

# REL-OR3/LDP-110DC/3X21 - Single relay



2908898

<https://www.phoenixcontact.com/us/products/2908898>

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Plug-in octal relays with power contacts, 3 changeover contacts, test button, freewheeling diode, mechanical switching position indicator, polarity: A1+, A2-, input voltage: 110 V DC

## Commercial data

Item number	2908898
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C460
Product key	CK6193
Catalog page	Page 308 (C-5-2019)
GTIN	4055626355511
Weight per piece (including packing)	91.87 g
Weight per piece (excluding packing)	88.45 g
Customs tariff number	85364900
Country of origin	PL

## Technical data

### Product properties

Product type	Single relay
Operating mode	100% operating factor
Mechanical service life	approx. $2 \times 10^7$ cycles

### Insulation characteristics

Insulation	Basic insulation
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### Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	3

### Electrical properties

Maximum power dissipation for nominal condition	1.83 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 $U_N$	110 V DC
Input voltage range	93.5 V DC ... 121 V DC (see diagram)
Input voltage range in reference to $U_N$	see diagram
Drive and function	monostable
Drive (polarity)	non-polarized
Typical response time	18 ms
Typical release time	20 ms
Protective circuit	Freewheeling diode
Status display	Yellow LED

### Output data

#### Switching

Contact switching type	3 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)
Limiting continuous current	10 A

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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 capacity 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)

## 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

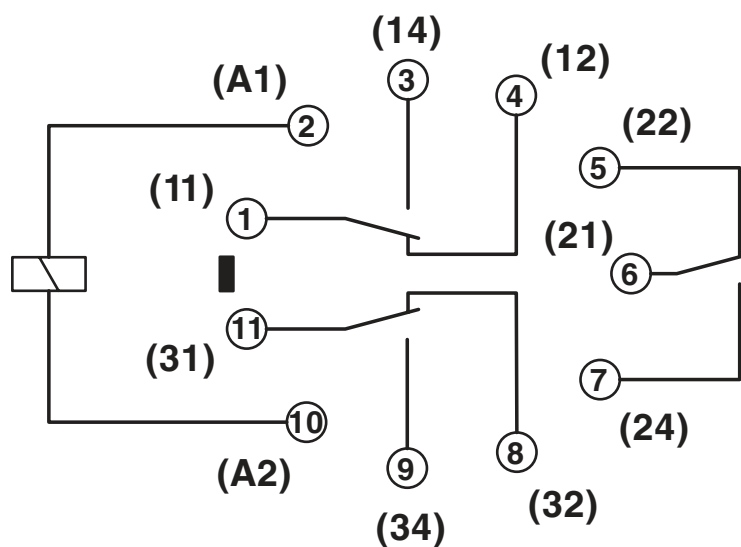
Standards/regulations	IEC 60664
	IEC 61810

## Mounting

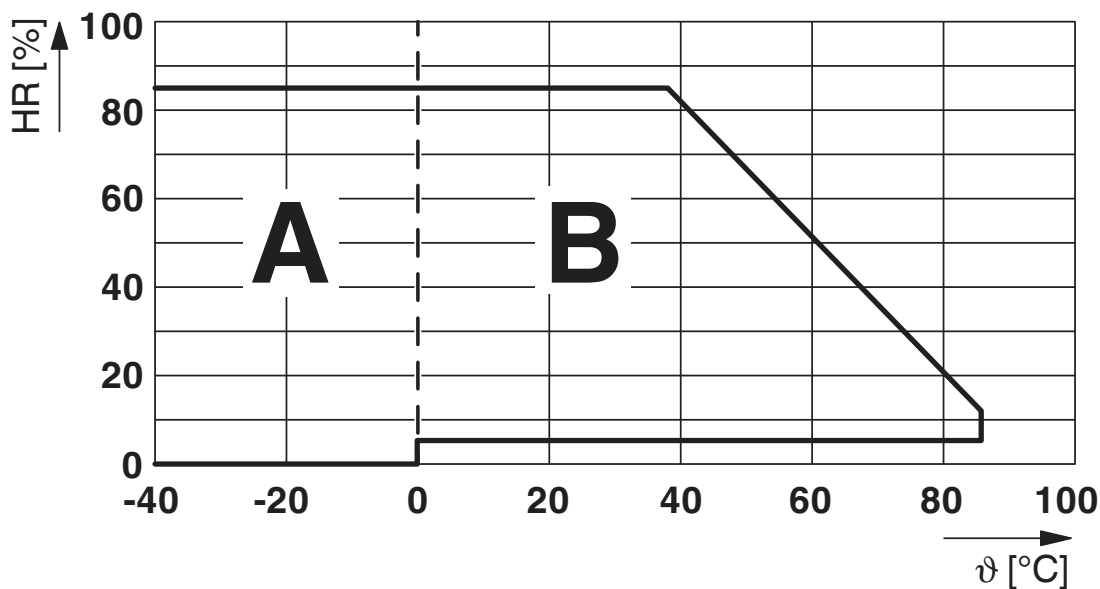
Mounting position	any
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## Drawings

