

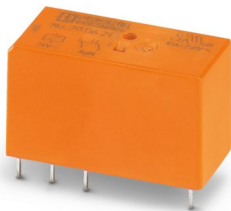
REL-MR-24DC/21-21/ATEX - Single relay



2906213

<https://www.phoenixcontact.com/us/products/2906213>

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 miniature power relay, RT III sealed with power contacts, 2 changeover contacts, input voltage: 24 V DC, in connection with the corresponding PLC base approved in accordance with ATEX/IECEx (zone 2) and Ex zone class I, div. 2.

Commercial data

Item number	2906213
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C460
Product key	CK693B
GTIN	4055626047409
Weight per piece (including packing)	16.104 g
Weight per piece (excluding packing)	15.7 g
Customs tariff number	85364190
Country of origin	AT

REL-MR-24DC/21-21/ATEX - Single relay



2906213

<https://www.phoenixcontact.com/us/products/2906213>

Technical data

Product properties

Product type	Single relay
Operating mode	100% operating factor
Mechanical service life	3x 10 ⁷ cycles
Date of last data management	02.05.2024

Insulation characteristics

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

Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	3

Electrical properties

Service life electrical	see diagram
Maximum power dissipation for nominal condition	0.41 W
Test voltage (Winding/contact)	5 kV AC (50 Hz, 1 min., winding/contact)
Test voltage (Contact/contact)	2.5 kV AC (50 Hz, 1 min., contact/contact)

Input data

Coil side

Nominal input voltage U _N	24 V DC
Input voltage range	18.7 V DC ... 59.5 V DC
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at U _N	17 mA
Typical response time	7 ms
Typical release time	3 ms
Coil resistance	1440 Ω ±10 % (at 20 °C)

Output data

Switching

Contact switching type	2 changeover contacts
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 10 mA)
Limiting continuous current	8 A
Maximum inrush current	25 A (20 ms)
Min. switching current	10 mA (At 5 V)

REL-MR-24DC/21-21/ATEX - Single relay



2906213
<https://www.phoenixcontact.com/us/products/2906213>

Interrupting rating (ohmic load) max.	190 W (at 24 V DC)
	85 W (at 48 V DC)
	60 W (at 60 V DC)
	44 W (at 110 V DC)
	60 W (at 220 V DC)
	2000 VA (for 250 V AC)
Switching capacity	2 A (at 24 V, DC13)
	0.2 A (at 250 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 A (at 250 V, AC15)

Connection data

Connection method	Plug / solder connection
-------------------	--------------------------

Dimensions

Dimensional drawing	
Width	12.7 mm
Height	29 mm
Depth	15.7 mm

Material specifications

Color	orange (RAL 2003)
-------	-------------------

Environmental and real-life conditions

Ambient conditions	
Degree of protection	RT III
Ambient temperature (operation)	-40 °C ... 85 °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
	EN 50178

Mounting

REL-MR-24DC/21-21/ATEX - Single relay



2906213

<https://www.phoenixcontact.com/us/products/2906213>

Assembly note	Can be aligned without spacing ($> 70\text{ °C} \geq 2.5\text{ mm}$)
Mounting position	any

