QUINT-HP-UPS/120AC/1.5KVA/PT - Uninterruptible power supply

1136804

https://www.phoenixcontact.com/us/products/1136804

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 documentation. Our general terms of use for downloads are valid.



QUINT AC UPS, IQ Technology, Wall mounting, input: 120 V AC, output: 120 V AC / 1500 VA.

Product description

The QUINT HP UPS for wall mounting, with IQ Technology and matching external battery module, ensures superior system availability. The online topology with a pure sine wave reliably supplies your AC loads with a perfect voltage at powers ranging from 1.5 kVA to 2.5 kVA.

Your advantages

- Pure sine wave in normal and battery operation
- Can be switched in parallel for increased performance, redundancy, or for a 3 AC system
- Startup from the energy storage system possible, even without mains input
- Communication platform: Com.board with USB or serial interface
- Compact design with active cooling

Commercial data

Item number	1136804
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CM30
Product key	CMUW15
GTIN	4063151072926
Weight per piece (including packing)	4,900 g
Weight per piece (excluding packing)	4,400 g
Customs tariff number	85371091
Country of origin	DE

Technical data

Input data

Input voltage	100 V AC -10 % / +20 %
	110 V AC -10 % / +20 %
	120 V AC -10 % / +15 %
	130 V AC -15 % / +10 %
Voltage type of supply voltage	AC
Frequency range (f_N)	47.5 Hz ... 52.5 Hz
	57 Hz ... 63 Hz
Bypass fuse	30 A T 250 V
Permissible backup fuse	32 A (Listed breaker)
Current consumption	nom. 19 A (100 V AC)
	nom. 17.3 A (110 V AC)
	nom. 15.9 A (120 V AC)
	nom. 14.6 A (130 V AC)
	max. 25.8 A (100 V AC)
	max. 23.4 A (110 V AC)
	max. 21.5 A (120 V AC)
	max. 21 A (130 V AC)
Rated short-time current carrying capacity Icw	6 kA

Output data

Classification according to IEC 62040-3	VFI-SS-111
Efficiency	> 94 % (100% load, battery charged)
	> 90 % (100% load, battery charged)
Apparent power	1500 VA
Real power	1350 W
Power factor (cos phi)	0.9
Crest factor	2.8
Switch-over time	0 ms
Connection in parallel	yes
	max. 3
Connection in series	no
Overload capability Mains operation	120 % ... 150 % (20 s / 5 s, then switch to bypass operation)
Overload capability Battery operation	120 % ... 150 % (20 s / 5 s, then shutdown)
Overload capability Bypass mode	120 % ... 150 % (for a sustained period / 20 s, then shutdown)
Rated short-time current carrying capacity Icw	6 kA

Mains operation

Output voltage	100 V AC ±2 %
	110 V AC ±2 %

	120 V AC ±2 %
	130 V AC ±2 %
Form of output voltage	Pure sine
Output current	nom. 15 A (100 V AC)
	nom. 13.6 A (110 V AC)
	nom. 12.5 A (120 V AC)
	nom. 11.5 A (130 V AC)
Maximum no-load power dissipation	28 W
Power loss nominal load max.	75 W (100% load, battery charged)
Nominal output frequency	50 Hz
	60 Hz
	±0.5 % (Output frequency tolerance)
Electronic current limitation	> 2,5 x Output: Current nom. (> 200 ms)

Battery operation

Maximum no-load power dissipation	25 W
Power loss nominal load max.	140 W (100% load, battery charged)
Nominal output frequency	50 Hz
	60 Hz
	±0.5 % (Output frequency tolerance)
Total harmonic distortion factor (THD)	< 3 % (linear load)
	< 8 % (non-linear load)
Electronic current limitation	> 2,5 x Output: Current nom. (> 200 ms)

Energy storage

Input

Input voltage	48 V DC
	max. 60 V DC
Input current	max. 40 A
Nominal capacity range	7 Ah ... 200 Ah
Charging current	max. 7 A

Output

Short-circuit current	650 A (< 1,5 ms)

General

Connection in parallel	yes
	max. 5
Connection in series	no
IQ-Technology	yes
Permissible backup fuse	40 A
Temperature sensor	yes
Permissible backup fuse	40 A

Connection data

Input

Position	1.x
Identification	1.1 (L), 1.2 (N), 1.3 (⏚)

