

REL-IR2/LDP- 12DC/2X21 - Single relay



2903659

<https://www.phoenixcontact.com/us/products/2903659>

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.



Plug-in industrial relay with power contacts, 2 changeover contacts, test button, status LED, freewheeling diode, mechanical switching position indicator, polarity: A1+, A2-, input voltage: 12 V DC

Commercial data

Item number	2903659
Packing unit	1 pc
Minimum order quantity	10 pc
Sales key	C460
Product key	CK6193
Catalog page	Page 300 (C-5-2019)
GTIN	4046356758123
Weight per piece (including packing)	36.4 g
Weight per piece (excluding packing)	35.23 g
Customs tariff number	85364190
Country of origin	PL

REL-IR2/LDP- 12DC/2X21 - Single relay



2903659

<https://www.phoenixcontact.com/us/products/2903659>

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
------------	------------------

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	0.94 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	12 V DC
Input voltage range	9.4 V DC ... 23.4 V DC
Input voltage range in reference to U_N	see diagram
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at U_N	78 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	2 changeover contacts
Type of switch contact	Single contact
Contact material	AgNi

REL-IR2/LDP- 12DC/2X21 - Single relay



2903659

<https://www.phoenixcontact.com/us/products/2903659>

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
-------------------	--------------------

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

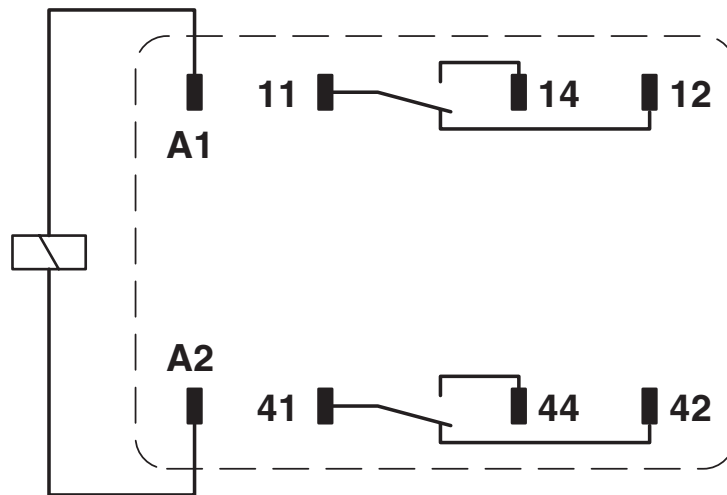
Standards/regulations	IEC 60664
	IEC 61810

Mounting

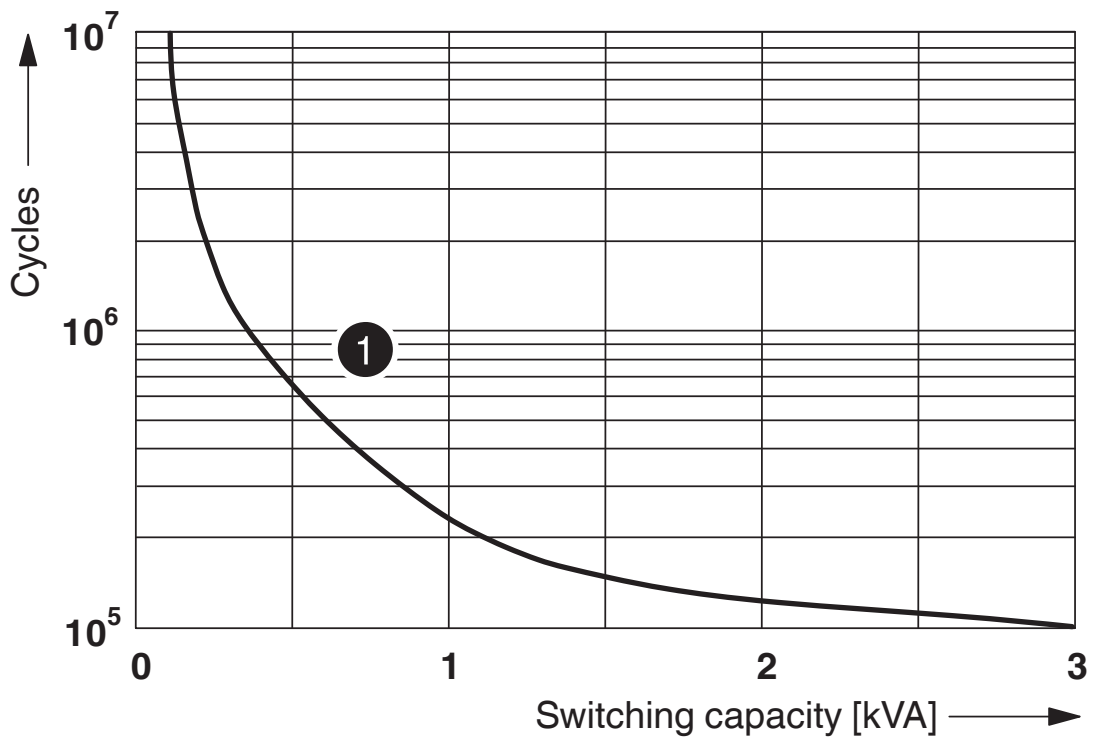
Mounting position	any
-------------------	-----