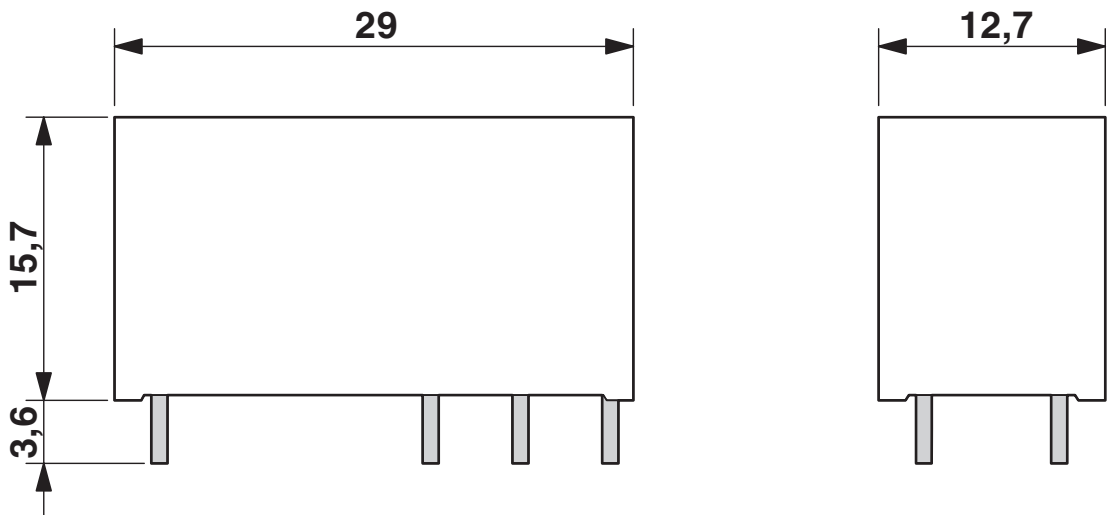
REL-MR-24DC/21-21/ATEX - Single relay



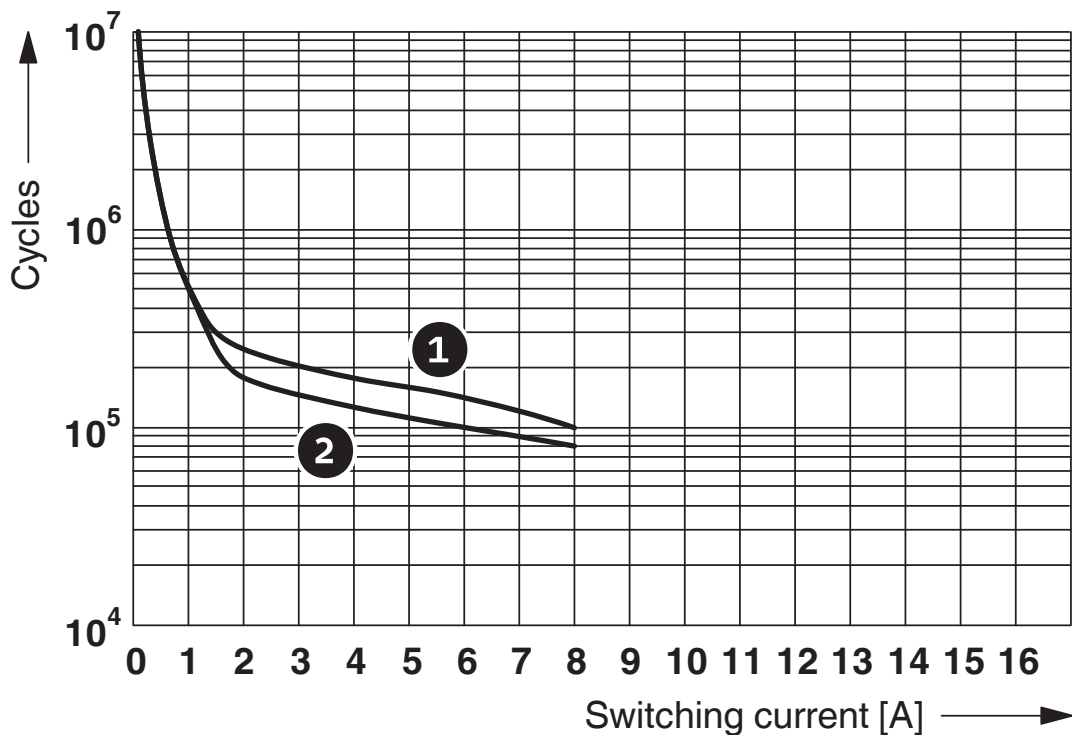
2906213
<https://www.phoenixcontact.com/us/products/2906213>

