

REL-PR1- 48DC/1/MB - Single relay



2908613

<https://www.phoenixcontact.com/us/products/2908613>

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Plug-in high-power relay with power contacts, specifically for switching high DC loads, 1 N/O contact, blowout magnet, coil voltage: 48 V DC

The figure shows version REL-PR1-24DC/1/MB

Commercial data

Item number	2908613
Packing unit	1 pc
Minimum order quantity	10 pc
Product key	DK6961
GTIN	4055626312781
Weight per piece (including packing)	87.5 g
Weight per piece (excluding packing)	87.5 g
Country of origin	PL

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Technical data

Product properties

Product type	Single relay
Operating mode	100% operating factor
Mechanical service life	approx. 2×10^7 cycles

Insulation characteristics

Overvoltage category	III
Pollution degree	3

Data management status

Date of last data management	01.04.2026
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Electrical properties

Service life electrical	see diagram
Maximum power dissipation for nominal condition	1.9 W
Test voltage (Winding/contact)	2.5 kV (50 Hz, 1 min., winding/contact)
Rated surge voltage	4 kV

Input data

Coil side

Nominal input voltage U_N	48 V DC
Drive and function	monostable
Drive (polarity)	non-polarized
Typical response time	20 ms
Typical release time	15 ms

Output data

Switching

Contact switching type	1 N/O contact
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	440 V AC 350 V DC
Minimum switching voltage	5 V (At 24 mA)
Limiting continuous current	16 A
Maximum inrush current	50 A (20 ms) 30 A (4 s)
Min. switching current	5 mA (at 24 V)
Interrupting rating (ohmic load) max.	384 W (at 24 V DC) 768 W (at 48 V DC) 930 W (at 60 V DC)

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	1650 W (at 110 V DC)
	2640 W (at 220 V DC)
	4000 VA (for 250 V AC)
Switching power min.	120 mW
Switching capacity	1 A (at 220 V, DC13)
	1.5 A (at 240 V, AC15)

Connection data

Connection method	Plug-in connection
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Dimensions

Width	38.6 mm
Height	36.1 mm
Depth	45.5 mm

Environmental and real-life conditions

Ambient conditions

Degree of protection	RT I
Ambient temperature (operation)	-40 °C ... 70 °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
	IEC 61810

