

REL-IR4/LDP- 48DC/4X21 - Single relay



2903678

<https://www.phoenixcontact.com/us/products/2903678>

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Plug-in industrial relay with power contacts, 4 changeover contacts, test button, status LED, freewheeling diode, mechanical switching position indicator, polarity: A1+, A2-, coil voltage: 48 V DC

Commercial data

Item number	2903678
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C460
Product key	CK6949
Catalog page	Page 292 (C-7-2013)
GTIN	4046356758918
Weight per piece (including packing)	35.305 g
Weight per piece (excluding packing)	34.2 g
Customs tariff number	85364190
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

Insulation characteristics

Insulation	Basic insulation
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Insulation characteristics

Insulation	Basic insulation
Overvoltage category	II
Pollution degree	2

Electrical properties

Service life electrical	see diagram
Maximum power dissipation for nominal condition	1.06 W
Test voltage (Winding/contact)	2.5 kV _{rms} (50 Hz, 1 min., winding/contact)
Test voltage (Changeover contact/changeover contact)	2 kV _{rms} (50 Hz, 1 min., changeover contact/changeover contact)
Rated insulation voltage	250 V AC
Rated surge voltage	2.5 kV

Input data

Coil side

Nominal input voltage U_N	48 V DC
Input voltage range	38.4 V DC ... 86.4 V DC (20 °C)
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at U_N	22 mA
Typical response time	13 ms
Typical release time	14 ms
Protective circuit	Freewheeling diode
Status display	Yellow LED

Output data

Switching

Contact switching type	4 changeover contacts
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (At 24 mA)
Limiting continuous current	6 A

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Maximum inrush current	16 A (20 ms, N/O contacts)
Min. switching current	5 mA (at 24 V)
Interrupting rating (ohmic load) max.	144 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)
	1500 VA (for 250 V AC)
Switching capacity min.	0.12 W
Switching capacity	2 A (at 24 V, DC13)
	0.22 A (at 120 V, DC13)
	0.11 A (at 250 V, DC13)
	1.5 A (at 24 V, AC15)
	1.5 A (at 120 V, AC15)
	1 A (at 240 V, AC15)
Motor load according to UL 508	1/3 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 ... 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

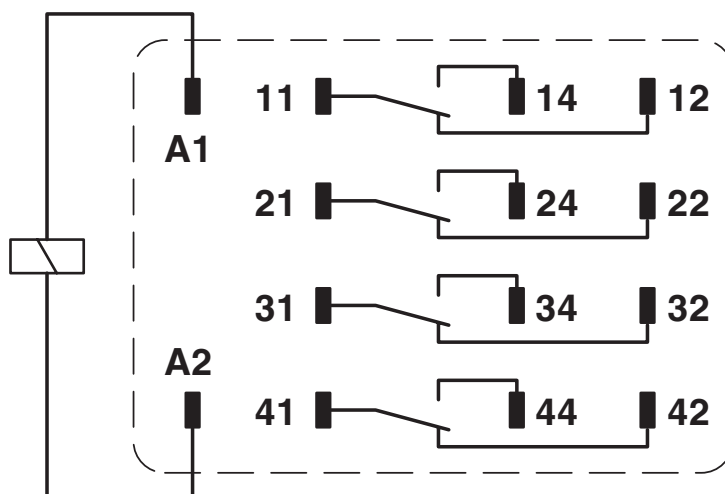
Standards/regulations	IEC 60664
	IEC 61810