Drawings

Dimensional drawing

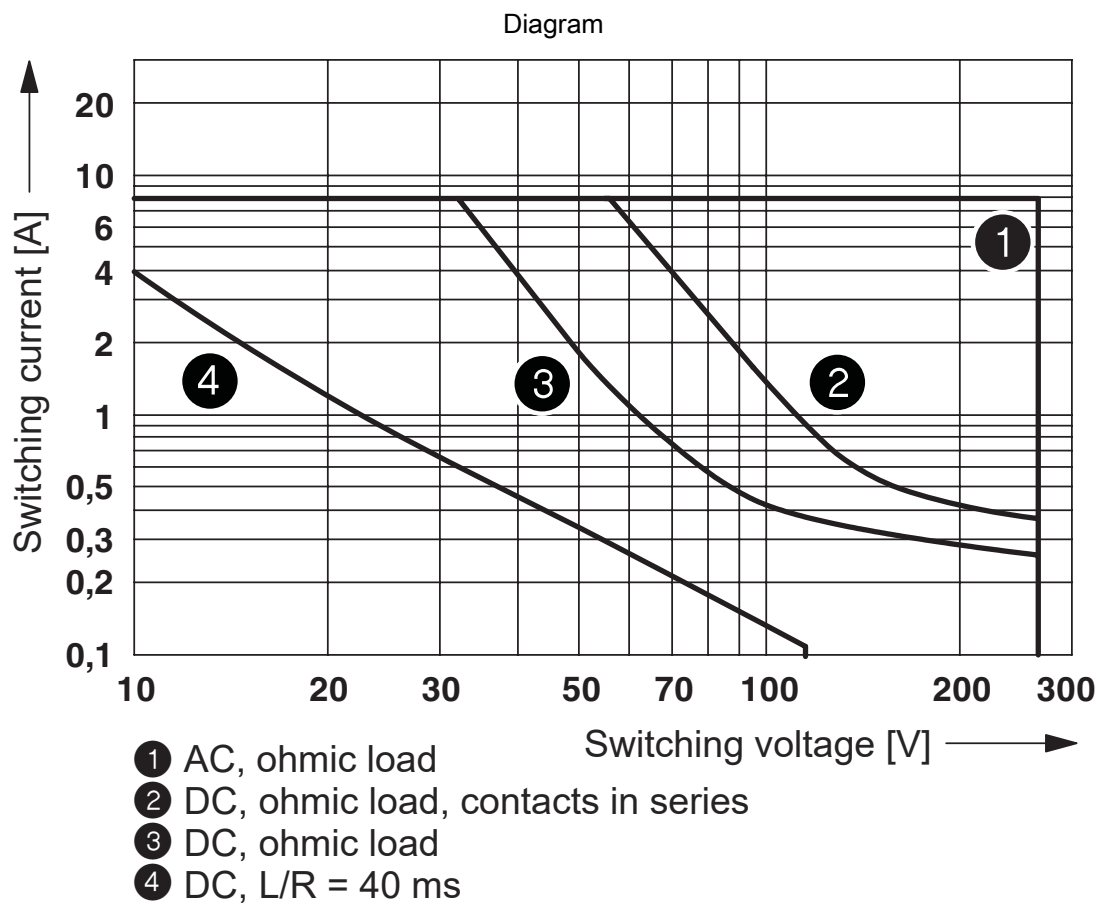


Diagram

