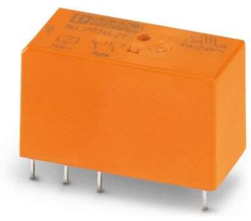
chanhvinh.com

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

2906213

https://www.phoenixcontact.com/pc/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
Product key	DK693B
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

chanhvinh.com

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

2906213

https://www.phoenixcontact.com/pc/products/2906213

Technical data

Product properties

Product type	Single relay
Operating mode	100% operating factor
Mechanical service life	3x 10^7 cycles

Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	3

Data management status

Date of last data management	08.11.2024

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)
	190 W (at 24 V DC)

chanhvinh.com

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

2906213

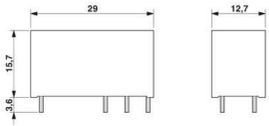
https://www.phoenixcontact.com/pc/products/2906213

Interrupting rating (ohmic load) max.	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

Assembly note	Can be aligned without spacing (> 70 °C ≥ 2.5 mm)

chanhvinh.com

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

2906213

https://www.phoenixcontact.com/pc/products/2906213

Mounting position	any

chanhvinh.com

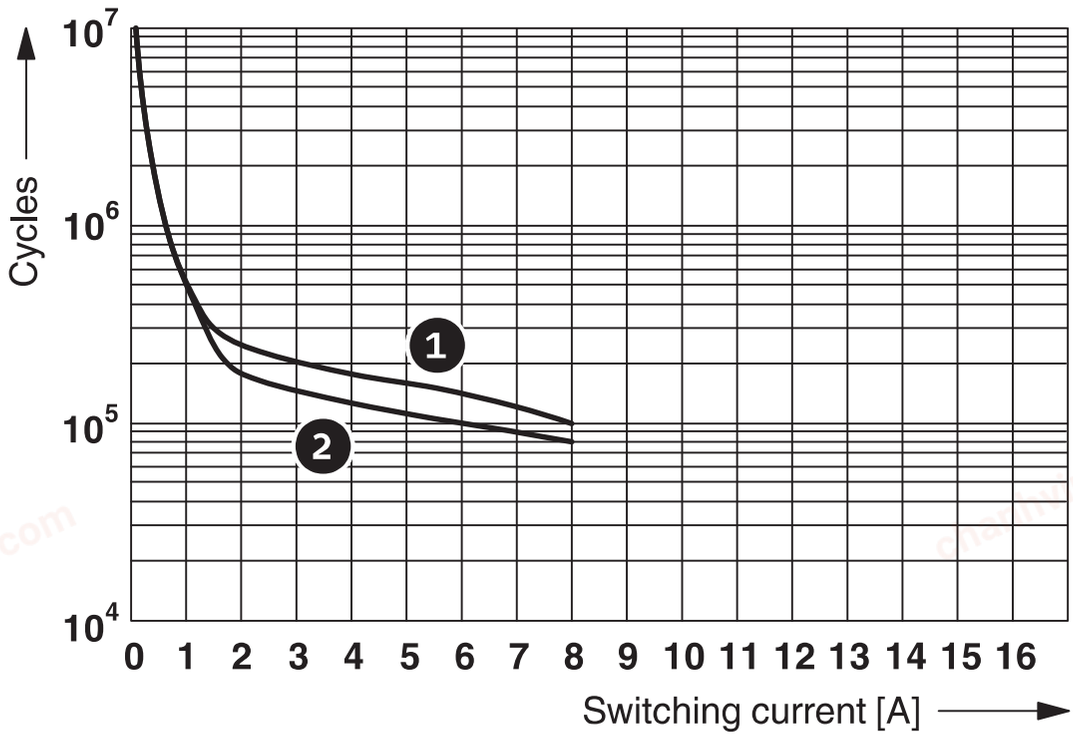
REL-MR-24DC/21-21/ATEX - Single relay

2906213

https://www.phoenixcontact.com/pc/products/2906213

Drawings

Diagram



1 250 V AC, ohmic load (DC coils)

2 250 V AC, ohmic load (AC coils)