Mounting

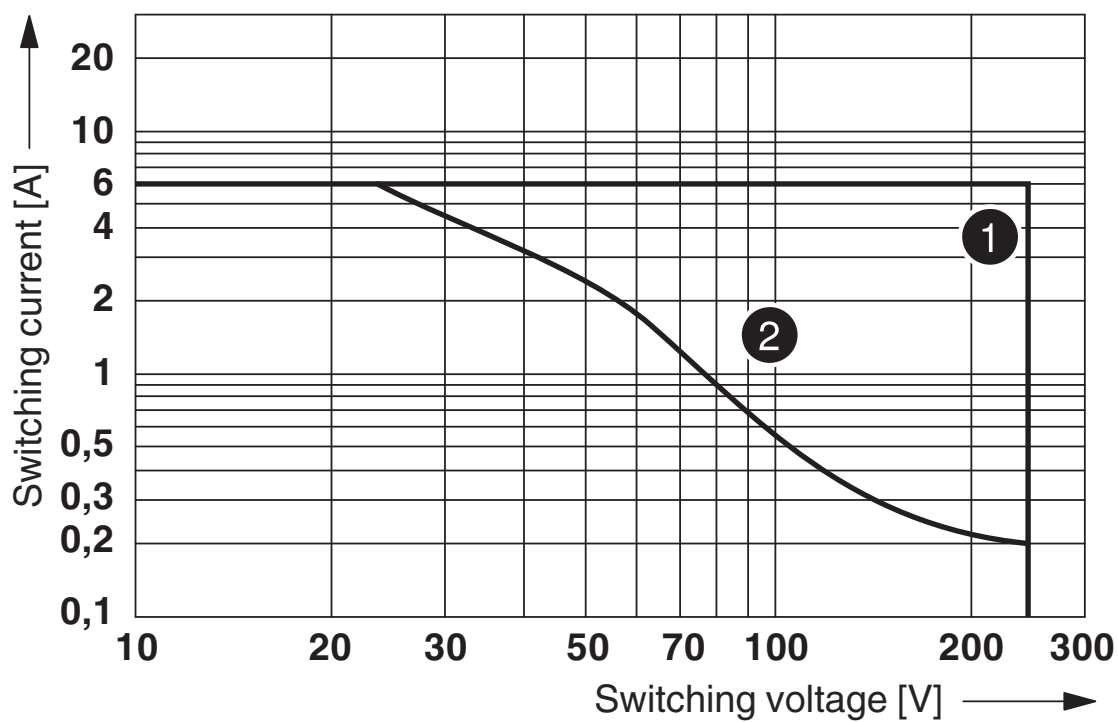
Mounting position	any
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Drawings

Circuit diagram

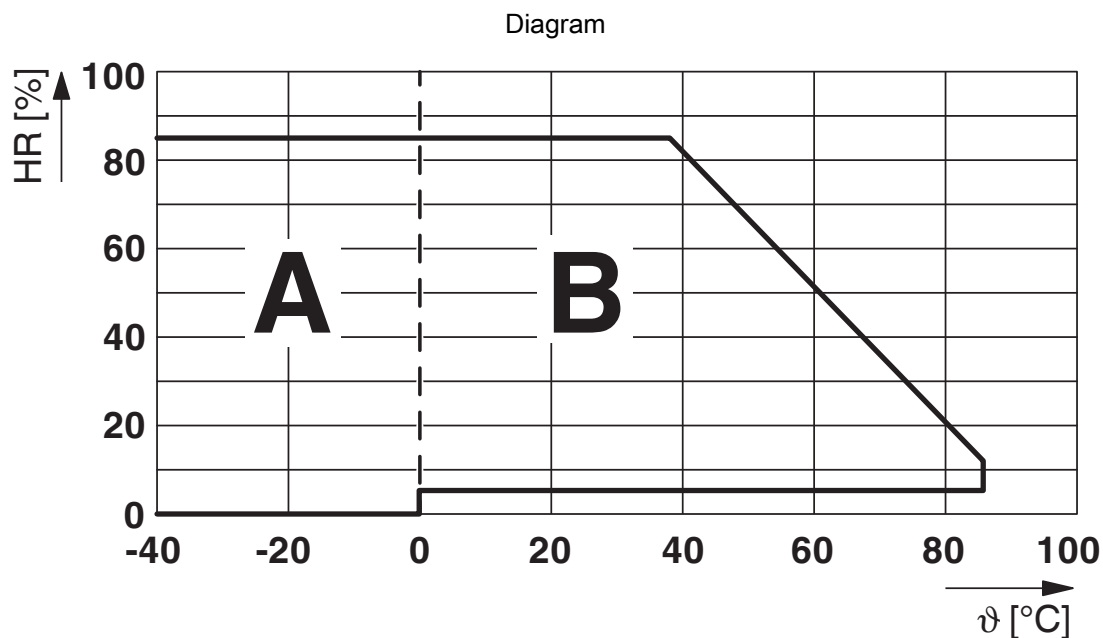


Diagram



① AC, ohmic load

② DC, ohmic load



Permissible humidity for operation and storage.

