

REL-IR4/24DC/4X21/EX - Single relay



2909738

<https://www.phoenixcontact.com/us/products/2909738>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Pluggable industrial relay, RT III sealed with power contacts, 4x changeover contacts, mechanical switch position indicator, polarity: non-polarized, input voltage: 24 V DC, in connection with RIF-2.../EX bases approved in accordance with ATEX/IECEX (zone 2) and Ex zone class I, div. 2.

Commercial data

Item number	2909738
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C460
Product key	CK6193
Catalog page	Page 345 (C-5-2019)
GTIN	4055626379685
Weight per piece (including packing)	35.43 g
Weight per piece (excluding packing)	35.43 g
Customs tariff number	85364190
Country of origin	PL

Technical data

Product properties

Product type	Single relay
Operating mode	100% operating factor
Mechanical service life	1x 10 ⁷ cycles, approximately

Insulation characteristics

Insulation	Basic insulation
------------	------------------

Insulation characteristics

Insulation	Basic insulation
Overvoltage category	II
Pollution degree	2

Electrical properties

Maximum power dissipation for nominal condition	0.91 W
Test voltage (Winding/contact)	2.5 kV _{rms} (50 Hz, 1 min., winding/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	2.5 kV

Input data

Coil side

Nominal input voltage U _N	24 V DC
Input voltage range	18.7 V DC ... 46.8 V DC
Input voltage range in reference to U _N	see diagram
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at U _N	38 mA
Typical response time	13 ms
Typical release time	3 ms

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
Maximum inrush current	16 A (20 ms, N/O contacts) 12 A (4 s, N/O contacts)

REL-IR4/24DC/4X21/EX - Single relay



2909738

<https://www.phoenixcontact.com/us/products/2909738>

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)
	1 A (at 230 V, AC15)
Motor load according to UL 508	1/3 HP, 240 V AC

Connection data

Connection method	Plug-in connection
-------------------	--------------------

Dimensions

Width	21.2 mm
Height	27.5 mm
Depth	35.6 mm

Environmental and real-life conditions

Ambient conditions

Degree of protection	RT III
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

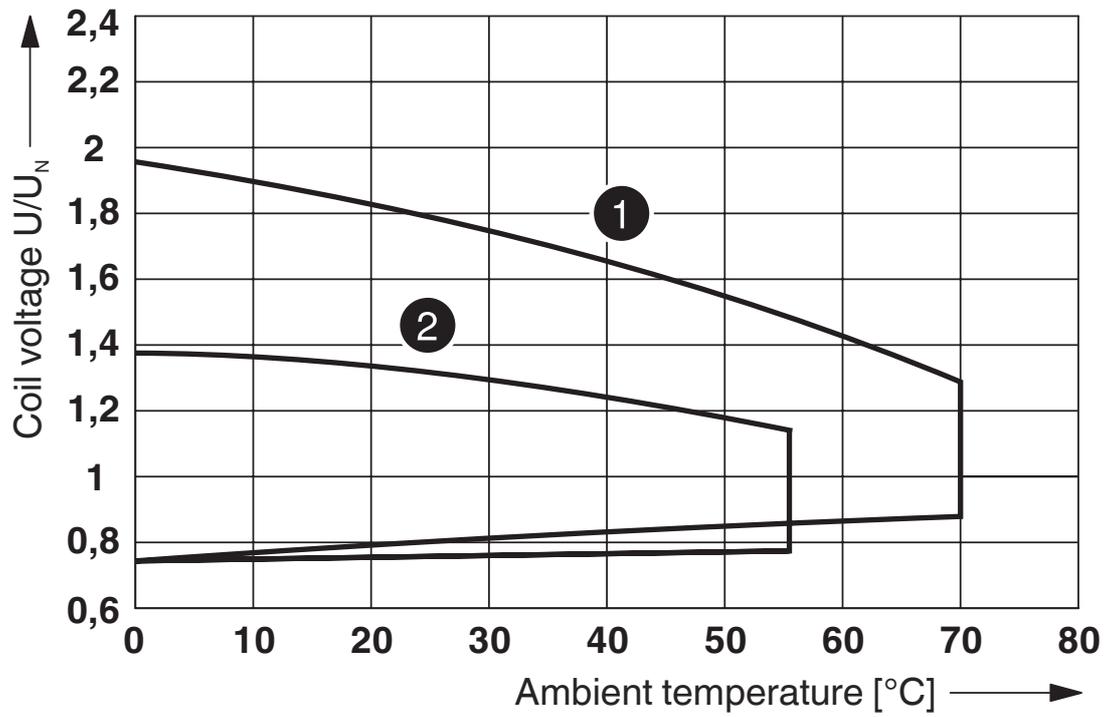
Standards/regulations	IEC 60664
	IEC 61810