Circuit diagram



Diagram



Permissible humidity for operation and storage.

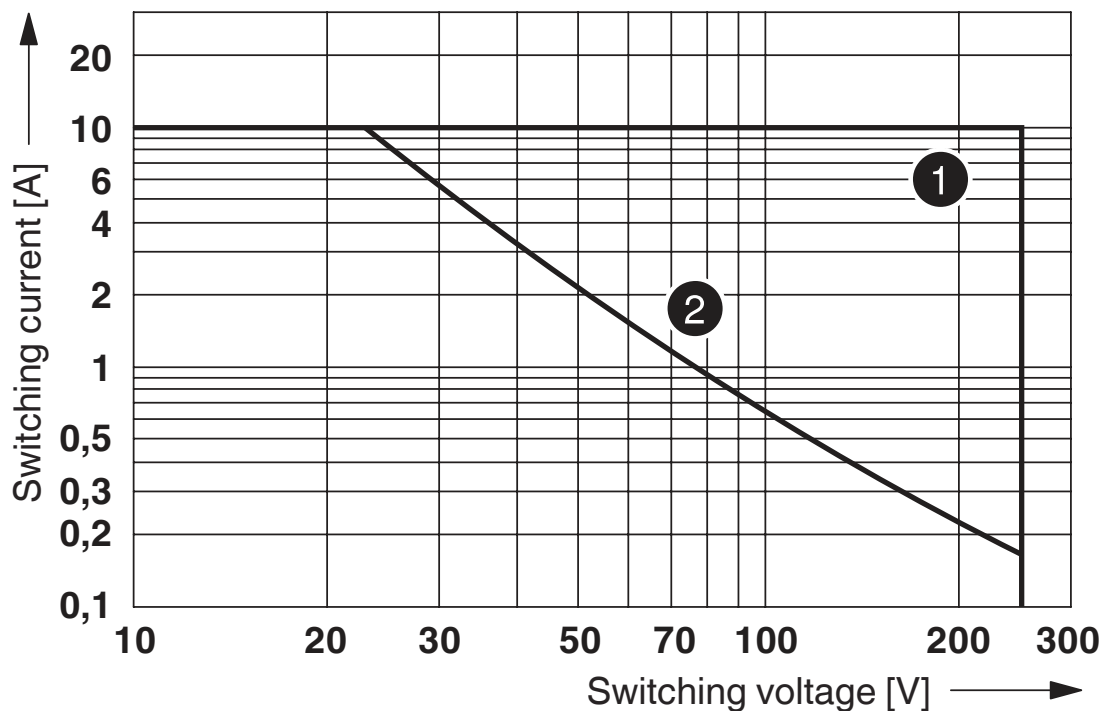
The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures  $\leq 0^\circ\text{C}$  must be prevented

Area B: Condensation at ambient temperatures  $> 0^\circ\text{C}$  must be prevented

On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature  $\leq 25^\circ\text{C}$ .

