

## Diode - QUINT4-DIODE/12-24DC/2X20/1X40 - 2907719

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DIN rail diode module 12-24 V DC/2x20 A or 1x40 A. Uniform redundancy up to the consumer.

### Product Description

A safe redundant system is the result of the parallel connection of two power supply units which are decoupled from one another. To further increase system availability, QUINT DIODE provides the solution: decoupling with diode.

### Your advantages

- Flexible mounting by simply snapping onto the DIN rail
- Save energy
- Rugged design
- Permanent monitoring of redundancy
- Consistent redundancy up to the load



### Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4055626231211

### Technical data

#### Dimensions

Width	50 mm
Height	130 mm
Depth	125 mm

#### 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)	≤ 95 % (at 25 °C, non-condensing)

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## Technical data

### Ambient conditions

Climatic class	3K3 (in acc. with EN 60721)
Degree of pollution	2
Installation height	≤ 2000 m

### Input data

Nominal input voltage range	12 V DC ... 24 V DC
	12 V DC ... 24 V DC
Input voltage range	10 V DC ... 30 V DC
	10 V DC ... 30 V DC
Nominal input current	2x 20 A (-40 °C ... 60 °C)
	1x 40 A (-40 °C ... 60 °C)
Maximum input current	2x 30 A (-40 °C ... 40 °C)
	1x 60 A (-40 °C ... 40 °C)
Nominal input current	2x 20 A (-25 °C ... 60 °C)
	1x 40 A (-25 °C ... 60 °C)
Maximum input current	2x 30 A (-25 °C ... 40 °C)
	1x 60 A (-25 °C ... 40 °C)

### Output data

Output voltage range	12 V DC ... 24 V DC
Nominal output current (I <sub>N</sub> )	40 A (Increasing power)
	20 A (Redundancy)
Derating	60 °C ... 70 °C (2.5%/K)
Connection in series	No
Power loss nominal load max.	10 W (I <sub>OUT</sub> = 20 A)

### General

Net weight	0.75 kg
Efficiency	> 97 %
Insulation voltage input/output	type test
	routine test
Insulation voltage input / PE	type test
	routine test
Protection class	III
Degree of protection	IP20
	40000000 h (40 °C)
Mounting position	horizontal DIN rail NS 35, EN 60715
Assembly instructions	alignable: P <sub>N</sub> ≥ 50%, 5 mm horizontally, 15 mm next to active components, 50 mm vertically alignable: P <sub>N</sub> < 50%, 0 mm horizontally, 40 mm vertically top, 20 mm vertically bottom

### Connection data, input

Connection method	Screw connection
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## Technical data

### Connection data, input

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

### Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
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)
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 3G Ex nA IIC T4 Gc
	KEMA 10 ATEX 0165X
IECEX	Ex nA IIC T4 Gc
	IECEX KEM 10.0091

### Environmental Product Compliance

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### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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## Approvals

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DNV GL / UL Listed / UL Recognized / cUL Recognized / cUL Listed / UL Recognized / UL Listed / cUL Listed / cUL Recognized / DNV GL / EAC

#### Ex Approvals

IECEX / ATEX / IECEX / ATEX / FM approved / FM approved / FM Canada approved / FM Canada approved

### Approval details

DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAA000011F
UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 123528
UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 211944
cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 211944
cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 123528
UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 211944

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DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAA000011F
EAC			RU C- DE.A*30.B.01082

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