Electrical service life

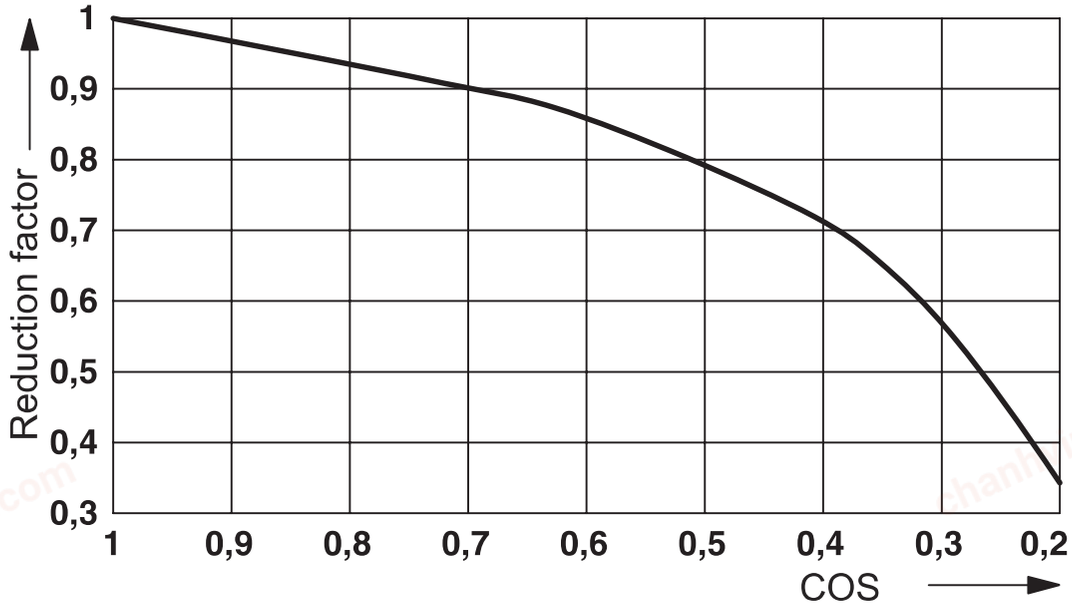
chanhvinh.com

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

2906213

https://www.phoenixcontact.com/pc/products/2906213

Diagram



Service life reduction factor with various cos phi

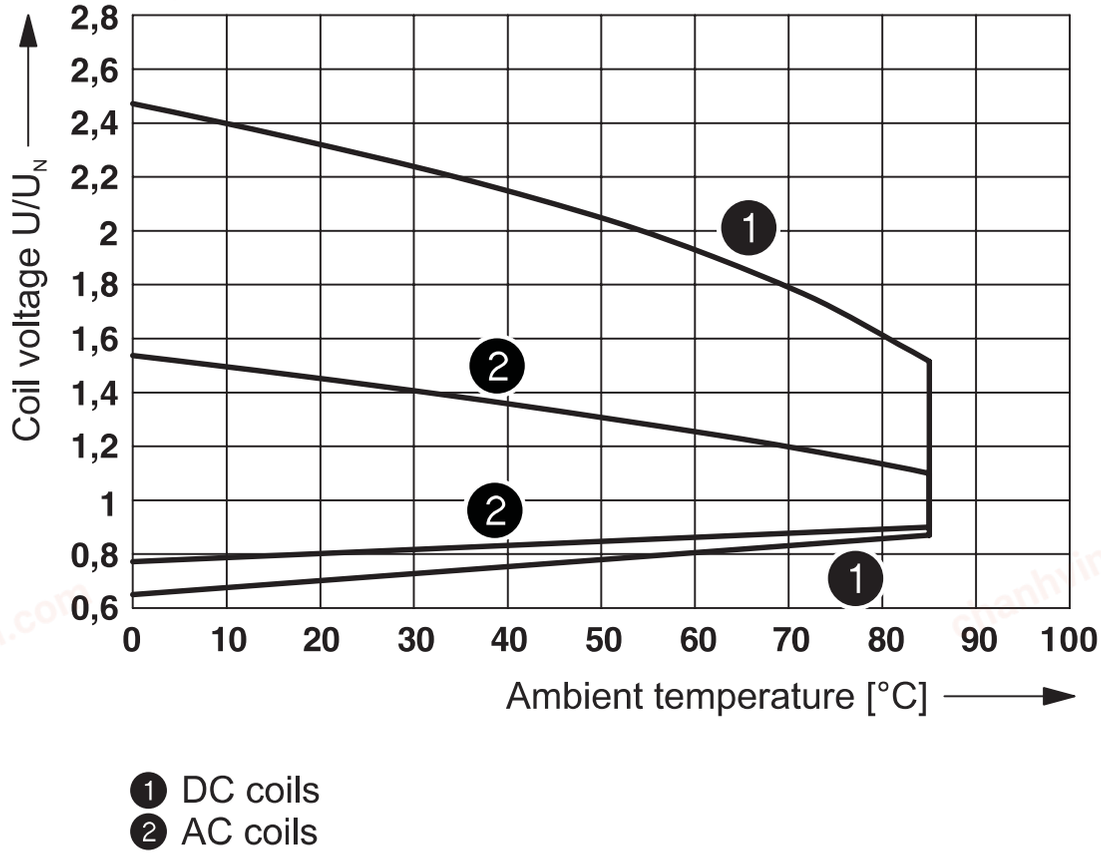
