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

2909642

https://www.phoenixcontact.com/pc/products/2909642

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Plug-in miniature power relay, with power contact, 1 changeover contact, manual operation, 24 V DC input voltage

Commercial data

Item number	2909642
Packing unit	10 pc
Minimum order quantity	10 pc
Product key	DK6923
Catalog page	Page 284 (C-5-2019)
GTIN	4055626377674
Weight per piece (including packing)	6.77 g
Weight per piece (excluding packing)	6.77 g
Customs tariff number	85364190
Country of origin	CZ

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Technical data

Product properties

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

Insulation characteristics

Overvoltage category	III
Pollution degree	3

Data management status

Date of last data management	02.05.2024

Electrical properties

Maximum power dissipation for nominal condition	0.17 W
Test voltage (Winding/contact)	4 kV AC (50 Hz, 1 min., winding/contact)

Input data

Coil side

Nominal input voltage U_N	24 V DC
Input voltage range	14.4 V DC ... 66 V DC
Input voltage range in reference to U_N	see diagram
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at U_N	7 mA
Typical response time	5 ms
Typical release time	2.5 ms
Coil resistance	3390 Ω ±10 % (at 20 °C)

Output data

Switching

Contact switching type	1 changeover contact
Type of switch contact	Single contact
Contact material	AgSnO
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (100 mA)
Limiting continuous current	6 A
Maximum inrush current	10 A (4 s)
Min. switching current	10 mA (12 V)
Interrupting rating (ohmic load) max.	140 W (24 V DC)
	20 W (48 V DC)
	18 W (60 V DC)

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	23 W (110 V DC)
	40 W (220 V DC)
	1500 VA (250 V AC)
Switching capacity	2 A (24 V (DC13))
	0.2 A (at 110 V, DC13)
	0.1 A (at 220 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 A (at 230 V, AC15)
Motor load according to UL 508	1/4 HP, 240 - 277 V AC (N/O contact)
	1/6 HP, 240 - 277 V AC (N/C contact)

Connection data

Connection method	Plug / solder connection

Dimensions

Width	5 mm
Height	28 mm
Depth	16 mm

Material specifications

Color	white (RAL 9010)

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

Approvals

Corrosive gas test

Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

Standards and regulations

Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1

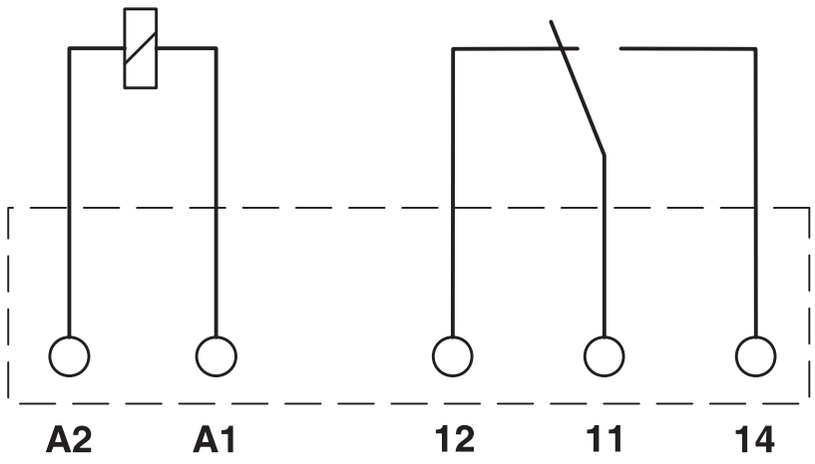
Mounting

Mounting type	Plug-in mounting
Assembly note	in rows with zero spacing
Mounting position	any

