

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



2908180
<https://www.phoenixcontact.com/us/products/2908180>

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Plug-in miniature relay, with power contact, 1 changeover contact, test button, mechanical switch position indicator, polarity: bipolar, input voltage: 24 V DC

Commercial data

Item number	2908180
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C460
Product key	CKF923
Catalog page	Page 294 (C-5-2019)
GTIN	4055626277899
Weight per piece (including packing)	19.652 g
Weight per piece (excluding packing)	18 g
Customs tariff number	85364190
Country of origin	CN

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Technical data

Product properties

Product type	Single relay
Operating mode	100% operating factor
Mechanical service life	5x 10 ⁶ cycles

Data management status

Date of last data management	02.05.2024
Article revision	02

Insulation characteristics

Overvoltage category	III
Pollution degree	2

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)
Rated insulation voltage	250 V AC

Input data

Coil side

Nominal input voltage U_N	24 V DC
Input voltage range	19.2 V DC ... 52.8 V DC
Input voltage range in reference to U_N	0.8 ... 2.2 (see diagram)
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at U_N	17 mA
Typical response time	9 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	12 V (at 10 mA)
Limiting continuous current	16 A
Maximum inrush current	32 A (20 ms)
Min. switching current	10 mA (at 12 V)
	384 W (at 24 V DC)

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Interrupting rating (ohmic load) max.	62 W (at 48 V DC)
	48 W (at 60 V DC)
	53 W (at 110 V DC)
	66 W (at 220 V DC)

Connection data

Connection method	Plug / solder connection
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Dimensions

Width	13 mm
Height	29 mm
Depth	25.5 mm

Environmental and real-life conditions

Ambient conditions

Degree of protection	RT II
Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Standards and regulations

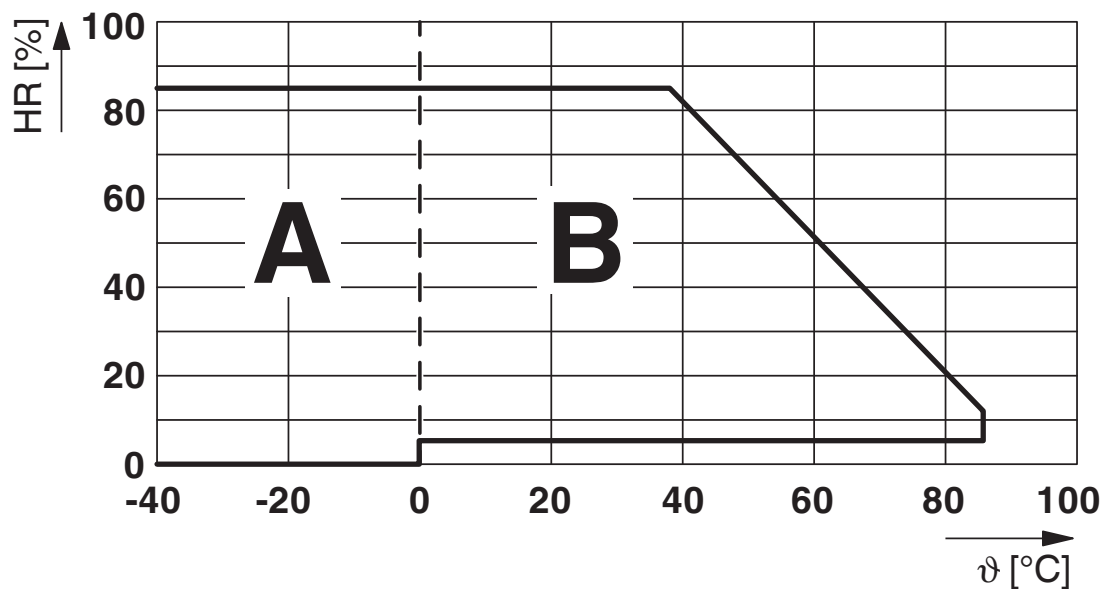
Standards/regulations	IEC 61810
	IEC 60664

Mounting

Mounting position	any
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Drawings

