

# Single relay - REL-MR- 24DC/21-21



2961192

<https://www.phoenixcontact.com/de/produkte/2961192>

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Plug-in miniature power relay, with power contact, 2 changeover contacts, input voltage 24 V DC



## Your advantages

- RT III-proof (wash-proof)
- Switching current of up to 8 A

## Commercial Data

Item number	2961192
Packing unit	10 pc
Minimum order quantity	10 pc
Sales Key	G1 - Relais
Product Key	CK6195
Catalog Page	Page 290 (C-5-2019)
GTIN	4017918158019
Weight per Piece (including packing)	15,98 g
Weight per Piece (excluding packing)	15,94 g
Customs tariff number	85364900
Country of origin	AT

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## Technical Data

### Product properties

Product type	Single relay
Set comprises	2967060 PLC-RSC- 24DC/21-21
	2967073 PLC-RSC- 24UC/21-21
	2967248 PLC-RSC- 48DC/21-21
	2912507 PLC-RSP- 24DC/21-21
	2912510 PLC-RSP- 24UC/21-21
	2912523 PLC-RSP- 48DC/21-21
	2900330 PLC-RPT- 24DC/21-21
	2900332 PLC-RPT- 24UC/21-21
	2900333 PLC-RPT- 48DC/21-21
	2967109 PLC-RSC- 24DC/ 1- 1/ACT
	2834481 PR1-RSC3-LDP-24DC/2X21
	2834562 PR1-RSP3-LDP-24DC/2X21
	2903334 RIF-1-RPT-LDP-24DC/2X21
2903350 RIF-1-RSC-LDP-24DC/2X21	
Operating mode	100% operating factor
Mechanical service life	3x 10 <sup>7</sup> cycles

### Insulation characteristics

Overvoltage category	III
Pollution degree	3
Insulation	Basic insulation

### Electrical properties

Service life electrical	see diagram
Maximum power dissipation for nominal condition	0.41 W
Test voltage Winding/contact	5 kV AC (50 Hz, 1 min., winding/contact)
Test voltage Contact/contact	2.5 kV AC (50 Hz, 1 min., contact/contact)

### Input data

#### Coil side

Nominal input voltage U <sub>N</sub>	24 V DC
Input voltage range	15.6 V DC ... 59.52 V DC
Typical input current at U <sub>N</sub>	17 mA
Typical response time	7 ms
Typical release time	3 ms
Coil resistance	1440 Ω ±10 % (at 20 °C)

### Output data

#### Switching

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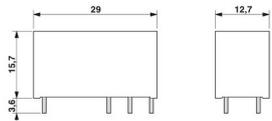
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Contact type	2 changeover contacts
Type of switch contact	Single contact
Drive and function	monostable
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 10 mA)
Limiting continuous current	8 A
Maximum inrush current	25 A (20 ms)
Min. switching current	10 mA (At 5 V)
Interrupting rating (ohmic load) max.	192 W (at 24 V DC) 96 W (at 48 V DC) 60 W (at 60 V DC) 44 W (at 110 V DC) 60 W (at 220 V DC) 2000 VA (for 250 V AC)
Switching capacity	2 A (at 24 V, DC13) 0.2 A (at 250 V, DC13) 3 A (at 24 V, AC15) 3 A (at 120 V, AC15) 3 A (at 250 V, AC15)
Motor load according to UL 508	1/4 HP, 120 V AC 1/2 HP, 240 V AC

## Connection data

Connection method	Solder connection
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## Dimensions

Dimensional drawing	
Width	12.7 mm
Height	29 mm
Depth	15.7 mm

## Environmental and real-life conditions

### Ambient conditions

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

## Approval data

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## 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	Can be aligned without spacing ( $> 70\text{ °C} \geq 2.5\text{ mm}$ )
Mounting position	any

