

REL-PR1-110DC/1/MB - Single relay

2908044

<https://www.phoenixcontact.com/us/products/2908044>



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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: 110 V DC

Commercial data

Item number	2908044
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C460
Product key	DK6961
GTIN	4055626266770
Weight per piece (including packing)	88.9 g
Weight per piece (excluding packing)	88.9 g
Customs tariff number	85364900
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	05.09.2025
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Electrical properties

Service life electrical	see diagram
Maximum power dissipation for nominal condition	1.65 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	110 V DC
Input voltage range	93.5 V DC ... 121 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	15 mA
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
	250 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)

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Interrupting rating (ohmic load) max.	384 W (at 24 V DC) 744 W (at 48 V DC) 900 W (at 60 V DC) 1540 W (at 110 V DC) 2640 W (at 220 V DC) 4000 VA (for 250 V AC)
Switching capacity min.	120 mW
Switching capacity	1 A (220 V, DC13) 1.5 A (240 V, AC15) 16 A (24 V DC, L/R = 40 ms) 12 A (48 V DC, L/R = 40 ms) 9.5 A (60 V DC, L/R = 40 ms) 5.4 A (110 V DC, L/R = 40 ms) 3 A (220 V DC, L/R = 40 ms) 2.7 A (250 V DC, L/R = 40 ms)

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
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Mounting

Mounting position	any
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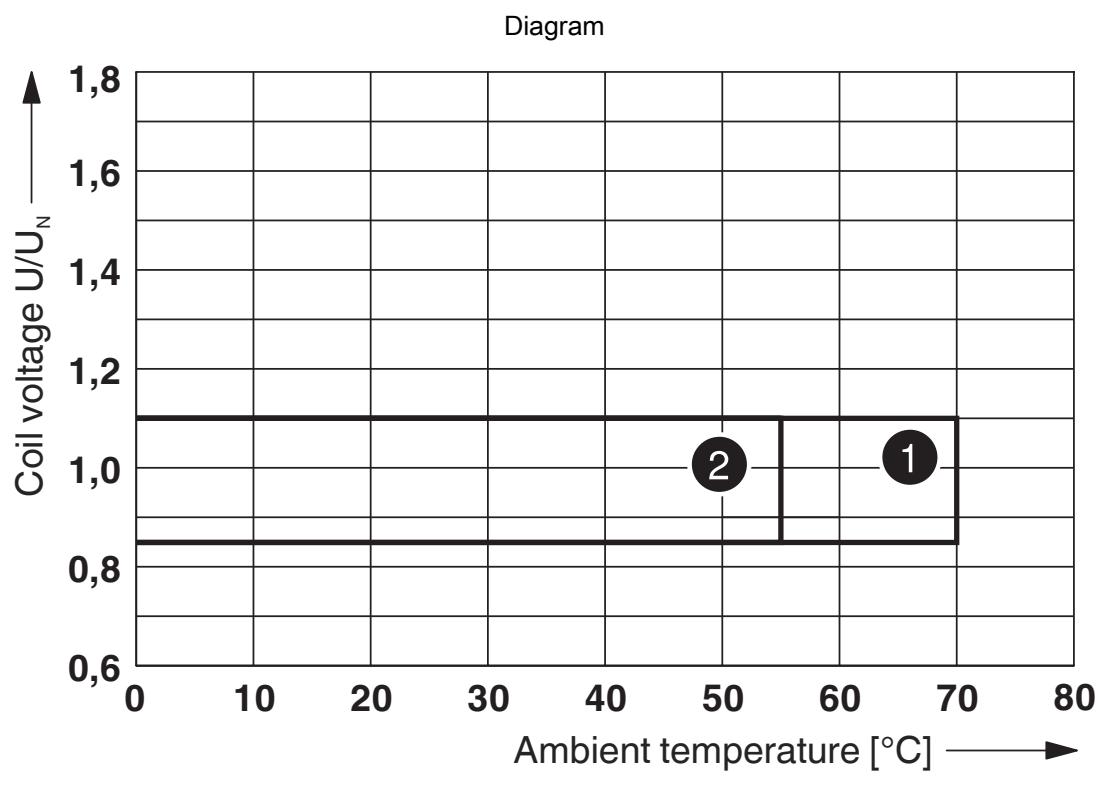
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Drawings



