

## Redundancy module - QUINT-ORING/24DC/2X20/1X40 - 2320186

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Active QUINT redundancy module for DIN rail mounting with integrated SFB (selective fuse breaking) technology and monitoring functions, input: 24 V DC, output: 24 V DC/2 x 20 A or 1 x 40 A, including mounted universal DIN rail adapter UTA 107/30

### Product Features

- 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
Weight per Piece (excluding packing)	752.8 GRM
Custom tariff number	85049091
Country of origin	China

### Technical data

#### Dimensions

Width	38 mm
Height	130 mm
Depth	125 mm
Width with alternative assembly	122 mm
Height with alternative assembly	130 mm
Depth with alternative assembly	41 mm

#### Ambient conditions

Degree of protection	IP20
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#### Ambient conditions

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, non-condensing)
Noise immunity	EN 61000-6-2:2005

#### Input data

Nominal input voltage	24 V DC
Input voltage range	18 V DC ... 28 V DC (SELV)
Type of protection	Protection against static surge voltages > 30 V
Nominal input current $I_N$	2x 20 A (-25 °C ... 60 °C)
	1x 40 A (-25 °C ... 60 °C)
Maximum current $I_{max}$	2x 26 A (-25 °C ... 40 °C)
	1x 52 A (-25 °C ... 40 °C)

#### Output data

Nominal output voltage	0.2 V (< DC input)
Output current	40 A (Increasing power)
	20 A (Redundancy)
Derating	60 °C ... 70 °C (2.5%/K)
Power loss nominal load max.	8 W ( $I_{OUT} = 40$ A)

#### General

Net weight	0.6 kg
Efficiency	> 98 %
Protection class	III
MTBF (IEC 61709, SN 29500)	> 720000 h (According to EN 29500)
Mounting position	horizontal DIN rail NS 35, EN 60715
Assembly instructions	Alignable: 5 mm horizontally, 15 mm next to active components, 50 mm vertically
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Low Voltage Directive	Conformance with LV directive 2006/95/EC
ATEX	# II 3 G Ex nA IIC T4 Gc
	DEKRA 11ATEX0031 X
IECEX	Ex nA IIC T4 Gc
	IECEX DEK 11.0015X
Standard – Electrical equipment of machines	EN 60204
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)

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### Technical data

#### General

Standard – Safety extra-low voltage	IEC 60950-1 (SELV) and EN 60204 (PELV)
UL approvals	UL/C-UL listed UL 508
	UL/C-UL Recognized UL 60950
	UL ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D (Hazardous Location)

#### Connection data, input

Connection method	Screw connection
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	6 mm <sup>2</sup>
Conductor cross section stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	4 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	10
Stripping length	8 mm
Screw thread	M3

#### Connection data, output

Connection method	Screw connection
Conductor cross section solid min.	0.5 mm <sup>2</sup>
Conductor cross section solid max.	16 mm <sup>2</sup>
Conductor cross section stranded min.	0.5 mm <sup>2</sup>
Conductor cross section stranded max.	16 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	6
Stripping length	10 mm

#### Signaling

Output name	Redundancy OK, 13/14
Output description	Group contact
Maximum switching voltage	max. 30 V AC/DC
Maximum inrush current	≤ 100 mA (short-circuit resistant)
Status display	LED redundancy OK
Note on status display	Green
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	6 mm <sup>2</sup>
Conductor cross section stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	4 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	16
Conductor cross section AWG/kcmil max	10
Tightening torque, min	0.5 Nm

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## Technical data

### Signaling

Tightening torque max	0.6 Nm
Screw thread	M3
Output name	ACB (Auto Current Balancing) OK, 23/24
Output description	Contact closed: $\Delta U_{IN} \leq 300 \text{ mV}$
Maximum switching voltage	max. 30 V AC/DC
Maximum inrush current	$\leq 100 \text{ mA}$ (short-circuit resistant)
Status display	ACB OK LED
Note on status display	LED bar graph green

## 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	27049005

### ETIM

ETIM 3.0	EC000599
ETIM 4.0	EC000599
ETIM 5.0	EC002540

### UNSPSC

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

## Approvals

### Approvals

#### Approvals

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

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## Approvals

Ex Approvals

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

Approvals submitted

## Approval details

UL Recognized

UL Listed

cUL Recognized

cUL Listed

RINA

GL

cUL Listed

BV

NK	
mm <sup>2</sup> /AWG/kcmil	10

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### Approvals

Nominal current IN	63 A
Nominal voltage UN	500 V

LR	
mm <sup>2</sup> /AWG/kcmil	6
Nominal current IN	41 A
Nominal voltage UN	500 V

DNV
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ABS
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cULus Recognized
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cULus Listed
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### Drawings

Block diagram

