

REL-IR2/L-120AC/2X21 - Single relay



2903667

<https://www.phoenixcontact.com/pc/products/2903667>

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Plug-in industrial relay with power contacts, 2 changeover contacts, test button, status LED, mechanical switching position indicator, input voltage: 120 V AC

Commercial data

Item number	2903667
Packing unit	10 pc
Minimum order quantity	10 pc
Product key	CK6943
Catalog page	Page 300 (C-5-2019)
GTIN	4046356758208
Weight per piece (including packing)	35.45 g
Weight per piece (excluding packing)	35.45 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. 2×10^7 cycles

Data management status

Date of last data management	02.05.2024
Article revision	02

Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	3 (Rated voltage of 230 V)
	2 (Rated voltage of 400 V)

Electrical properties

Service life electrical	see diagram
Maximum power dissipation for nominal condition	1.56 W
Test voltage (Winding/contact)	2.5 kV _{rms} (50 Hz, 1 min., winding/contact)
Test voltage (Contact/contact)	2.5 kV _{rms} (50 Hz, 1 min., contact/contact)
Test voltage (Changeover contact/changeover contact)	2.5 kV _{rms} (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	120 V AC
Input voltage range	93.6 V AC ... 165.6 V AC
Input voltage range in reference to U_N	see diagram
Mains frequency	50/60 Hz
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at U_N	13 mA
Typical response time	5 ms ... 15 ms (depending on phase relation)
Typical release time range	5 ms ... 20 ms (depending on phase relation)
Status display	LED (yellow)

Output data

Switching

Contact switching type	2 changeover contacts
Type of switch contact	Single contact

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Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (At 24 mA)
Limiting continuous current	12 A
Maximum inrush current	30 A (20 ms, N/O contacts)
Min. switching current	5 mA (at 24 V)
Interrupting rating (ohmic load) max.	288 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)
	3000 VA (for 250 V AC)
Switching capacity min.	0.12 W
Motor load according to UL 508	1/2 HP, 240 V AC

Connection data

Connection method	Plug-in connection
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Dimensions

Width	21.2 mm
Height	27.5 mm
Depth	35.6 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

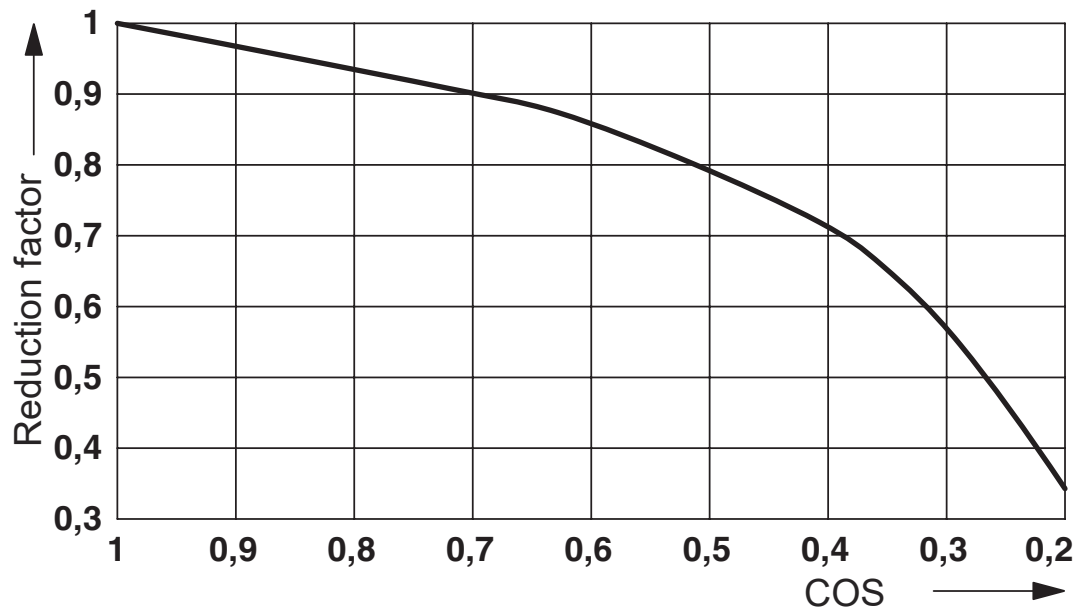
Standards/regulations	IEC 60664
	IEC 61810