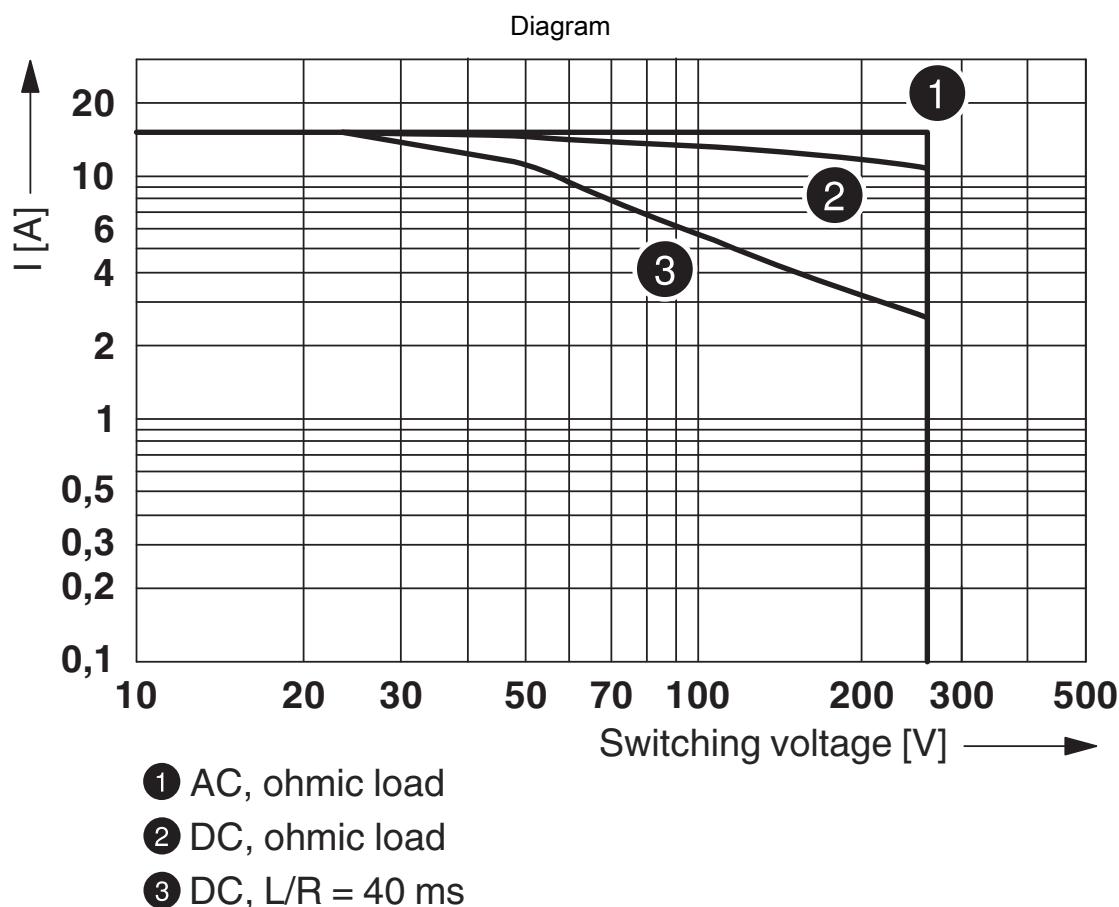
Operating voltage range

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Interrupting rating

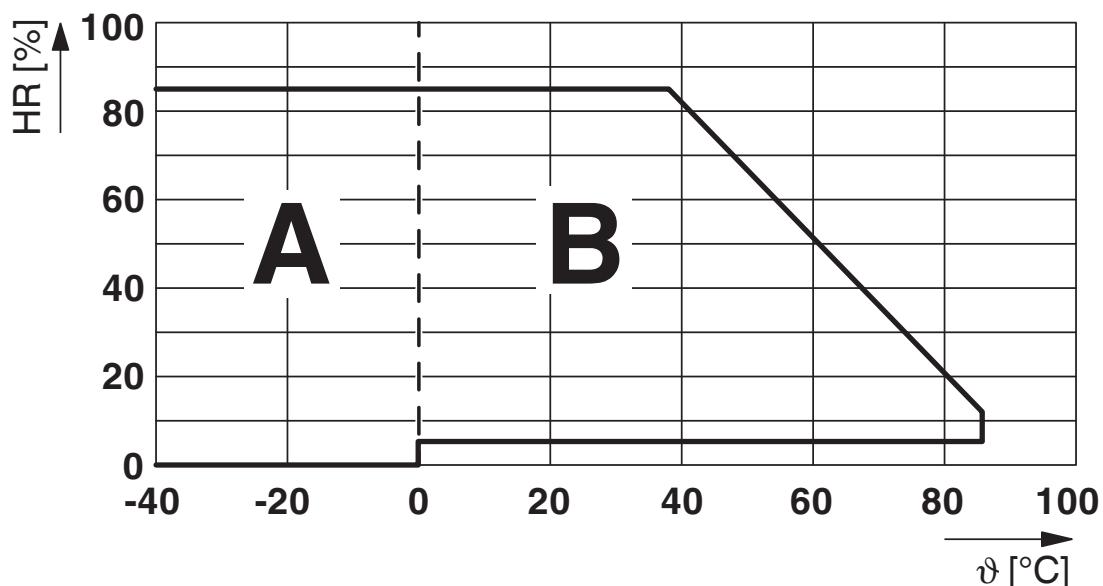
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Diagram