Mounting

Mounting position	any
-------------------	-----

Drawings

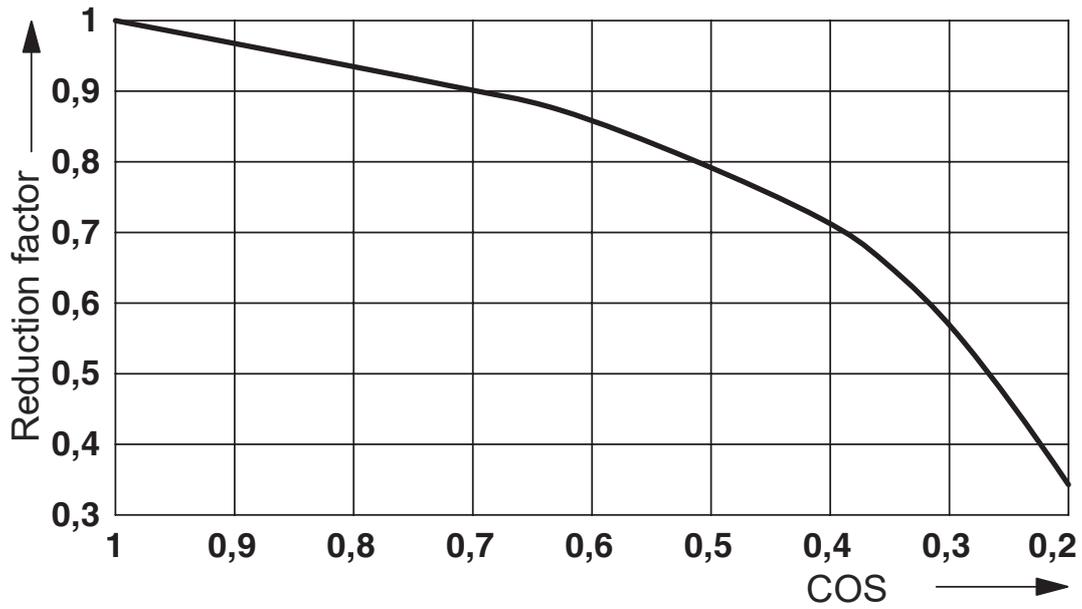
Diagram



- ① DC coils
- ② AC coils

Operating voltage range

Diagram



Service life reduction factor

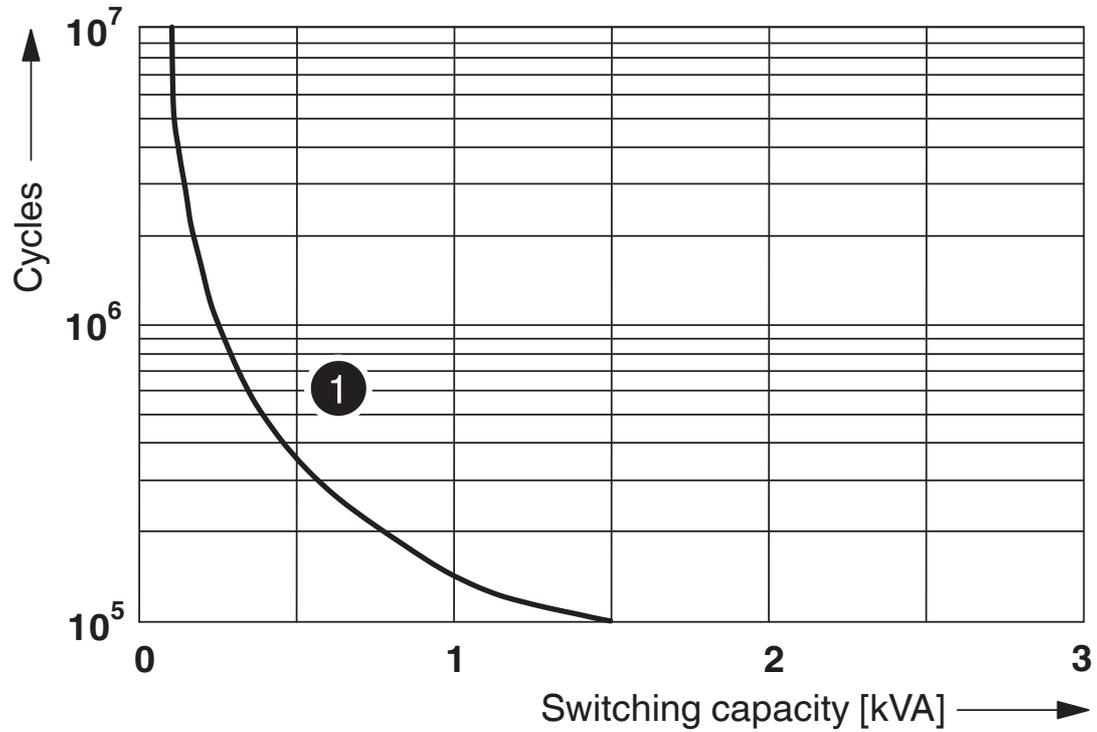
