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

2909642

https://www.phoenixcontact.com/us/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
Sales key	C460
Product key	CK6923
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

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

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)
	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

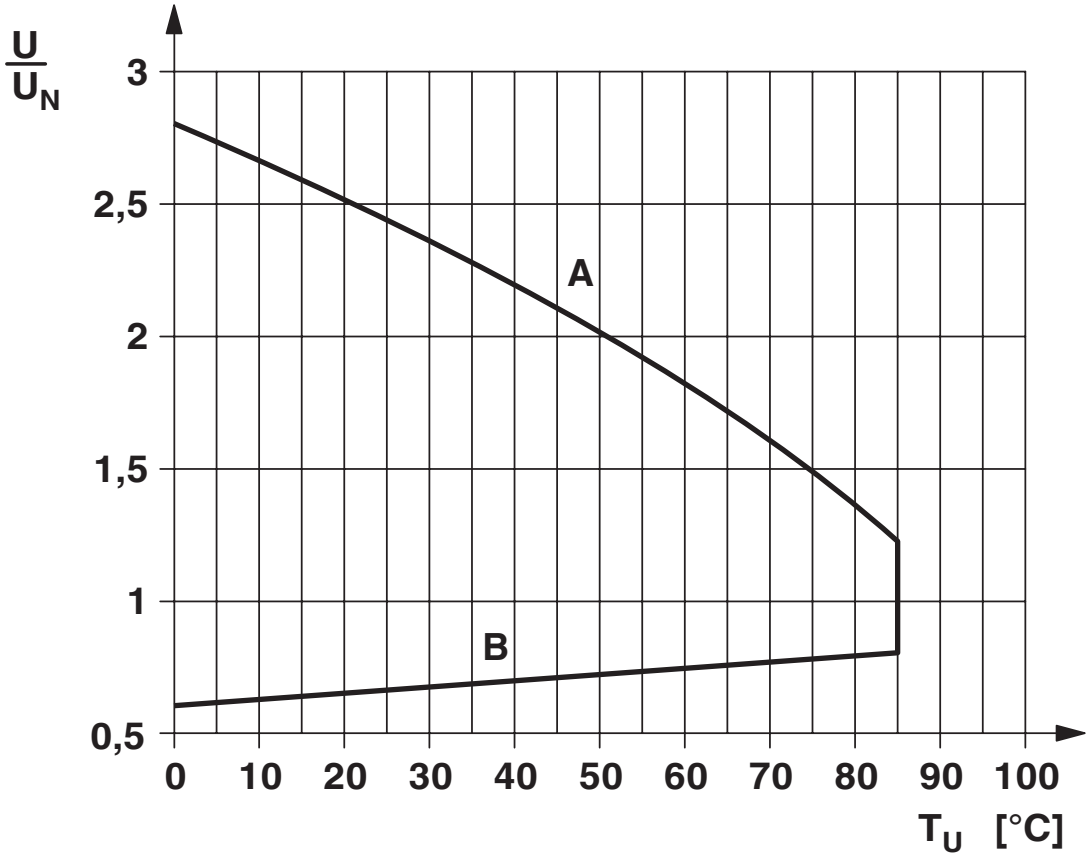
Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1

