

# Redundancy module, with protective coating - QUINT-DIODE/48DC/40



2866585

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QUINT-DIODE/48DC/40 redundancy module



# Redundancy module, with protective coating - QUINT-DIODE/48DC/40



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## Commercial Data

Item number	2866585
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Product Key	CMRP44
GTIN	4046356494458
Weight per Piece (including packing)	679 g
Weight per Piece (excluding packing)	679 g
Customs tariff number	85049090
Country of origin	CN

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## Technical Data

### Input data

#### DC operation

Input voltage	48 V DC ( $U_N$ )	
	< 60 V DC ( $U_{max}$ )	
Input voltage range	10 V DC ... 60 V DC	
Input voltage range DC	10 V DC ... 60 V DC	
Voltage type of supply voltage	DC	
Reverse polarity protection	< yes 120 V	
Nominal input current ( $I_N$ )	2x 20 A	
	1x 40 A	
Maximum current $I_{max}$	2x 19 A (6 mm <sup>2</sup> at 40°C)	
	1x 39 A (6 mm <sup>2</sup> at 40°C)	
	2x 16 A (6 mm <sup>2</sup> at 60°C)	
	1x 32 A (6 mm <sup>2</sup> at 60°C)	
	2x 27 A (10 mm <sup>2</sup> at 40°C)	
	1x 54 A (10 mm <sup>2</sup> at 40°C)	
	2x 21 A (10 mm <sup>2</sup> at 60°C)	
	1x 43 A (10 mm <sup>2</sup> at 60°C)	
	2x 30 A (16 mm <sup>2</sup> at 40 °C)	
	1x 60 A (16 mm <sup>2</sup> at 40 °C)	
	2x 24 A (16 mm <sup>2</sup> at 60°C)	
	1x 48 A (16 mm <sup>2</sup> at 60°C)	
	Nominal input current ( $I_N$ )	2x 20 A
		1x 40 A
Maximum current $I_{max}$	2x 17 A (6 mm <sup>2</sup> at 40°C for potentially explosive areas: Class I, Div. 2, Groups A, B, C, D; T4)	
	1x 35 A (6 mm <sup>2</sup> at 40°C for potentially explosive areas: Class I, Div. 2, Groups A, B, C, D; T4)	
	2x 14 A (6 mm <sup>2</sup> at 60°C for potentially explosive areas: Class I, Div. 2, Groups A, B, C, D; T4)	
	1x 28 A (6 mm <sup>2</sup> at 60°C for potentially explosive areas: Class I, Div. 2, Groups A, B, C, D; T4)	
	2x 24 A (10 mm <sup>2</sup> at 40°C for potentially explosive areas: Class I, Div. 2, Groups A, B, C, D; T4)	
	1x 49 A (10 mm <sup>2</sup> at 40°C for potentially explosive areas: Class I, Div. 2, Groups A, B, C, D; T4)	
	2x 19 A (10 mm <sup>2</sup> at 60°C for potentially explosive areas: Class I, Div. 2, Groups A, B, C, D; T4)	
	1x 39 A (10 mm <sup>2</sup> at 60°C for potentially explosive areas: Class I, Div. 2, Groups A, B, C, D; T4)	
	2x 27 A (16 mm <sup>2</sup> at 40°C for potentially explosive areas: Class I, Div. 2, Groups A, B, C, D; T4)	

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	1x 54 A (16 mm <sup>2</sup> at 40°C for potentially explosive areas: Class I, Div. 2, Groups A, B, C, D; T4)
	2x 22 A (16 mm <sup>2</sup> at 60°C for potentially explosive areas: Class I, Div. 2, Groups A, B, C, D; T4)
	1x 44 A (16 mm <sup>2</sup> at 60°C for potentially explosive areas: Class I, Div. 2, Groups A, B, C, D; T4)
Transient surge protection	Transil diode
Voltage drop, input/output	approx. 0.7 V

## Output data

Efficiency	> 97 %
Nominal output voltage	47.3 V DC (Input/output voltage drop of 48 V ... 0.7 V)
Output voltage	U <sub>In</sub> -
Nominal output current (I <sub>N</sub> )	40 A
Power loss nominal load max.	28 W
Connection in series	No

## Connection data

### Input

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.	10 mm <sup>2</sup>
Conductor cross section AWG min.	20
Conductor cross section AWG max.	6
Stripping length	10 mm
Screw thread	M4
Tightening torque, min	1.2 Nm
Tightening torque max	1.5 Nm

### 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.	10 mm <sup>2</sup>
Conductor cross section AWG min.	20
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## Electrical properties

Insulation voltage output / PE	1 kV
Insulation voltage input / PE	1 kV

## Product properties

Product type	Redundancy module
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### Insulation characteristics

Protection class	II
Degree of pollution	2

## Dimensions

Width	62 mm
Height	84 mm
Depth	102 mm
Horizontal pitch	3.4 Div.

### Installation dimensions

Installation distance right/left	5 mm / 5 mm
Installation distance top/bottom	50 mm / 50 mm

## Mounting

Mounting type	DIN rail mounting
Assembly instructions	alignable: horizontal 20 mm, vertical 50 mm
Mounting position	horizontal and vertical DIN rail NS 35, EN 60715

## Material specifications

Color	aluminium
Housing material	Metal
Type of housing	AlMg (hood), GD-ZnAlCu (cooling unit)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 70 °C (> 60 °C derating, □ -25 ... 60°C)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Max. permissible relative humidity (operation)	≤ 95 % (at 25 °C, non-condensing)
Shock	30g, 18 ms according to IEC 60068-2-27
Vibration (operation)	3 Hz ... 15 Hz, amplitude ±2.5 mm; 15 Hz ... 100 Hz, 2.3g according to IEC 60068-2-6

## Standards and regulations

Declaration of conformity in acc. with EN 60079-15	□ II 3 G Ex nA II T4 X
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Standard – Electronic equipment for use in electrical power installations and their assembly into electrical power installations	EN 50178/VDE 0160 (PELV)
Standard - Electrical safety	EN 60950-1/VDE 0805 (SELV)

## Approval data

UL approvals	UL/C-UL listed UL 508
	UL/C-UL Recognized UL 60950-1
	UL/C-UL Listed UL 1604 Class I, Division 2, Groups A, B, C, D

## Conformity/Approvals

ATEX	<input type="checkbox"/> II 3 G Ex nA II T4
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## EMC data

Low Voltage Directive	Conformance with Low Voltage Directive 2014/35/EC
Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
EMC requirements for noise emission	EN 61000-6-3
	EN 61000-6-4
EMC requirements for noise immunity	EN 61000-6-1
	EN 61000-6-2
Noise emission	EN 55011
Noise immunity	EN 61000-6-2:2005

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## Classifications

### ECLASS

ECLASS-9.0	27371010
ECLASS-10.0.1	27371010
ECLASS-11.0	27371010

### ETIM

ETIM 7.0	EC000683
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### UNSPSC

UNSPSC 21.0	32151504
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## Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 25; For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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PHOENIX CONTACT GmbH & Co. KG  
Flachmarktstraße 8  
D-32825 Blomberg  
+49 (0) 5235-3 00  
[info@phoenixcontact.com](mailto:info@phoenixcontact.com)