

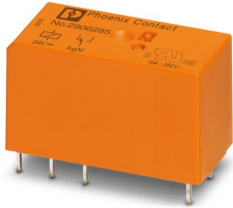
REL-MR-BL- 24DC/21HC - Single relay



2906285

<https://www.phoenixcontact.com/us/products/2906285>

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Plug-in miniature power relay in basic design, with power contact for high continuous currents, 1 changeover contact, input voltage 24 V DC

Commercial data

Item number	2906285
Packing unit	20 pc
Minimum order quantity	20 pc
Sales key	C460
Product key	CKF921
GTIN	4055626066943
Weight per piece (including packing)	12.4 g
Weight per piece (excluding packing)	12.3 g
Customs tariff number	85364900
Country of origin	AT

Technical data

Product properties

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

Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	3

Data management status

Date of last data management	03.05.2024
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Electrical properties

Service life electrical	see diagram
Maximum power dissipation for nominal condition	0.4 W
Test voltage (Winding/contact)	5 kV AC (50 Hz, 1 min., winding/contact)
Rated insulation voltage	250 V AC
Rated surge voltage	4 kV

Input data

Coil side

Nominal input voltage U_N	24 V DC
Input voltage range	16.8 V DC ... 54 V DC
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at U_N	17 mA
Typical response time	8 ms
Typical release time	6 ms

Output data

Switching

Contact switching type	1 changeover contact
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	16 A
Maximum inrush current	30 A (300 ms)
Min. switching current	10 mA (at 12 V)
	384 W (at 24 V DC)

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Interrupting rating (ohmic load) max.	58 W (at 48 V DC)
	48 W (at 60 V DC)
	50 W (at 110 V DC)
	80 W (at 220 V DC)
	4000 VA (for 250 V AC)
Switching capacity	2 A (at 24 V, DC13)
	1.5 A (at 230 V, AC15)

Connection data

Connection method	Solder connection
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Dimensions

Dimensional drawing	
Width	12.7 mm
Height	29 mm
Depth	15.7 mm

Material specifications

Color	orange (RAL 2003)
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Environmental and real-life conditions

Ambient conditions

Degree of protection	RT II
Ambient temperature (operation)	-40 °C ... 85 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Standards and regulations

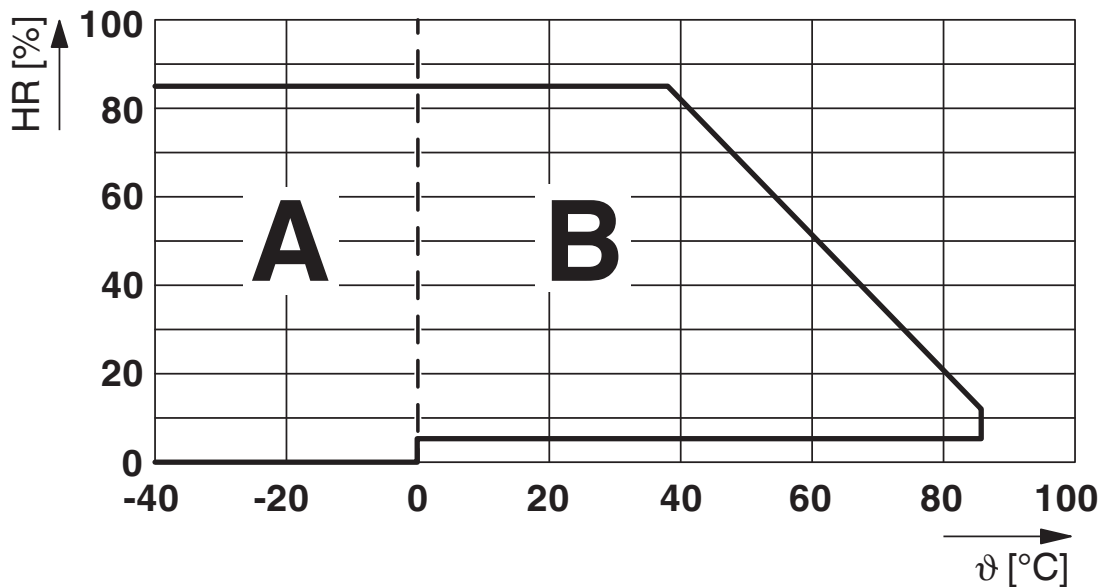
Standards/regulations	IEC 60664
	EN 61810-1

Mounting

Mounting type	Plug-in mounting
Mounting position	any

Drawings

Diagram



Permissible humidity for operation and storage.

