

Redundancy module, with protective coating - QUINT-ORING/24DC/2X10/1X20 - 2320173

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Active QUINT redundancy module for DIN rail mounting with Auto Current Balancing ACB technology and monitoring functions, input: 24 V DC, output: 24 V DC/2 x 10 A or 1 x 20 A, including mounted UTA 107/30 universal DIN rail adapter

Product Description

The Auto Current Balancing ACB technology of the QUINT ORING modules doubles the service life of redundantly operated power supplies by evenly utilizing the power supply units. The load current is automatically distributed symmetrically.

Why buy this product

- Service life of the redundant solution is doubled, thanks to uniform distribution of the load
- Save energy
- Permanent monitoring of redundancy
- Consistent redundancy up to the load



Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 524902
GTIN	4046356524902
Weight per Piece (excluding packing)	400.000 g
Custom tariff number	85049091
Country of origin	China

Technical data

Dimensions

Width	32 mm
Height	130 mm
Depth	125 mm
Width with alternative assembly	122 mm
Height with alternative assembly	130 mm

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Technical data

Dimensions

Depth with alternative assembly	35 mm
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Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 70 °C (> 60 °C Derating: 2.5 %/K)
Ambient temperature (start-up type tested)	-40 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Max. permissible relative humidity (operation)	≤ 100 % (at 25 °C, non-condensing)
Climatic class	3K3 (in acc. with EN 60721)
Degree of pollution	2
Installation height	2000 m

Input data

Nominal input voltage range	24 V DC
Input voltage range	18 V DC ... 28 V DC (SELV)
Nominal input current	2x 10 A (-25 °C ... 60 °C) 1x 20 A (-25 °C ... 60 °C)
Maximum input current	2x 15 A (-25 °C ... 40 °C) 1x 30 A (-25 °C ... 40 °C) 60 A (12 ms, SFB Technology)

Output data

Nominal output voltage	0.1 V (< DC input)
Nominal output current (I _N)	20 A (Increasing power) 10 A (Redundancy)
Derating	60 °C ... 70 °C (2.5%/K)
Connection in series	No
Circuit breaker against surge voltage at output by invasive foreign matter	≤ 32 V DC
Power loss nominal load max.	2 W (I _{OUT} = 20 A)

General

Net weight	0.4 kg
Efficiency	> 98 %
Protection class	III
Degree of protection	IP20
	> 1000000 h (40 °C)
Mounting position	horizontal DIN rail NS 35, EN 60715
Assembly instructions	alignable: P _N ≥ 50 %, 5 mm horizontally, 15 mm next to active components, 50 mm vertically alignable: P _N < 50 %, 0 mm horizontally, 40 mm vertically top, 20 mm vertically bottom

Connection data, input

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Technical data

Connection data, input

Connection method	Screw connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	4 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section AWG min.	14
Conductor cross section AWG max.	12
Stripping length	8 mm
Screw thread	M3

Connection data, output

Connection method	Screw connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	6 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	4 mm ²
Conductor cross section AWG min.	10
Stripping length	7 mm
Screw thread	M3

Connection data for signaling

Connection method	Screw connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	4 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section AWG min.	16
Conductor cross section AWG max.	12
Stripping length	10 mm
Screw thread	M3

Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Noise immunity	EN 61000-6-2:2005
Connection in acc. with standard	CUL
Standards/regulations	EN 61000-4-2
Contact discharge	4 kV (Test Level 2)
Standards/regulations	EN 61000-4-3
Frequency range	80 MHz ... 1 GHz
Test field strength	10 V/m (Test Level 3)
Frequency range	1.4 GHz ... 2 GHz