REL-IR4/24DC/4X21/EX - Single relay



2909738

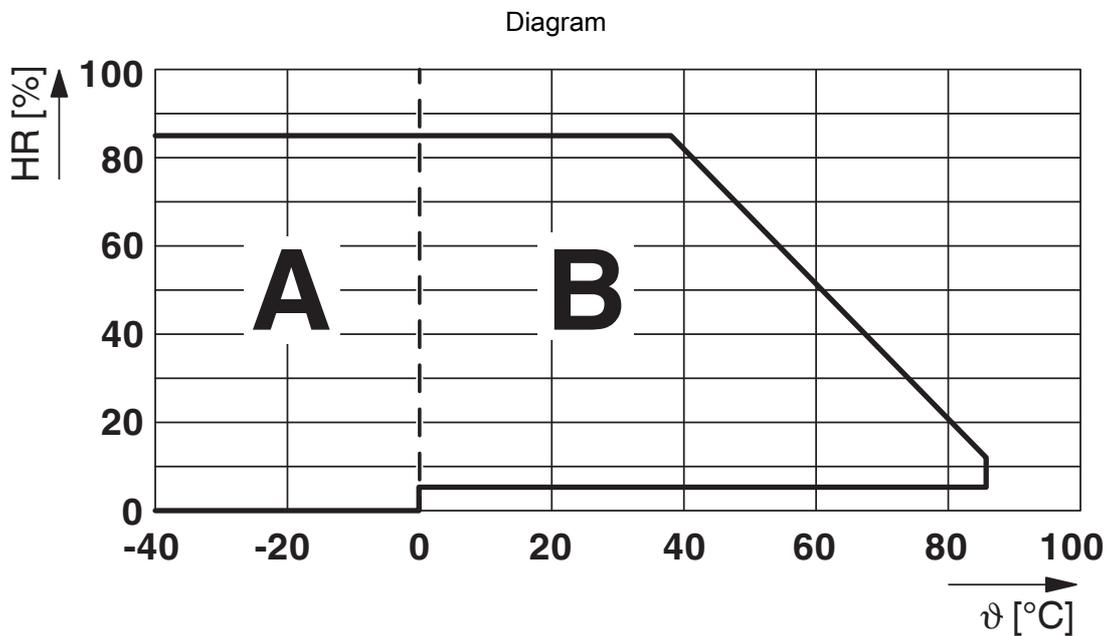
<https://www.phoenixcontact.com/us/products/2909738>

Diagram



① 250 V AC, Ohmic load

Electrical service life



Permissible humidity for operation and storage.