Connection technology

Position marking	1.1 (L), 1.2 (N), 1.3 (⏚)

Conductor connection

Connection method	Push-in connection
rigid	2.5 mm² ... 6 mm²
flexible	2.5 mm² ... 6 mm²
flexible with ferrule without plastic sleeve	2.5 mm² ... 4 mm²
flexible with ferrule with plastic sleeve	2.5 mm² ... 4 mm²
rigid (AWG)	14 ... 10
Stripping length	10 mm

Output

Position	2.x
Identification	2.1 (L), 2.2 (L'), 2.3 (N), 2.4 (⏚)

Connection technology

Position marking	2.1 (L), 2.2 (L'), 2.3 (N), 2.4 (⏚)

Conductor connection

Connection method	Push-in connection
rigid	2.5 mm² ... 6 mm²
flexible	2.5 mm² ... 6 mm²
flexible with ferrule without plastic sleeve	2.5 mm² ... 4 mm²
flexible with ferrule with plastic sleeve	2.5 mm² ... 4 mm²
rigid (AWG)	14 ... 10
Stripping length	10 mm

Battery

Position	4.x
Identification	4.1, 4.2

Connection technology

Position marking	4.1 (+), 4.2 (-)

Conductor connection

Connection method	Push-in connection
rigid	6 mm² ... 16 mm²
flexible	6 mm² ... 16 mm²
flexible with ferrule without plastic sleeve	6 mm² ... 16 mm²

flexible with ferrule with plastic sleeve	6 mm² ... 16 mm²
rigid (AWG)	8 ... 6
Stripping length	18 mm

Signal

Position	3.x
Identification	3.1 ... 3.9

Connection technology

Position marking	3.1 (Alarm), 3.2 (Bat.-Mode), 3.3 (Power Good), 3.4 (Ready), 3.5 (P>Pn), 3.6 (Service Required), 3.7 (Bat.-Start), 3.8 (Remote), 3.9 (SGnd)

Conductor connection

rigid	0.2 mm² ... 4 mm²
flexible	0.2 mm² ... 4 mm²
flexible with ferrule without plastic sleeve	0.2 mm² ... 2.5 mm²
flexible with ferrule with plastic sleeve	0.2 mm² ... 2.5 mm²
rigid (AWG)	24 ... 12
Stripping length	10 mm

Interfaces

Interface	Battery module communication interface
Number of interfaces	1
Connection method	RJ45
Position	5.x
Locking	Locking clip
Transmission physics	Twisted-Pair 4x2
Interface	Parallel operation communication interface
Number of interfaces	2
Connection method	RJ45
Position	5.x
Locking	Locking clip
Transmission physics	Twisted-Pair 4x2

Signaling

Signal input Bat.-Start

Low signal	Connection to SGnd with < 2.7 kΩ
High signal	Open (> 200 kΩ between Bat.-Start and SGnd)

Signal input Remote

Low signal	Connection to SGnd with < 2.7 kΩ
High signal	Open (> 35 kΩ between Remote and SGnd)

Signal 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

Signal output Battery Mode

Position	3.x
Signalization designation	Bat.-Mode
Position marking	3.2 (Bat.-Mode)
Switching output	Transistor output, active
Output voltage	24 V
Continuous load current	≤ 20 mA

Signal output Power Good

Position	3.x
Signalization designation	Power Good
Position marking	3.3 (Power Good)
Switching output	Transistor output, active
Output voltage	24 V
Continuous load current	≤ 20 mA

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 mA

Signal output $P > P_N$

Position	3.x
Signalization designation	$P>P_n$
Position marking	3.5 (P>Pn)
Switching output	Transistor output, active
Output voltage	24 V
Continuous load current	≤ 20 mA

Signal output Service Required

Position	3.x
Signalization designation	Service Required
Position marking	3.6 (Service Required)
Switching output	Transistor output, active
Output voltage	24 V

Continuous load current	≤ 20 mA

Signal ground SGnd

Function	Signal ground
Reference potential	For signal inputs and signal outputs

Product properties

Product type	AC UPS
Product family	QUINT AC UPS

Data management status

Article revision	00

Insulation characteristics

Protection class	I
Overvoltage category	II
Pollution degree	3

Dimensions

Item dimensions

Width	150 mm
Height	240 mm
Depth	143 mm

Drill hole

Diameter	5.5 mm

Installation dimensions

Installation distance right/left	0 mm / 0 mm
Installation distance top/bottom	50 mm / 50 mm