Mounting

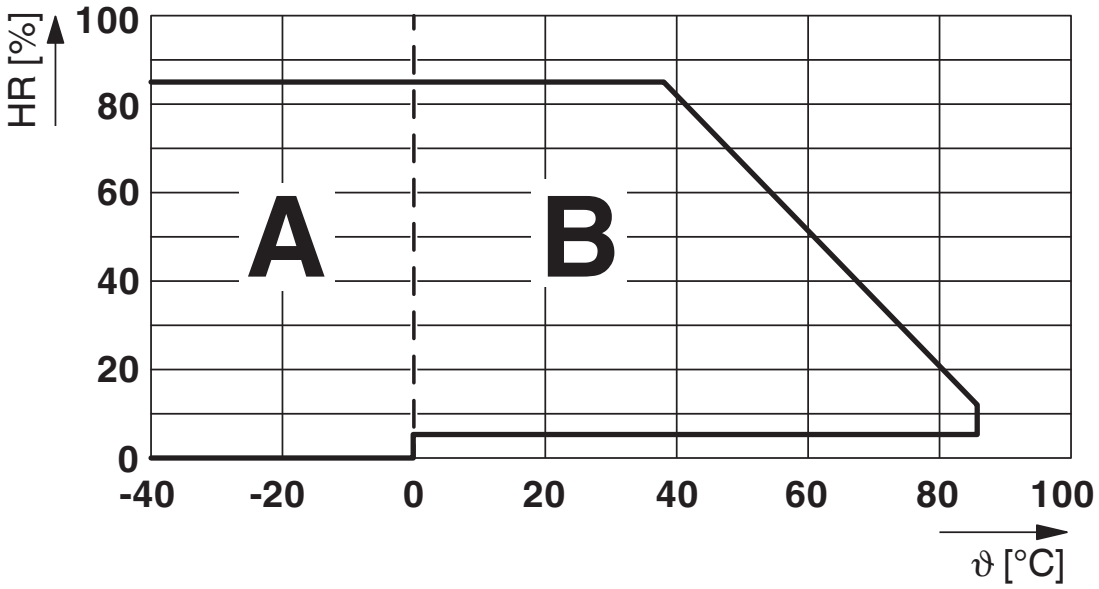
Mounting type	Plug-in mounting
Assembly note	in rows with zero spacing
Mounting position	any

Drawings

Diagram



Diagram

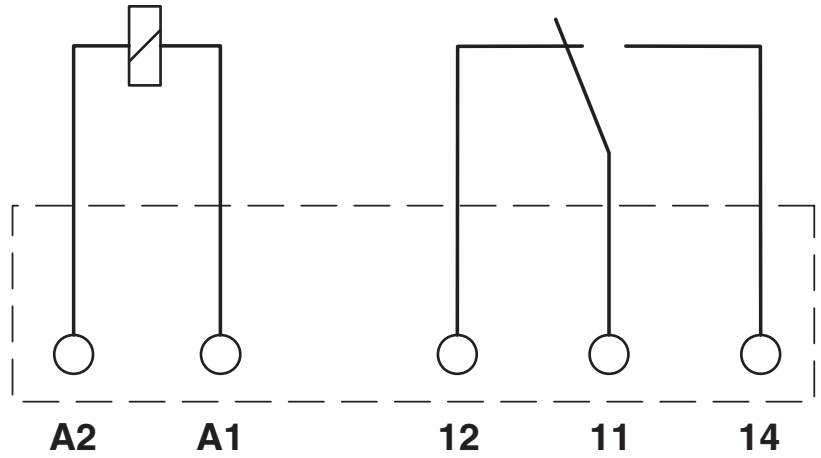


Permissible humidity for operation and storage.
The maximum permissible ambient temperature as specified in the data sheet must be observed.

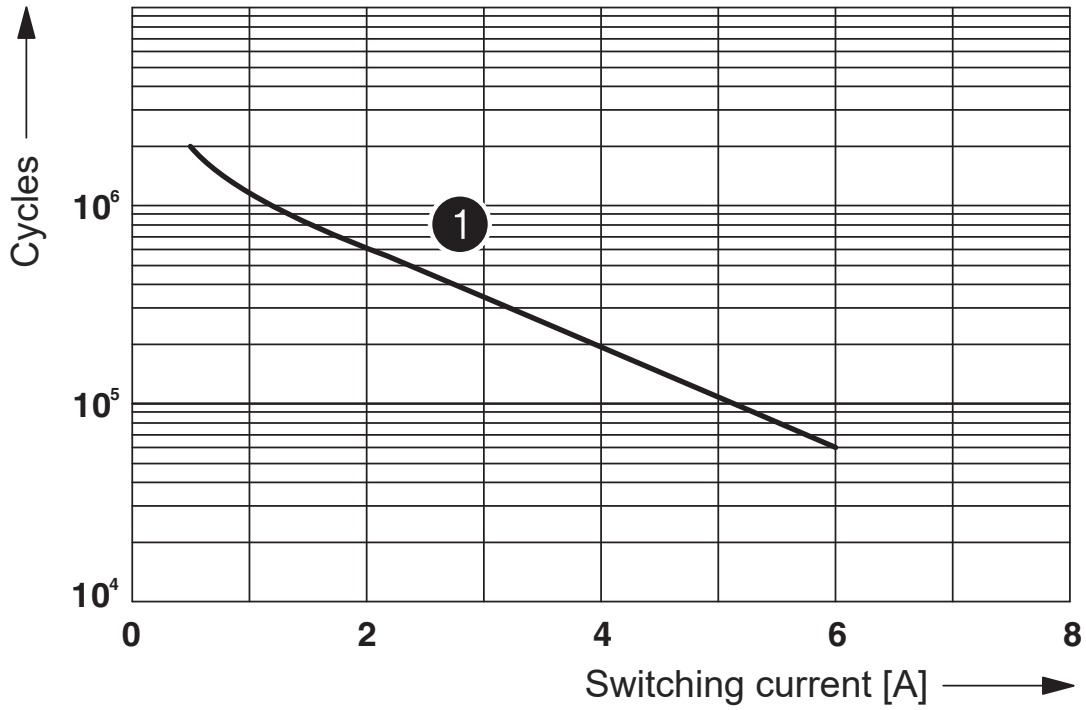
Area A: Ice buildup at ambient temperatures ≤ 0°C must be prevented
Area B: Condensation at ambient temperatures > 0°C must be prevented