Diagram



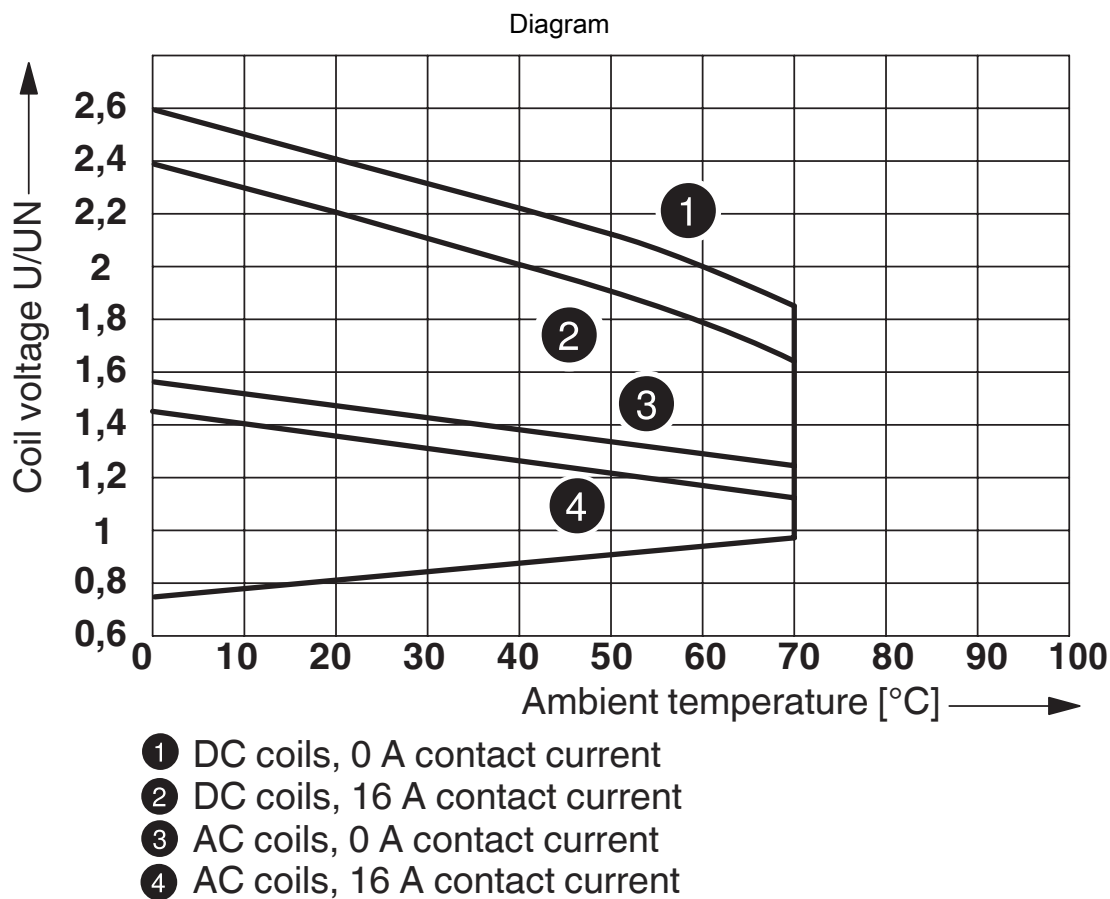
Permissible humidity for operation and storage.

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

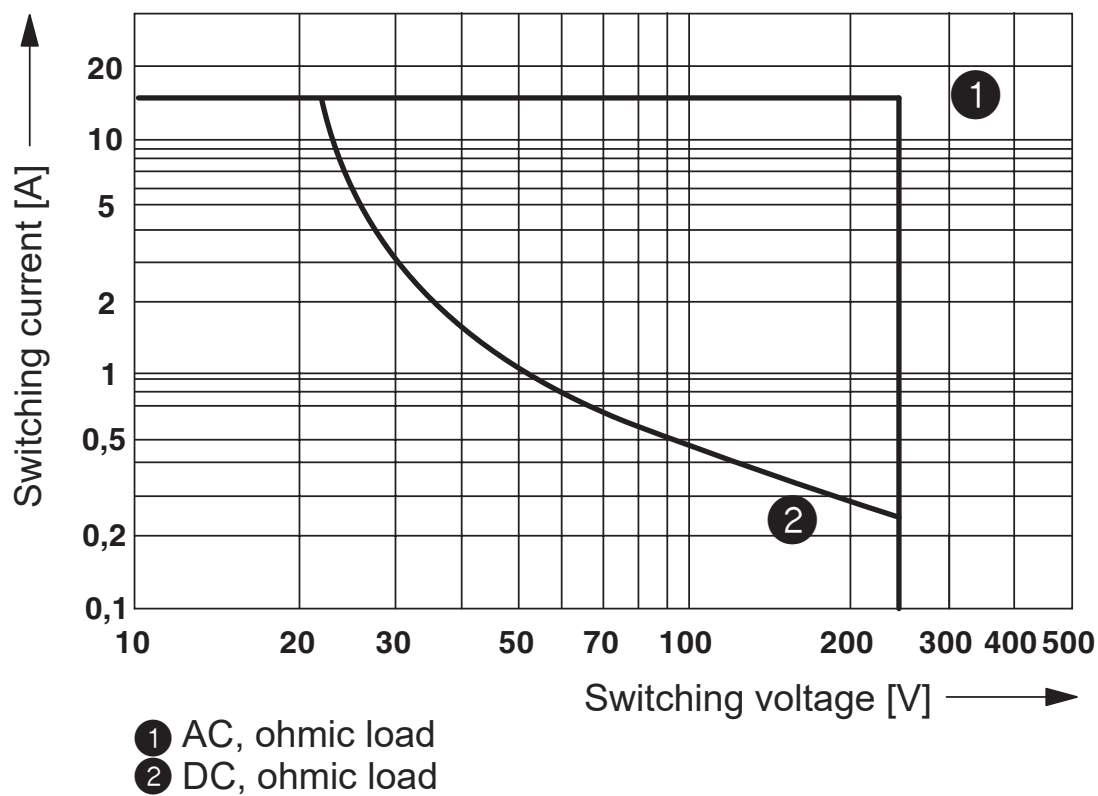
Area B: Condensation at ambient temperatures $> 0^{\circ}\text{C}$ must be prevented