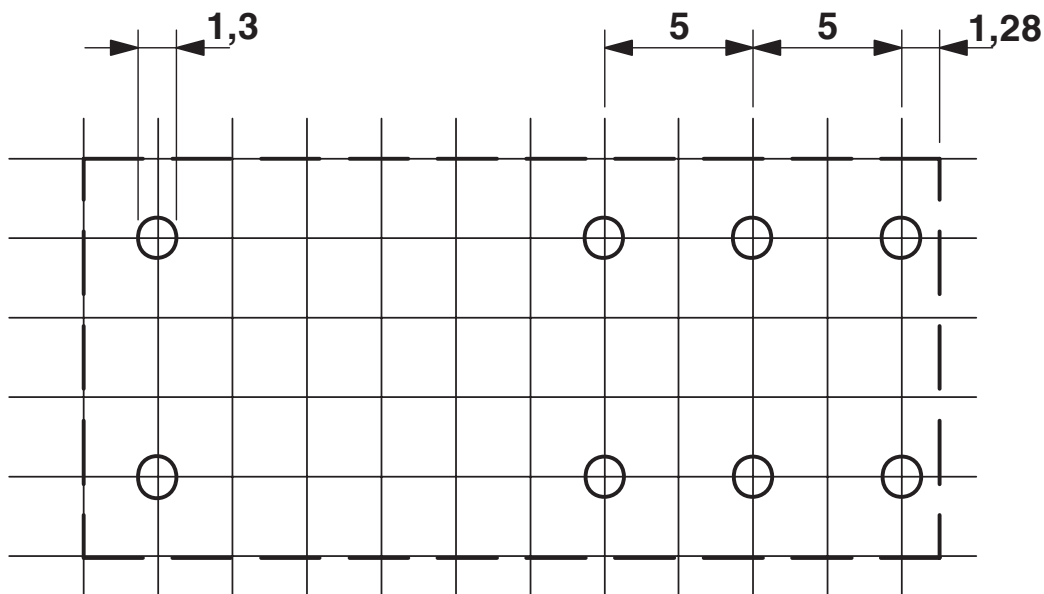
The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures $\leq 0^{\circ}\text{C}$ must be prevented

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

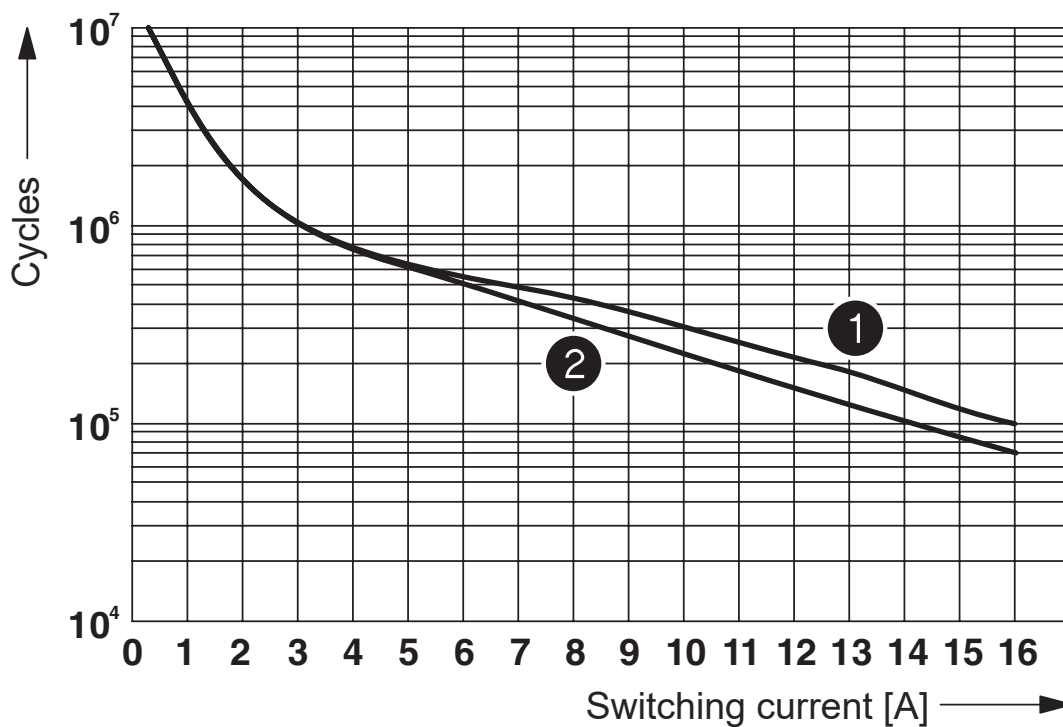
On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature $\leq 25^{\circ}\text{C}$.

