

INTERFACE Power Supply QUINT POWER

Primary switched-mode power supply units

The field of plant and special engineering offers tailor-made solutions for special application purposes. There are frequent system expansions during the course of the project in cooperation with the end customer. Of course the construction follows the specifications, but the customer calls for a high degree of flexibility in the project planning phase to be able to adapt the application ideally to his requirements. QUINT POWER with its comprehensive range of products is ideal as a universal power supply unit.



QUINT 24 V DC/3.5 A

1 AC



QUINT 24 V DC/5 A

1 AC

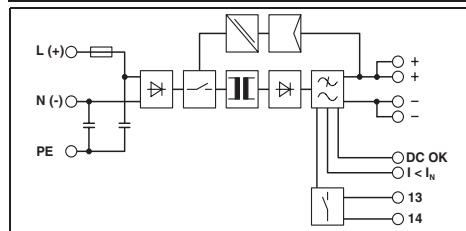
QUINT POWER SFB 1~

Make use of the functional advantages of the especially slim and narrow QUINT POWER SFB power supply units. The unique SFB technology and the preventive function monitoring increase the availability of your application.



Width 32 mm

Applied for: UL-EX US / CU-EX US / NW

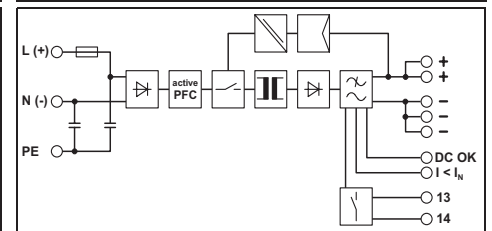


Connection data	solid	stranded	AWG	
	[mm ²]			
Input	0.2-2.5	0.2-2.5	20-12	M3
Output	0.2-2.5	0.2-2.5	20-12	M3
Signal	0.2-2.5	0.2-2.5	20-12	M3



Width 40 mm

Applied for: UL-EX US / CU-EX US / NW



Connection data	solid	stranded	AWG	
	[mm ²]			
Input	0.2-2.5	0.2-2.5	20-12	M3
Output	0.2-2.5	0.2-2.5	20-12	M3
Signal	0.2-2.5	0.2-2.5	20-12	M3

Description	Power supply unit, primary switched-mode
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Technical data

Input data

Input nominal voltage range	100 V AC ... 240 V AC
Input voltage range AC/DC	85 V AC ... 264 V AC / 90 V DC ... 350 V DC
Frequency range	45 Hz ... 65 Hz / 0 Hz
Current consumption (nominal load)	Approx. 1.4 A (120 V AC) / Approx. 0.8 A (230 V AC)
Inrush current limitation at 25°C (typ.) / I _{rt}	< 20 A / < 2 A ² s
Mains buffering (I _N , typ.)	> 20 ms (120 V AC) / > 80 ms (230 V AC)
Input fuse	5 A (slow-blow, internal)
Recommended backup fuse, LS switch	6 A, 10 A, 16 A (characteristic B)

Output data

Nominal output voltage	24 V DC ±1%
Setting range of the output voltage	18 V DC ... 29.5 V DC (> 24 V constant capacity)

Output current / POWER BOOST / SFB (12 ms)	3.5 A / 4 A / 15 A
Magnetic fuse tripping	-

Can be connected in parallel / series	Yes / Yes
Max. power dissipation (idling/nominal load)	3.5 W / 11 W
Efficiency (typ.)	> 88% (for 230 V AC and nominal values)
Residual ripple	< 50 mV _{pp}

Signaling

Signaling DC OK	LED, active switching output, relay contact
Boost signaling	LED, active switching output

General data

Weight / Dimensions W x H x D	0.5 kg / 32 x 130 x 125 mm
Installation position	Horizontal DIN rail NS 35, EN 60715
Distance during assembly	Can be aligned: horizontally 5 mm, in addition to active components of 15 mm, vertically 5 cm

Type of connection	Pluggable screw connection
Degree of protection / Class of protection	IP20 / I, with PE connection
MTBF (at nominal load, 40°C)	> 500 000 h in acc. with IEC 61709 (SN 29500)
Ambient temperature (operation)	-25°C ... 70°C (> 60°C derating)

Standards/regulations

Insulation voltage input/output	2 kV AC (routine test) / 4 kV AC (type test)
Electromagnetic compatibility	Conformance with EMC guideline 2004/108/EC and for low-voltage guideline 2006/95/EC

Electrical safety, safety transformer	IEC 60950/VDE 0805 (SELV), IEC 61558-2-17
Electronic equipm. for electrical power installations	EN 50178/VDE 0160 (PELV)
Safe isolation	DIN VDE 0100-410, DIN VDE 0106-1010
UL approvals	UL Listed UL 508, UL/C-UL Recognized UL 60950

Type	QUINT-PS/ 1AC/24DC/ 3.5	Order No.	2866747	Pcs. / Pkt.	1
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Technical data

