

# Redundancy module - STEP3-DIODE/5-24DC/2X5/1X10/PT



1283937

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Redundancy module, STEP DIODE, 5 V DC ... 24 V DC, 1x 10 A, 2x 5 A



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## 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, STEP DIODE provides the solution: decoupling with diode.

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## Commercial Data

Item number	1283937
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	CMRH43
GTIN	4063151488949
Weight per Piece (including packing)	78 g
Weight per Piece (excluding packing)	54 g
Customs tariff number	85049090
Country of origin	VN

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## Technical Data

### Input data

Nominal input voltage range	5 V DC ... 24 V DC
Input voltage range	4.5 V DC ... 30 V DC
Voltage type of supply voltage	DC
Nominal input current ( $I_N$ )	2x 5 A DC
	1x 10 A DC
Reverse polarity protection	< yes60 V DC
Voltage drop, input/output	typ. 0.5 V ( $I_{OUT} = 5$ A DC)
Transient surge protection	Transil diode

### Output data

Nominal output voltage	24 V DC
Setting range of the output voltage ( $U_{Set}$ )	5 V DC ... 24 V DC
Output voltage	$U_{in}$ -
Nominal output current ( $I_N$ )	1x 10 A
	2x 5 A
Derating	50 °C ... 70 °C (2 % / K)

### Connection data

#### Conductor connection

Connection method	Push-in connection
rigid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
flexible with ferrule without plastic sleeve	0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
	1 mm <sup>2</sup> (recommended)
flexible with ferrule with plastic sleeve	0.2 mm <sup>2</sup> ... 1 mm <sup>2</sup>
	1 mm <sup>2</sup> (recommended)
rigid (AWG)	24 ... 14 (Cu)
Stripping length	10 mm

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## Electrical properties

Insulation voltage input, output / housing	500 V DC
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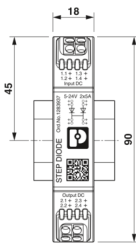
## Product properties

Product type	Redundancy module
MTBF (IEC 61709, SN 29500)	> 29675000 h (25 °C)
	18693000 h (40 °C)
	13996000 h (50 °C)

## Insulation characteristics

Protection class	III
Degree of pollution	2

## Dimensions

Dimensional drawing	
Width	18 mm
Height	90 mm
Depth	55 mm (Device depth (DIN rail mounting))
Depth	61 mm
Horizontal pitch	1 Div. (DIN 43880)

## Installation dimensions

Installation distance right/left	0 mm / 0 mm
Installation distance top/bottom	30 mm / 30 mm

## Mounting

Mounting type	DIN rail mounting
Assembly instructions	alignable: 0 mm horizontally, 30 mm vertically
Mounting position	horizontal DIN rail NS 35, EN 60715

## Material specifications

Inflammability class in acc. with UL 94 (housing / terminal blocks)	V0
Housing material	Metal
Foot latch material	Polyamid
Housing material	Polycarbonate

## Environmental and real-life conditions

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## Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-10 °C ... 70 °C (Derating: > 50 °C; 2 %/K)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Maximum altitude	5000 m
Max. permissible relative humidity (operation)	≤ 95 % (at 25 °C, non-condensing)
Vibration (operation)	< 15 Hz, amplitude ±2.5 mm

## Standards and regulations

### Electrical safety

Standards/specifications	IEC 61010-1 (SELV)
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### Protective extra-low voltage

Standards/specifications	IEC 61010-1 (SELV)
	IEC 61010-2-201 (PELV)

## Approval data

### UL

Identification	UL/C-UL Listed UL 61010-1
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### UL

Identification	UL/C-UL Listed UL 61010-2-201
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### UL

Identification	UL/C-UL Listed ANSI/UL 121201 Class I, Division 2, Groups A, B, C, D (Hazardous Location)
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# Redundancy module - STEP3-DIODE/5-24DC/2X5/1X10/PT

