

## 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

### 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 PCE
Catalog page	Page 626 (IF-2011)
GTIN	 4 046356 524919
Custom tariff number	85044090
Country of origin	CHINA

### Technical data

#### Input data

Nominal input voltage	24 V DC
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)
Nominal input current $I_N$	1x 40 A (-25 °C ... 60 °C)
Maximum current $I_{max}$	2x 26 A (-25°C ... 40°C)

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## Technical data

### Input data

Maximum current $I_{max}$	1x 52 A (-25°C ... 40°C)
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### Output data

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

### General data

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
Net weight	0.6 kg
Efficiency	> 98 %
Degree of protection	IP20
Protection class	III
MTBF (IEC 61709, SN 29500)	> 720000 h (According to EN 29500)
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	Alignable: 5 mm horizontally, 15 mm next to active components, 50 mm vertically
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
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 - 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 (PELV)
UL approvals	UL/C-UL listed UL 508
UL approvals	UL/C-UL Recognized UL 60950
UL approvals	UL ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D (Hazardous Location)

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### Technical data

#### 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
Conductor cross section AWG/kcmil max	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
Conductor cross section AWG/kcmil max	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.	24
Conductor cross section AWG/kcmil max	10
Tightening torque, min	0.5 Nm
Tightening torque max	0.6 Nm
Screw thread	M3
Output name	ACB (Auto Current Balancing) OK, 23/24
Output description	Contact closed: $\Delta U_{IN} \leq 300 \text{ mV}$

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## Technical data

### Signaling

Maximum switching voltage	max. 30 V AC/DC
Maximum inrush current	≤ 100 mA (short-circuit resistant)
Status display	ACB OK LED
Note on status display	LED bar graph green

## Classifications

### ETIM

ETIM 3.0	EC000599
ETIM 4.0	EC000599
ETIM 5.0	EC000599

### UNSPSC

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

### 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

## Approvals

### Approvals

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#### Approvals

UL Recognized / UL Listed / cUL Recognized / cUL Listed / RINA / GL / cULus Recognized / cULus Listed

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#### Ex Approvals

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

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## Approvals


Approvals submitted


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### Approval details

UL Recognized 

UL Listed 


cUL Recognized 

cUL Listed 

RINA

GL

cULus Recognized 

cULus Listed 

## Accessories

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

### Accessories

Assembly adapters - UTA 107 - 2853983

Universal DIN rail adapter



Assembly adapters - UWA 182/52 - 2938235



Universal wall adapter

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



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

### Drawings

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Block diagram