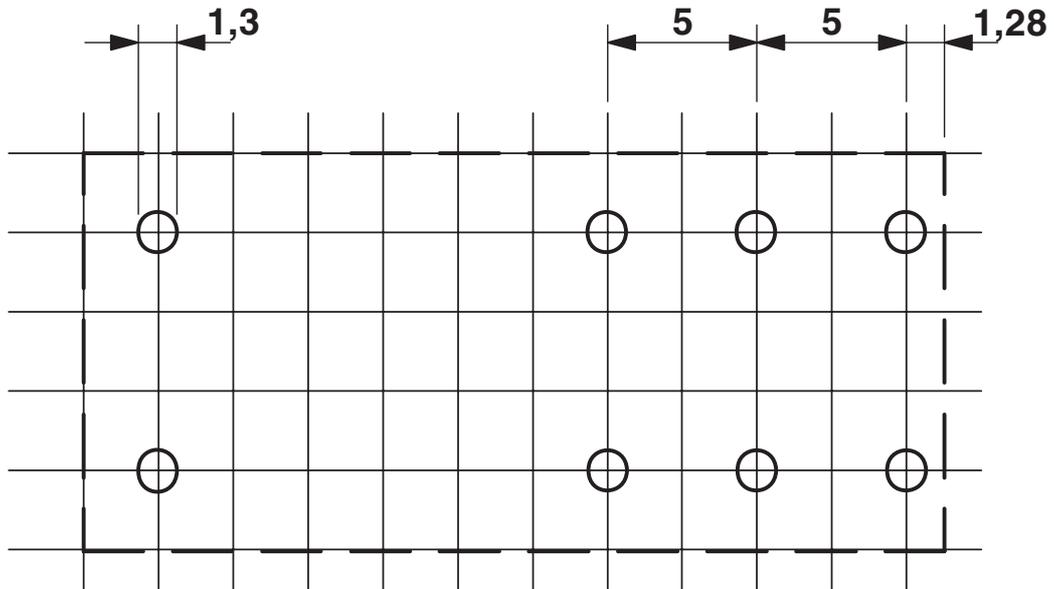
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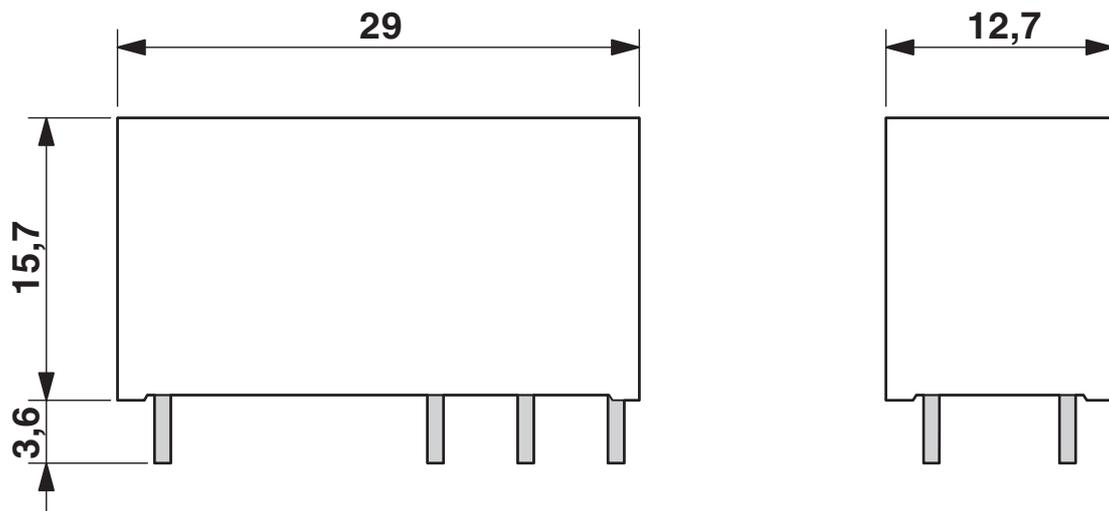
## Drawings