Input data

Input nominal voltage range	100 V AC ... 240 V AC
Input voltage range AC/DC	85 V AC ... 264 V AC / 90 V DC ... 350 V DC
Frequency range	45 Hz ... 65 Hz / 0 Hz
Current consumption (nominal load)	Approx. 1.2 A (120 V AC) / Approx. 0.6 A (230 V AC)
Inrush current limitation at 25°C (typ.) / I _{rt}	< 15 A / < 1 A ² s
Mains buffering (I _N , typ.)	> 30 ms (120 V AC) / > 30 ms (230 V AC)
Input fuse	5 A (slow-blow, internal)
Recommended backup fuse, LS switch	6 A, 10 A, 16 A (characteristic B)

Output data

Nominal output voltage	24 V DC ±1%
Setting range of the output voltage	18 V DC ... 29.5 V DC (> 24 V constant capacity)

Output current / POWER BOOST / SFB (12 ms)	5 A / 7.5 A / 30 A
Magnetic fuse tripping	Max. 2 A (characteristic C)

Can be connected in parallel / series	Yes / Yes
Max. power dissipation (idling/nominal load)	3 W / 15 W
Efficiency (typ.)	> 90% (for 230 V AC and nominal values)
Residual ripple	< 40 mV _{pp}

Signaling

Signaling DC OK	LED, active switching output, relay contact
Boost signaling	LED, active switching output

General data

Weight / Dimensions W x H x D	0.7 kg / 40 x 130 x 125 mm
Installation position	Horizontal DIN rail NS 35, EN 60715
Distance during assembly	Can be aligned: horizontally 5 mm, in addition to active components of 15 mm, vertically 5 cm

Type of connection	Pluggable screw connection
Degree of protection / Class of protection	IP20 / I, with PE connection
MTBF (at nominal load, 40°C)	> 500 000 h in acc. with IEC 61709 (SN 29500)
Ambient temperature (operation)	-25°C ... 70°C (> 60°C derating)

Standards/regulations

Insulation voltage input/output	2 kV AC (routine test) / 4 kV AC (type test)
Electromagnetic compatibility	Conformance with EMC guideline 2004/108/EC and for low-voltage guideline 2006/95/EC

Electrical safety, safety transformer	IEC 60950/VDE 0805 (SELV), IEC 61558-2-17
Electronic equipm. for electrical power installations	EN 50178/VDE 0160 (PELV)
Safe isolation	DIN VDE 0100-410, DIN VDE 0106-1010
UL approvals	UL Listed UL 508, UL/C-UL Recognized UL 60950

Type	QUINT-PS/ 1AC/24DC/ 5	Order No.	2866750	Pcs. / Pkt.	1
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QUINT 24 V DC/10 A

1 AC



QUINT 24 V DC/20 A

1 AC



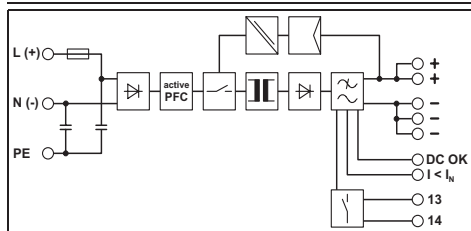
QUINT 24 V DC/40 A

1 AC



Width 60 mm

Applied for UL-EX US / CU-EX US / NV



Connection data	solid	stranded	AWG	
	[mm ²]			
Input	0.2-2.5	0.2-2.5	16-12	M3
Output	0.2-2.5	0.2-2.5	16-12	M3
Signal	0.2-2.5	0.2-2.5	16-12	M3

Type	Order No.	Pcs. / Pkt.
QUINT-PS/ 1AC/24DC/10	2866763	1

100 V AC ... 240 V AC
85 V AC ... 264 V AC / 90 V DC ... 350 V DC
45 Hz ... 65 Hz / 0 Hz
Approx. 2.8 A (120 V AC) / Approx. 1.2 A (230 V AC)
< 15 A / < 1.5 A²s
> 40 ms (120 V AC) / > 40 ms (230 V AC)
6.3 A (slow-blow, internal)
10 A, 16 A (characteristic B)

24 V DC ±1%
18 V DC ... 29.5 V DC (> 24 V constant capacity)

10 A / 15 A / 60 A
Max. 6 A (characteristic B), max 4 A (characteristic C)

Yes / Yes
7 W / 18 W
> 92.5% (for 230 V AC and nominal values)
< 30 mV_{PP}

LED, active switching output, relay contact
LED, active switching output

1.1 kg / 60 x 130 x 125 mm
Horizontal DIN rail NS 35, EN 60715
Can be aligned: horizontally 5 mm, in addition to active components of 15 mm, vertically 5 mm
Pluggable screw connection
IP20 / I, with PE connection
> 500 000 h in acc. with IEC 61709 (SN 29500)
-25°C ... 70°C (> 60°C derating)

