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

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Active QUINT redundancy module for DIN rail mounting with ACB technology (Active Current Balancing) and monitoring functions, input: 24 V DC, output: 24 V DC/2 x 40 A or 1 x 80 A, including mounted UTA 107 universal DIN rail adapter

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)	1240.0 GRM
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

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 70 °C (> 60 °C derating, 2.5 %/K, startup at -40°C type-tested)
Ambient temperature (storage/transport)	-40 °C ... 85 °C

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

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Ambient conditions

Max. permissible relative humidity (operation)	≤ 95 % (at 25 °C, non-condensing)
Noise immunity	EN 61000-6-2:2005
Maximum altitude	2000 m

Input data

Nominal input voltage range	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 40 A (-25 °C ... 60 °C)
	1x 80 A (-25 °C ... 60 °C)
Maximum current I_{max}	2x 45 A (-25°C ... 40°C)
	1x 90 A (-25°C ... 40°C)

Output data

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

General

Net weight	0.9 kg
Efficiency	> 98 %
Protection class	III
	> 720000 h (40°C)
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
Standard – Electrical equipment of machines	EN 60204-1
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

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

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General

	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.	0.5 mm²
Conductor cross section solid max.	16 mm²
Conductor cross section flexible min.	0.5 mm²
Conductor cross section flexible max.	16 mm²
Conductor cross section AWG min.	6
Stripping length	10 mm
Screw thread	M3

Connection data, output

Connection method	Screw connection
Conductor cross section solid min.	0.5 mm²
Conductor cross section solid max.	35 mm²
Conductor cross section flexible min.	0.5 mm²
Conductor cross section flexible max.	35 mm²
Conductor cross section AWG min.	2
Stripping length	18 mm
Screw thread	M4

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 mm²
Conductor cross section solid max.	6 mm²
Conductor cross section flexible min.	0.2 mm²
Conductor cross section flexible max.	4 mm²
Conductor cross section AWG min.	16
Conductor cross section AWG max.	10
Tightening torque, min	1.2 Nm
Tightening torque max	1.5 Nm

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Signaling

Screw thread	M3
Output name	ACB (Auto Current Balancing) OK, 23/24
Output description	Contact closed: $\Delta U_{IN} \leq 300$ mV
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
Conductor cross section solid min.	0.2 mm²
Conductor cross section solid max.	6 mm²
Conductor cross section flexible min.	0.2 mm²
Conductor cross section flexible max.	4 mm²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	10
Tightening torque, min	0.5 Nm
Tightening torque max	0.6 Nm
Screw thread	M3
Maximum inrush current	≤ 100 mA (short-circuit resistant)

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	27049002

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

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

Classifications

UNSPSC

UNSPSC 12.01	39121004
UNSPSC 13.2	39121004

Approvals

Approvals

Approvals

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

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approvals submitted

Approval details

UL Recognized

cUL Recognized

UL Listed

cUL Listed

EAC

RINA

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

Approvals

GL

EAC

BV

DNV

NK

mm²/AWG/kcmil	10
Nominal current IN	63 A
Nominal voltage UN	500 V

LR

mm²/AWG/kcmil	6
Nominal current IN	41 A
Nominal voltage UN	500 V

ABS

cULus Recognized

cULus Listed

Drawings

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Block diagram