

1067327

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QUINT AC-USV, IQ Technology, DIN rail mounting, input: 120 V AC / 230 V AC, output: 120 V AC / 230 V AC / 500 VA.

## Commercial data

Item number	1067327
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CM23
Product key	CMUI15
GTIN	4055626736082
Weight per piece (including packing)	3,062 g
Weight per piece (excluding packing)	2,724 g
Customs tariff number	85371091
Country of origin	DE



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# Technical data

## Input data

Input voltage	120 V AC
	230 V AC
Input voltage range	90 V AC 264 V AC
Nominal input voltage range	100 V AC 240 V AC
Typical national grid voltage	120 V AC
Voltage type of supply voltage	AC
Frequency range (f <sub>N</sub> )	45 Hz 65 Hz
Permissible backup fuse	max. 25 A
Current consumption	6.9 A (100 V AC)
	2.86 A (240 V AC)
	19 A (24 V DC)

## Output data

Efficiency	> 97 % (100 % load, with charged energy storage)
	~ 87 % (100 % load )
Apparent power	500 VA
Real power	400 W
Power factor (cos phi)	0.8
Crest factor	2.8
Switch-over time	< 10 ms
UPS classification	VFD-SS-311
Connection in parallel	no
Connection in series	No
Overload capability Mains operation	in accordance with internal fuse
Overload capability Battery operation	105 % (Permanent)
	120 % 150 % (20 s / 5 s, then shutdown)

#### Mains operation

Output voltage	120 V AC
	230 V AC
Nominal output current (I <sub>N</sub> )	4.17 A (120 V AC)
	2.17 A (230 V AC)
Maximum no-load power dissipation	typ. 9 W (120 V AC)
	typ. 10 W (230 V AC)
Power loss nominal load max.	typ. 10 W (120 V AC)
	typ. 11 W (230 V AC)
Nominal output frequency	60 Hz ±5 Hz
	50 Hz ±5 Hz
Output fuse	10 A 400 V gRL



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### Battery operation

Output voltage	120 V AC ±2 %
	230 V AC ±2 %
Form of output voltage	Pure sine
Maximum no-load power dissipation	approx. 23 W (120 V AC)
	approx. 24 W (230 V AC)
Power loss nominal load max.	approx. 57 W (120 V AC)
	approx. 54 W (230 V AC)
Nominal output frequency	60 Hz
	50 Hz
	±5 % (grid-guided)
	±0.5 % (self-guided)
Total harmonic distortion factor (THD)	< 3 % (linear load)
	< 8 % (non-linear load)
Electronic current limitation	> 2,5 x I <sub>N</sub> (> 200 ms)

### Energy storage

I	np	ut

Input voltage	24 V DC
Deep discharge protection	20 V DC 24 V DC (can be parameterized)
Nominal capacity range	3.4 Ah 200 Ah (5x 40 Ah)
Charging current	max. 5 A
End-of-charge voltage	24 V DC 31 V DC (temperature compensated)

#### General

Battery technology	VRLA, VRLA-WTR, LI-ION (see section: Ordering data)
Charge characteristic curve	ΙU <sub>0</sub> U
Permissible backup fuse	50 A

### Interfaces

Interface	USB (Modbus/RTU)
Number of interfaces	1
Connection method	MINI-USB Type B
Connection marking	5.1
Locking	Screw
Transmission physics	USB 2.0
Maximum cable length	3 m
Electrical isolation	yes

# Signaling

Signal input BatStart	
Low signal	Connection to SGnd with < 2.7 $k\Omega$



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High signal	Open (> 200 kΩ between BatStart and SGnd)
Signal input Remote	
Low signal	Connection to SGnd with < 2.7 $k\Omega$
High signal	Open (> 35 k $\Omega$ between Remote and SGnd)
ignal output Alarm	
Position	3.x
Signalization designation	Alarm
Position marking	3.1 (Alarm)
Switching output	Transistor output, active
Output voltage	24 V
Continuous load current	≤ 20 mA
LED status indicator	red
signal output Battery Mode	
Position	3.x
Signalization designation	BatMode
Position marking	3.2 (BatMode)
Switching output	Transistor output, active
Output voltage	24 V
Continuous load current	≤ 20 mA
LED status indicator	yellow
signal output AC OK	
Position	3.x
Signalization designation	AC OK
Position marking	3.3 (AC OK)
Switching output	Transistor output, active
Output voltage	24 V
Continuous load current	≤ 20 mA
LED status indicator	green
Signal output Ready Position	3.x
Signalization designation	Ready
Position marking	3.4 (Ready)
Switching output	Transistor output, active
Output voltage	24 V
Continuous load current	≤ 20 A
LED status indicator	green
	<u> </u>
Signal output P > P <sub>N</sub>	
Position	3.x
Signalization designation	P>P <sub>n</sub>