chanhvinh.com

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

2906213

https://www.phoenixcontact.com/pc/products/2906213

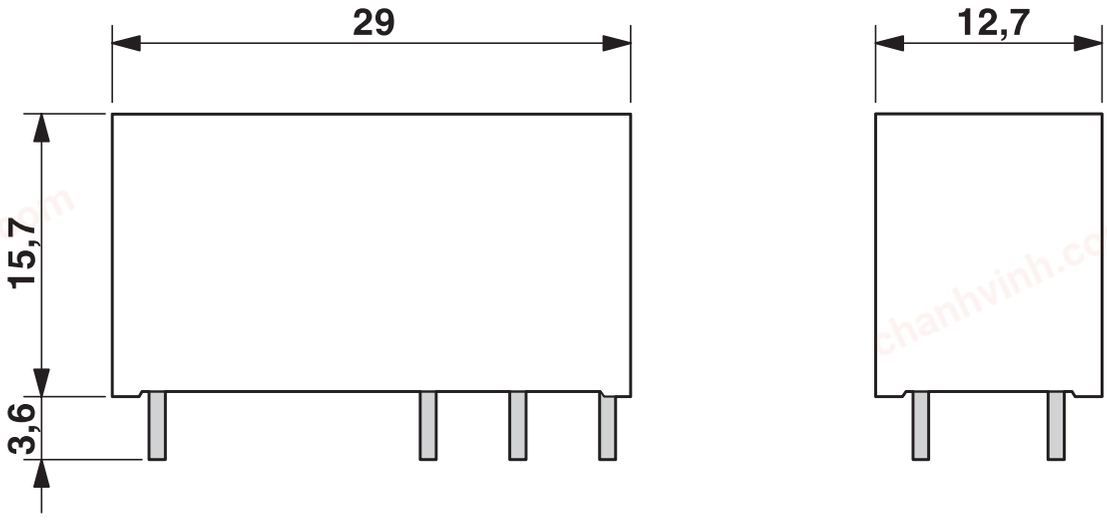
Diagram



1 DC coils
2 AC coils

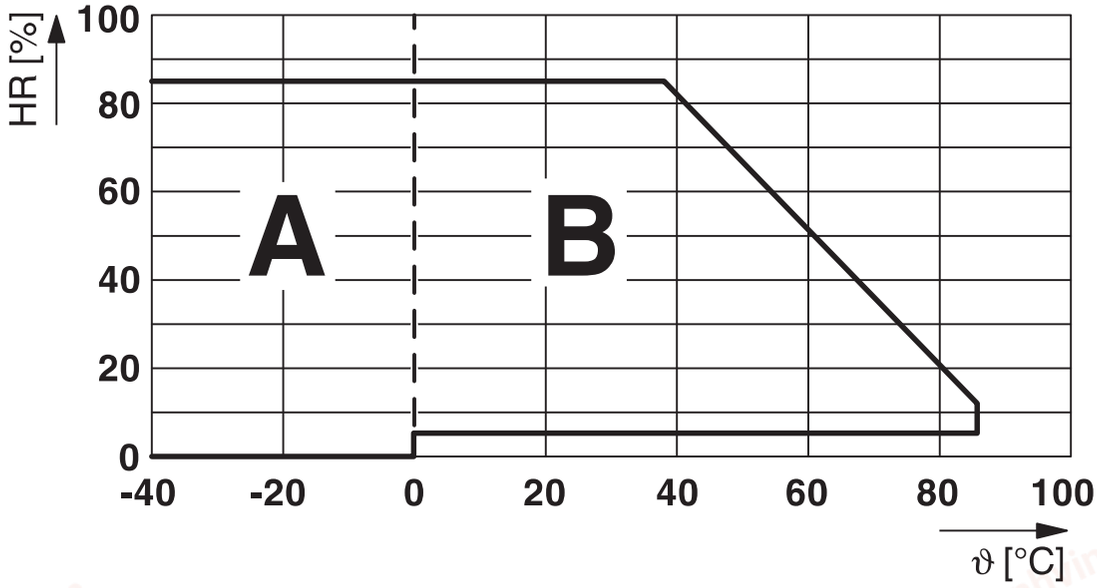
Operating voltage range

Dimensional drawing



chanhvinh.com