Mounting

Mounting type	Wall mounting

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 60 °C (> 50 °C: 2,5 % / K)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Maximum altitude	≤ 4000 m (> 1000 m: 3 % / 1000 m)
Max. permissible relative humidity (operation)	≤ 95 %
Shock	30g in each direction, according to IEC 60068-2-27
Vibration (operation)	5 Hz ... 100 Hz, 0.7g (EN 60068-2-6)

Approvals

UL

Identification	UL/C-UL Recognized UL 1778

EMC data

Low Voltage Directive	Conformance with Low Voltage Directive 2014/35/EC
Interference emission	Noise emission
Noise immunity	Immunity
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
Output	± 2 kV
Signal	± 2 kV
	± 2 kV (Communication parallel operation, battery module)
Comments	Criterion A

Surge voltage load (surge)

Standards/regulations	EN 61000-4-5

Surge voltage load (surge)

Signal	1 kV (asymmetrical)
Comments	Criterion B
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	10 V (asymmetrical)
Comments	Criterion A

Power frequency magnetic field

Standards/regulations	EN 61000-4-8
Frequency	60 Hz
Signal	30 A/m
Comments	Criterion A

Harmonic and interharmonic components

Standards/regulations	EN 61000-4-13

Harmonic and interharmonic components

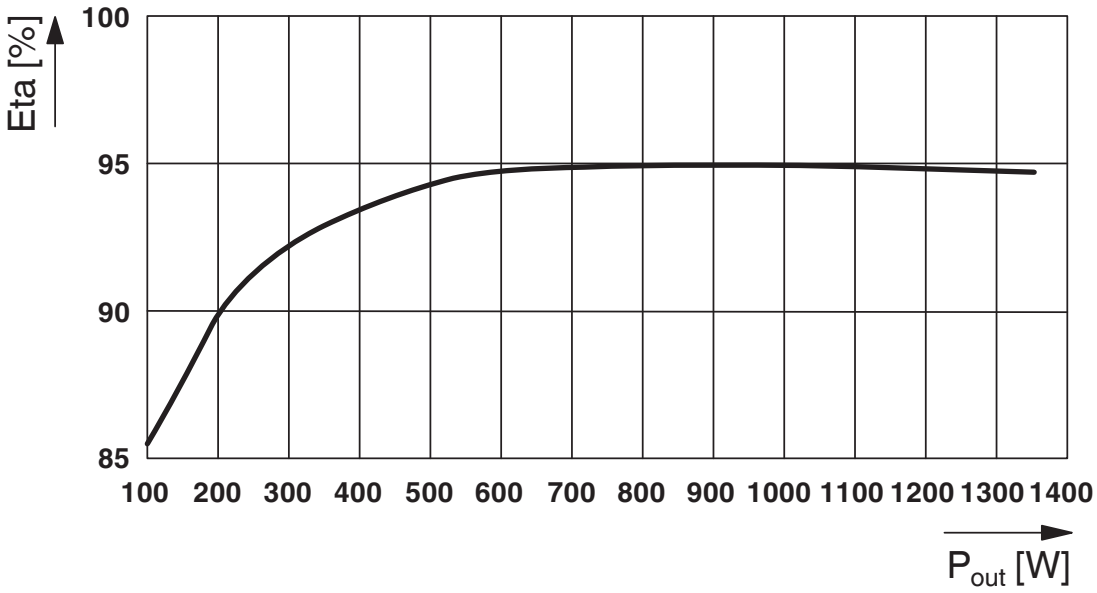
Comments	Criterion A

Criteria

Criterion A	Normal operating behavior within the specified limits.
Criterion B	Temporary impairment to operational behavior that is corrected by the device itself.

