

# REL-PR3-120AC/3X1 - Single relay



2903708

<https://www.phoenixcontact.com/us/products/2903708>

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Plug-in high-power relay with power contacts, 3 N/O contacts, coil voltage: 120 V AC



## Commercial data

Item number	2903708
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C460
Product key	DK6965
GTIN	4046356759205
Weight per piece (including packing)	83.8 g
Weight per piece (excluding packing)	83.8 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	approx. $10^7$ 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

Service life electrical	see diagram
Maximum power dissipation for nominal condition	2.76 W
Test voltage (Winding/contact)	2.5 kV <sub>rms</sub> (50 Hz, 1 min., winding/contact)
Test voltage (Contact/contact)	2.5 kV <sub>rms</sub> (50 Hz, 1 min., contact/contact)
Test voltage (N/O contact / N/O contact)	2.5 kV <sub>rms</sub> (50 Hz, 1 min., N/O contact / N/O contact)
Rated insulation voltage	250 V AC
Rated surge voltage	4 kV

### Input data

#### Coil side

Nominal input voltage $U_N$	120 V AC
Input voltage range	102 V AC ... 132 V AC (20 °C)
Mains frequency	50/60 Hz
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at $U_N$	23 mA
Typical response time	5 ms ... 25 ms (depending on phase relation)
Typical release time range	5 ms ... 20 ms (depending on phase relation)

### Output data

#### Switching

Contact switching type	3 N/O contacts
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	440 V AC 250 V DC
Minimum switching voltage	10 V (At 24 mA)

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Limiting continuous current	16 A
Maximum inrush current	50 A (20 ms, N/O contacts)
Min. switching current	10 mA (at 24 V)
Interrupting rating (ohmic load) max.	384 W (at 24 V DC)
	720 W (at 48 V DC)
	600 W (at 60 V DC)
	660 W (at 110 V DC)
	183 W (at 220 V DC)
	4000 VA (for 250 V AC)
	4000 VA (at 440 V AC)
	Switching capacity
1 A (at 120 V, DC13)	
1 A (at 220 V, DC13)	
1.5 A (at 24 V, AC15)	
1.5 A (at 120 V, AC15)	
1.5 A (at 240 V, AC15)	
3-phase motor load	1500 W (at 400 V, AC3)
Motor load according to UL 508	1/3 HP, 120 V AC (N/O contact)
	1/2 HP, 240 V AC (N/O contact)

## Connection data

Connection method	Plug-in connection
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## Dimensions

Width	38.6 mm
Height	36.1 mm
Depth	45.5 mm

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	RT I
Ambient temperature (operation)	-40 °C ... 55 °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

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Mounting position	any
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## Drawings

Diagram



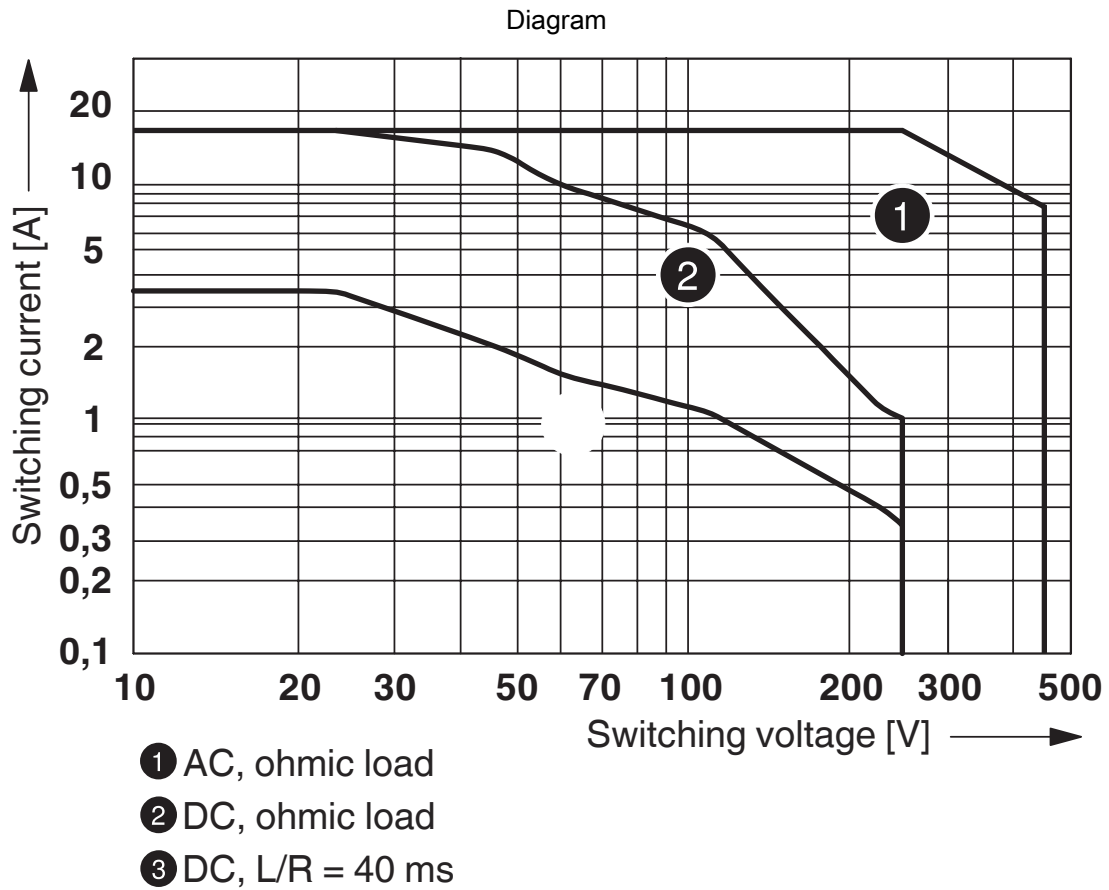
- ① DC coils
- ② AC coils

Operating voltage range

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Interrupting rating

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Diagram



① 250 V AC, Ohmic load

Electrical service life

Diagram



Service life reduction factor

Diagram



Permissible humidity for operation and storage.

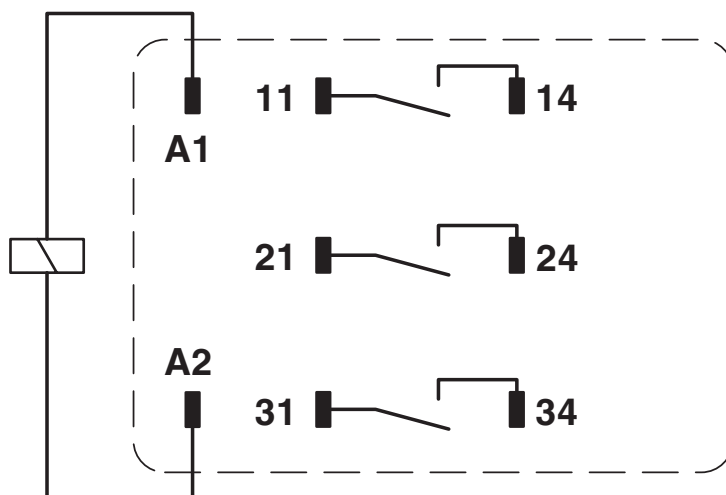
The maximum permissible ambient temperature as specified in the data sheet must be observed.

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/2903708>

 **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 10.0	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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