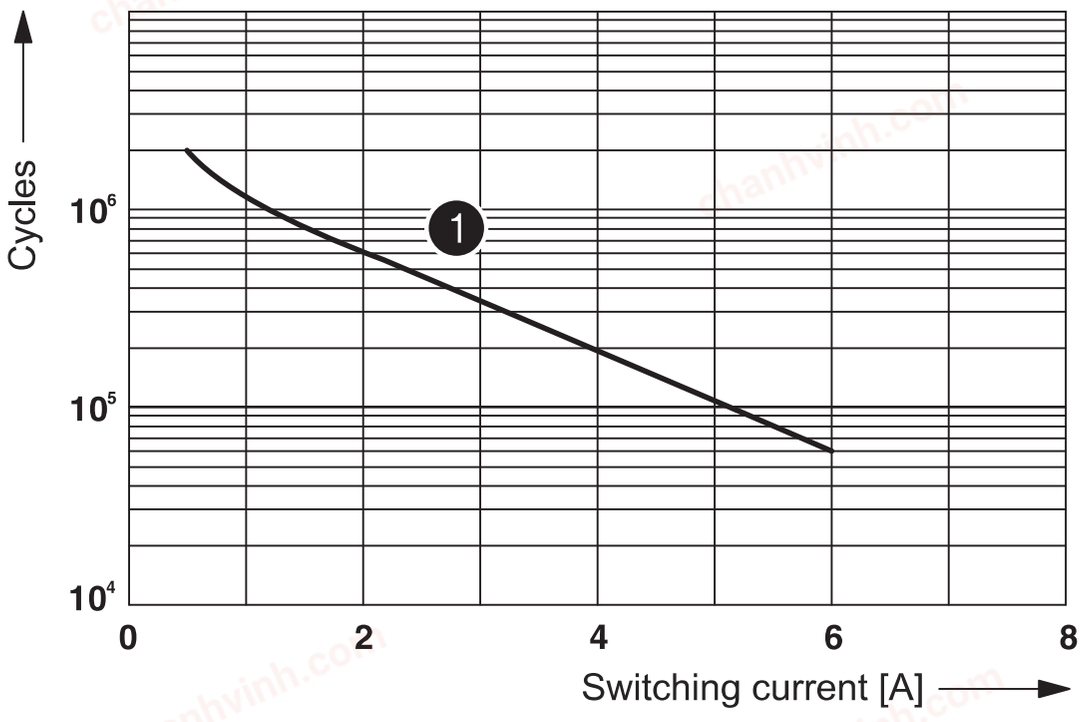
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Drawings

Circuit diagram



Diagram



1 250 V AC, ohmic load

Electrical service life

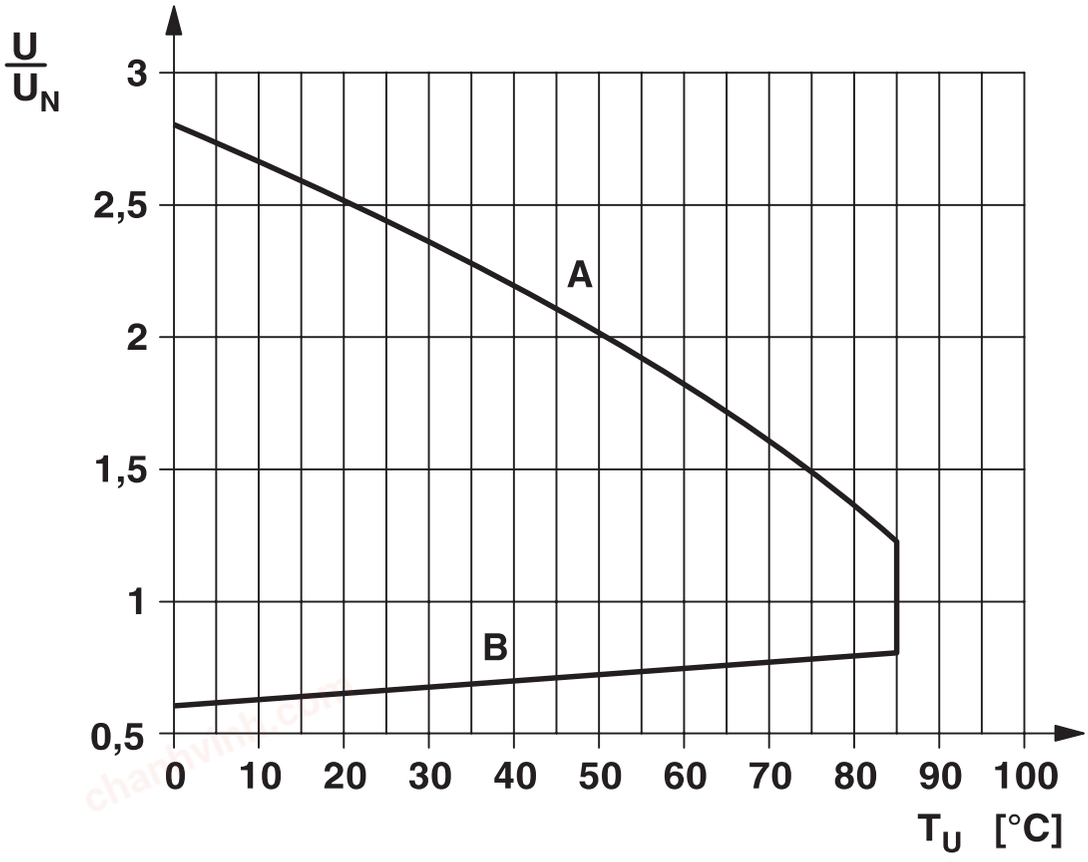
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Diagram



