

# REL-MR- 12DC/21/MS - Single relay



2909641

<https://www.phoenixcontact.com/us/products/2909641>

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Plug-in miniature power relay, with power contact, 1 changeover contact, manual operation, 12 V DC input voltage

## Commercial data

Item number	2909641
Packing unit	10 pc
Minimum order quantity	10 pc
Note	Made to order (non-returnable)
Sales key	C460
Product key	CK6195
Catalog page	Page 284 (C-5-2019)
GTIN	4055626377667
Weight per piece (including packing)	6.63 g
Weight per piece (excluding packing)	4.7 g
Customs tariff number	85364190
Country of origin	CZ

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## Technical data

### Product properties

Product type	Single relay
Operating mode	100% operating factor
Mechanical service life	1x 10 <sup>7</sup> cycles

### Insulation characteristics

Overvoltage category	III
Pollution degree	3

### Electrical properties

Maximum power dissipation for nominal condition	0.17 W
Test voltage (Winding/contact)	4 kV AC (50 Hz, 1 min., winding/contact)

### Input data

#### Coil side

Nominal input voltage U <sub>N</sub>	12 V DC
Input voltage range	7.2 V DC ... 33 V DC
Input voltage range in reference to U <sub>N</sub>	see diagram
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at U <sub>N</sub>	14 mA
Typical response time	5 ms
Typical release time	2.5 ms
Coil resistance	848 Ω ±10 % (at 20 °C)

### Output data

#### Switching

Contact switching type	1 changeover contact
Type of switch contact	Single contact
Contact material	AgSnO
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 100 mA)
Limiting continuous current	6 A
Maximum inrush current	10 A (4 s)
Min. switching current	10 mA (at 12 V)
Interrupting rating (ohmic load) max.	140 W (at 24 V DC) 20 W (at 48 V DC) 18 W (at 60 V DC) 23 W (at 110 V DC) 40 W (at 220 V DC) 1500 VA (for 250□V□AC)

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Switching capacity	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	0.1 A (at 220 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 A (at 230 V, AC15)
Motor load according to UL 508	1/4 HP, 240 - 277 V AC (N/O contact)
	1/6 HP, 240 - 277 V AC (N/C contact)

## Connection data

Connection method	Plug / solder connection
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## Dimensions

Width	5 mm
Height	28 mm
Depth	16 mm

## Material specifications

Color	white (RAL 9010)
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## Environmental and real-life conditions

### Ambient conditions

Degree of protection	RT II
Ambient temperature (operation)	-40 °C ... 85 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

## Approvals

### Corrosive gas test

Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

## Standards and regulations

Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1

## Mounting

Assembly instructions	in rows with zero spacing
Mounting position	any

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## Classifications

### ECLASS

ECLASS-11.0	27371601
ECLASS-12.0	27371601
ECLASS-13.0	27371601

### ETIM

ETIM 9.0	EC001437
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### UNSPSC

UNSPSC 21.0	39122300
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## Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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