Drilling plan/solder pad geometry



Basic pitch 2.5 mm

Dimensional drawing

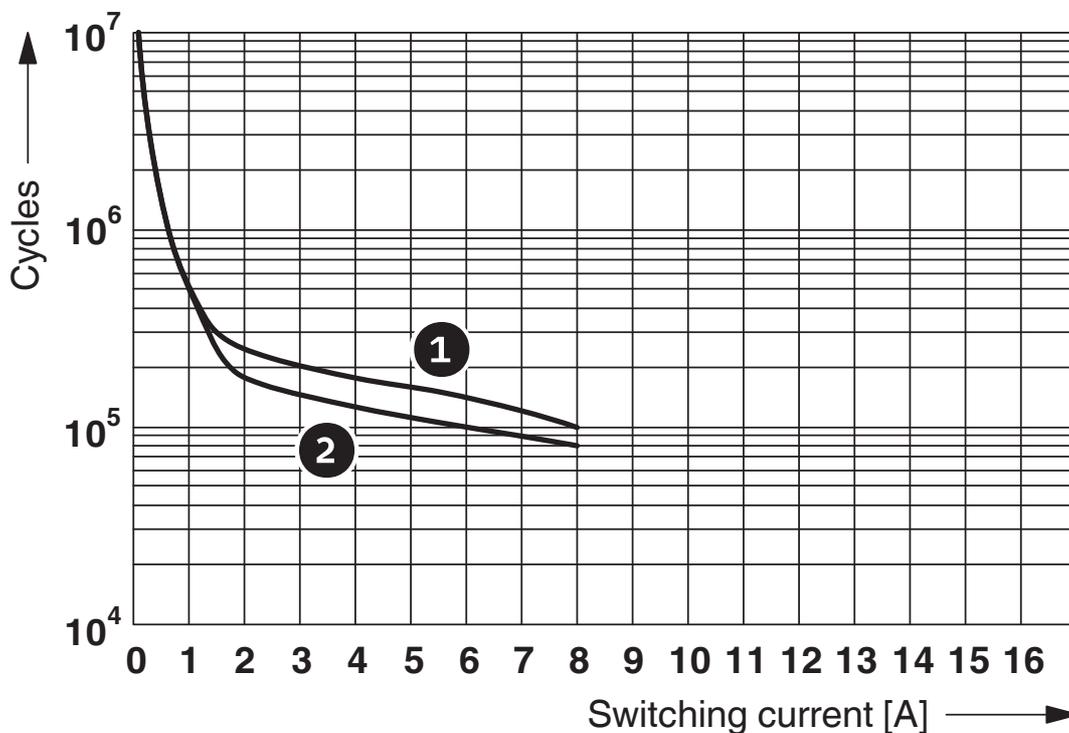


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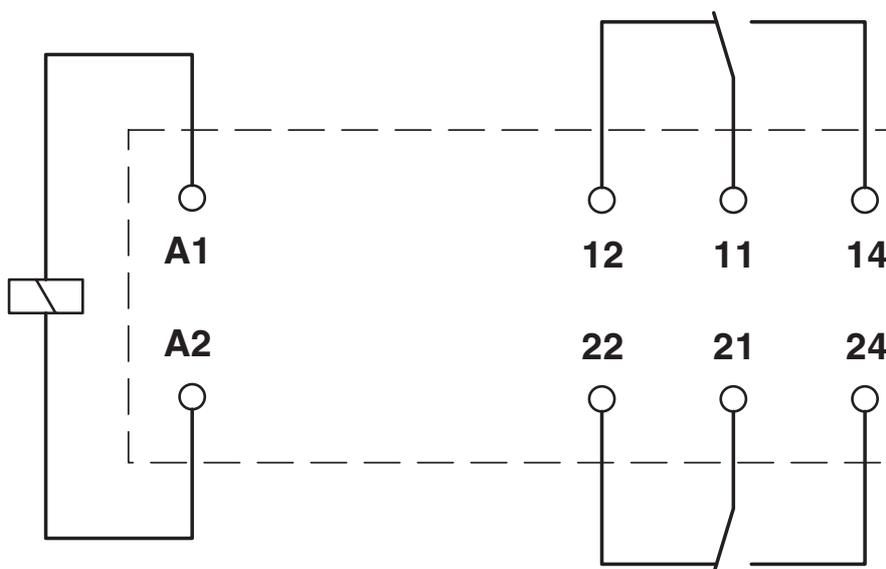
Diagram



- ① 250 V AC, ohmic load (DC coils)
- ② 250 V AC, ohmic load (AC coils)