Drilling plan/solder pad geometry



Basic pitch 2.5 mm

Diagram



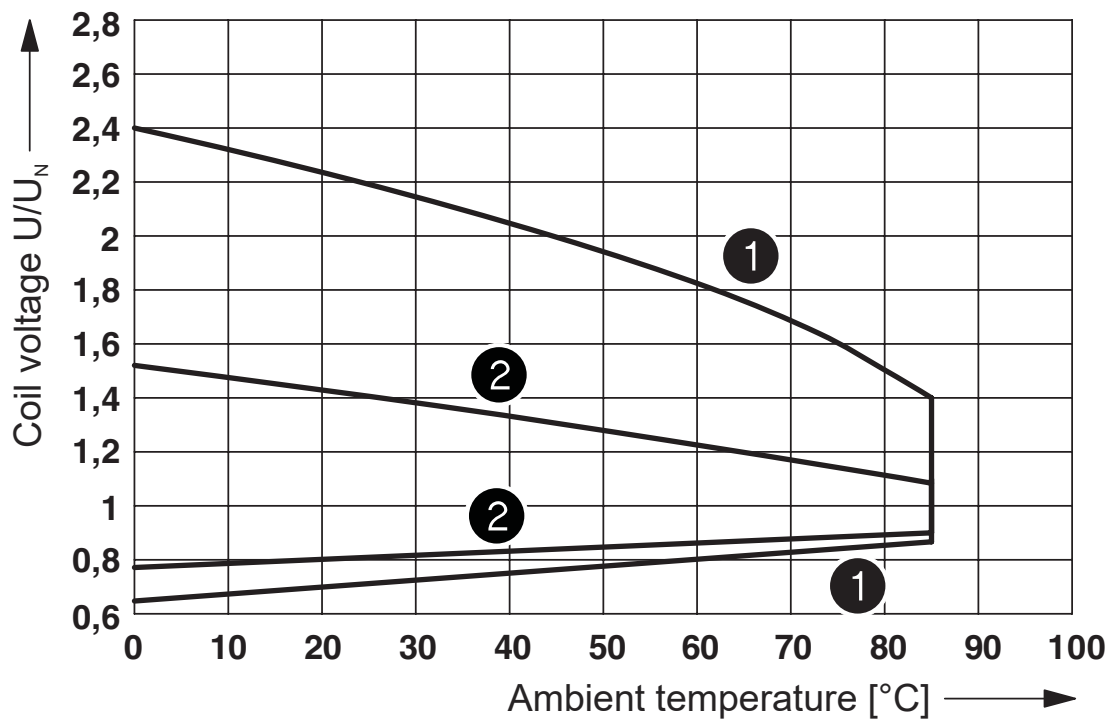
- ① 250 V AC, ohmic load (DC coils)
- ② 250 V AC, ohmic load (AC coils)

Electrical service life

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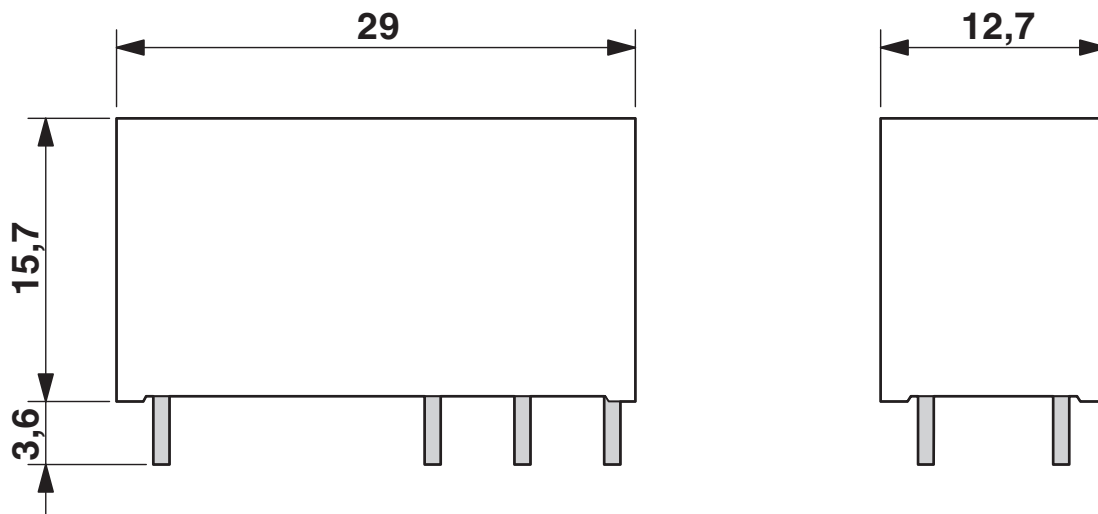
Diagram