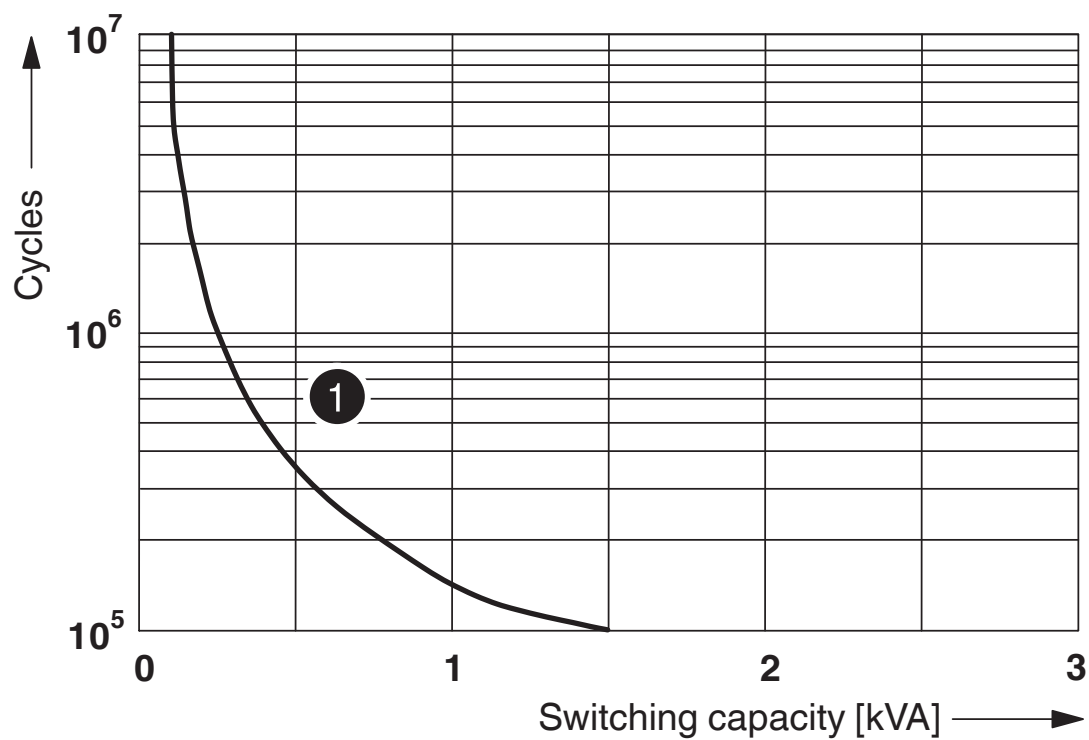
The maximum permissible ambient temperature as specified in the data sheet must be observed.