Electrical service life

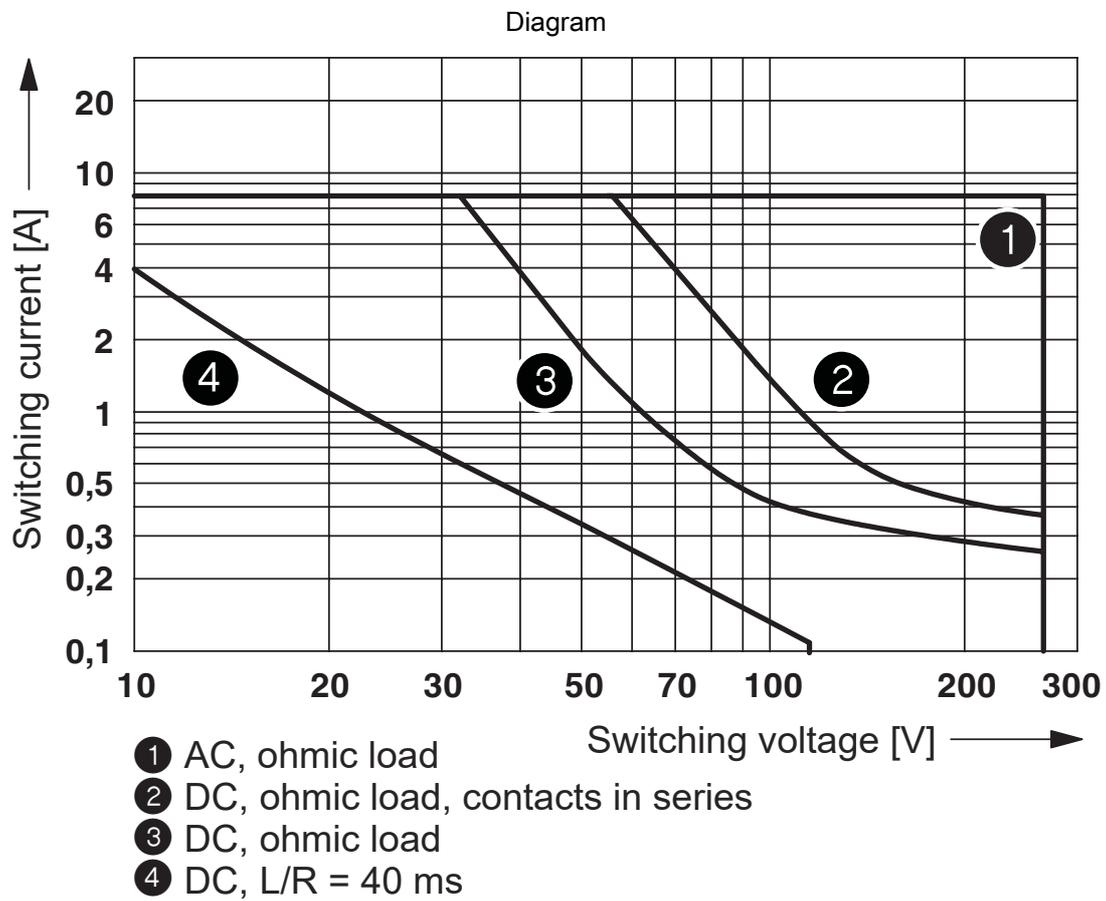
Circuit diagram



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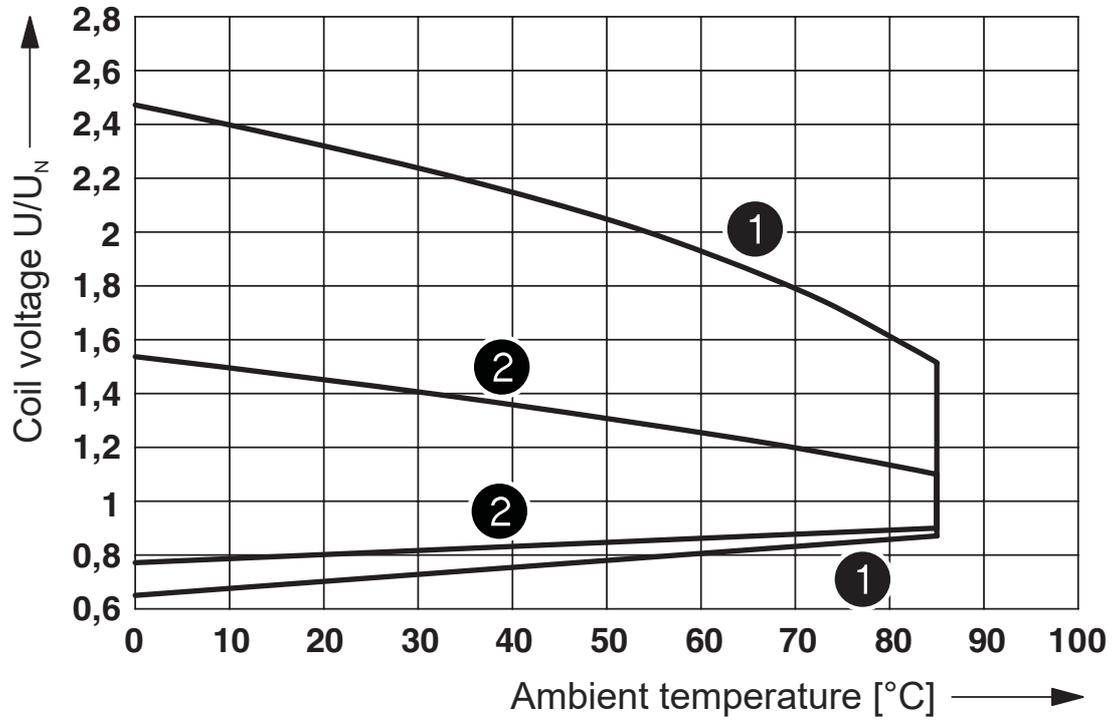
Interrupting rating