Mounting

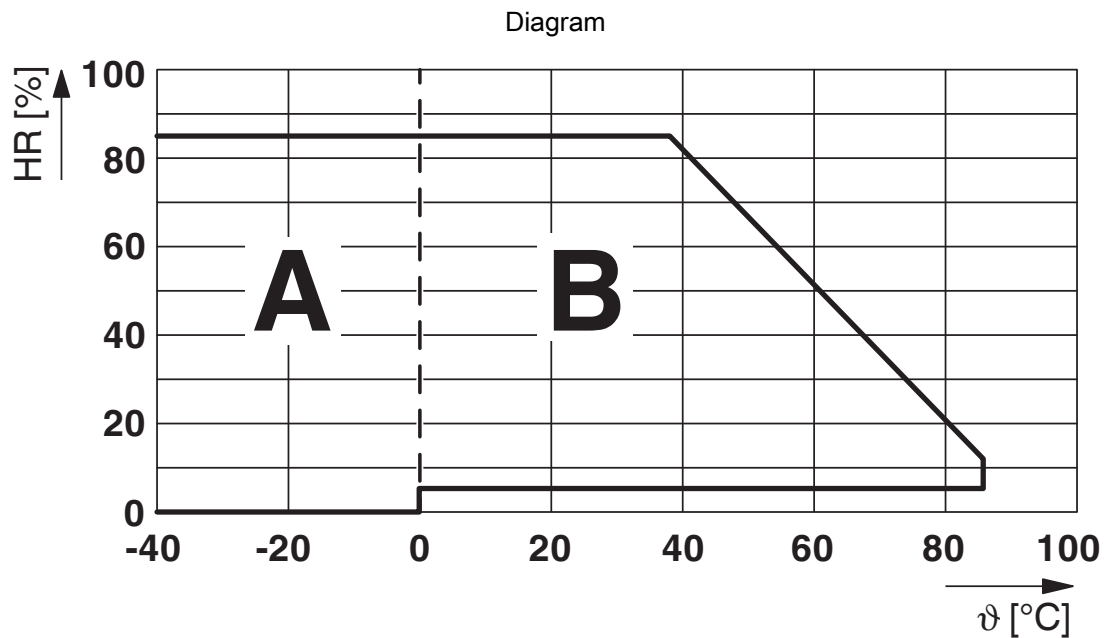
Mounting position	any
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Drawings

Diagram



Service life reduction factor



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

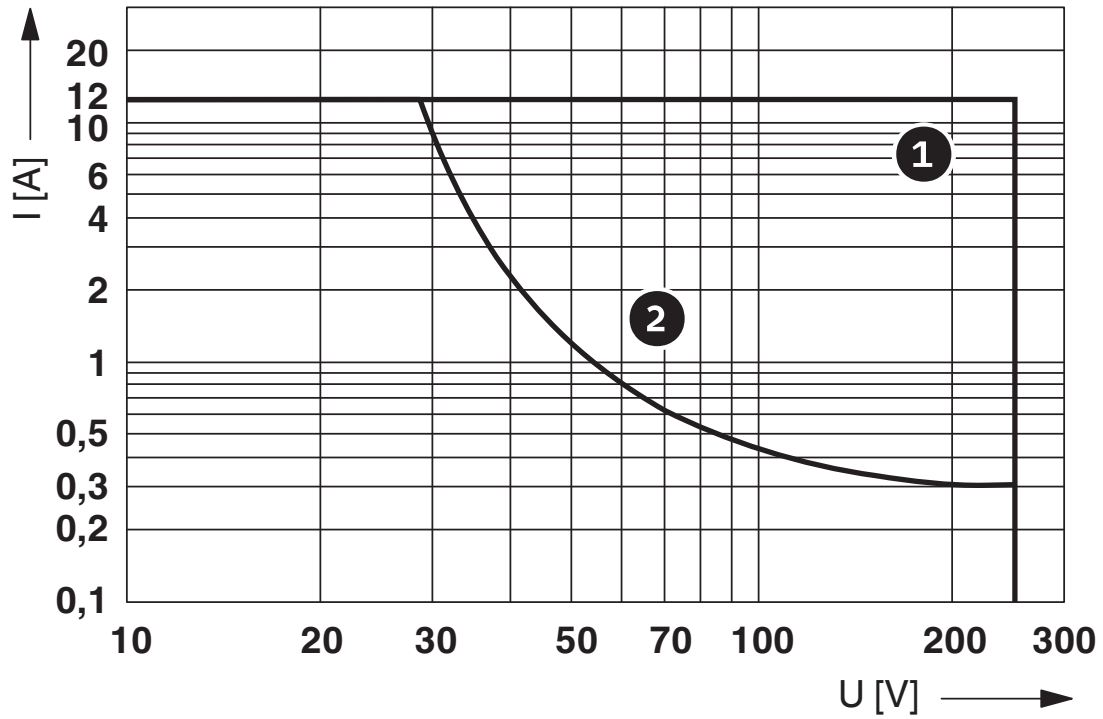
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Diagram



