

# REL-OR2/LDP- 24DC/2X21 - Single relay



2903689

<https://www.phoenixcontact.com/us/products/2903689>

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Plug-in octal relays with power contacts, 2 changeover contacts, test button, freewheeling diode, mechanical switching position indicator, polarity: A1+, A2-, coil voltage: 24 V DC

## Commercial data

Item number	2903689
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C460
Product key	DK6193
GTIN	4046356759021
Weight per piece (including packing)	86.41 g
Weight per piece (excluding packing)	86.41 g
Customs tariff number	85364190
Country of origin	PL

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## Technical data

### Product properties

Product type	Single relay
Set comprises	2903297 RIF-3-RPT-LDP-24DC/2X21
	2903303 RIF-3-RSC-LDP-24DC/2X21
Operating mode	100% operating factor
Mechanical service life	approx. $2 \times 10^7$ cycles

### Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	3

### Data management status

Date of last data management	05.09.2025
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### Electrical properties

Maximum power dissipation for nominal condition	1.44 W
Test voltage (Winding/contact)	2.5 kV <sub>rms</sub> (50 Hz, 1 min., winding/contact)
Test voltage (Contact/contact)	2 kV <sub>rms</sub> (50 Hz, 1 min., contact/contact)
Test voltage (Changeover contact/changeover contact)	2 kV <sub>rms</sub> (50 Hz, 1 min., changeover contact/changeover contact)
Rated insulation voltage	250 V AC
Rated surge voltage	4 kV

### Input data

#### Coil side

Nominal input voltage $U_N$	24 V DC
Input voltage range	20.4 V DC ... 26.4 V DC (20 °C)
Drive and function	monostable
Typical input current at $U_N$	60 mA
Typical response time	18 ms
Typical release time	20 ms
Protective circuit	Freewheeling diode
Status display	LED (yellow)

### Output data

#### Switching

Contact switching type	2 changeover contacts
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	10 V (At 24 mA)

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Limiting continuous current	10 A
Maximum inrush current	30 A (20 ms, N/O contacts)
Min. switching current	10 mA (at 24 V)
Interrupting rating (ohmic load) max.	240 W (at 24 V DC)
	124 W (at 48 V DC)
	108 W (at 60 V DC)
	52 W (at 110 V DC)
	48 W (at 220 V DC)
	2500 VA (for 250 V AC)
Switching power min.	0.24 W
Switching capacity	2 A (at 24 V, DC13)
	0.22 A (at 120 V, DC13)
	0.11 A (at 250 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	1.5 A (at 240 V, AC15)
Motor load according to UL 508	1/2 HP, 240 V AC (N/O contact)

## Connection data

Connection method	Plug-in connection
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## Dimensions

Width	35 mm
Height	35 mm
Depth	54.4 mm

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	RT I
Ambient temperature (operation)	-40 °C ... 70 °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
	IEC 61810

## Mounting

Mounting position	any
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Drawings

