

# REL-OR3/LDP-220DC/3X21 - Single relay



2907027

<https://www.phoenixcontact.com/us/products/2907027>

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Plug-in octal relay with power contacts, 3 change-over contacts, test key, mechanical switch position display, coil voltage: 220 V DC, response voltage at 23 °C without pre-excitation  $\geq 60\%$  ... 80 % of the rated voltage ( $\geq 132$  V DC ...  $\leq 176$  V DC)

## Commercial data

Item number	2907027
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C460
Product key	DK6953
GTIN	4055626159959
Weight per piece (including packing)	92.88 g
Weight per piece (excluding packing)	92 g
Customs tariff number	85364900
Country of origin	PL

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## Technical data

### Product properties

Product type	Single relay
Operating mode	100% operating factor
Mechanical service life	$1 \times 10^7$ cycles, approximately

### Insulation characteristics

Insulation	Basic insulation
Oversupply 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	1.76 W
Test voltage (Winding/contact)	2.5 kV <sub>rms</sub> (50 Hz, 1 min., winding/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 <sub>N</sub>	220 V DC
Input voltage range	187 V DC ... 242 V DC
Input voltage range in reference to U <sub>N</sub>	see diagram
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at U <sub>N</sub>	8 mA
Typical response time	18 ms
Typical release time	7 ms
Protective circuit	Freewheeling diode
Status display	LED (yellow)

### 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 power min.	0.24 W
Switching capacity	2 A (at 24 V, DC13) 1.5 A (at 230 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

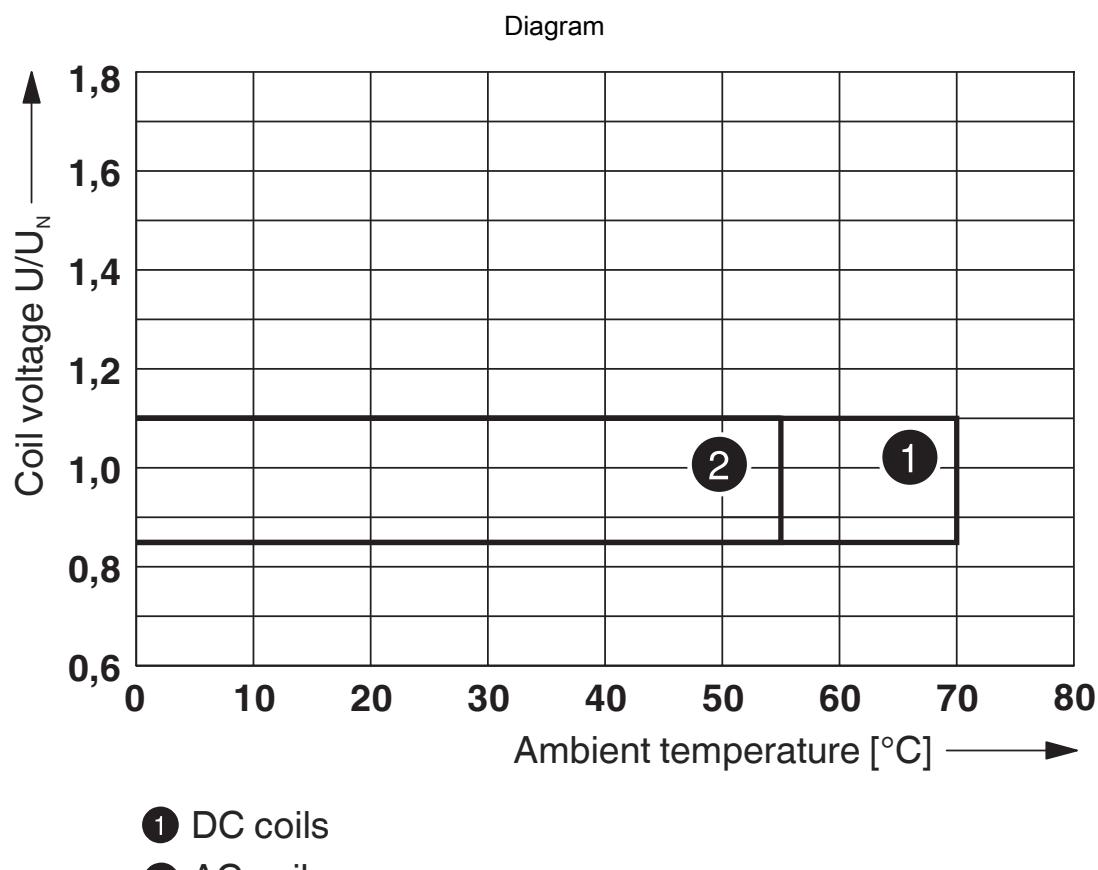
## Standards and regulations

Standards/regulations	IEC 60664 IEC 61810
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## Mounting