Drawings

Circuit diagram

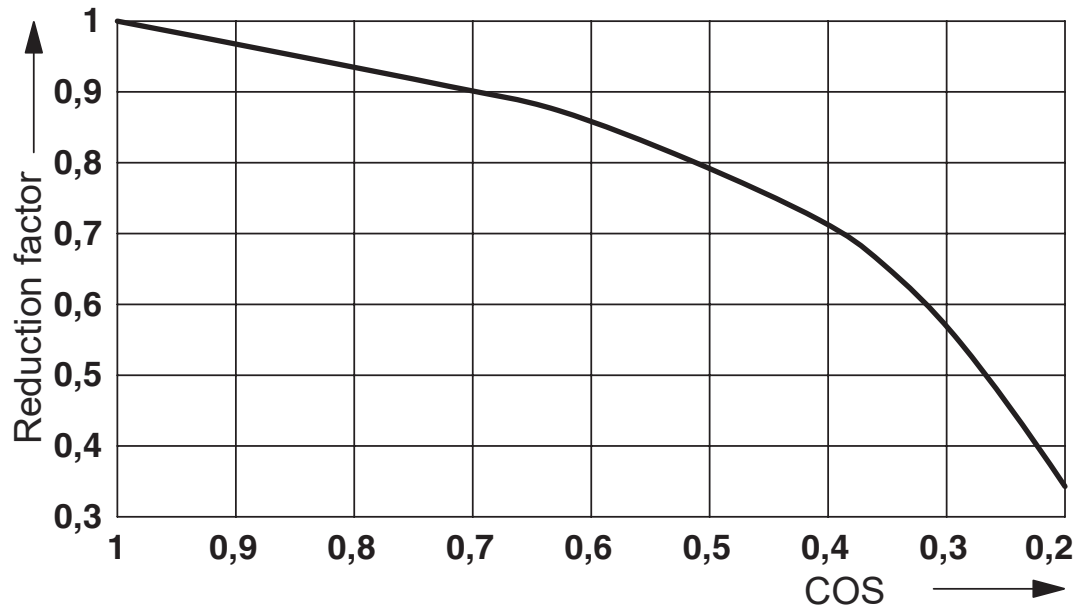


Diagram

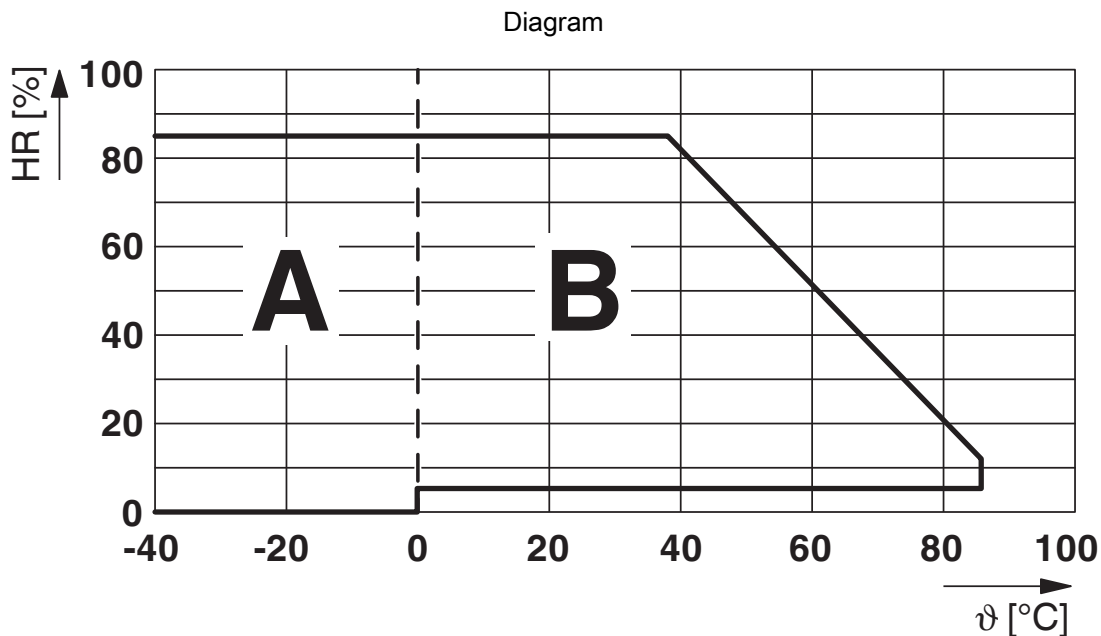


① 250 V AC, Ohmic load

