Diode - QUINT-DIODE/48DC/2X20/1X40 - 2320160

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DIN rail diode module 48 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
- Rugged design
- Consistent redundancy up to the load

Key Commercial Data

Packing unit	1 pc
GTIN	4 046356 524759
GTIN	4046356524759
Weight per Piece (excluding packing)	750.000 g
Custom tariff number	85049091
Country of origin	China

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

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Technical data

Ambient conditions

Max. permissible relative humidity (operation)	≤ 95 % (at 25 °C, non-condensing)
Climatic class	3K3 (in acc. with EN 60721)
Degree of pollution	2
Installation height	2000 m

Input data

Nominal input voltage range	48 V DC
	48 V DC
Input voltage range	30 V DC ... 56 V DC
	30 V DC ... 56 V DC
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)
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

Nominal output voltage	48 V DC
Nominal output current (I_N)	40 A (Increasing power)
	20 A (Redundancy)
Derating	60 °C ... 70 °C (2.5%/K)
Connection in series	No
Power loss nominal load max.	14 W (I_{OUT} = 20 A)

General

Net weight	0.75 kg
Efficiency	> 97 %
Protection class	III
Degree of protection	IP20
MTBF (IEC 61709, SN 29500)	40000000 h
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 alignable: P_N <50%, 0 mm horizontally, 40 mm vertically top, 20 mm vertically bottom

Connection data, input

Connection method	Screw connection
Conductor cross section solid min.	0.2 mm²
Conductor cross section solid max.	6 mm²
Conductor cross section flexible min.	0.2 mm²

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Technical data

Connection data, input

Conductor cross section flexible max.	4 mm²
Conductor cross section AWG min.	12
Conductor cross section AWG max.	10
Stripping length	7 mm
Screw thread	M3

Connection data, output

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.	10
Conductor cross section AWG max.	6
Stripping length	10 mm
Screw thread	M4

Standards

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

Conformance/approvals

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)

EMC data

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Low Voltage Directive	Conformance with Low Voltage Directive 2006/95/EC
Electrostatic discharge	EN 61000-4-2
Electromagnetic HF field	EN 61000-4-3
Fast transients (burst)	EN 61000-4-4
Surge voltage load (surge)	EN 61000-4-5

Drawings

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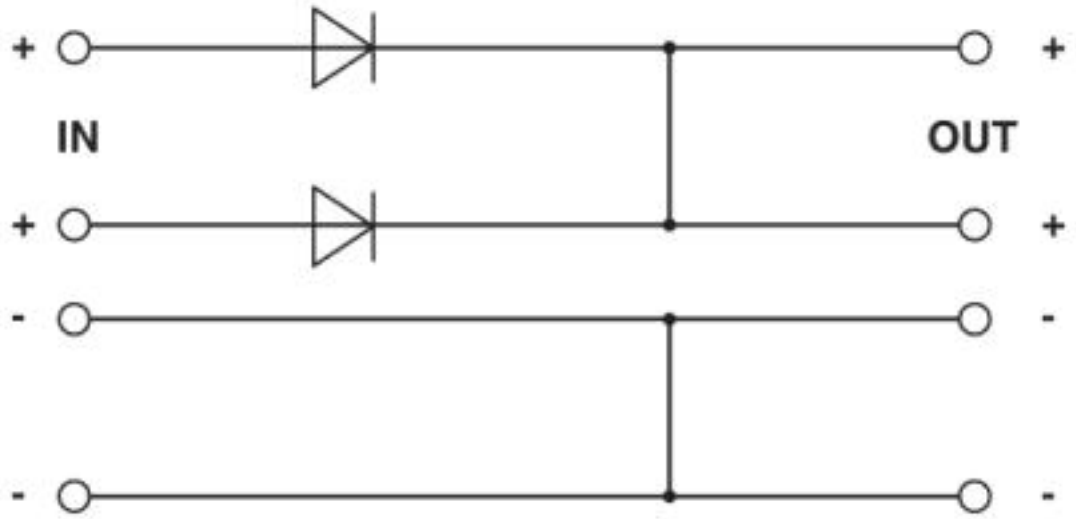
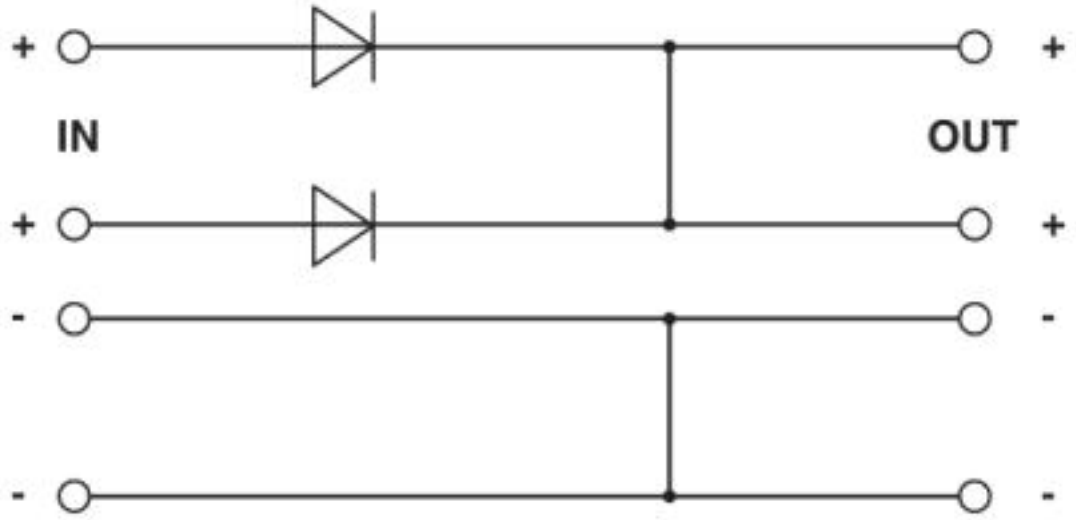
Block diagram