Interrupting rating

Curve 1: AC, ohmic load

Curve 2: DC, ohmic load

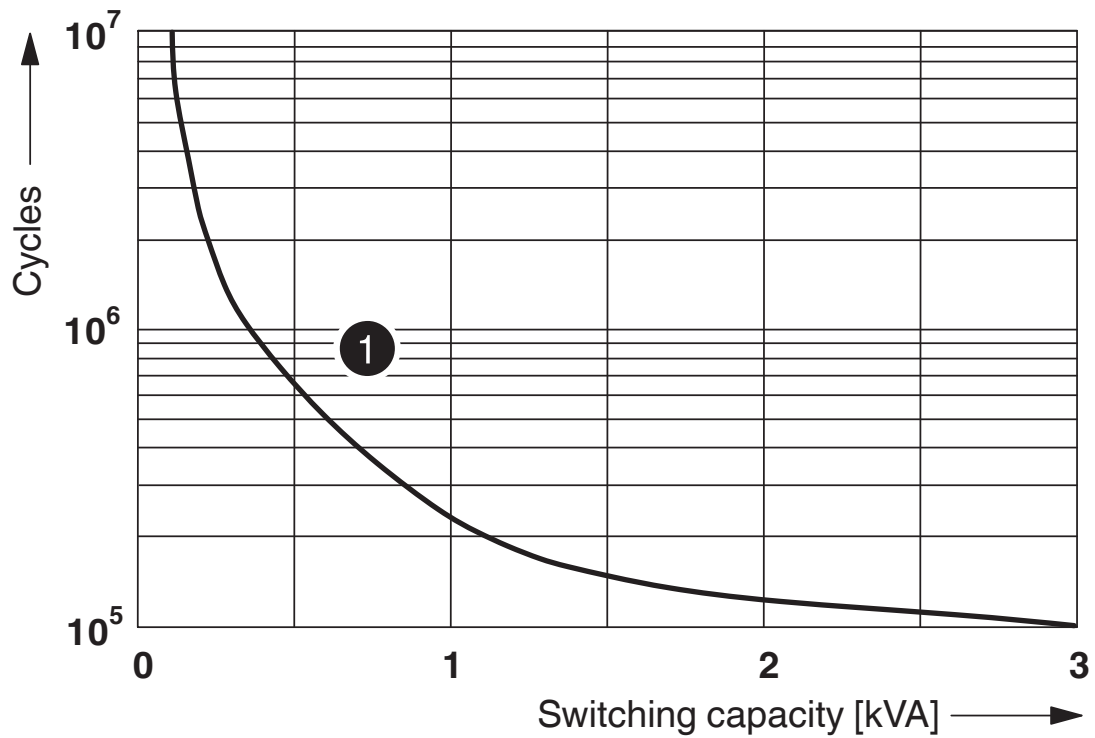
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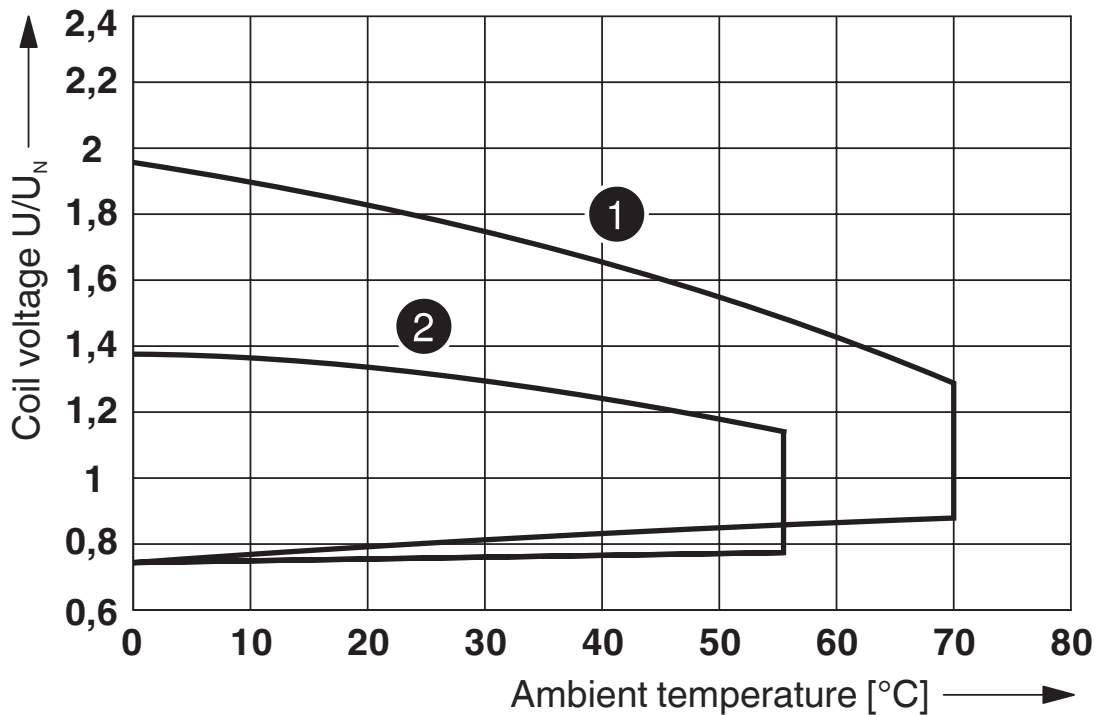
Diagram