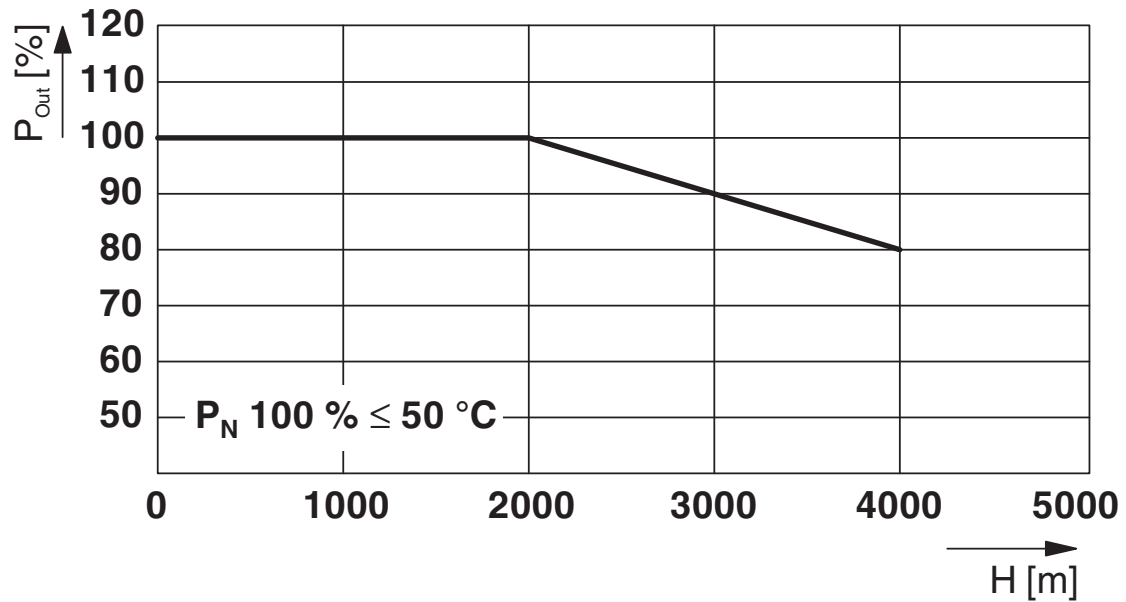


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## Drawings

Diagram



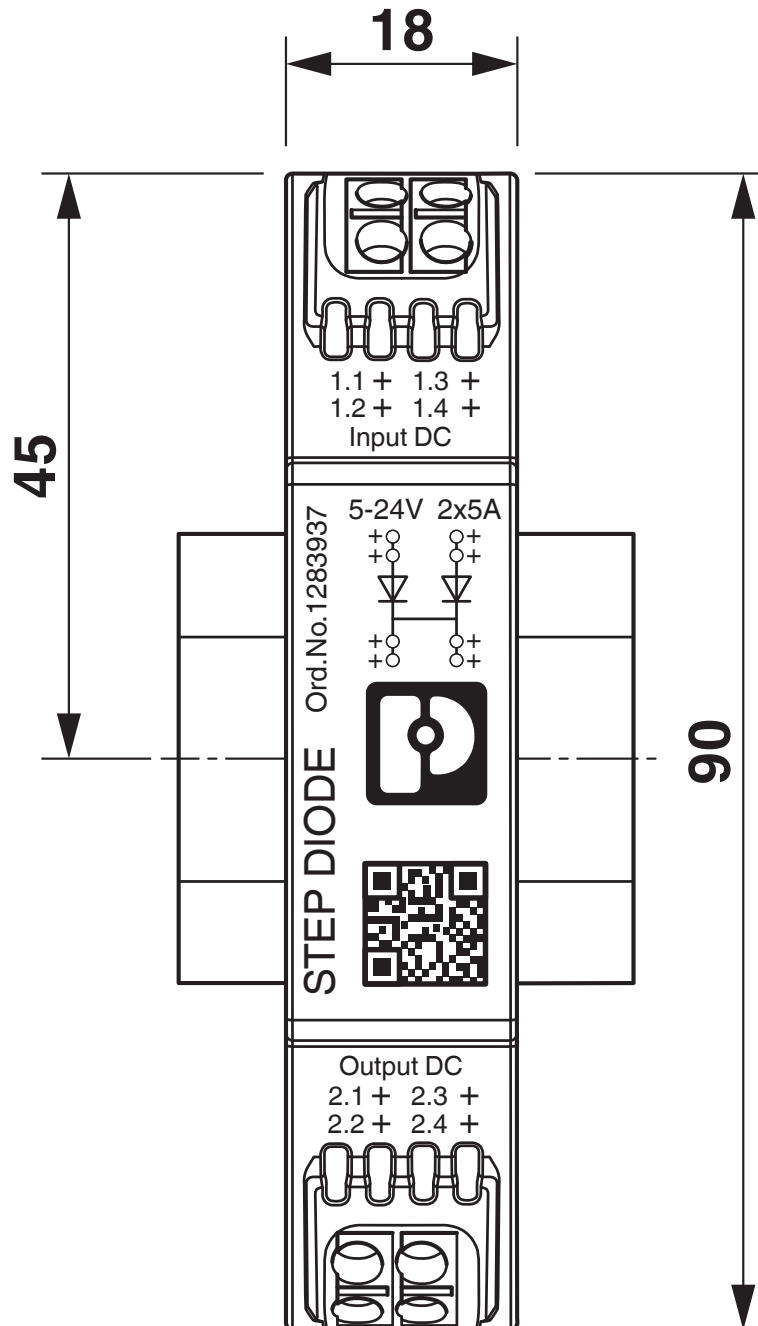
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Dimensional drawing