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



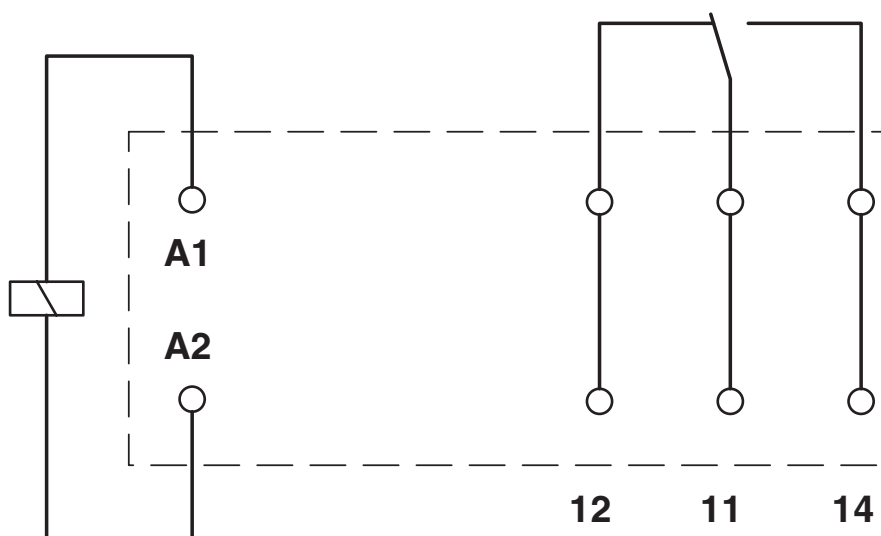
Operating voltage range

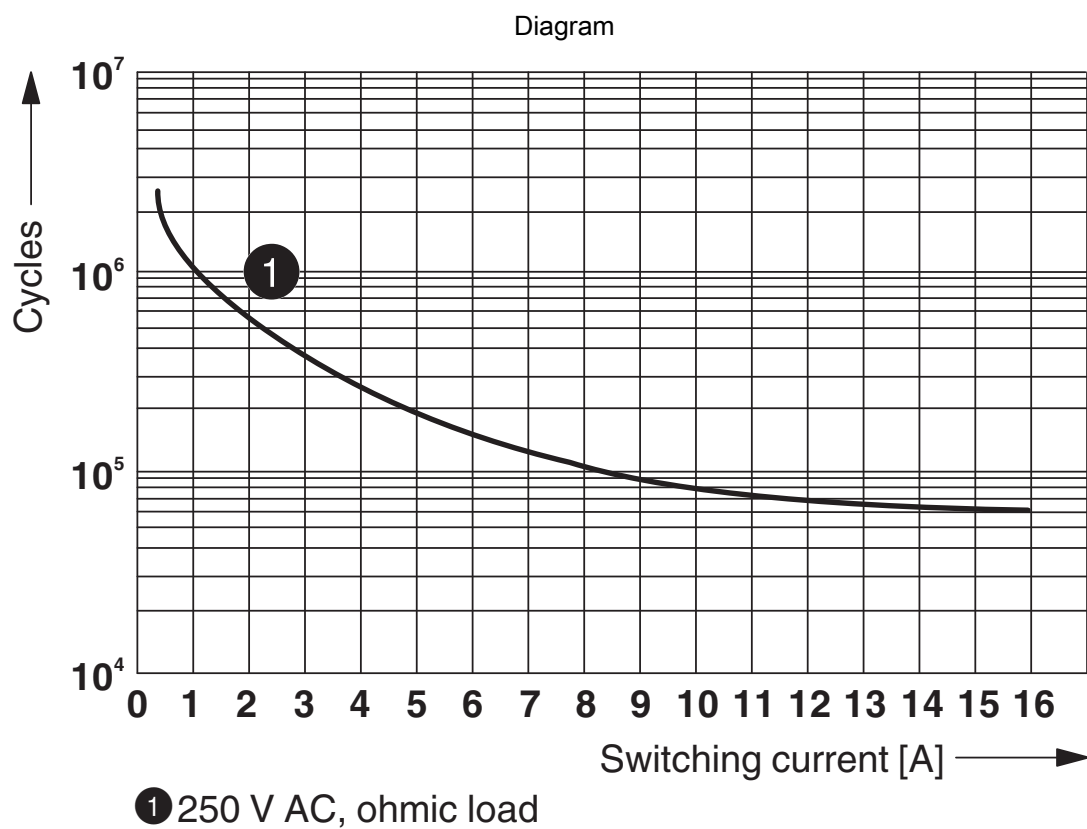
Diagram



Interrupting rating

Circuit diagram





Electrical service life

1) 30 V DC, ohmic load

2) 250 V AC, ohmic load

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/2908180>



cUL Recognized
Approval ID: FILE E 195083



UL Recognized
Approval ID: FILE E 195083



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

cULus Recognized

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