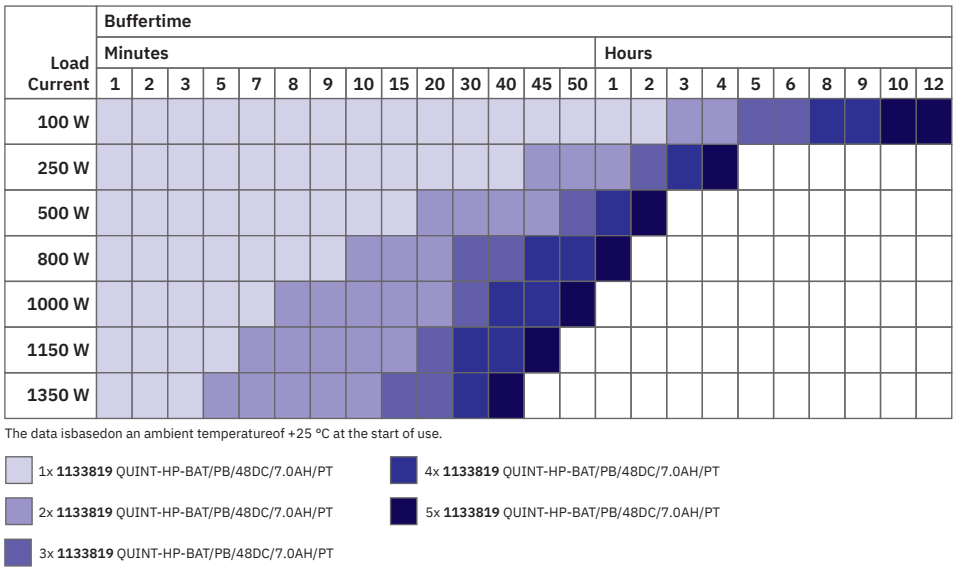
Drawings

Diagram



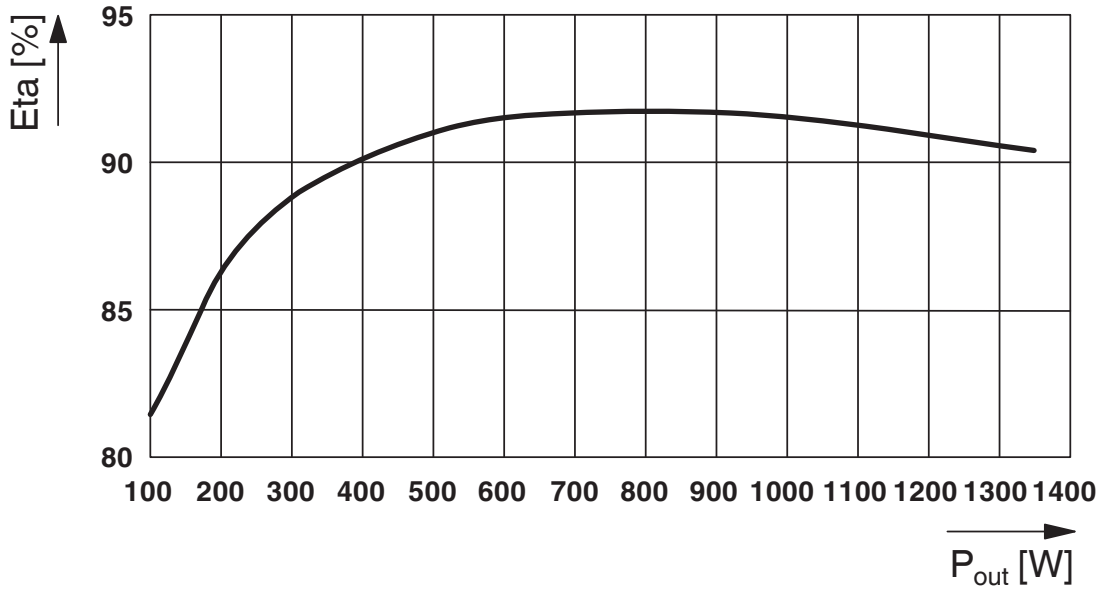
Efficiency (normal operation)

Graphic



QUINT HP UPS 1.5 kVA buffer times

Diagram



Efficiency (battery operation)

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1136804

cULus Listed
Approval ID: E342453-20230513

cULus Listed
Approval ID: E359066-20230828

Classifications

ECLASS

ECLASS-13.0	27040705
ECLASS-11.0	27040705

ETIM

ETIM 9.0	EC000382

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%

Phoenix Contact 2024 © - all rights reserved
https://www.phoenixcontact.com

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com