Diagram

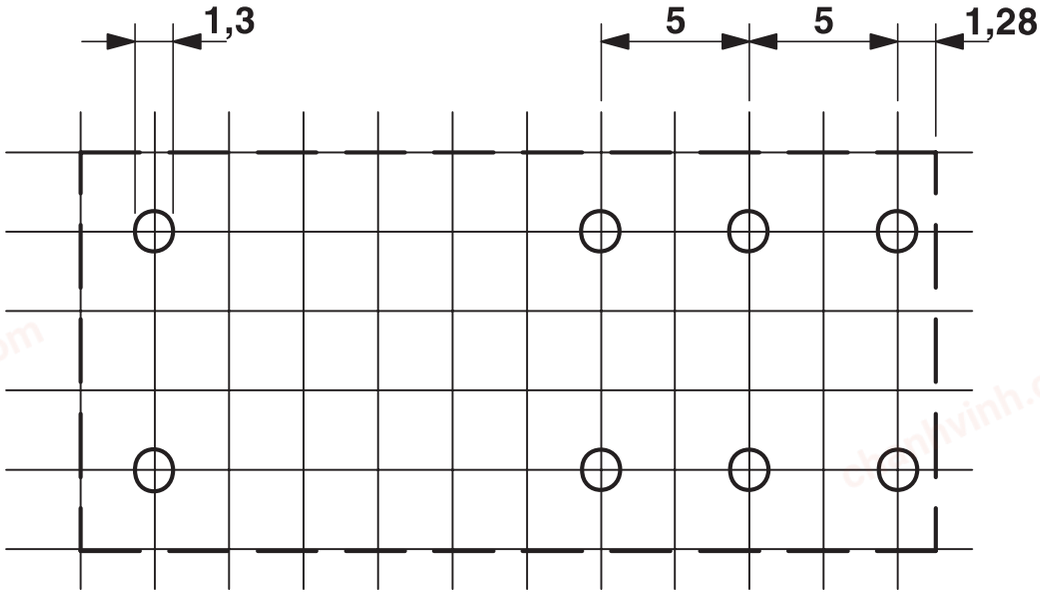


Permissible humidity for operation and storage.
The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures ≤ 0°C must be prevented
Area B: Condensation at ambient temperatures > 0°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 ≤ 25°C.