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

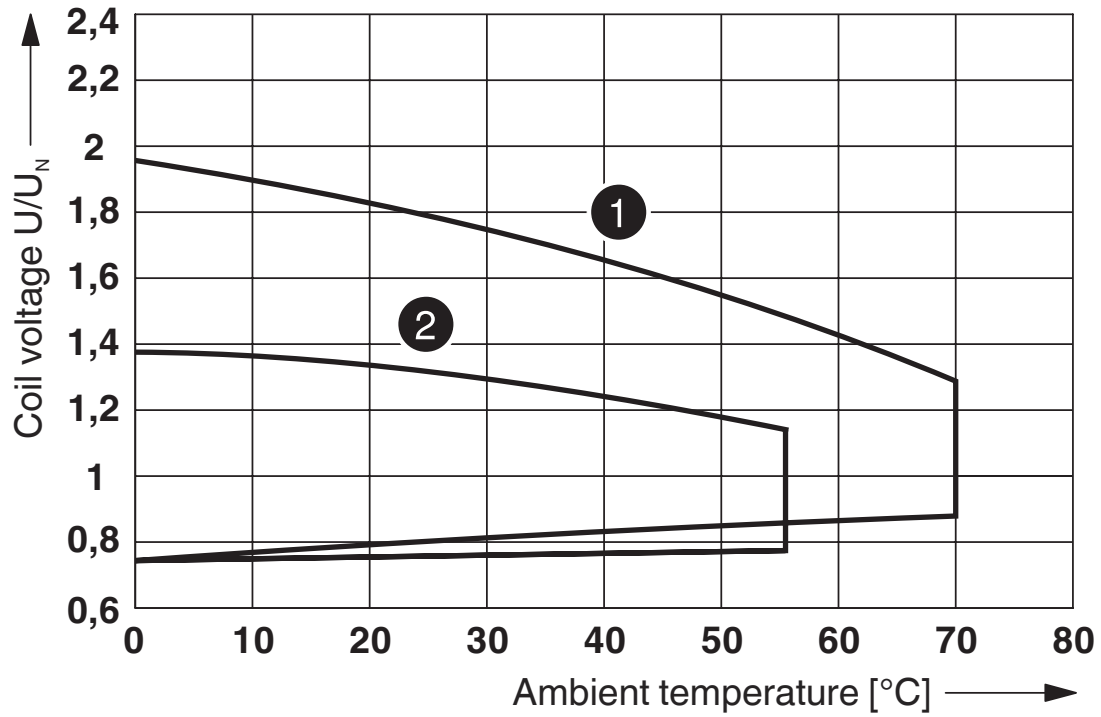
Area B: Condensation at ambient temperatures $> 0^\circ\text{C}$ must be prevented