Mounting

Mounting position	any
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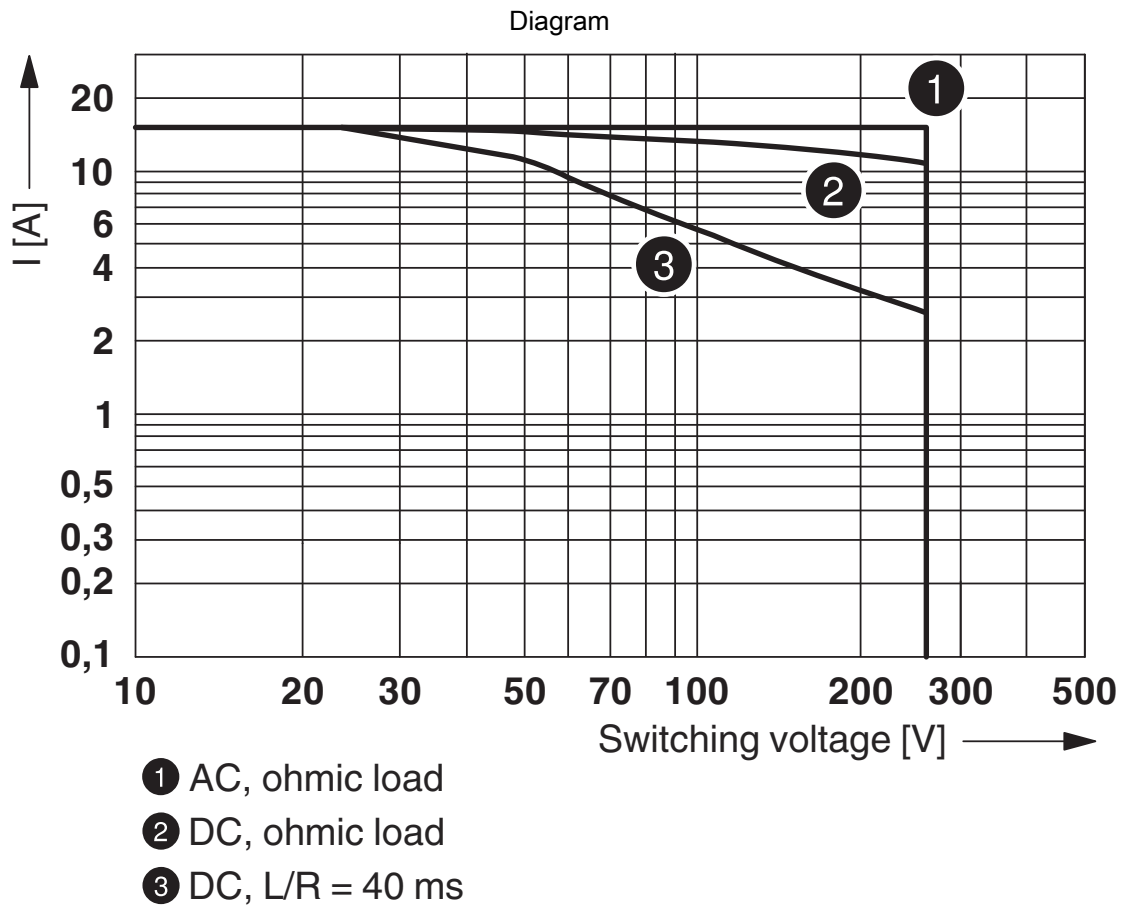
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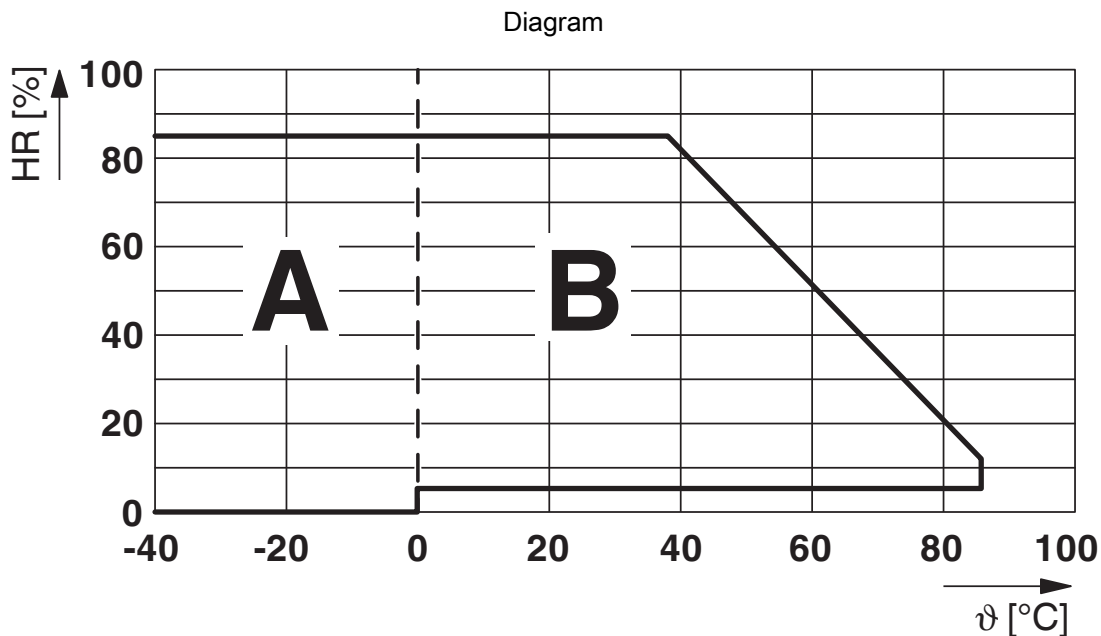
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Drawings



Interrupting rating



Permissible humidity for operation and storage.