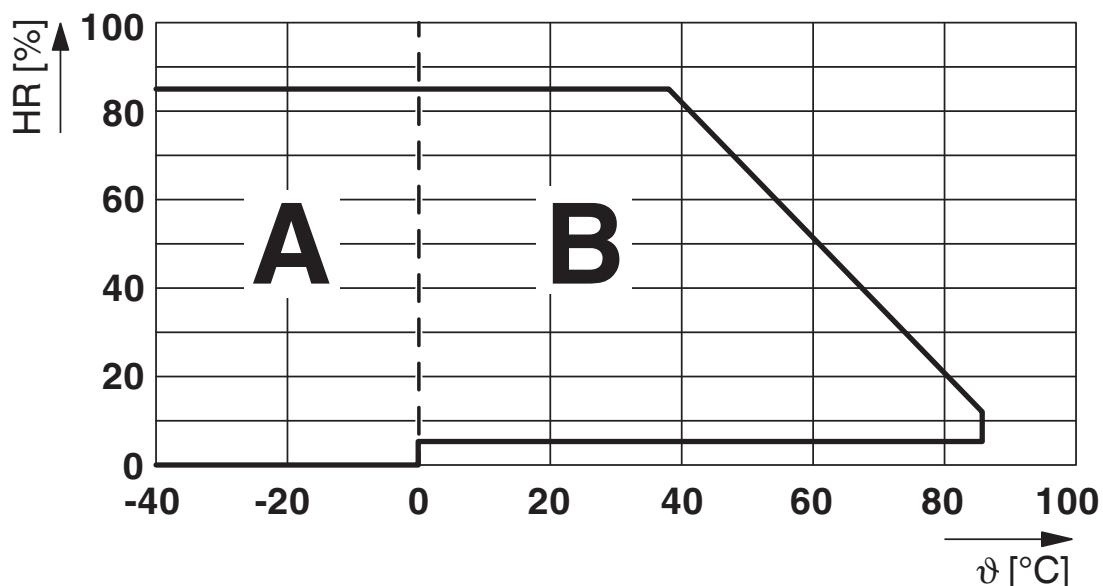
Mounting position	any
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## Drawings



Operating voltage range

Diagram



Permissible humidity for operation and storage.

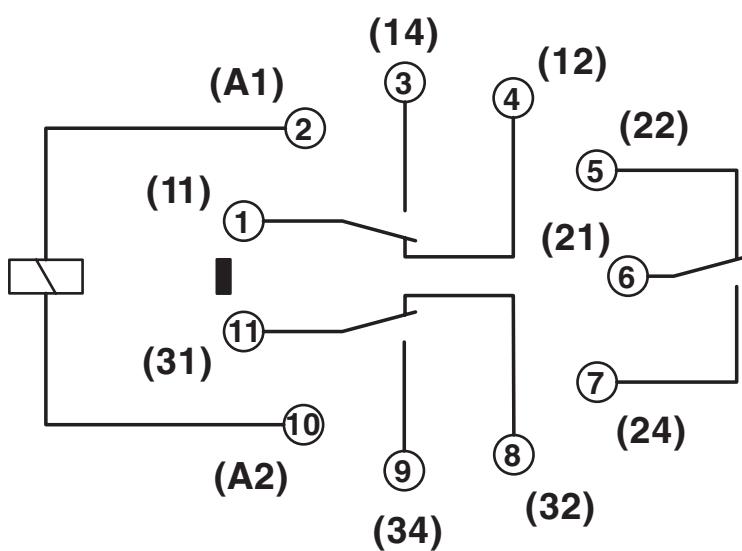
The maximum permissible ambient temperature as specified in the data sheet must be observed.

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  $\leq 25^{\circ}\text{C}$ .

Circuit diagram



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## Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2907027>



**CSA**

Approval ID: 256725



**EAC**

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



**cULus Recognized**

Approval ID: E172140

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## Classifications

### ECLASS

ECLASS-13.0	27371601
ECLASS-15.0	27371601

### ETIM

ETIM 9.0	EC001437
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### 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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Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)