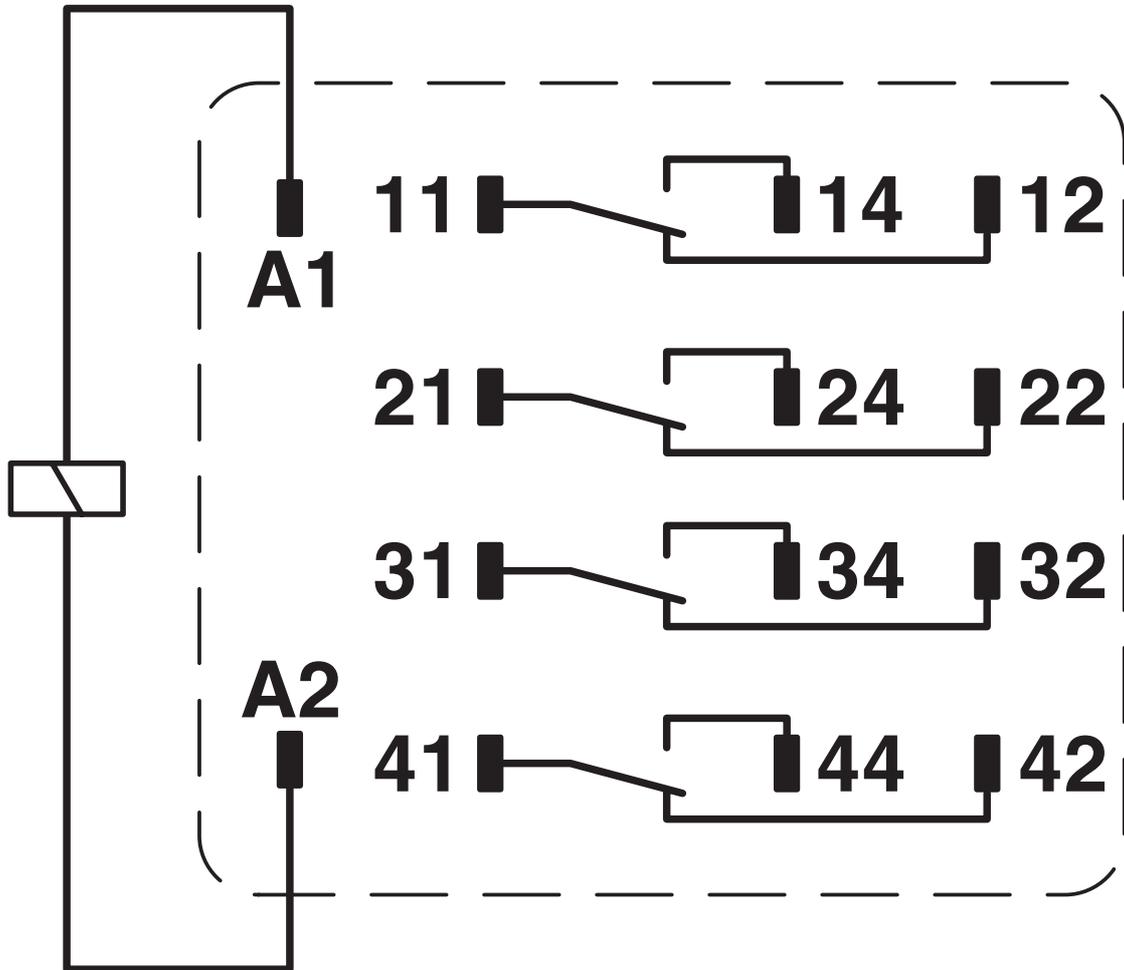
The maximum permissible ambient temperature as specified in the data sheet must be observed.

