

Redundancy module, with protective coating - QUINT4-S-ORING/12-24DC/1X40/VP - 1043418

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Active QUINT single redundancy module for DIN rail mounting, protective coating, input: 12 - 24 V DC, output: 12 - 24 V DC/1 x 40 A, incl. mounted UTA 107/30 universal DIN rail adapter

Product Description

Active redundancy module for superior system availability and maximum operational reliability. QUINT S-ORING enables the separate structuring of a redundant system. In combination with the new QUINT POWER power supply, the redundant system is monitored continuously.

Your advantages

- Consistent redundancy up to the load
- Input voltage and decoupling section monitored on a permanent basis
- Save energy by decoupling with MOSFET
- Protection against surge voltages in excess of 30 V DC at the output
- Protective coating with ATEX and IECEx approval for extreme environmental conditions



Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4055626607474
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)	-40 °C ... 70 °C (> 60 °C Derating: 2.5 %/K)
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	≤ 5000 m (> 2000 m, observe derating)

Input data

Nominal input voltage range	12 V DC ... 24 V DC
Input voltage range	8 V DC ... 27.5 V DC (SELV)
Current consumption	40 A
Nominal input current	40 A (-40 °C ... 60 °C)

Output data

Output voltage range	8 V DC ... 27.5 V DC
Nominal output current (I _N)	40 A
Static Boost (I _{Stat.Boost})	45 A
Dynamic Boost (I _{Dyn.Boost})	60 A (5 s)
Selective Fuse Breaking (I _{SFB})	215 A (15 ms)
Derating	60 °C ... 70 °C (2.5%/K)
Connection in series	No
Output overvoltage protection	≤ 30 V DC
Power loss nominal load max.	6.5 W (I _{OUT} = 40 A)
	6 W (I _{OUT} = 40 A)

General

Net weight	0.4 kg
Efficiency	typ. 99 % (12 V DC)
	typ. 99.2 % (24 V DC)
Protection class	III
Degree of protection	IP20
MTBF (IEC 61709, SN 29500)	> 13486000 h (25 °C)
	> 7314000 h (40 °C)
	> 3379000 h (60 °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

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Technical data

General

	alignable: P _N <50%, 0 mm horizontally, 40 mm vertically top, 20 mm vertically bottom
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Connection data, input

Connection method	Screw connection
Conductor cross section solid min.	0.5 mm ²
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.	20
Conductor cross section AWG max.	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.	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.	20
Conductor cross section AWG max.	6
Stripping length	10 mm
Screw thread	M4

Connection data for signaling

Connection method	Push-in connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	1.5 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	1.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	16
Stripping length	8 mm

Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Noise emission	Additional basic standard EN 61000-6-5 (immunity in power station)
Noise immunity	Immunity according to EN 61000-6-1 (residential), EN 61000-6-2 (industrial), and EN 61000-6-5 (power station equipment zone)
Standards/regulations	EN 61000-4-2
Contact discharge	4 kV (Test Level 2)

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Standards and Regulations

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 61000-4-6
Frequency range	0.15 MHz ... 80 MHz
Voltage	10 V (Test Level 3)
Conducted noise emission	EN 55016 EN 61000-6-4 (Class A)
Standards/regulations	EN 61000-4-8
Low Voltage Directive	Conformance with Low Voltage Directive 2014/35/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)
Standard - Safe isolation	DIN VDE 0100-410
Standard – Protection against shock currents, basic requirements for protective separation in electrical equipment	EN 50178
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.
ATEX	# II 3 G Ex nA nC IIC Gc
	SIQ 17 ATEX 020 U
IECEX	Ex nA nC IIC Gc
	IECEX SIQ 17.0006U

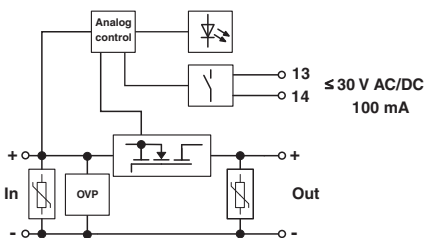
Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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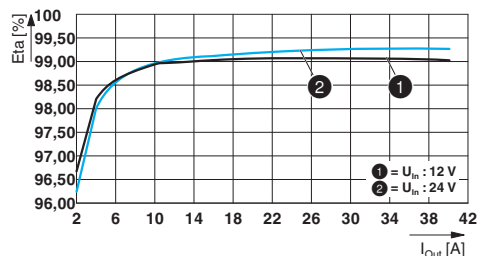
Drawings

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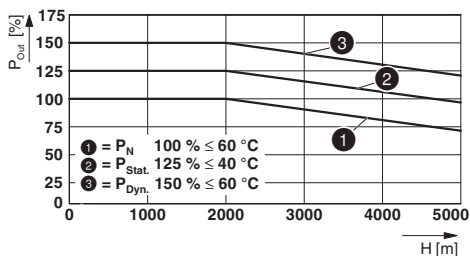
Block diagram



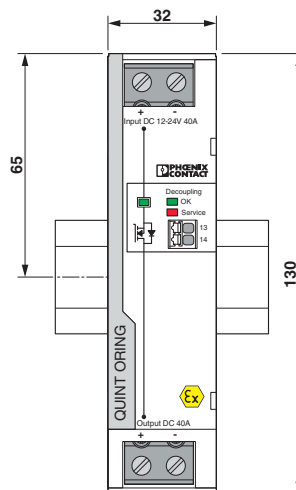
Diagram



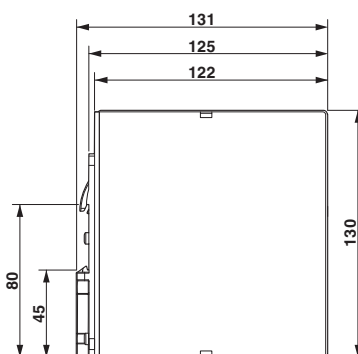
Diagram



Dimensional drawing



Dimensional drawing



Classifications

eCl@ss

eCl@ss 8.0	27371010
eCl@ss 9.0	27371010

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Classifications

ETIM

ETIM 5.0	EC000683
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Approvals

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UL Listed / UL Recognized / cUL Recognized / cUL Listed / EAC / UL Recognized / UL Listed / cUL Listed / cUL Recognized / EAC

Ex Approvals

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

Approval details

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			RU C-DE.A*30.B.01082
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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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EAC			RU C-DE.A*30.B.01082

Accessories

Accessories

Assembly 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.

Assembly adapters - UTA 107/30 - 2320089



Universal DIN rail adapter

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



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

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Accessories

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