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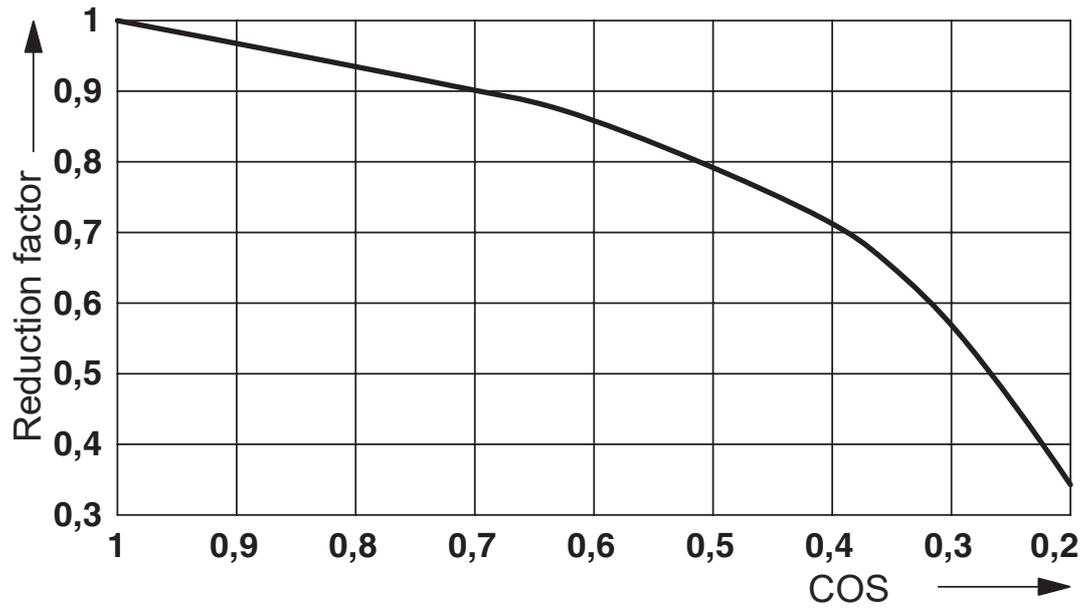
Diagram



- ① DC coils
- ② AC coils

Operating voltage range

Diagram



Service life reduction factor with various cos phi

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## Approvals



**cUL Recognized**  
Approval ID: FILE E 228652



**UL Recognized**  
Approval ID: FILE E 228652



**EAC**  
Approval ID: TR\_TS\_D\_00573\_c



**UL Recognized**  
Approval ID: FILE E 228652



**EAC**  
Approval ID: RU\*C-DE.\*08.B.00010



**VDE Zeichengenehmigung**  
Approval ID: 40007758

	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $mm^2$
Reports with production monitoring			-	-



**VDE Zeichengenehmigung**  
Approval ID: 40048281

	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $mm^2$
Reports with production monitoring			-	-



**PRS**  
Approval ID: TE/2109/880590/16



**cUL Recognized**  
Approval ID: FILE E 228652



**cUL Recognized**  
Approval ID: FILE E 172140

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**UL Recognized**

Approval ID: FILE E 172140

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## Classifications

### ECLASS

ECLASS-9.0	27371601
ECLASS-10.0.1	27371601
ECLASS-11.0	27371601

### ETIM

ETIM 8.0	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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