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Technical data

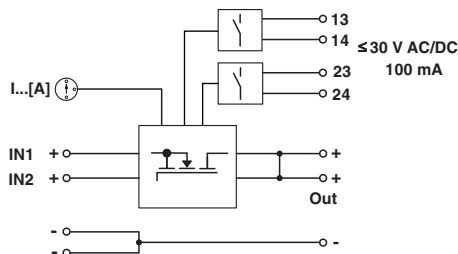
Standards and Regulations

Test field strength	3 V/m (Test Level 2)
Standards/regulations	EN 61000-4-4
Comments	Criterion B
Standards/regulations	EN 61000-4-5
Signal	1 kV (Test Level 2 - asymmetrical)
Standards/regulations	EN 61000-6-3
	EN 61000-4-6
Frequency range	0.15 MHz ... 80 MHz
Voltage	10 V (Test Level 3)
Low Voltage Directive	Conformance with Low Voltage Directive 2006/95/EC
Standard - Electrical safety	EN 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 60204-1 (PELV)
UL approvals	UL/C-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)
Shock	18 ms, 30g, in each space direction (according to IEC 60068-2-27)
Vibration (operation)	< 15 Hz, amplitude ±2.5 mm (according to IEC 60068-2-6)
	15 Hz ... 150 Hz, 2.3g t _v = 90 min.
Noxious gas test	ISA-S71.04-1985 G3 Harsh Group A
ATEX	# II 3 G Ex nA IIC T4 Gc
	DEKRA 11ATEX0031 X
IECEX	Ex nA IIC T4 Gc
	IECEX DEK 11.0015X
Assembly instructions	alignable: P _N ≥50 %, 5 mm horizontally, 15 mm next to active components, 50 mm vertically alignable: P _N <50 %, 0 mm horizontally, 40 mm vertically top, 20 mm vertically bottom
Mounting position	horizontal DIN rail NS 35, EN 60715

Drawings

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Block diagram



Classifications

eCl@ss

eCl@ss 4.0	27250311
eCl@ss 4.1	27250311
eCl@ss 5.0	27242213
eCl@ss 5.1	27242213
eCl@ss 6.0	27049005
eCl@ss 7.0	27049005
eCl@ss 8.0	27371010
eCl@ss 9.0	27371010

ETIM

ETIM 3.0	EC000599
ETIM 4.0	EC000599
ETIM 5.0	EC000683
ETIM 6.0	EC000683

UNSPSC

UNSPSC 6.01	30211502
UNSPSC 7.0901	39121004
UNSPSC 11	39121004
UNSPSC 12.01	39121004
UNSPSC 13.2	32151504

Approvals

Approvals

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UL Recognized / UL Listed / cUL Recognized / cUL Listed / RINA / NK / LR / ABS / EAC / EAC / BV / DNV GL / cULus Recognized / cULus Listed

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Approvals

Ex Approvals

UL Listed / cUL Listed / IECEx / ATEX / cULus Listed

Approval details

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 211944
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UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 123528
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cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 211944
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cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 123528
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RINA		http://www.rina.org/en	ELE004715XG
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NK		http://www.classnk.or.jp/hp/en/	14A002
mm ² /AWG/kcmil	10		
Nominal current I _N	63 A		
Nominal voltage U _N	500 V		

LR		http://www.lr.org/en	14-20005
mm ² /AWG/kcmil	6		
Nominal current I _N	41 A		
Nominal voltage U _N	500 V		

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Approvals

ABS		http://www.eagle.org/eagleExternalPortalWEB/	15-GD1354693-PDA
EAC			EAC-Zulassung
EAC			RU C-DE.A*30.B.01082
BV		http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials	36077/A1 BV
DNV GL		http://exchange.dnv.com/tari/	TAA000011F
cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	
cULus Listed			

Accessories

Accessories

Assembly adapter

Assembly adapters - UTA 107/30 - 2320089



Universal DIN rail adapter

Assembly adapters - UWA 182/52 - 2938235



Universal wall adapter for securely mounting the power supply in the event of strong vibrations. The power supply is screwed directly onto the mounting surface. The universal wall adapter is attached at the top/bottom.

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Accessories

Assembly adapters - QUINT-PS-ADAPTERS7/1 - 2938196



Assembly adapter for QUINT-PS... power supply on S7-300 rail