Drilling plan/solder pad geometry



Basic pitch 2.5 mm

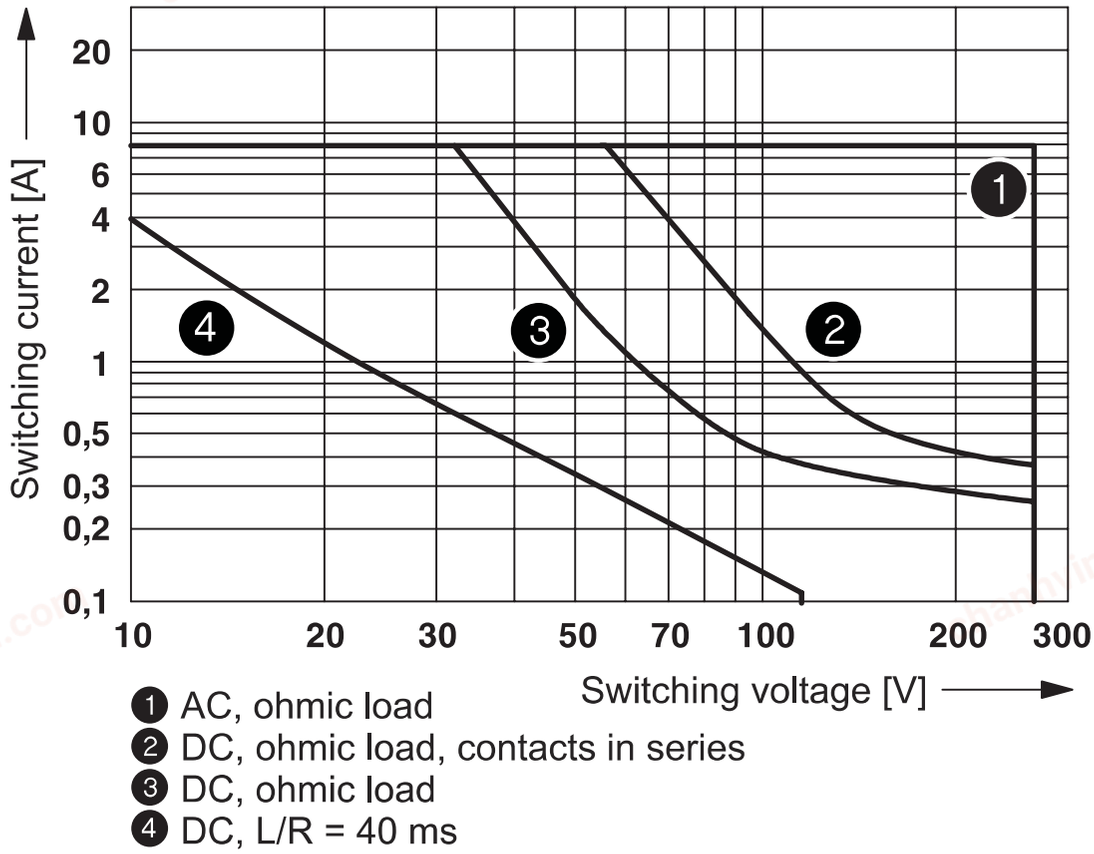
chanhvinh.com

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

2906213

https://www.phoenixcontact.com/pc/products/2906213

Diagram



1 AC, ohmic load
2 DC, ohmic load, contacts in series
3 DC, ohmic load
4 DC, L/R = 40 ms

Interrupting rating

chanhvinh.com

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

2906213

https://www.phoenixcontact.com/pc/products/2906213

Approvals

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

cUL Recognized
Approval ID: FILE E 228652

UL Recognized
Approval ID: FILE E 228652

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

VDE approval of drawings
Approval ID: 40007758

cULus Recognized

chanhvinh.com

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

2906213

https://www.phoenixcontact.com/pc/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

chanhvinh.com

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

2906213

https://www.phoenixcontact.com/pc/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 2025 © - all rights reserved
https://www.phoenixcontact.com

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstraße 8
D-32825 Blomberg
+49 (0) 5235-3 00
info@phoenixcontact.com