

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

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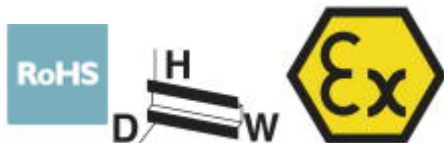
DIN rail diode module 48 V DC/2x20 A or 1x40 A. Uniform redundancy up to the consumer.

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) | 0.750 kg |
| 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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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 mm ² |
| Conductor cross section solid max. | 6 mm ² |
| Conductor cross section flexible min. | 0.2 mm ² |

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Connection data, input

| | |
|---------------------------------------|-------------------|
| Conductor cross section flexible max. | 4 mm ² |
| 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 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. | 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 |
| Connection in acc. with standard | CUL |
| Standards/regulations | EN 61000-4-2 |
| Contact discharge | 8 kV (Contact discharge) |
| Standards/regulations | EN 61000-4-3 |
| Frequency range | 80 MHz ... 1 GHz |
| Test field strength | 20 V/m |
| Frequency range | 1 GHz ... 3 GHz |
| Test field strength | 10 V/m |
| Standards/regulations | EN 61000-4-4 |
| Comments | Criterion A |
| Standards/regulations | EN 61000-6-3 |
| | EN 61000-4-6 |
| Frequency range | 0.15 MHz ... 80 MHz |
| Voltage | 10 V |
| Low Voltage Directive | Conformance with Low Voltage 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 |

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Standards and Regulations

| | |
|-----------------------|--|
| | 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 |

Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27040801 |
| eCl@ss 4.1 | 27040801 |
| 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 |

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

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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 |
| 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 | | | |

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Approvals

cULus Listed



Accessories

Accessories

Assembly adapter

Assembly adapters - UWA 182/52 - 2938235



Universal wall adapter for securely mounting the device in the event of strong vibrations. The device is screwed directly onto the mounting surface. The universal wall adapter is attached on the top/bottom.

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



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

Assembly adapters - UTA 107/30 - 2320089



Universal DIN rail adapter