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

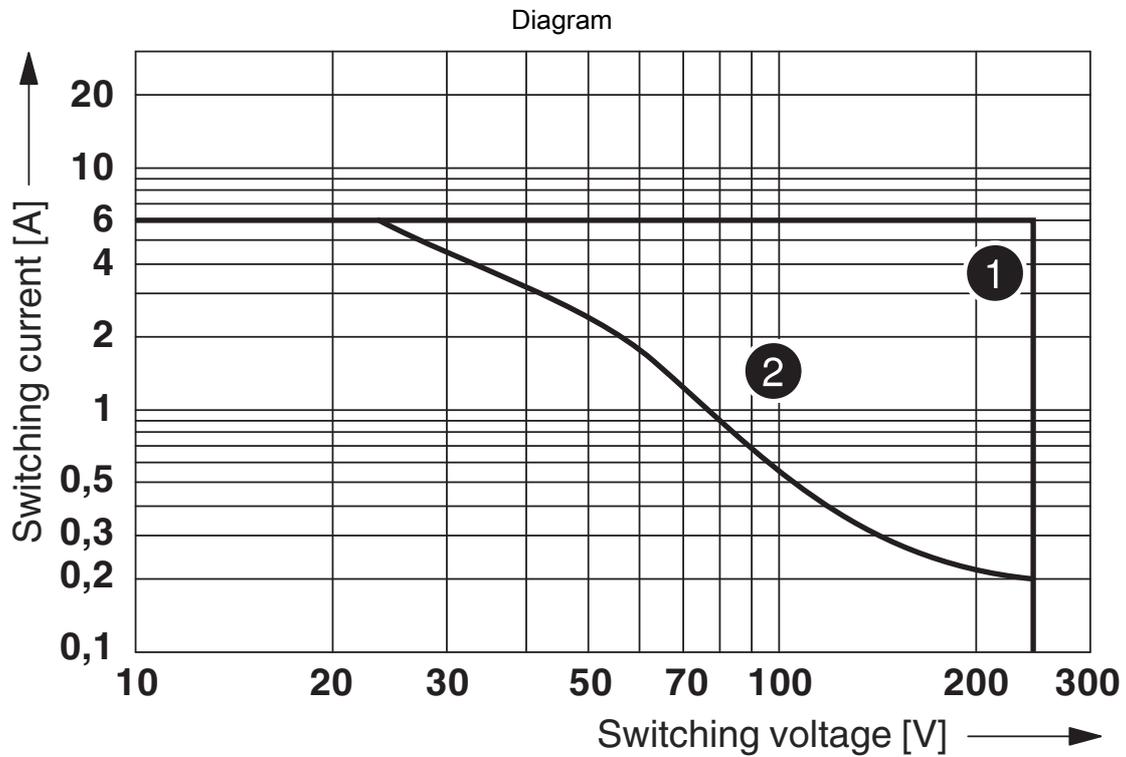
On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature $\leq 25^\circ\text{C}$.

Circuit diagram



2909738

<https://www.phoenixcontact.com/us/products/2909738>



- ① AC, ohmic load
- ② DC, ohmic load

Interrupting rating

REL-IR4/24DC/4X21/EX - Single relay



2909738

<https://www.phoenixcontact.com/us/products/2909738>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2909738>



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

REL-IR4/24DC/4X21/EX - Single relay



2909738

<https://www.phoenixcontact.com/us/products/2909738>

Classifications

ECLASS

ECLASS-11.0	27371601
ECLASS-12.0	27371601
ECLASS-13.0	27371601

ETIM

ETIM 8.0	EC001437
----------	----------

UNSPSC

UNSPSC 21.0	39122300
-------------	----------

REL-IR4/24DC/4X21/EX - Single relay



2909738

<https://www.phoenixcontact.com/us/products/2909738>

Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

REL-IR4/24DC/4X21/EX - Single relay



2909738

<https://www.phoenixcontact.com/us/products/2909738>

Mandatory accessories

RIF-2-BPT/4X21/EX - Relay base

1047028

<https://www.phoenixcontact.com/us/products/1047028>



RIF-2.../EX relay base for assembling with RTIII-sealed industrial relays with 4 changeover contacts for use in zone 2, Push-in connection, plug-in option for input / interference suppression modules, for mounting on NS 35/7,5

RIF-2-BSC/4X21/EX - Relay base

1047031

<https://www.phoenixcontact.com/us/products/1047031>



RIF-2.../EX relay base for assembling with RTIII-sealed industrial relays with 4 changeover contacts for use in zone 2, screw connection, plug-in option for input / interference suppression modules, for mounting on NS 35/7,5

Phoenix Contact 2023 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com