Diagram



- ① DC coils
- ② AC coils

Operating voltage range

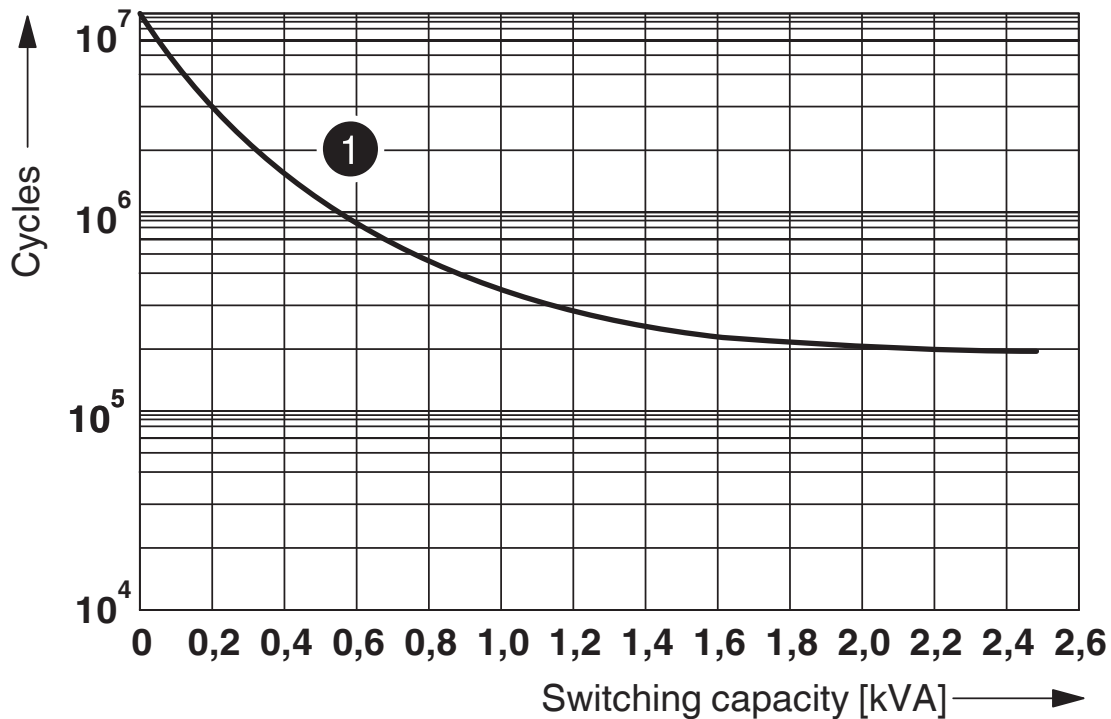
Diagram



- ① AC, ohmic load
- ② DC, ohmic load

Interrupting rating

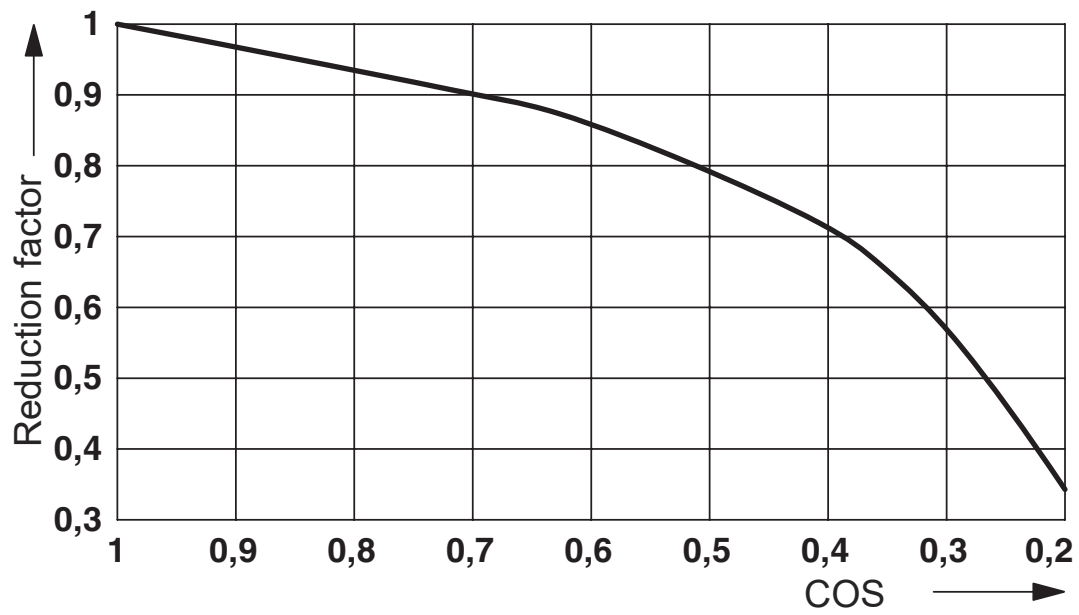
Diagram



250 V AC, ohmic load

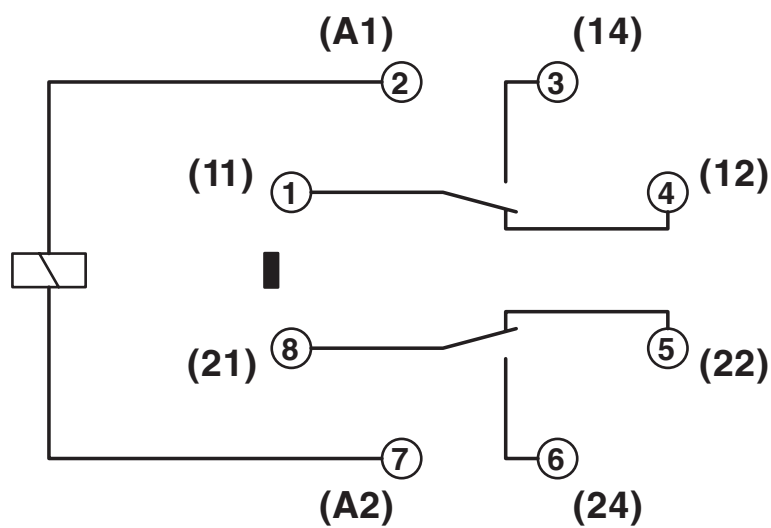
Electrical service life

Diagram



Service life reduction factor

Circuit diagram



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## Classifications

### UNSPSC

UNSPSC 21.0	39122300
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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