

Uninterruptible power supply - QUINT-UPS/ 24DC/12DC/5/24DC/10 - 2320461

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Uninterruptible power supply with IQ technology for DIN rail mounting, input: 24 V DC, output: 24 V DC/10 A and 12 V DC/5 A, including mounted universal DIN rail adapter UTA 107/30

Product Features

- Easy handling thanks to automatic battery detection, tool-free battery replacement during operation, and communication via the IFS interface
- Reliable starting of difficult loads with the static POWER BOOST power reserve with up to 1.5 times the nominal current permanently
- Fast tripping of standard circuit breakers with SFB (selective fuse breaking) technology
- Device suitable for universal use thanks to comprehensive license package and extensive parameterization and diagnostics options
- One UPS module - two voltages
- Maximum flexibility, thanks to the dual output



Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	760.0 g
Country of origin	China

Technical data

Dimensions

Width	35 mm
Height	130 mm
Depth	125 mm
Width with alternative assembly	123 mm
Height with alternative assembly	130 mm
Depth with alternative assembly	39 mm

Ambient conditions

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Technical data

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Max. permissible relative humidity (operation)	≤ 95 % (25°C, non-condensing)
Noise immunity	EN 61000-6-2:2005

Input data

Input voltage	24 V DC
Nominal input voltage	18 V DC ... 30 V DC
Current consumption (maximum)	16 A (Maximum, mains operation)
Current consumption (charging process)	4 A (Charging, mains operation)
Fixed connect threshold	≤ 22 V DC
Variable connect threshold	1 V/0.1 s

Output data (24 V DC mains operation)

Nominal output voltage	24 V DC
Output voltage range (depends on the input voltage)	18 V DC ... 30 V DC ($U_{OUT} = U_{IN} - 0.5 \text{ V DC}$)
Nominal output current (I_N)	10 A (-25 °C ... 60 °C)
POWER BOOST (I_{Boost})	15 A (-25°C ... 40°C)
Selective Fuse Breaking (I_{SFB})	60 A (-25 °C ... 60 °C)

Output data (12 V DC mains operation)

Nominal output voltage	12 V DC
Nominal output current (I_N)	5 A (-25 °C ... 60 °C)
POWER BOOST (I_{Boost})	7.5 A (-25°C ... 40°C)

Output data (24 V DC battery operation)

Nominal output voltage	24 V DC
Output voltage range (depends on the input voltage)	19.2 V DC ... 27.6 V DC ($U_{OUT} = U_{BAT} - 0.5 \text{ V DC}$)
Nominal output current (I_N)	10 A (-25 °C ... 60 °C)
POWER BOOST (I_{Boost})	15 A (-25°C ... 40°C)
Selective Fuse Breaking (I_{SFB})	65 A (-25 °C ... 60 °C)

Output data (12 V DC battery operation)

Nominal output voltage	12 V DC
Nominal output current (I_N)	5 A (-25 °C ... 60 °C)
POWER BOOST (I_{Boost})	7.5 A (-25°C ... 40°C)

General output data

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Technical data

General output data

Total power $P_{12V} + P_{24V}$	max. 360 W
Efficiency 12 V DC	> 93 % (Mains operation, with charged power storage)
Efficiency 24 V DC	> 98 % (Mains operation, with charged power storage)

General

IQ technology	Yes
Net weight	0.6 kg
Protection class	III
MTBF (IEC 61709, SN 29500)	> 652000 h (40°C)
Mounting position	horizontal DIN rail NS 35, EN 60715
Assembly instructions	Can be aligned: horizontal 5 mm, vertical 50 mm

Connection data, input

Connection method	Pluggable 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.	16
Conductor cross section AWG max.	12
Stripping length	7 mm
Screw thread	M4

Connection data, output

Connection method	Pluggable 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.	16
Conductor cross section AWG max.	12
Stripping length	7 mm
Screw thread	M4

Connection data for signaling

Connection method	Pluggable screw connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²

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Technical data

Connection data for signaling

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.	12
Stripping length	7 mm
Screw thread	M4

Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise immunity	EN 61000-6-2:2005
Connection in acc. with standard	CUL
Standards/regulations	EN 61000-4-2
	EN 61000-4-3
	EN 61000-4-4
	EN 61000-4-5
	EN 61000-4-6
Standard - Electrical safety	EN 60950-1/VDE 0805 (SELV)
Standard – Electronic equipment for use in electrical power installations and their assembly into electrical power installations	EN 50178/VDE 0160 (PELV)
UL approvals	UL Listed UL 508
	UL/C-UL Recognized UL 60950
Vibration (operation)	< 15 Hz, amplitude ±2.5 mm (according to IEC 60068-2-6)
	15 Hz ... 150 Hz, 2.3g t _v = 90 min.
Low Voltage Directive	Conformance with LV directive 2006/95/EC
Rail applications	EN 50121-4

Classifications

eCl@ss

eCl@ss 4.0	27040702
eCl@ss 4.1	27040603
eCl@ss 5.0	27040603
eCl@ss 5.1	27040603
eCl@ss 6.0	27040603
eCl@ss 7.0	27040603
eCl@ss 8.0	27040603
eCl@ss 9.0	27040705

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Classifications

ETIM

ETIM 3.0	EC001039
ETIM 4.0	EC000382
ETIM 5.0	EC000382

UNSPSC

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

Approvals

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

Ex Approvals

Approvals submitted


Approval details

UL Recognized

UL Listed

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Approvals


cUL Recognized 

cUL Listed 

EAC

EAC

cULus Recognized 

cULus Listed 

Accessories

Accessories

Assembly adapter

Assembly adapters - UTA 107/30 - 2320089



Universal DIN rail adapter

Assembly adapters - UWA 182/52 - 2938235



Universal wall adapter

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Accessories

Assembly adapters - QUINT-PS-ADAPTERS7/1 - 2938196



Assembly adapter for QUINT-PS... power supply on S7-300 rail

Battery unit

Energy storage - UPS-BAT/VRLA/24DC/1.3AH - 2320296



Energy storage device, lead AGM, VRLA technology, 24 V DC, 1.3 Ah, tool-free battery replacement, automatic detection, and communication with QUINT UPS-IQ

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/10A/10KJ - 2320377



Maintenance-free power storage based on double-layer capacitor, 24 V DC, 10 kJ, automatic detection and communication with QUINT UPS-IQ

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



Maintenance-free power 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-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.

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-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

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Accessories

Data cable - IFS-OPEN-END-DATACABLE - 2320450



Data cable with open cable ends for communication, e.g., between a Phoenix Contact Inline communication terminal (IB IL RS UNI-PAC, 2700893) and Phoenix Contact devices with the 12-pos. IFS data port, such as QUINT UPS-IQ or TRIO UPS

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.

Drawings

Block diagram