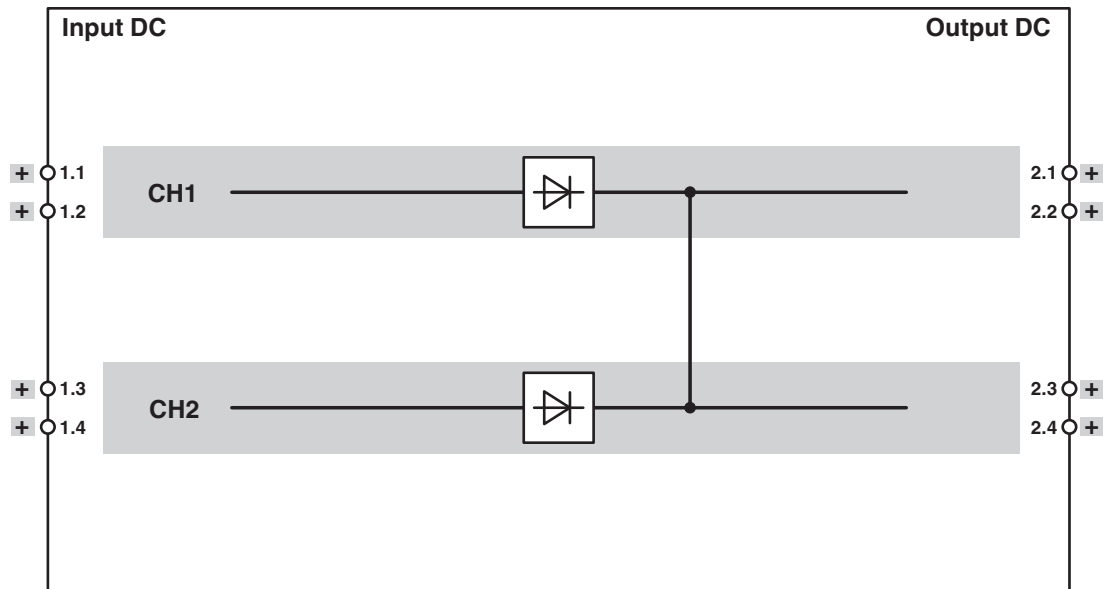
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Block diagram





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## Approvals



**IECEE CB Scheme**  
Approval ID: DK-122039-UL



**EAC**  
Approval ID: RU S-DE.BL08.W.00764



**cULus Listed**  
Approval ID: FILE E 199827

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## Classifications

### ECLASS

ECLASS-11.0

27371010

### ETIM

ETIM 8.0

EC000683

### UNSPSC

UNSPSC 21.0

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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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