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.

Circuit diagram



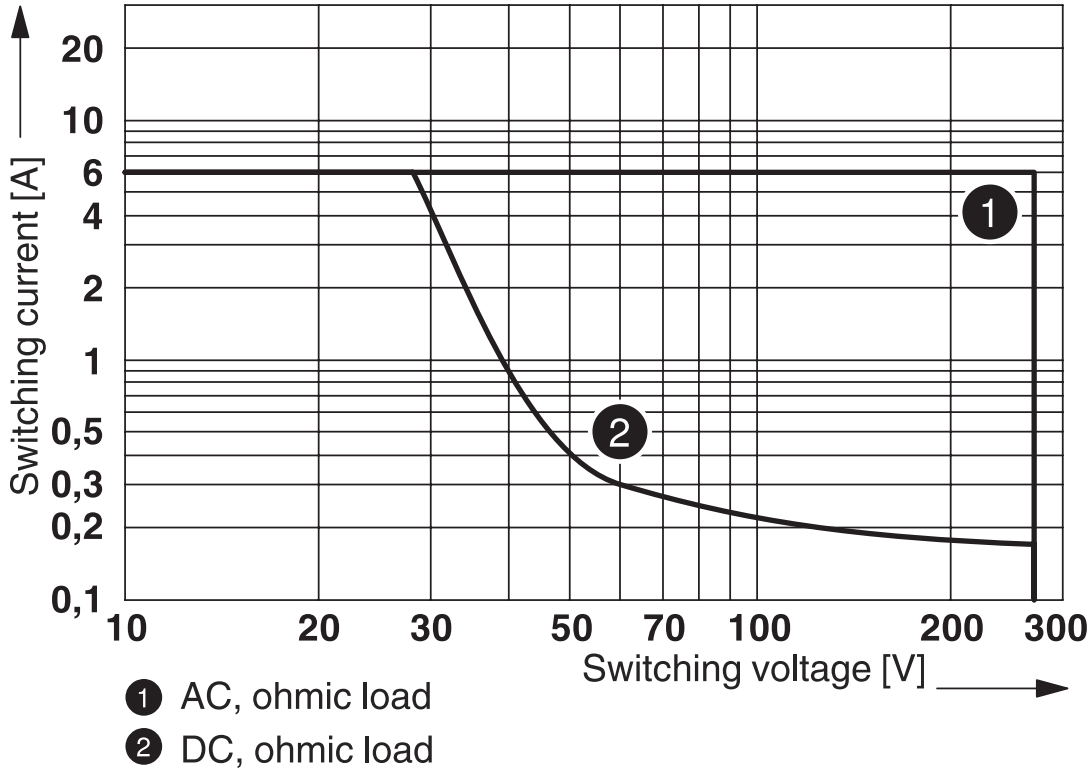
Diagram



1 250 V AC, ohmic load

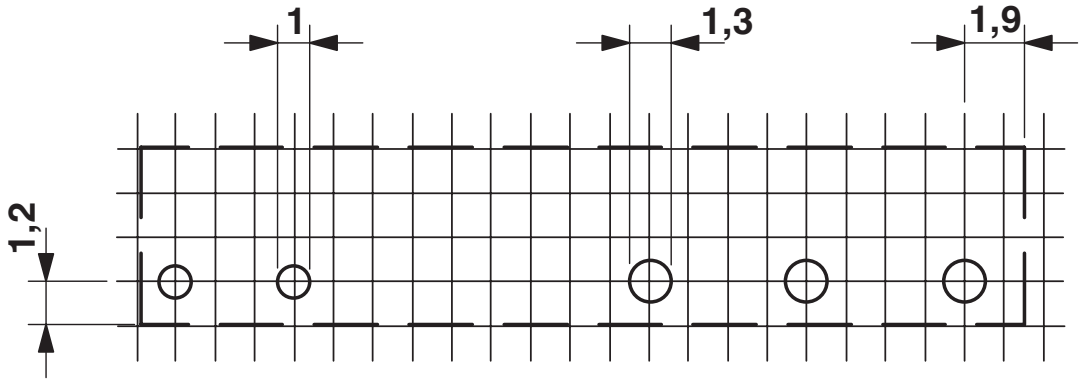
Electrical service life

Diagram



Interrupting rating

Drilling plan/solder pad geometry



a = pitch division 1.25 mm and 1.27 mm

Approvals

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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: 40010212

cULus Recognized

Classifications

ECLASS

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

ETIM

ETIM 9.0	EC001437

UNSPSC

UNSPSC 21.0	39122300

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%

Mandatory accessories

PLC-BPT- 24DC/21 - Relay base

2900445

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6.2 mm PLC basic terminal block with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 24 V DC

PLC-BSC- 24DC/21 - Relay base

2966016

https://www.phoenixcontact.com/us/products/2966016



6.2 mm PLC basic terminal block with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 24 V DC

PLC-BPT- 24UC/21 - Relay base

2900446

https://www.phoenixcontact.com/us/products/2900446



6.2 mm PLC basic terminal block with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 24 V AC/DC

PLC-BSC- 24UC/21 - Relay base

2966029

https://www.phoenixcontact.com/us/products/2966029



6.2 mm PLC basic terminal block with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 24 V AC/DC

PLC-BPT- 24DC/ 1/SEN - Relay base

2900262

https://www.phoenixcontact.com/us/products/2900262



6.2 mm PLC basic terminal block for input functions with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 24 V DC

PLC-BSC- 24DC/ 1/SEN - Relay base

2966061