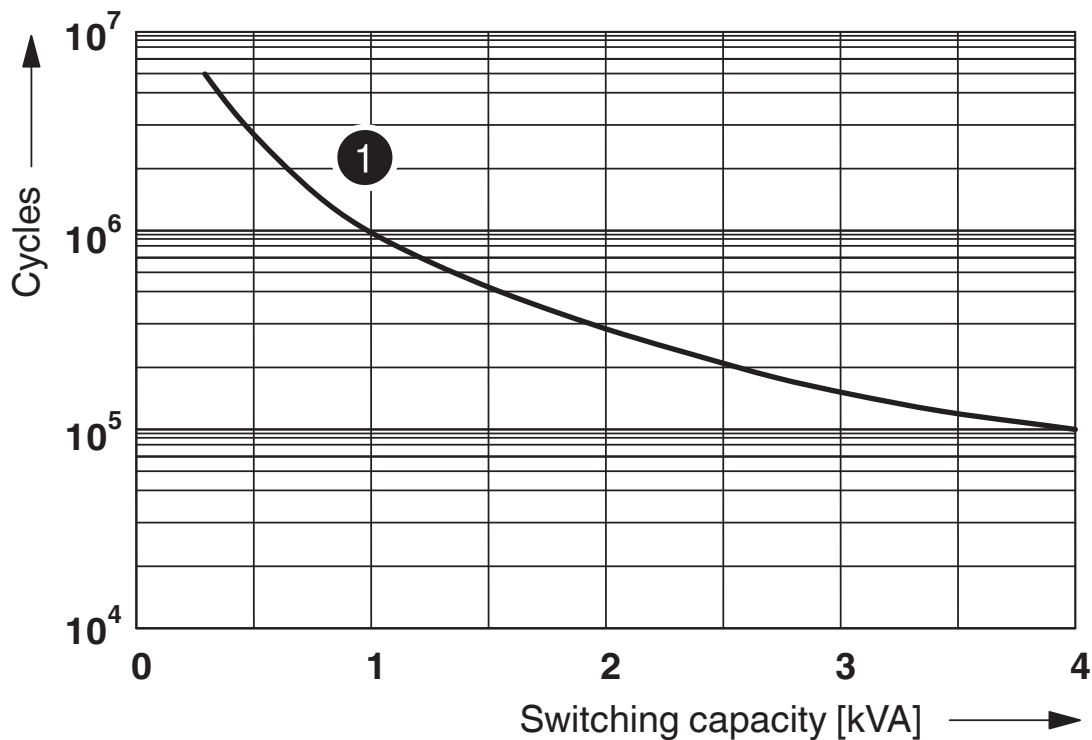
The maximum permissible ambient temperature as specified in the data sheet must be observed.

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 $\leq 25^{\circ}\text{C}$.

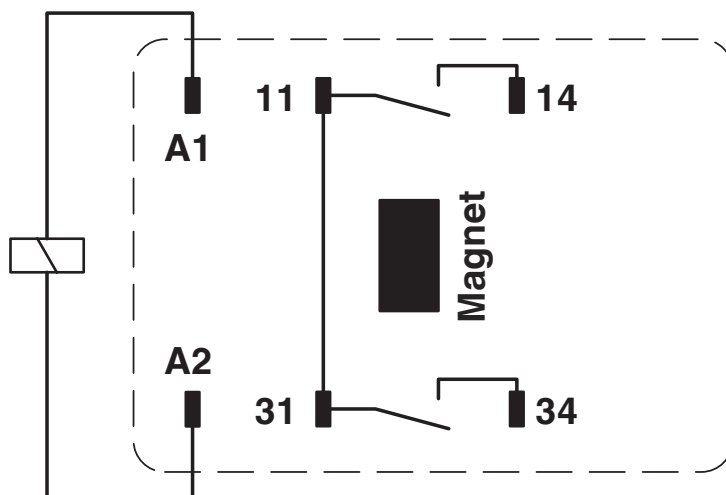
Diagram



① 250 V AC, Ohmic load

Electrical service life

Circuit diagram



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Classifications

ECLASS

ECLASS-13.0	27371601
ECLASS-15.0	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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