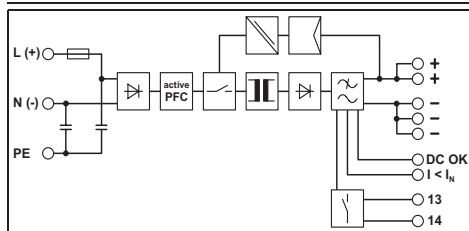
2 kV AC (routine test) / 4 kV AC (type test)
Conformance with EMC guideline 2004/108/EC and for low-voltage guideline 2006/95/EC
IEC 60950/VDE 0805 (SELV), IEC 61558-2-17
EN 50178/VDE 0160 (PELV)
DIN VDE 0100-410, DIN VDE 0106-1010
UL Listed UL 508, UL/C-UL Recognized UL 60950

EN 61000-3-2



Width 90 mm

Applied for UL-EX US / CU-EX US / NV



Connection data	solid	stranded	AWG	
	[mm ²]			
Input	0.2-6	0.2-4	18-10	M4
Output	0.2-6	0.2-4	12-10	M4
Signal	0.2-6	0.2-4	18-10	M4

Type	Order No.	Pcs. / Pkt.
QUINT-PS/ 1AC/24DC/20	2866776	1

100 V AC ... 240 V AC
85 V AC ... 264 V AC / 90 V DC ... 350 V DC
45 Hz ... 65 Hz / 0 Hz
Approx. 5.1 A (120 V AC) / Approx. 2.3 A (230 V AC)
< 20 A / < 3.2 A²s
> 20 ms (120 V AC) / > 20 ms (230 V AC)
12 A (slow-blow, internal)
10 A, 16 A (characteristic B)

24 V DC ±1%
18 V DC ... 29.5 V DC (> 24 V constant capacity)

20 A / 26 A / 120 A
Max. 16 A (characteristic B), max 6 A (characteristic C)

Yes / Yes
8 W / 40 W
> 93% (for 230 V AC and nominal values)
< 30 mV_{PP}

LED, active switching output, relay contact
LED, active switching output

1.7 kg / 90 x 130 x 125 mm
Horizontal DIN rail NS 35, EN 60715
Can be aligned: horizontally 5 mm, in addition to active components of 15 mm, vertically 5 mm
Screw connection
IP20 / I, with PE connection
> 500 000 h in acc. with IEC 61709 (SN 29500)
-25°C ... 70°C (> 60°C derating)

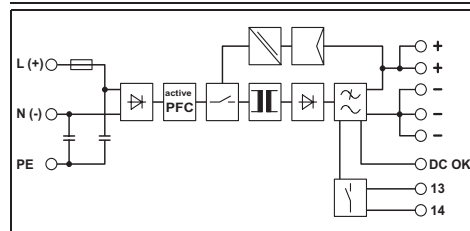
2 kV AC (routine test) / 4 kV AC (type test)
Conformance with EMC guideline 2004/108/EC and for low-voltage guideline 2006/95/EC
IEC 60950/VDE 0805 (SELV), IEC 61558-2-17
EN 50178/VDE 0160 (PELV)
DIN VDE 0100-410, DIN VDE 0106-1010
UL Listed UL 508, UL/C-UL Recognized UL 60950

EN 61000-3-2



Width 240 mm

EX:



Connection data	solid	stranded	AWG	
	[mm ²]			
Input	0.2-6	0.2-4	24-10	M3
Output	0.5-16	0.5-10	20-6	M4
Signal	0.2-6	0.2-4	24-10	M3

Type	Order No.	Pcs. / Pkt.
QUINT-PS-100-240AC/24DC/40	2938879	1

110 V AC ... 240 V AC
85 V AC ... 264 V AC / 90 V DC ... 350 V DC
45 Hz ... 65 Hz / 0 Hz
Approx. 11 A (120 V AC) / Approx. 4.5 A (230 V AC)
< 15 A / < 3.2 A²s
> 20 ms (120 V AC) / > 20 ms (230 V AC)
20 A (fast blow, internal)
16 A, 25 A (characteristic B)

24 V DC ±1%
22.5 V DC ... 29.5 V DC (> 24 V constant capacity)

40 A / 45 A
-

Yes / Yes
28 W / 80 W
> 92% (for 230 V AC and nominal values)
< 30 mV_{PP}

LED, active switching output, relay contact
-

3.5 kg / 240 x 130 x 125 mm
Horizontal DIN rail NS 35, EN 60715
Can be aligned: Horizontal 0 cm, vertical 5 mm
Screw connection
IP20 / I, with PE connection
> 500 000 h in acc. with IEC 61709 (SN 29500)
-25°C ... 70°C (> 60°C derating)

2 kV AC (routine test) / 3 kV AC (type test)
Conformance with EMC guideline 2004/108/EC and for low-voltage guideline 2006/95/EC
EN 60950/VDE 0805 (SELV), EN 61558-2-17
EN 50178/VDE 0160 (PELV)
DIN VDE 0100-410, DIN VDE 0106-1010
UL/C-UL listed UL 508, UL/C-UL Recognized UL 60950, UL/C-UL Listed UL 1604 Class I, Division 2, Groups A, B, C, D

EN 61000-3-2