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Position marking	3.5 (P>Pn)
Switching output	Transistor output, active
Output voltage	24 V
Continuous load current	≤ 20 mA
Signal ground SGnd	
Connection labeling	3.9
Function	Signal ground
Reference potential	For signal inputs and signal outputs
Electrical properties	
Number of phases	1.00
Product properties	
Product type	AC UPS
Product family	QUINT AC-USV
MTBF (IEC 61709, SN 29500)	445469 h (40 °C)
Insulation characteristics	
Protection class	1
Overvoltage category	II
Pollution degree	3 (≤ 130 V AC)
	2 (> 200 V AC)
Dimensions	
Item dimensions	
Width	180 mm
Height	130 mm
Depth	125 mm
Installation dimensions	
Installation distance right/left	0 mm / 0 mm
Installation distance top/bottom	50 mm / 50 mm
Mounting	
Mounting type	DIN rail mounting
Material specifications	
Housing material	Metal
Environmental and real-life conditions	
Ambient conditions	
Degree of protection	IP20
Ambient temperature (operation)	-25 °C 60 °C (> 50 °C: 2,5 % / K)
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Ambient temperature (storage/transport)	-40 °C 85 °C
Maximum altitude	≤ 3000 m (> 2000 m: 0,6 % / 100 m)
Max. permissible relative humidity (operation)	≤ 95 %
Shock	20g in all directions (EN 60068-2-27)
Vibration (operation)	5 Hz 100 Hz, 0.7g (EN 60068-2-6)
andards and regulations	
Uninterruptible power supply systems	
Standard designation	Uninterruptible power supply systems
Standards/specifications	EN 62040-1
oprovals	
UL	
Identification	UL/C-UL Recognized UL 1778
MC data	
Low Voltage Directive	Conformance with Low Voltage Directive 2014/35/EC
Interference emission	Noise emission in accordance with EN 62040-2
Noise immunity	Immunity in accordance with EN 62040-2
Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Conducted noise emission	EN 62040-02 (Class C2)
Electrostatic discharge	
Standards/regulations	EN 61000-4-2
Electrostatic discharge	
Contact discharge	± 6 kV
Discharge in air	± 8 kV
Comments	Criterion A
Electromagnetic HF field	
Standards/regulations	EN 61000-4-3
Electromagnetic HF field	
Frequency range	80 MHz 6 GHz
Test field strength	10 V/m
Comments	Criterion A
Fast transients (burst)	
Standards/regulations	EN 61000-4-4
Fast transients (burst)	
Input	± 2 kV
	±2 kV



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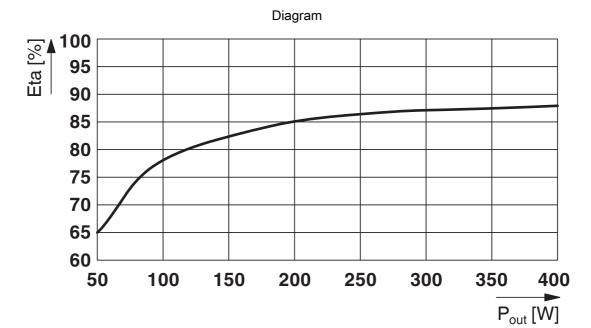
<b>C</b> 1	
Signal	± 2 kV
	± 2 kV (USB)
Comments	Criterion A (B for USB)
Surge voltage load (surge)	
Standards/regulations	EN 61000-4-5
Signal	1 kV (asymmetrical)
Comments	Criterion A
Input/Output	± 1 kV (symmetrical)
	± 2 kV (asymmetrical)
Conducted interference	
Standards/regulations	EN 61000-4-6
Conducted interference	
Frequency range	0.15 MHz 80 MHz
Signal	1 kV (asymmetrical)
Comments	Criterion A
Power frequency magnetic field	
Standards/regulations	EN 61000-4-8
Frequency	50 Hz
Signal	30 A/m
Comments	Criterion A
Criteria	
Criterion A	Normal operating behavior within the specified limits.
Criterion B	Temporary impairment to operational behavior that is corrected by the device itself.