- ① DC coils
- ② AC coils

Operating voltage range

Dimensional drawing



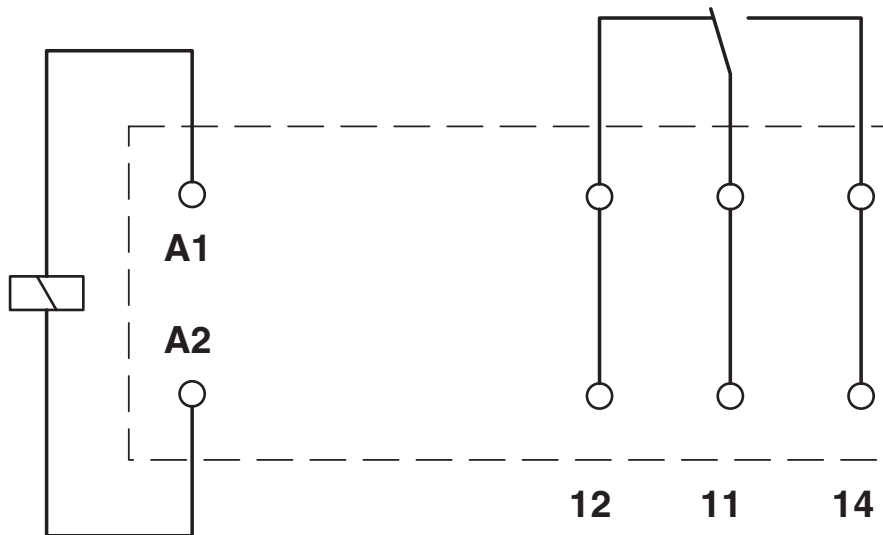
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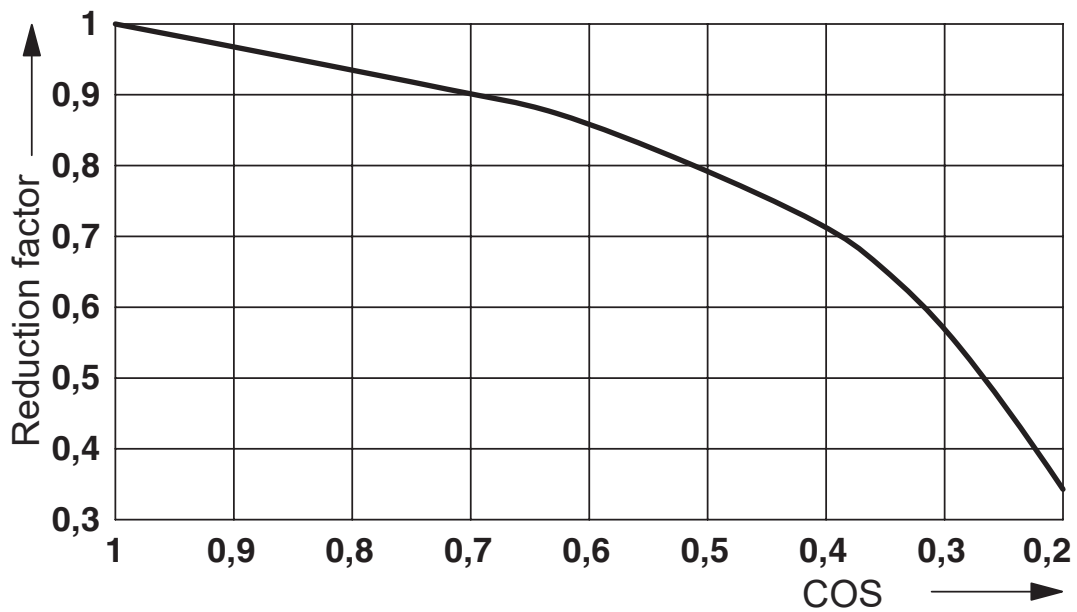
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Circuit diagram



Diagram



Service life reduction factor with various cos phi

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2906285>



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Approval ID: FILE E 228652



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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
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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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