① 250 V AC, Ohmic load

Electrical service life

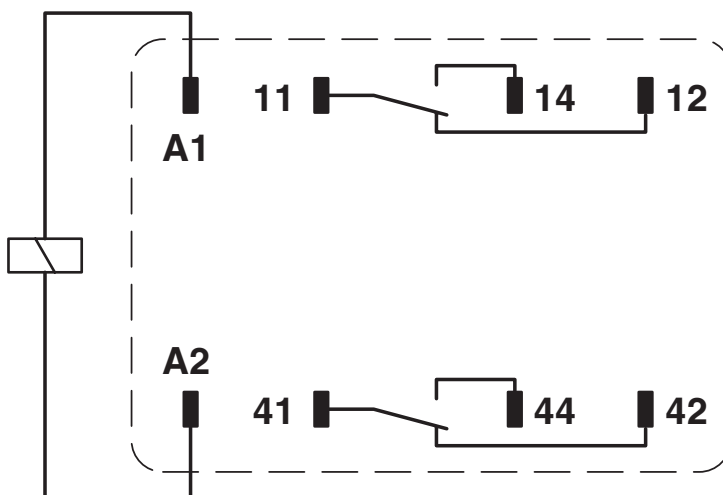
Diagram



- ① DC coils
- ② AC coils

Operating voltage range

Circuit diagram



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/2903667>



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



VDE Zeichengenehmigung

Approval ID: 40040427

cULus Recognized

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Classifications

ECLASS

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

RIF-2-BPT/4X21 - Relay base

2900934

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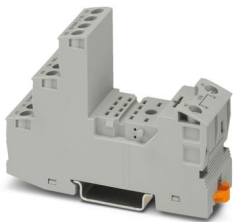


Relay base RIF-2..., for industrial relay with 2 or 4 changeover contacts, Push-in connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

RIF-2-BSC/4X21 - Relay base

2900932

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RIF-2... relay base, for industrial relay with 2 or 4 changeover contacts, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

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