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

2903659

<https://www.phoenixcontact.com/us/products/2903659>

Diagram

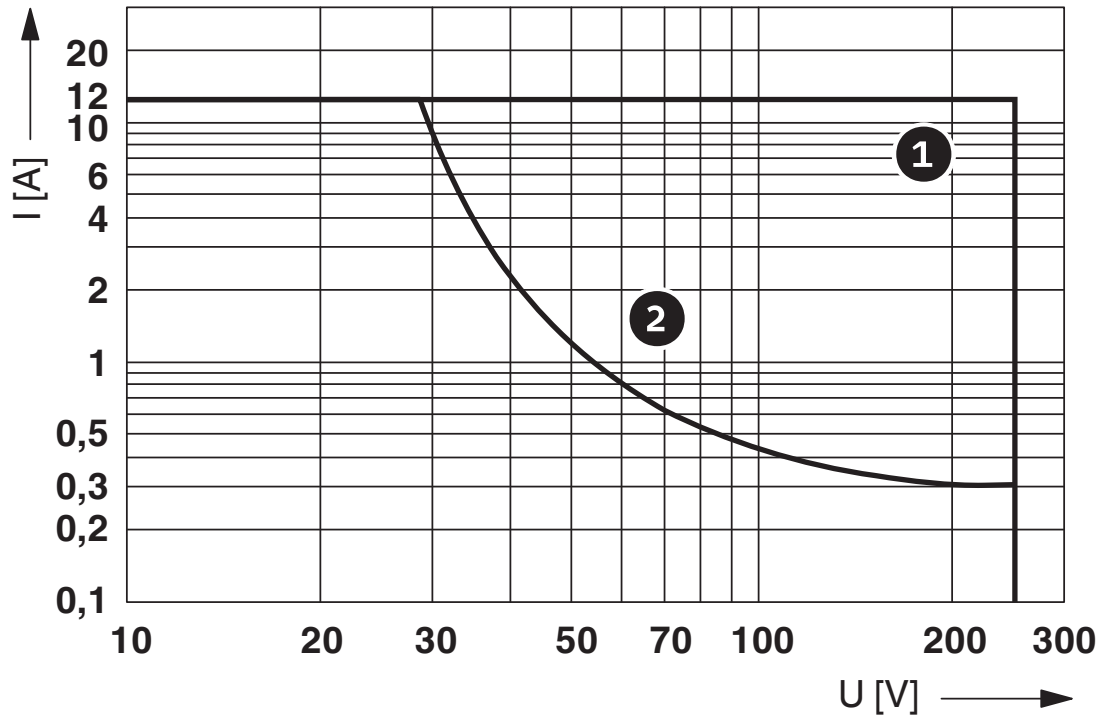


① DC coils

② AC coils

Operating voltage range

Diagram



Interrupting rating
Curve 1: AC, ohmic load
Curve 2: DC, ohmic load

REL-IR2/LDP- 12DC/2X21 - Single relay



2903659

<https://www.phoenixcontact.com/us/products/2903659>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2903659>



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

REL-IR2/LDP- 12DC/2X21 - Single relay



2903659

<https://www.phoenixcontact.com/us/products/2903659>

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-IR2/LDP- 12DC/2X21 - Single relay



2903659

<https://www.phoenixcontact.com/us/products/2903659>

Environmental product compliance

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

REL-IR2/LDP- 12DC/2X21 - Single relay



2903659

<https://www.phoenixcontact.com/us/products/2903659>

Mandatory accessories

RIF-2-BPT/4X21 - Relay base

2900934

<https://www.phoenixcontact.com/us/products/2900934>

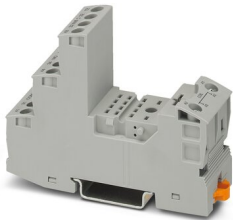


Relay base RIF-2..., for industrial relay with 2 or 4 changeover contacts, Push-in connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

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

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