https://www.phoenixcontact.com/us/products/2966061



6.2 mm PLC basic terminal block for input functions with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 24 V DC

PLC-BPT- 24UC/ 1/ACT - Relay base

2900450

https://www.phoenixcontact.com/us/products/2900450



6.2 mm PLC basic terminal block for output functions with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with load return line connection (BB), 1 N/O contact, input voltage 24 V AC/DC

PLC-BSC- 24UC/ 1/ACT - Relay base

2982799

https://www.phoenixcontact.com/us/products/2982799



6.2 mm PLC basic terminal block for output functions with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with load return line connection (BB), 1 N/O contact, input voltage 24 V AC/DC

PLC-BSC- 24DC/21/SO46 - Relay base

2980458

https://www.phoenixcontact.com/us/products/2980458



6.2 mm PLC basic terminal block with protection against interference currents/voltages on the control side, with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with increased input current consumption, 1 changeover contact, input voltage 24 V DC

RIF-0-BPT/21 - Relay base

2900958

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Relay base RIF-0..., for miniature power relay with 1 changeover contact or solid-state relays of the same design, Push-in connection, for mounting on NS 35/7,5

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RIF-0-BSC/21 - Relay base

2900957

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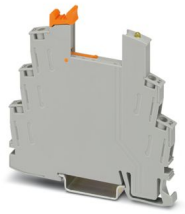

RIF-0... relay base, for miniature power relay with 1 changeover contact or identical solid-state relays, screw connection, for mounting on NS 35/7,5

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