

Power supply units and UPS

Uninterruptible power supplies

QUINT UPS for AC applications

The QUINT UPS for AC applications delivers a pure sine curve at the output. The sine generated in battery operation is synchronous with the mains previously used for supply. The QUINT AC UPS for 120 V AC/230 V AC with 400 W/500 VA power can be combined with all UPS-CAP, LI-ION, and UPS-BAT energy storage devices.

Optimum use of the buffer time and preventive monitoring of the energy storage device:

- Detects the current state of charge of the energy storage device and calculates the remaining runtime
- Calculates the current life expectancy of the energy storage device

Worldwide use:

- Input voltages from 96 to 264 V AC
- Storage of the level and frequency of the input voltage, in the event of mains failure, the output is automatically supplied with 120 V AC/60 Hz or 230 V AC/50 Hz
- Manual voltage pre-selection possible

Maximum energy efficiency:

- Offline operation: 98% efficiency for charged energy storage device
- Power factor cos phi 0.8

Extensive signaling and parameterization:

- Switching outputs
- USB interface
- Data port
- Parameterization with memory module

Simplified startup:

- The UPS can be switched on without a power supply network (cold restart)

Notes:

The buffer time associated with your solution is dependent on the load current. Exact details for each uninterruptible power supply can be found on page 328.



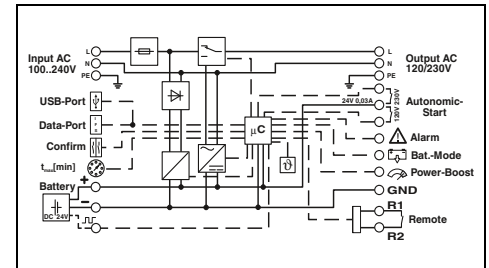
IQ Technology
Designed by PHOENIX CONTACT



Uninterruptible power supply,
1 AC / 1 AC, 500 VA



EX: cULus



Technical data

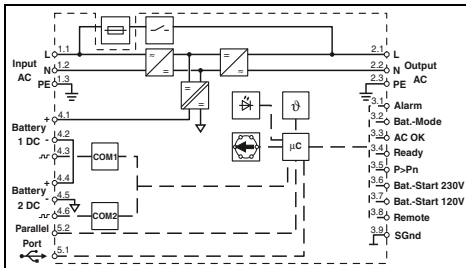
General input data	Input voltage range	184 V AC ... 264 V AC
	Frequency range	45 Hz ... 65 Hz
	Activation threshold	Can be configured using UPS-CONF software
Input data	120 V AC	230 V AC
	120 V AC -20% / +15%	230 V AC -20% / +15%
	102 V AC ... 138 V AC	196 V AC ... 264 V AC
	50 Hz ... 60 Hz	50 Hz ... 60 Hz
	6.8 A	3.7 A
General output data	Nominal power / Apparent power	400 W / 500 VA
	Derating	> 50°C ... 70°C (2.5%/K)
	Switch-over time	< 10 ms
	Efficiency (typ.)	> 98% > 98% (Mains operation)
Output data (mains operation)	120 V AC	230 V AC
	Nominal output voltage	230 V AC
	- Nominal output current (sustained period)	2.2 A (-25°C ... 70°C)
	- Power Boost (sustained period)	2.7 A (-25°C ... 70°C)
Output data (battery operation)	120 V AC	230 V AC
	120 V AC	230 V AC
	Nominal output voltage	230 V AC
	- Nominal output current I_N (sustained period)	2.2 A (-25°C ... 50°C)
	- Power Boost I_{Boost} (5 s)	2.7 A (-25°C ... 50°C)
Energy storage	Nominal voltage U_N	24 V DC
	End-of-charge voltage	25 V DC ... 30 V DC (temperature compensated)
	Nominal capacity range	3 Ah ... 200 Ah
	Max. charging current	2 A
Signaling	Signaling	LED, active switching outputs, interface/software
Interfaces	Interfaces	IFS (Interface system data port), MINI-USB type B
General data	Classification according to IEC 62040-3	VFD-SS-311
	Weight / Dimensions W x H x D	2.2 kg / 125 x 130 x 125 mm
	Connection method	Screw connection
	Input/output connection data rigid / flexible / AWG	1.5 - 6 mm ² / 1.5 - 4 mm ² / 18 - 10
	Signal connection data rigid / flexible / AWG	0.2 - 2.5 mm ² / 0.2 - 2.5 mm ² / 24 - 10
	Degree of protection / Protection class	IP20 / I
	Ambient temperature (operation)	-25°C ... 70°C (> 50°C Derating: 2.5%/K)
Standards/regulations	UL approvals	UL/C-UL Recognized UL 1778

Ordering data

Description	Type	Order No.	Pcs./Pkt.
Power supply, uninterruptible	QUINT-UPS/ 1AC/ 1AC/500VA	2320270	1



Uninterruptible power supply,
1 AC / 1 AC, 1 KVA



Technical data

90 V AC ... 264 V AC
45 Hz ... 65 Hz

Can be configured using UPS-CONF software

120 V AC	230 V AC
120 V AC -10% / +20%	230 V AC -20% / +15%
96 V AC ... 144 V AC	184 V AC ... 264 V AC
60 Hz ±5%	50 Hz ±5%
10.5 A	5.5 A

900 W / 1 kVA
> 50°C ... 60°C (2.5%/K)
0 ms

> 92% (120 V AC)	> 94% (230 V AC)
120 V AC	230 V AC
120 V AC	230 V AC
8.3 A (-25°C ... 70°C)	4.3 A (-25°C ... 70°C)
13 A (-25°C ... 70°C)	7 A (-25°C ... 70°C)
120 V AC	230 V AC
120 V AC	230 V AC
8.3 A (-25°C ... 70°C)	4.3 A (-25°C ... 70°C)
13 A (-25°C ... 70°C)	7 A (-25°C ... 70°C)

2x 24 V DC
58 V (temperature compensated)
3.4 Ah ... 200 Ah
5 A

LED, active switching output
MINI-USB type B, lockable

VFI-SS-111
5 kg / 290 x 130 x 125 mm
Screw connection
0.2 - 6 mm² / 0.2 - 4 mm² / 30 - 10
0.2 - 2.5 mm² / 0.2 - 2.5 mm² / 30 - 12
IP20 / I
-25°C ... 60°C (> 50°C Derating: 2.5%/K)

UL/C-UL Recognized UL 1778

Ordering data

Type	Order No.	Pcs./Pkt.
QUINT4-UPS/1AC/1AC/1KVA	2320283	1