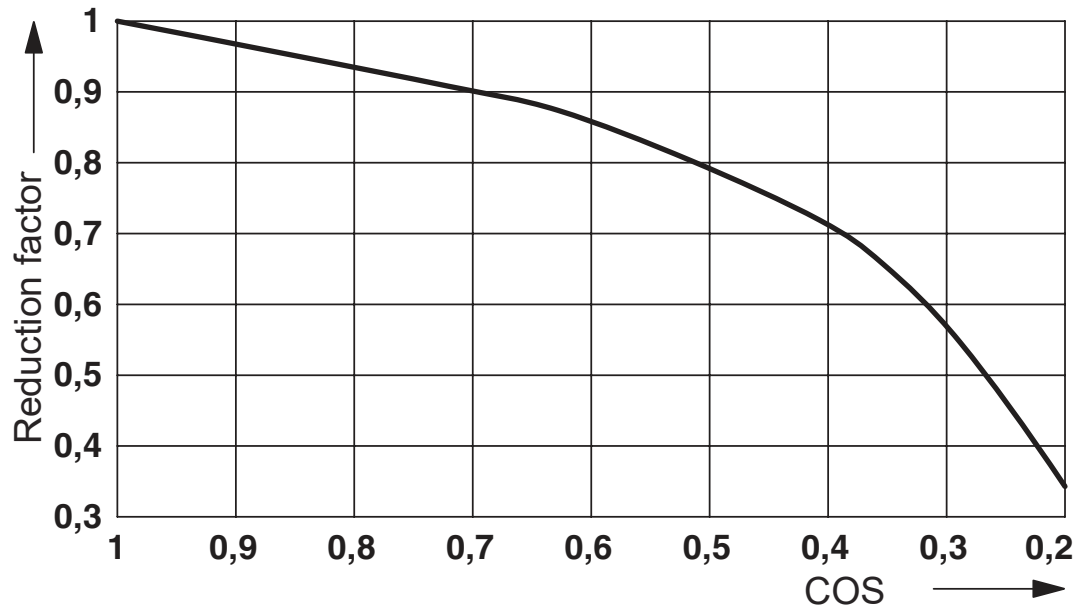
Diagram



- ① AC, ohmic load
- ② DC, ohmic load

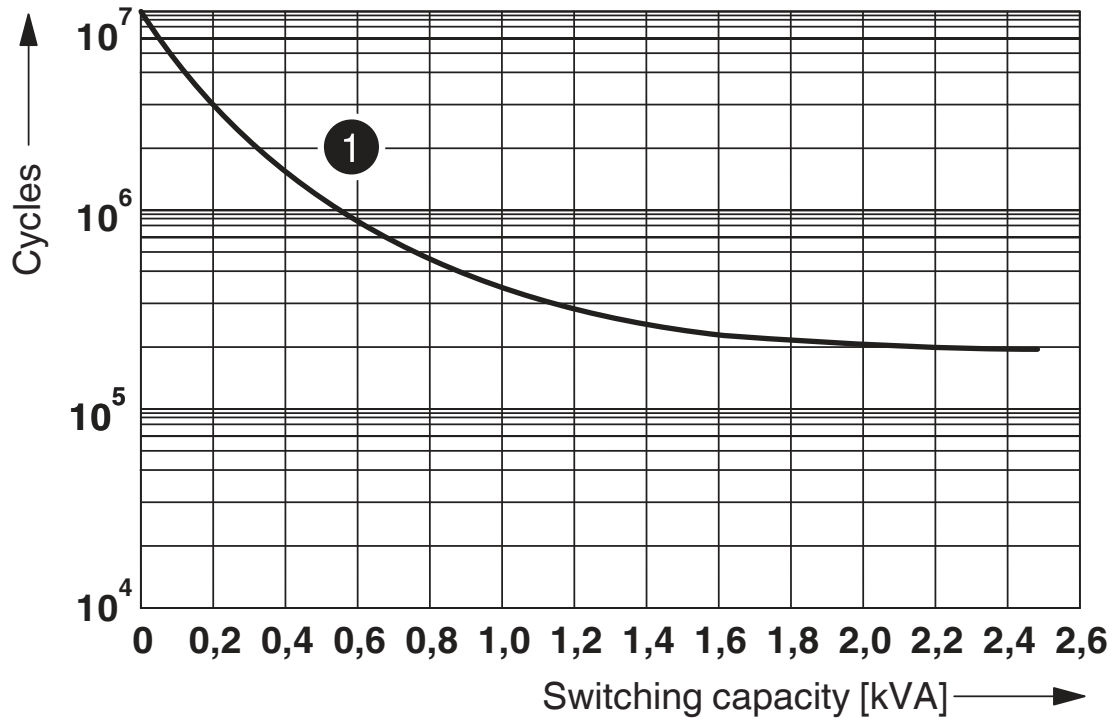
Interrupting rating

Diagram



Service life reduction factor

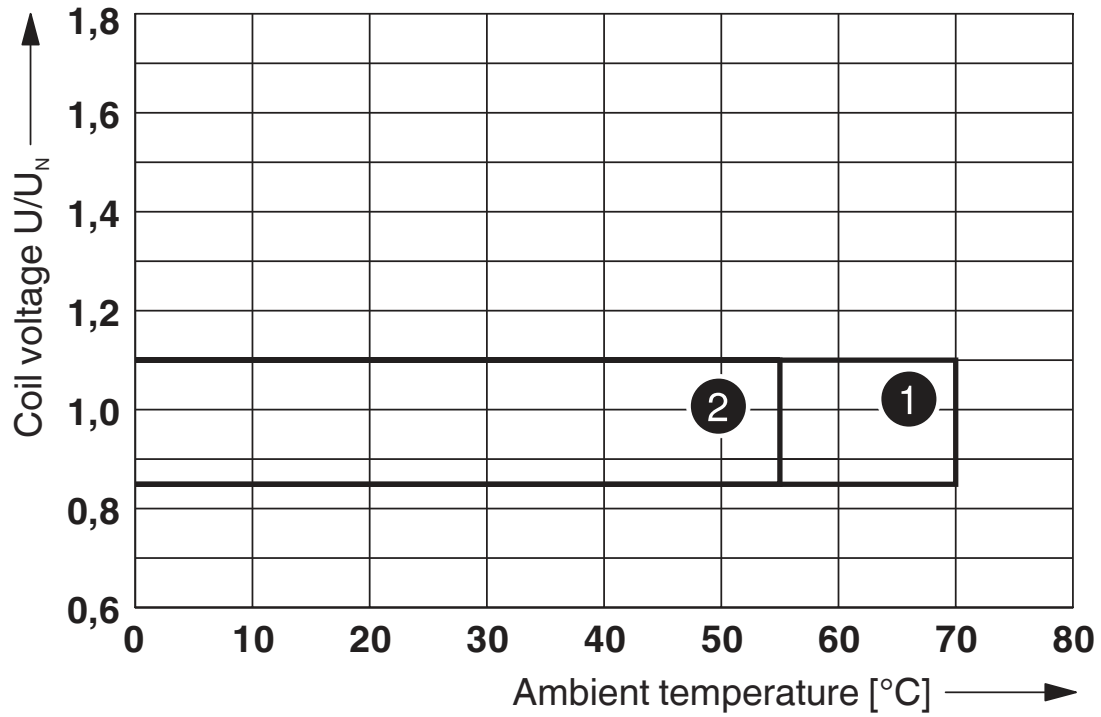
Diagram



250 V AC, ohmic load

Electrical service life

Diagram



- ① DC coils
- ② AC coils

Operating voltage range



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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2908898>



**CSA**

Approval ID: 256725



**cUL Recognized**

Approval ID: FILE E 172140



**UL Recognized**

Approval ID: FILE E 172140



**EAC**

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



**EAC**

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

**cULus Recognized**

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## Classifications

### ECLASS

ECLASS-11.0	27371601
ECLASS-12.0	27371601
ECLASS-13.0	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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## Mandatory accessories

### RIF-3-BPT/3X21 - Relay base

2900938

<https://www.phoenixcontact.com/us/products/2900938>



Relay base RIF-3..., for octal relays with 3 changeover contacts, Push-in connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

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### RIF-3-BSC/3X21 - Relay base

2900936

<https://www.phoenixcontact.com/us/products/2900936>



RIF-3... relay base, for octal relay with 3 changeover contacts, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

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