

Power supplies and UPS

Power supplies

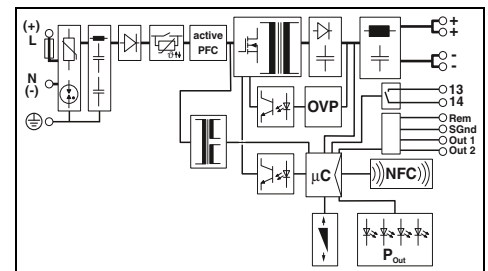
QUINT POWER power supplies – Maximum functionality

QUINT POWER, 1 AC, 24 V DC

- Easy system extension with static boost
- Starting of heavy loads with dynamic boost
- SFB Technology selectively trips standard circuit breakers; consumers connected in parallel continue working
- High noise immunity, thanks to integrated gas-filled surge arrester and a mains failure buffer time of more than 20 ms
- Comprehensive signaling with preventive function monitoring
- Signaling thresholds and characteristic curves can be set via NFC, available pre-configured from a batch quantity of 1



Power supply,
1 AC, 24 V DC, 5 A

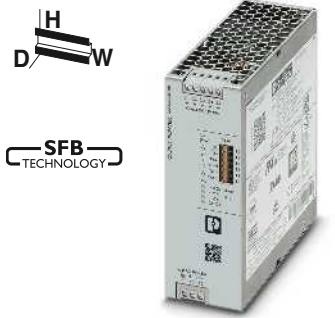


Technical data

Input data	
Input voltage range	100 V AC ... 240 V AC -15% ... +10% 110 V DC ... 250 V DC -18% ... +40%
Frequency range (f_N)	50 Hz ... 60 Hz -10% ... +10%
Typical current consumption (in static boost)	1.7 A (100 V AC) / 1.5 A (120 V AC) 0.9 A (230 V AC) / 0.8 A (240 V AC) 1.6 A (110 V DC) / 0.7 A (250 V DC) typ. 14 A / < 0.3 A ² s
Inrush current limitation at 25°C / I ² t	typ. 28 ms (120 V AC) / typ. 38 ms (230 V AC)
Mains buffering (I_N)	
Output data	
Nominal output voltage (U_N)	24 V DC
Output current I_N / $I_{Stat. Boost}$ / $I_{Dyn. Boost}$ / I_{SFB}	5 A / 6.25 A / 10 A (5 s) / 30 A (15 ms)
Magnetic circuit breaker tripping	A1 ... A4 / B2 / C1 ... C2 / Z1 ... Z4
Can be connected in parallel/series	Yes / yes
Max. power dissipation (no load/nominal load)	< 3 W (230 V AC) / < 16 W (230 V AC)
Efficiency	typ. 88.8% (120 V AC) / typ. 89.2% (230 V AC)
Residual ripple	< 30 mV _{pp}
Signaling	
LED signaling	DC OK, utilization indicator
Configurable signal output	Relay contact 13/14, Out 1 digital, Out 2 digital/analog
Signal options	I_{Out} , U_{Out} , P_{Out} , U_{In} , OK, Operating hours, Temp. OK, OVP
General data	
Weight / Dimensions W x H x D	0.7 kg / 36 x 130 x 125 mm
Connection	alignable: 5 mm horizontally, 15 mm next to active components, 50 mm vertically
Connection method	Screw connection
Input connection data rigid / flexible / AWG	0.2 - 2.5 mm ² / 0.2 - 2.5 mm ² / 24 - 14
Output connection data rigid / flexible / AWG	0.2 - 2.5 mm ² / 0.2 - 2.5 mm ² / 24 - 14
Signal connection data rigid / flexible / AWG	0.2 - 1 mm ² / 0.2 - 1.5 mm ² / 24 - 16
Degree of protection / Protection class	IP20 / I
MTBF (IEC 61709, SN 29500)	> 930000 h (40°C)
Ambient temperature (operation)	-25°C ... 70°C (> 60°C Derating: 2.5%/K)
Ambient temperature (startup type tested)	-40°C
Standards/regulations	
Insulation voltage input/output	2 kV AC (routine test) / 4 kV AC (type test)
Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Electrical safety	IEC 60950-1/VDE 0805 (SELV)
Safety transformers for switched-mode power supply units	EN 61558-2-16
Overvoltage category in accordance with EN 62477-1,	III (≤ 2000 m), II (≤ 5000 m), II (≤ 5000 m)
EN 61010-1, EN 60950-1	
UL approvals	UL Listed UL 508, UL/C-UL Recognized UL 60950-1, UL ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D (Hazardous Location)
Limitation of harmonic line currents	EN 61000-3-2