Block diagram



Classifications

eCl@ss

eCl@ss 4.0	27250300
eCl@ss 4.1	27250300
eCl@ss 5.0	27371000
eCl@ss 5.1	27371000
eCl@ss 6.0	27371000
eCl@ss 7.0	27371010
eCl@ss 8.0	27371010
eCl@ss 9.0	27371010

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Classifications

ETIM

ETIM 2.0	EC001039
ETIM 3.0	EC001039
ETIM 4.0	EC002540
ETIM 5.0	EC000683
ETIM 6.0	EC000683
ETIM 7.0	EC000683

UNSPSC

UNSPSC 6.01	30211502
UNSPSC 7.0901	39121004
UNSPSC 11	39121004
UNSPSC 12.01	39121004
UNSPSC 13.2	32151504

Approvals

Approvals

Approvals

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

Ex Approvals

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

Approval details

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

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Approvals

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 211944
cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 123528
EAC			EAC-Zulassung
EAC			RU C-DE.A*30.B.01082
cULus Recognized			
cULus Listed			

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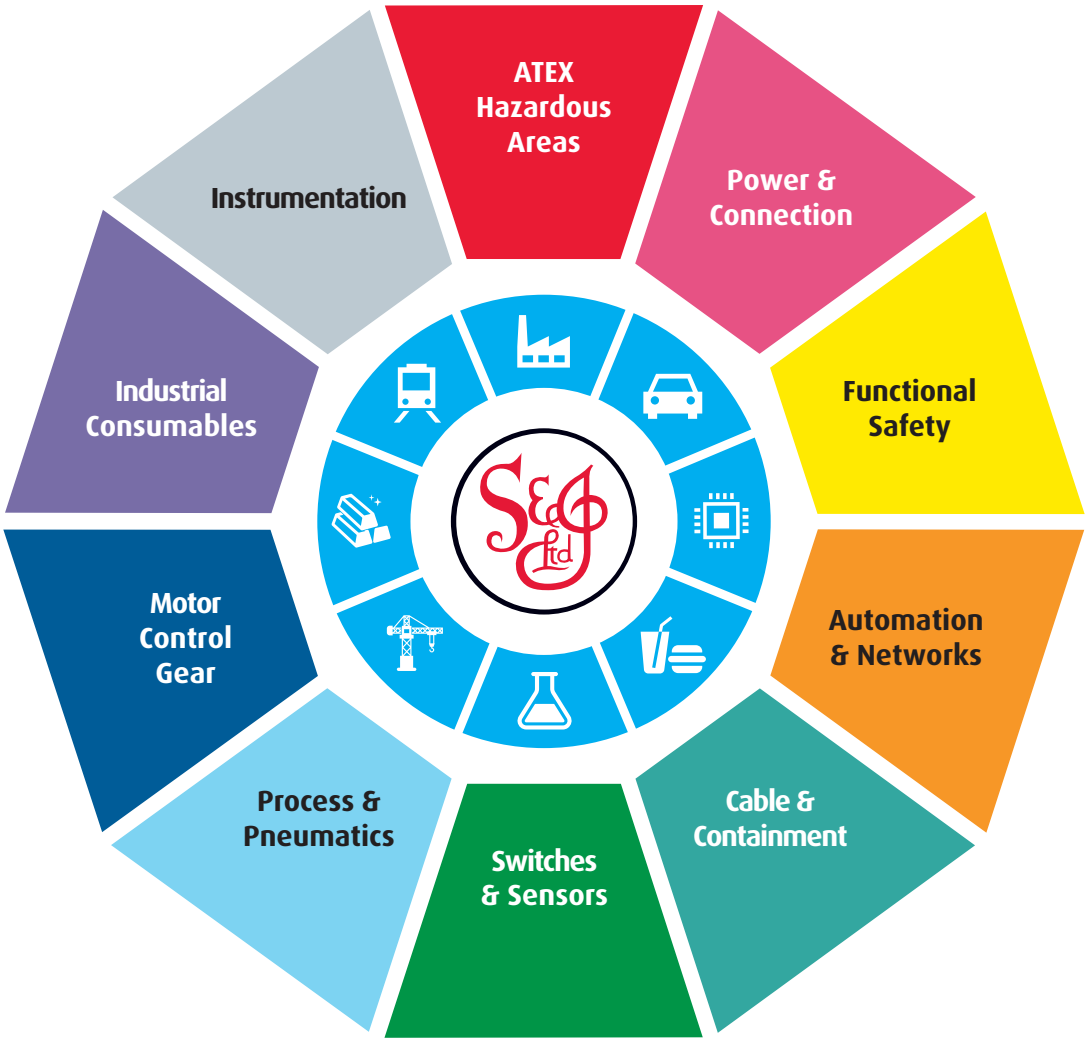

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