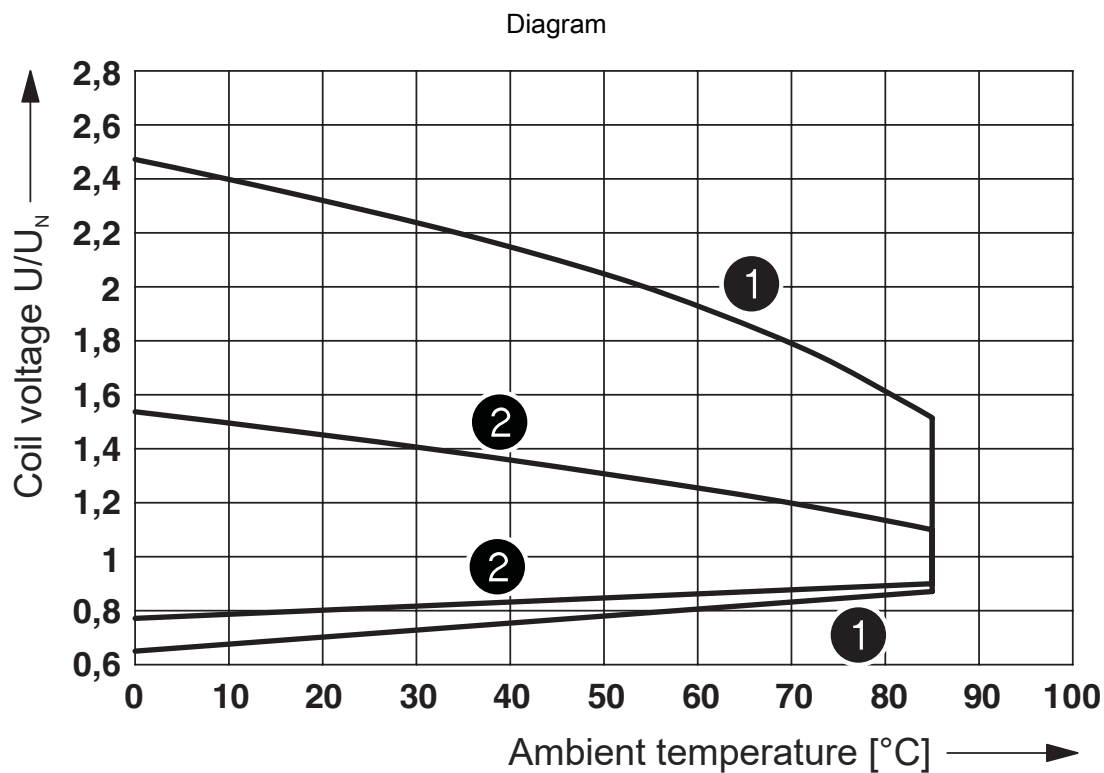


- 1 250 V AC, ohmic load (DC coils)
- 2 250 V AC, ohmic load (AC coils)

