/regulations	EN 61000-4-4
Comments	Criterion B
Standards/regulations	EN 62040-2 (Class C1)
	EN 61000-4-6
Frequency range	0.15 MHz ... 80 MHz
Voltage	10 V (Test Level 3)
Standard – Limitation of mains harmonic currents	EN 61000-3-2 (Class A)
UL approvals	UL/C-UL Recognized UL 1778
Shock	18 ms, 30g, in each space direction (according to IEC 60068-2-27)
Vibration (operation)	< 15 Hz, amplitude ± 2.5 mm (according to IEC 60068-2-6)
	15 Hz ... 150 Hz, 2.3g $t_v = 90$ min.
Rail applications	EN 50121-4

Environmental Product Compliance

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

Drawings

Block diagram



Classifications

eCl@ss

eCl@ss 4.0	27040702
eCl@ss 4.1	27040702
eCl@ss 5.0	27242213
eCl@ss 5.1	27040600
eCl@ss 6.0	27040600
eCl@ss 7.0	27040602
eCl@ss 8.0	27040602

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Classifications

eCl@ss

eCl@ss 9.0	27040705
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ETIM

ETIM 3.0	EC001039
ETIM 4.0	EC000382
ETIM 5.0	EC000382
ETIM 6.0	EC000382

UNSPSC

UNSPSC 6.01	30211510
UNSPSC 7.0901	39121011
UNSPSC 11	39121011
UNSPSC 12.01	39121011
UNSPSC 13.2	39121011

Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / EAC / EAC / cULus Recognized


Ex Approvals

UL Recognized / cUL Recognized / cULus Recognized

Approval details

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

EAC



EAC-Zulassung

cULus Recognized



Accessories

Accessories

Assembly adapter

Assembly adapters - UWA 130 - 2901664



2-piece universal wall adapter for securely mounting the power supply in the event of strong vibrations. The profiles that are screwed onto the side of the power supply 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 power supply in the event of strong vibrations. The power supply is screwed directly onto the mounting surface. The universal wall adapter is attached at 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

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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

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Accessories

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

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

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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.

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