Ordering data

Description	Type	Order No.	Pcs./Pkt.
Power supply, primary-switched	QUINT4-PS/1AC/24DC/5	2904600	1



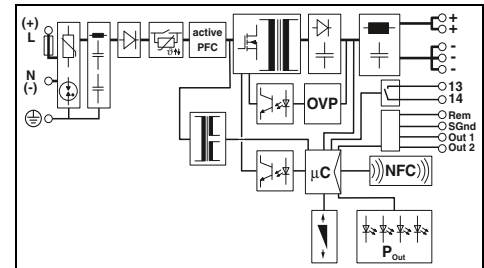
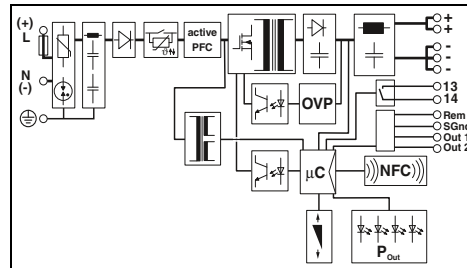
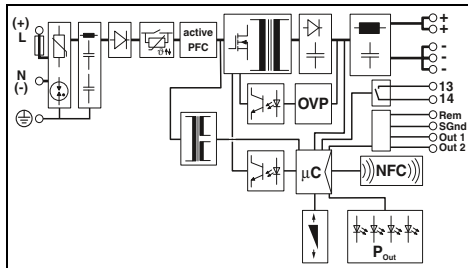
Power supply,
1 AC, 24 V DC, 10 A



Power supply,
1 AC, 24 V DC, 20 A



Power supply,
1 AC, 24 V DC, 40 A



Technical data

100 V AC ... 240 V AC -15% ... +10%
110 V DC ... 250 V DC -18% ... +40%
50 Hz ... 60 Hz -10% ... +10%
3.4 A (100 V AC) / 2.8 A (120 V AC)
1.5 A (230 V AC) / 1.5 A (240 V AC)
3 A (110 V DC) / 1.3 A (250 V DC)
typ. 18 A / < 0.7 A²s
typ. 42 ms (120 V AC) / typ. 44 ms (230 V AC)

24 V DC
10 A / 12.5 A / 20 A (5 s) / 60 A (15 ms)
A1...A6 / B2...B6 / C1...C3 / Z1...Z6
Yes / yes
< 3 W (230 V AC) / < 17 W (230 V AC)
typ. 92.5% (120 V AC) / typ. 93.4% (230 V AC)
< 80 mV_{pp}

DC OK, utilization indicator
Relay contact 13/14, Out 1 digital, Out 2 digital/analog
I_{Out}, U_{Out}, P_{Out}, U_{In}, OK, Operating hours, Temp. OK, OVP

0.9 kg / 50 x 130 x 125 mm
alignable: 5 mm horizontally, 15 mm next to active components,
50 mm vertically
Screw connection
0.2 - 2.5 mm² / 0.2 - 2.5 mm² / 24 - 14
0.2 - 2.5 mm² / 0.2 - 2.5 mm² / 24 - 14
0.2 - 1 mm² / 0.2 - 1.5 mm² / 24 - 16
IP20 / I
> 783000 h (40°C)
-25°C ... 70°C (> 60°C Derating: 2.5%/K)
-40°C

2 kV AC (routine test) / 4 kV AC (type test)
Conformance with EMC Directive 2014/30/EU
IEC 60950-1/VDE 0805 (SELV)
EN 61558-2-16
III (≤ 2000 m), II (≤ 5000 m), II (≤ 5000 m)

UL Listed UL 508, UL/C-UL Recognized UL 60950-1,
UL ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D
(Hazardous Location)
EN 61000-3-2

