

Redundancy module - QUINT-ORING/24DC/2X40/1X80 - 2902879

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Active QUINT redundancy module for DIN rail mounting with ACB (Auto Current Balancing) Technology and monitoring functions, input: 24 V DC/2x 40 A, output: 24 V DC/1 x 80 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.

Your advantages

- 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 pc
GTIN	
GTIN	4046356698276
Weight per Piece (excluding packing)	900.000 g
Custom tariff number	85049091
Country of origin	China

Technical data

Dimensions

Width	66 mm
Height	130 mm
Depth	125 mm
Width with alternative assembly	122 mm
Height with alternative assembly	130 mm
Depth with alternative assembly	69 mm

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Technical data

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)	≤ 95 % (at 25 °C, non-condensing)
Climatic class	3K3 (in acc. with EN 60721)
Degree of pollution	2
Installation height	2000 m
	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 40 A (-25 °C ... 60 °C)
	1x 80 A (-25 °C ... 60 °C)
Maximum input current	2x 45 A (-25 °C ... 40 °C)
	1x 90 A (-25 °C ... 40 °C)
	215 A (12 ms, SFB Technology)

Output data

Nominal output voltage	0.2 V (< DC input)
	24 V DC
Nominal output current (I _N)	80 A (Increasing power)
	40 A (Redundancy)
Derating	60 °C ... 70 °C (2.5%/K)
Connection in series	No
Output overvoltage protection	≤ 32 V DC
Power loss nominal load max.	16 W (I _{OUT} = 80 A)

General

Net weight	0.9 kg
Efficiency	> 98 %
Protection class	III
Degree of protection	IP20
	> 720000 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

Connection method	Screw connection
Conductor cross section solid min.	0.5 mm ²

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Technical data

Connection data, input

Conductor cross section solid max.	16 mm ²
Conductor cross section flexible min.	0.5 mm ²
Conductor cross section flexible max.	16 mm ²
Conductor cross section AWG min.	6
Stripping length	10 mm
Screw thread	M4

Connection data, output

Connection method	Screw connection
Conductor cross section solid min.	0.5 mm ²
Conductor cross section solid max.	35 mm ²
Conductor cross section flexible min.	0.5 mm ²
Conductor cross section flexible max.	35 mm ²
Conductor cross section AWG min.	2
Stripping length	18 mm
Screw thread	M5

Connection data for signaling

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.	16
Conductor cross section AWG max.	10
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
Test field strength	3 V/m (Test Level 2)
Standards/regulations	EN 61000-4-4
Comments	Criterion B
Standards/regulations	EN 61000-6-3

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Standards and Regulations

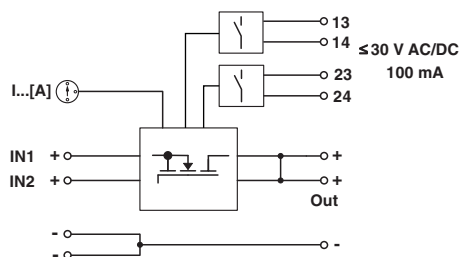
	EN 61000-4-6
Frequency range	0.15 MHz ... 80 MHz
Voltage	10 V (Test Level 3)
Low Voltage Directive	Conformance with LV directive 2006/95/EC
Standard - Electrical safety	EN 60950-1/VDE 0805 (SELV)
Standard – Electronic equipment for use in electrical power installations and their assembly into electrical 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, 90 min.

Environmental Product Compliance

	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 25;
	For details about hazardous substances go to tab “Downloads”, Category “Manufacturer's declaration”

Drawings

Block diagram



Classifications

eCl@ss

eCl@ss 4.0	27250311
eCl@ss 4.1	27250311
eCl@ss 5.0	27242213
eCl@ss 5.1	27371000
eCl@ss 6.0	27371000
eCl@ss 7.0	27371010
eCl@ss 8.0	27371010

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Classifications

eCl@ss

eCl@ss 9.0	27371010
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ETIM

ETIM 3.0	EC000599
ETIM 4.0	EC000599
ETIM 5.0	EC002540
ETIM 6.0	EC002540
ETIM 7.0	EC002540

UNSPSC

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

Approvals

Approvals

Approvals

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


Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approval details

DNV GL		http://exchange.dnv.com/tari/	TAA000011F
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BV		http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials	36077/A1 BV
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LR		http://www.lr.org/en	14-20005
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Nominal voltage UN	500 V
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Approvals

Nominal current IN	41 A
mm ² /AWG/kcmil	6

NK		http://www.classnk.or.jp/hp/en/	14A002
Nominal voltage UN	500 V		
Nominal current IN	63 A		
mm ² /AWG/kcmil	10		

ABS	http://www.eagle.org/eagleExternalPortalWEB/	15-GD1354693-PDA
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RINA		http://www.rina.org/en	ELE004715XG
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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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UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 211944
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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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EAC		EAC-Zulassung
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EAC		RU C-DE.A*30.B.01082
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Approvals

cULus Recognized



cULus Listed



Accessories

Accessories

Assembly adapter

Assembly adapters - UWA 182/52 - 2938235



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

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



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

Mounting rail adapter

DIN rail adapter - UTA 107 - 2853983

Universal DIN rail adapter