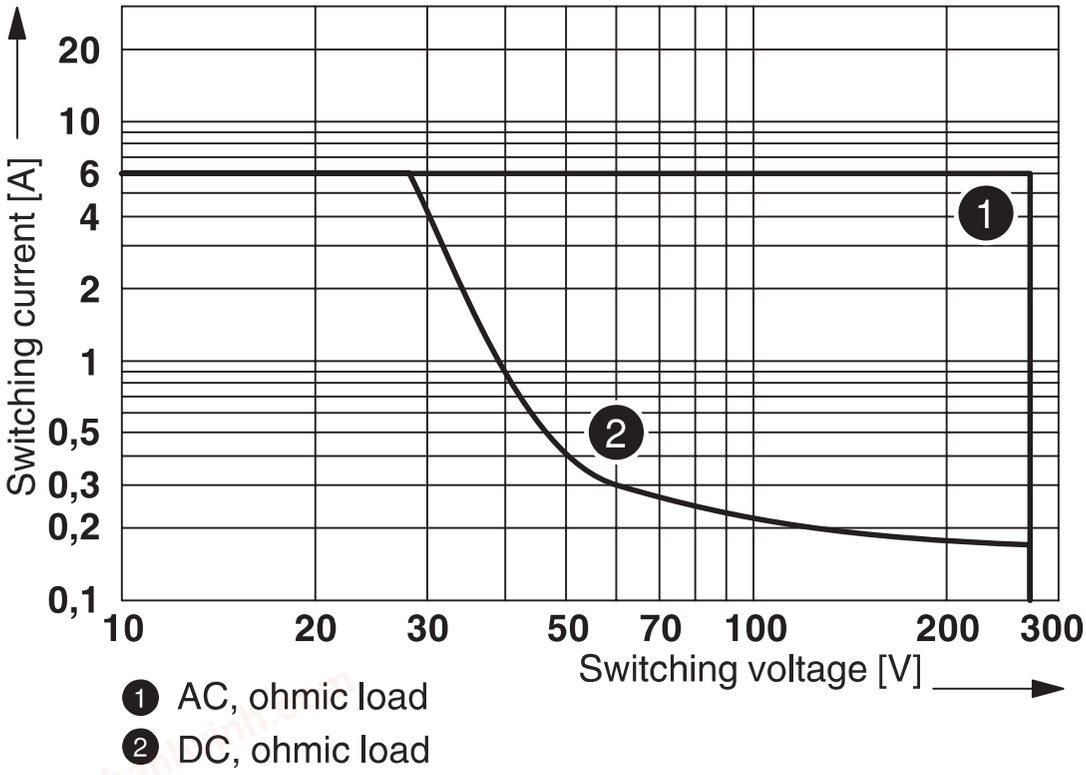
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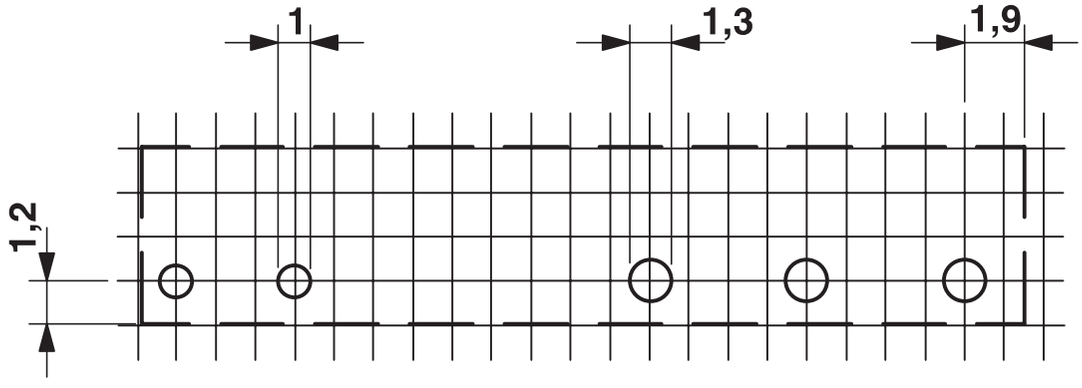
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Diagram