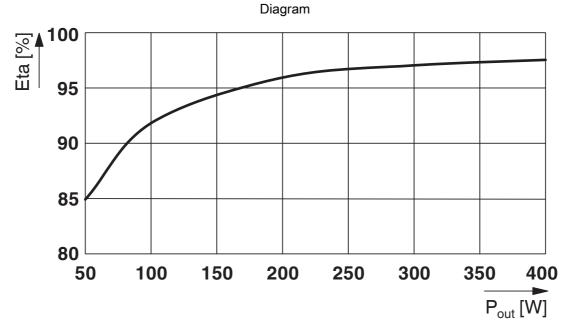
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# Drawings



Efficiency (battery operation)

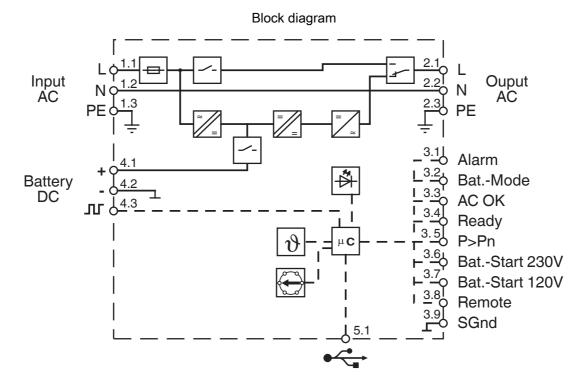


Efficiency (normal operation)



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Block diagram



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# Approvals

🌣 To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1067327

	IECEE CB Scheme Approval ID: DK-95944-UL
e <b>911</b> us	CULus Recognized Approval ID: FILE E 342453
	EAC Approval ID: RU-DE.B.00184/20
<b>F/</b>	UL Recognized Approval ID: FILE E 359066
<b>.R</b> .	cUL Recognized Approval ID: FILE E 359066
cUL	us Recognized



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# Classifications

## ECLASS

	ECLASS-11.0	27040705		
	ECLASS-12.0	27040705		
	ECLASS-13.0	27040705		
ETIM				
	ETIM 9.0	EC000382		
UNSPSC				
	UNSPSC 21.0	39121000		



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# Environmental product compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"



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Accessories

UPS-BAT/PB/24DC/4AH - Battery module

1274117

https://www.phoenixcontact.com/us/products/1274117



Battery module, VRLA-AGM, 24 V DC, 4 Ah, automatic detection and communication with QUINT UPS-IQ

## UPS-BAT/PB/24DC/7AH - Battery module

1274118

https://www.phoenixcontact.com/us/products/1274118



Battery module, VRLA-AGM, 24 V DC, 7 Ah, automatic detection and communication with QUINT UPS-IQ



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### UPS-BAT/PB/24DC/12AH - Battery module

#### 1274119

https://www.phoenixcontact.com/us/products/1274119



Battery module, VRLA-AGM, 24 V DC, 12 Ah, automatic detection and communication with QUINT UPS-IQ

### MINI-SCREW-USB-DATACABLE - Data cable

2908217

https://www.phoenixcontact.com/us/products/2908217



Used for communication between an industrial PC and Phoenix Contact devices with USB-Mini-B connection.



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FUSE 10A/400V GRL - Fuse

#### 2908358

https://www.phoenixcontact.com/us/products/2908358

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



### UWA 130 - Mounting adapter

2901664 https://www.phoenixcontact.com/us/products/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.



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UWA 182/52 - Mounting adapter

#### 2938235

https://www.phoenixcontact.com/us/products/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.

## UPS-BAT/PB/24DC/20AH - Battery module

1348516

https://www.phoenixcontact.com/us/products/1348516



Battery module, VRLA-AGM, 24 V DC, 20 Ah, automatic detection and communication with QUINT UPS-IQ



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UPS-BAT/PB/24DC/40AH - Battery module

### 1354641

https://www.phoenixcontact.com/us/products/1354641



Battery module, VRLA-AGM, 24 V DC, 40 Ah, automatic detection and communication with QUINT UPS-IQ

### UPS-BAT/VRLA-WTR/24DC/13AH - Battery module

#### 2320416

https://www.phoenixcontact.com/us/products/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

IQ



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### UPS-BAT/VRLA-WTR/24DC/26AH - Battery module

#### 2320429

https://www.phoenixcontact.com/us/products/2320429



UPS-BAT/LI-ION/24DC/120WH - Battery module

#### 2320351

https://www.phoenixcontact.com/us/products/2320351



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

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



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

#### 2908232

https://www.phoenixcontact.com/us/products/2908232



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

## PLT-SEC-T3-120-FM-UT - Type 3 surge protection device

#### 2907918

https://www.phoenixcontact.com/us/products/2907918



Type 2/3 surge protection, consisting of protective plug and base element, with integrated status indicator and remote signaling for single-phase power supply networks. Nominal voltage: 120 V AC/DC



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## PLT-SEC-T3-230-FM-UT - Type 3 surge protection device

#### 2907919

https://www.phoenixcontact.com/us/products/2907919



Type 2/3 surge protection, consisting of protective plug and base element with screw connection. For single-phase power supply network with integrated status indicator and remote signaling. Nominal voltage: 230 V AC/DC

### POWER MANAGEMENT SUITE - Configuration software

#### 1252232

https://www.phoenixcontact.com/us/products/1252232



Configuration and management software

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