Extract from the online catalog

QUINT-PS/ 1AC/48DC/ 5

Order No.: 2866679

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Commercial data	
GTIN (EAN)	4 046356 307895
sales group	H036
Pack	1 pcs.
Customs tariff	85044082
Catalog page information	Page 587 (IF-2011)

Product notes

WEEE/RoHS-compliant since: 02/17/2008

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Product description

QUINT POWER power supply units – Maximum system availability with SFB technology

Compact power supply units of the new QUINT POWER generation maximize the availability of your system. With the SFB technology (Selective Fuse Breaking Technology), six times the nominal current for 12 ms, even the standard power circuit-breakers can now also be triggered reliably and quickly. Faulty current paths are switched off selectively, the fault is located and important system parts continue to operate. Comprehensive diagnostics are provided through constant monitoring of output voltage and current. This preventive function monitoring visualizes critical operating modes and reports them to the control unit before an error can occur.

Technical data

Input data

Nominal input voltage	100 V AC ... 240 V AC
AC input voltage range	85 V AC ... 264 V AC
DC input voltage range	90 V DC ... 350 V DC
Short-term input voltage	300 V AC
AC frequency range	45 Hz ... 65 Hz
DC frequency range	0 Hz
Current consumption	Approx. 2.8 A (120 V AC)
	Approx. 1.2 A (230 V AC)
Inrush surge current	< 15 A (typical)
Power failure bypass	> 40 ms (120 V AC)
	> 40 ms (230 V AC)
Input fuse	6.3 A (slow-blow, internal)
Permissible backup fuse	B10
	B16
Additional text	AC: 1 x circuit breaker - recommended fuse
Type of protection	Transient surge protection
Protective circuit/component	Varistor

Output data

Nominal output voltage	48 V DC ±1%
Setting range of the output voltage	30 V DC ... 56 V DC (> 48 V constant capacity)
Output current	5 A (-25 °C ... 60 °C)
	7.5 A (with POWER BOOST, -25°C ... 40°C permanent)
	30 A (SFB technology, 12 ms)
	7.5 A ($U_{In} \geq$ 100 V AC)
Magnetic fuse tripping	C2
Derating	60 °C ... 70 °C (2.5%/K)
Connection in parallel	Yes, for redundancy and increased capacity
Connection in series	Yes
Control deviation	< 1 % (change in load, static 10% ... 90%)
	< 2 % (change in load, dynamic 10% ... 90%)
	< 0.1 % (change in input voltage ±10%)
Residual ripple	< 50 mV_{PP} (with nominal values)

Maximum power dissipation NO-Load	7 W
Power loss nominal load max.	21 W

General data

Width	60 mm
Height	130 mm
Depth	125 mm
Width with alternative assembly	122 mm
Height with alternative assembly	130 mm
	63 mm
Net weight	1.1 kg
Efficiency	> 92.5 % (for 230 V AC and nominal values)
Insulation voltage input/output	4 kV AC (type test)
	2 kV AC (routine test)
Degree of protection	IP20
Protection class	I
MTBF (IEC 61709, SN 29500)	> 500000 h (According to IEC 61709)
Ambient temperature (operation)	-25 °C ... 70 °C (> 60 °C derating)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Max. permissible relative humidity (operation)	95 % (at 25 °C, no condensation)
Mounting position	horizontal DIN rail NS 35, EN 60715
Assembly instructions	Can be aligned: 5 mm horizontally, 15 mm next to active components, 5 cm vertically
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 50081-2
Noise immunity	EN 61000-6-2:2005
Low Voltage Directive	Conformance with LV directive 2006/95/EC
Standard – Electrical equipment of machines	EN 60204
Standard - Safety of transformers	IEC 61558-2-17
Standard - Electrical safety	IEC 60950-1/VDE 0805 (SELV)
Standard – Electronic equipment for use in electrical power installations and their assembly into electrical power installations	EN 50178/VDE 0160 (PELV)
Standard – Safety extra-low voltage	IEC 60950-1 (SELV) and EN 60204 (PELV)
Standard - Safe isolation	DIN VDE 0100-410
	DIN VDE 0106-1010
Standard – Protection against electric shock	DIN 57100-410

Standard – Protection against shock currents, basic requirements for protective separation in electrical equipment	DIN VDE 0106-101
Standard – Limitation of mains harmonic currents	EN 61000-3-2
Standard – Equipment safety	GS (tested safety)
Standard - Approval for medical use	IEC 60601
Approval - requirement of the semiconductor industry with regard to mains voltage dips	Semi F47-0706
Certificate	CB Scheme
UL approvals	UL Listed UL 508
	UL/C-UL Recognized UL 60950
	UL listed ANSI/ISA-12.12.01 class I, division 2, groups A, B, C, D
Surge voltage category	III

Connection data, input

Connection method	Pluggable screw connection
Conductor cross section solid min.	0.2 mm²
Conductor cross section solid max.	2.5 mm²
Conductor cross section stranded min.	0.2 mm²
Conductor cross section stranded max.	2.5 mm²
Conductor cross section AWG/kcmil min.	16
Conductor cross section AWG/kcmil max	12
Stripping length	7 mm
Screw thread	M3

Connection data, output

Connection method	Pluggable screw connection
Conductor cross section solid min.	0.2 mm²
Conductor cross section solid max.	2.5 mm²
Conductor cross section stranded min.	0.2 mm²
Conductor cross section stranded max.	2.5 mm²
Conductor cross section AWG/kcmil min.	16
Conductor cross section AWG/kcmil max	12
Stripping length	7 mm

Signaling

Output name	DC OK active
Output description	U_{OUT} > 0.9 x U_N: High signal

Maximum switching voltage	+ 24 V DC
Maximum inrush current	min. 20 mA (short-circuit resistant)
Continuous load current	≤ 20 mA
Status display	U_{OUT} > 0.9 x U_N: "DC OK" LED green
Note on status display	U_{OUT} < 0.9 x U_N: Flashing "DC OK" LED
	I_{OUT} < I_N: LED ON
Conductor cross section solid min.	0.2 mm²
Conductor cross section solid max.	2.5 mm²
Conductor cross section stranded min.	0.2 mm²
Conductor cross section stranded max.	2.5 mm²
Conductor cross section AWG/kcmil min.	16
Conductor cross section AWG/kcmil max	12
Tightening torque, min	0.5 Nm
Tightening torque max	0.6 Nm
Screw thread	M3
Output name	DC OK floating
Output description	Relay contact, U_{OUT} > 0.9 x U_N: Contact closed
Maximum switching voltage	≤ 30 V AC/DC
Maximum inrush current	≤ 1 A
Continuous load current	≤ 1 A
Status display	U_{OUT} > 0.9 x U_N: "DC OK" LED green
Note on status display	U_{OUT} < 0.9 x U_N: Flashing "DC OK" LED
Output name	POWER BOOST, active
Output description	I_{OUT} < I_N: High signal
Maximum switching voltage	+ 24 V DC
Maximum inrush current	min. 20 mA (short-circuit resistant)
Continuous load current	≤ 20 mA
Status display	I_{OUT} > I_N: LED "BOOST" yellow

Address

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