Interrupting rating

Drilling plan/solder pad geometry



a = pitch division 1.25 mm and 1.27 mm

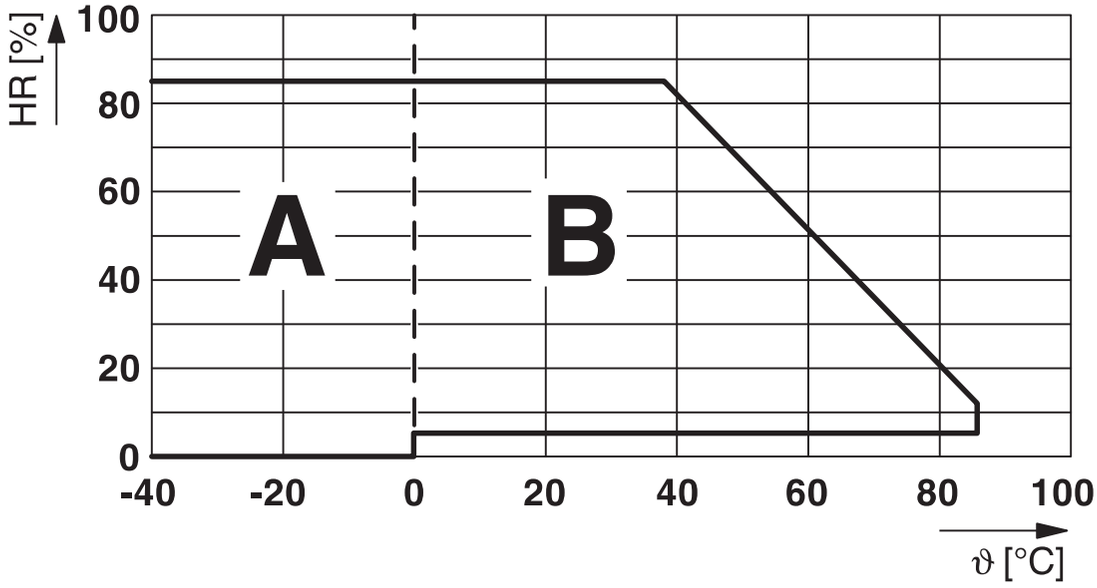
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Diagram



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.

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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/pc/products/2909642

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: 40010212

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Classifications

ECLASS

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

ETIM

ETIM 9.0	EC001437

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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