Ordering data

Type	Order No.	Pcs./Pkt.
QUINT4-PS/1AC/24DC/10	2904601	1

Technical data

100 V AC ... 240 V AC -15% ... +10%
110 V DC ... 250 V DC -18% ... +40%
50 Hz ... 60 Hz -10% ... +10%
6.8 A (100 V AC) / 5.5 A (120 V AC)
2.8 A (230 V AC) / 2.7 A (240 V AC)
6 A (110 V DC) / 2.5 A (250 V DC)
typ. 11 A / < 0.4 A²s
typ. 28 ms (120 V AC) / typ. 29 ms (230 V AC)

24 V DC
20 A / 25 A / 30 A (5 s) / 120 A (15 ms)
A1...A16 / B2...B13 / C1...C6 / Z1...Z16
Yes / yes
< 5 W (230 V AC) / < 32 W (230 V AC)
typ. 92.4% (120 V AC) / typ. 94% (230 V AC)
< 50 mV_{pp}

DC OK, utilization indicator
Relay contact 13/14, Out 1 digital, Out 2 digital/analog
I_{Out}, U_{Out}, P_{Out}, U_{In}, OK, Operating hours, Temp. OK, OVP

1.3 kg / 70 x 130 x 125 mm
alignable: 5 mm horizontally, 15 mm next to active components,
50 mm vertically
Screw connection
0.2 - 6 mm² / 0.2 - 4 mm² / 24 - 10
0.2 - 6 mm² / 0.2 - 4 mm² / 24 - 10
0.2 - 1 mm² / 0.2 - 1.5 mm² / 24 - 16
IP20 / I
> 673000 h (40°C)
-25°C ... 70°C (> 60°C Derating: 2.5%/K)
-40°C

2 kV AC (routine test) / 4 kV AC (type test)
Conformance with EMC Directive 2014/30/EU
IEC 60950-1/VDE 0805 (SELV)
EN 61558-2-16
III (≤ 2000 m), II (≤ 5000 m), II (≤ 5000 m)

UL Listed UL 508, UL/C-UL Recognized UL 60950-1,
UL ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D
(Hazardous Location)
EN 61000-3-2

Ordering data

Type	Order No.	Pcs./Pkt.
QUINT4-PS/1AC/24DC/20	2904602	1

Technical data

100 V AC ... 240 V AC -15% ... +10%
110 V DC ... 250 V DC -18% ... +40%
50 Hz ... 60 Hz -10% ... +10%
10.6 A (100 V AC) / 10 A (120 V AC)
5.2 A (230 V AC) / 5.7 A (240 V AC)
10.2 A (110 V DC) / 5.6 A (250 V DC)
typ. 11 A / < 0.5 A²s
typ. 24 ms (120 V AC) / typ. 25 ms (230 V AC)

24 V DC
40 A / 45 A / 60 A (5 s) / 215 A (15 ms)
A1 ... A16 / B2 ... B25 / C1 ... C13 / Z1 ... Z16
Yes / yes
< 4 W (230 V AC) / < 56 W (230 V AC)
typ. 95% (120 V AC) / typ. 96% (230 V AC)
< 50 mV_{pp}

DC OK, utilization indicator
Relay contact 13/14, Out 1 digital, Out 2 digital/analog
I_{Out}, U_{Out}, P_{Out}, U_{In}, OK, Operating hours, Temp. OK, OVP

2.6 kg / 120 x 130 x 141 mm
alignable: 5 mm horizontally, 15 mm next to active components,
50 mm vertically
Screw connection
0.2 - 6 mm² / 0.2 - 4 mm² / 24 - 10
0.5 - 16 mm² / 0.5 - 16 mm² / 8 - 6
0.2 - 1.5 mm² / 0.2 - 1.5 mm² / 24 - 16
IP20 / I
> 500000 h (40°C)
-25°C ... 70°C (> 60°C Derating: 2.5%/K)
-40°C

2 kV AC (routine test) / 4 kV AC (type test)
Conformance with EMC Directive 2014/30/EU
IEC 60950-1/VDE 0805 (SELV)
EN 61558-2-16
III (≤ 2000 m), II (≤ 5000 m), II (≤ 5000 m)

UL Listed UL 508, UL/C-UL Recognized UL 60950-1,
UL ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D
(Hazardous Location)
EN 61000-3-2

Ordering data

Type	Order No.	Pcs./Pkt.
QUINT4-PS/1AC/24DC/40	2904603	1