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

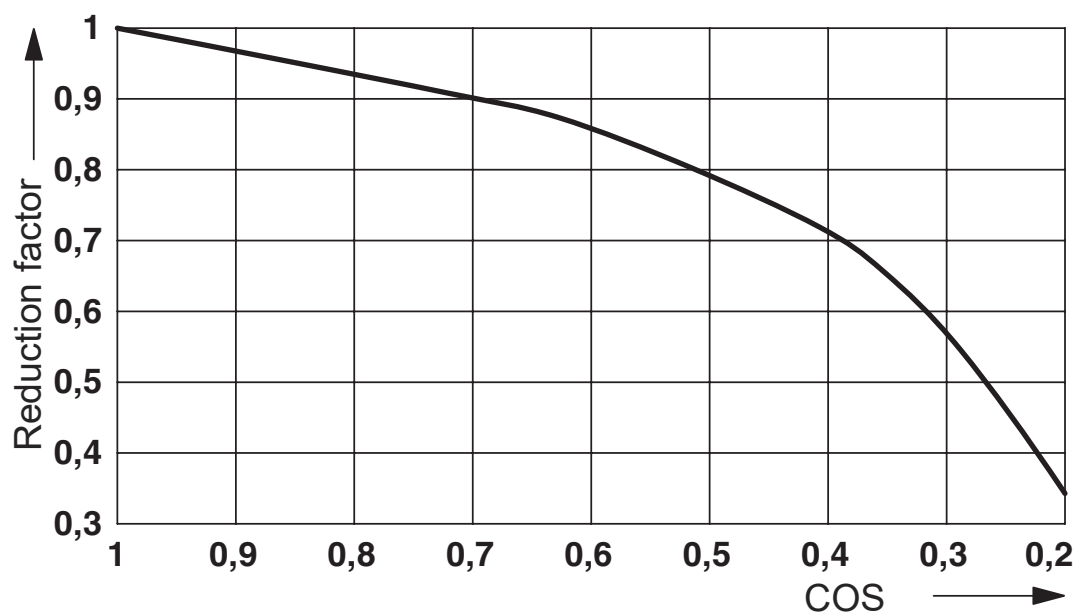
Diagram



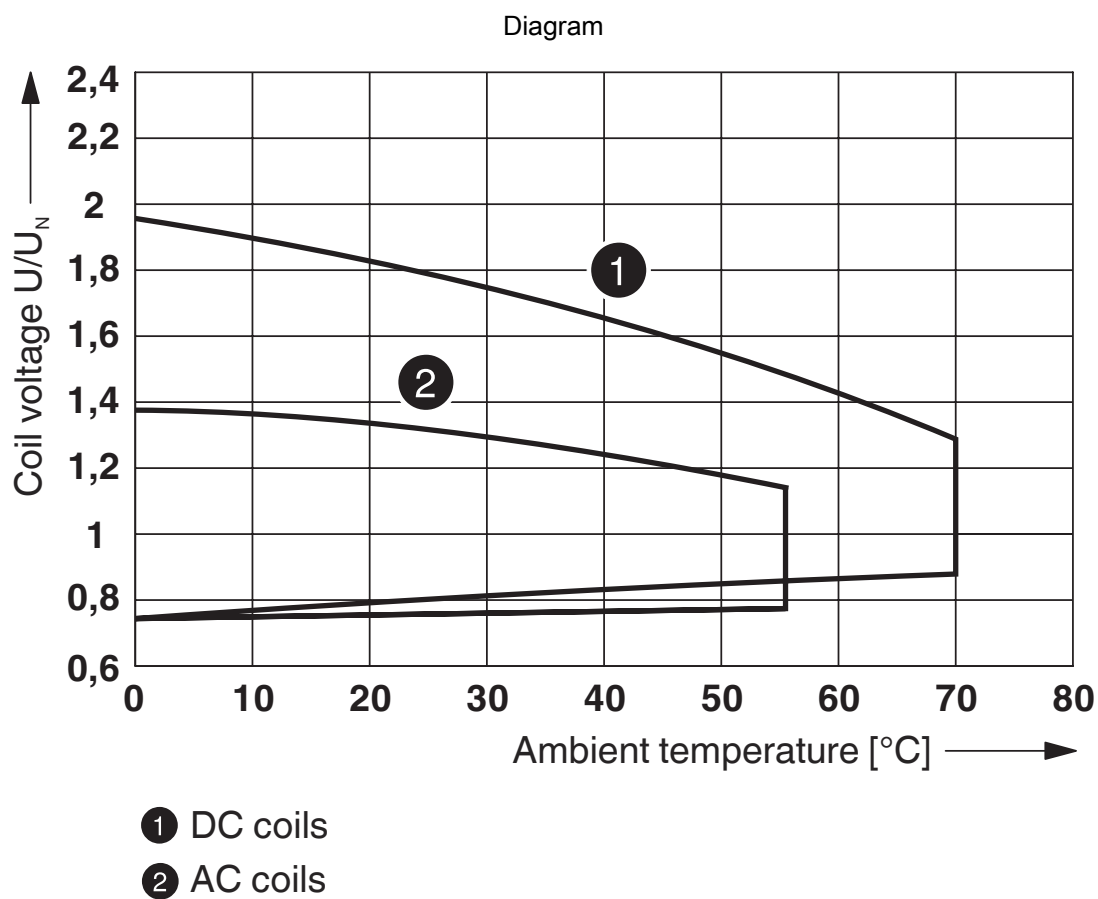
① 250 V AC, Ohmic load

Electrical service life

Diagram



Service life reduction factor



Operating voltage range

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2903678>



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



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
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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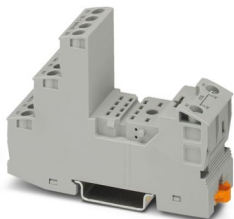


Relay base RIF-2..., for industrial relay with 2 or 4 changeover contacts, Push-in connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

RIF-2-BSC/4X21 - Relay base

2900932

<https://www.phoenixcontact.com/us/products/2900932>



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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