Electrical service life



Interrupting rating



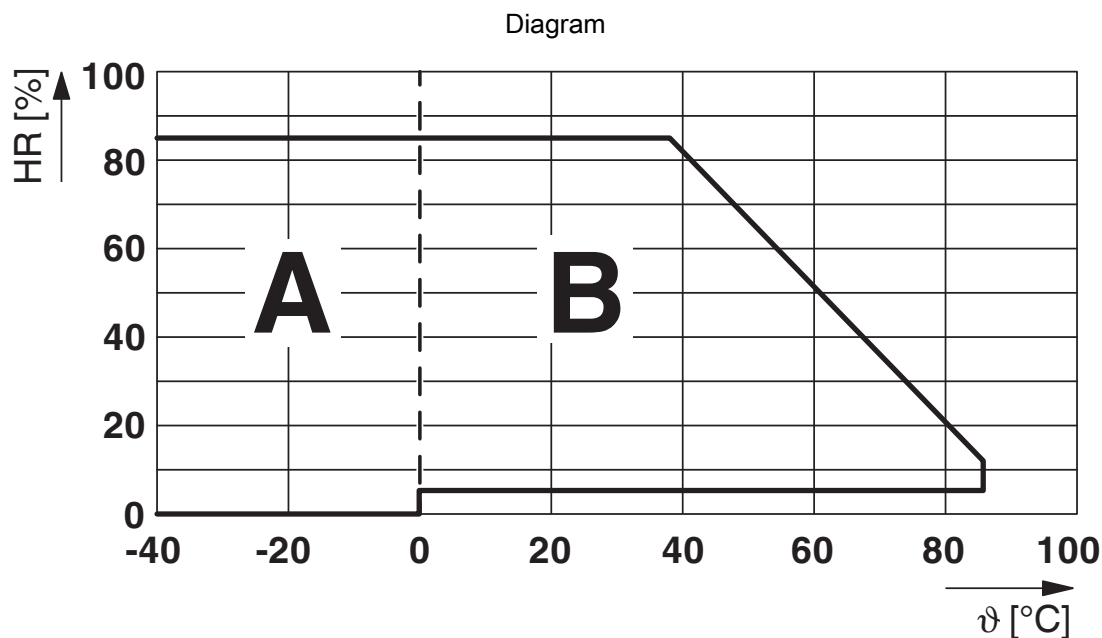
- ① DC coils
- ② AC coils

Operating voltage range

Diagram



Service life reduction factor with various cos phi



Permissible humidity for operation and storage.

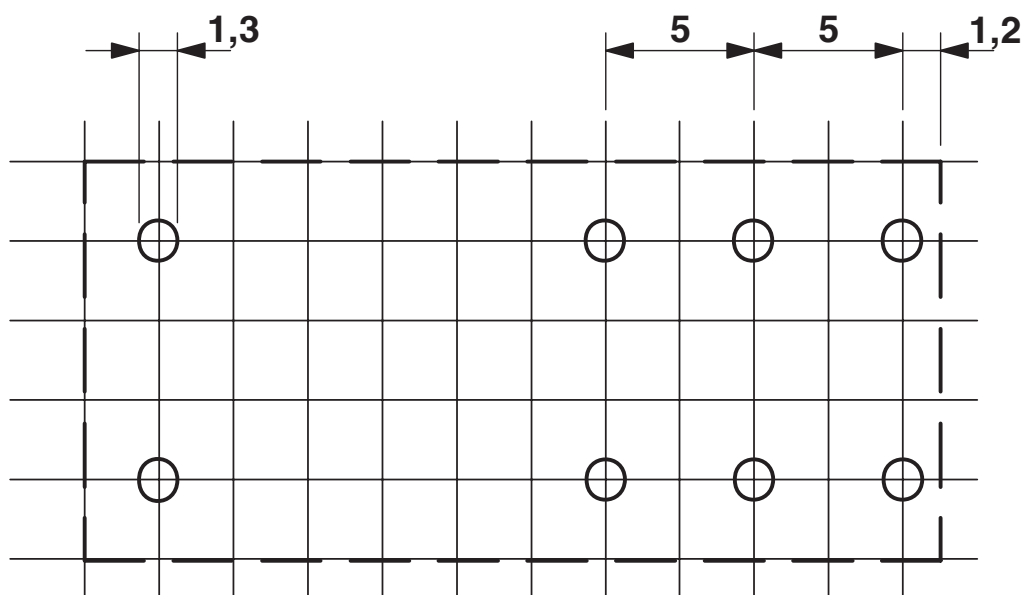
The maximum permissible ambient temperature as specified in the data sheet must be observed.

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

Drilling plan/solder pad geometry



Basic pitch 2.5 mm

REL-MR-24DC/21-21/ATEX - Single relay




2906213

<https://www.phoenixcontact.com/us/products/2906213>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2906213>




cUL Recognized
Approval ID: FILE E 228652




UL Recognized
Approval ID: FILE E 228652



EAC
Approval ID: TR_TS_D_00573_c



EAC
Approval ID: RU*C-DE.*08.B.00010



VDE Zeichengenehmigung
Approval ID: 40007758

cULus Recognized

REL-MR-24DC/21-21/ATEX - Single relay



2906213

<https://www.phoenixcontact.com/us/products/2906213>

Classifications

ECLASS

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

ETIM

ETIM 9.0	EC001437
----------	----------

UNSPSC

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

REL-MR-24DC/21-21/ATEX - Single relay



2906213
<https://www.phoenixcontact.com/us/products/2906213>

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%

Phoenix Contact 2024 © - 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