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 $\leq 0^\circ\text{C}$ 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 $\leq 25^\circ\text{C}$.

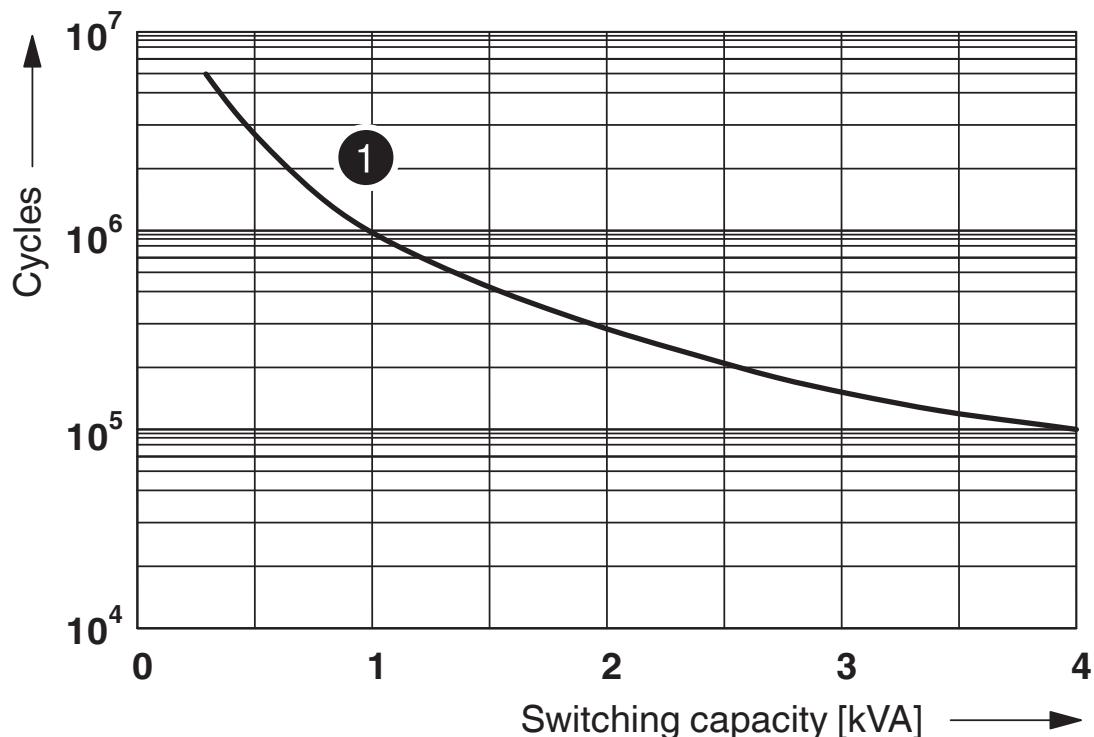
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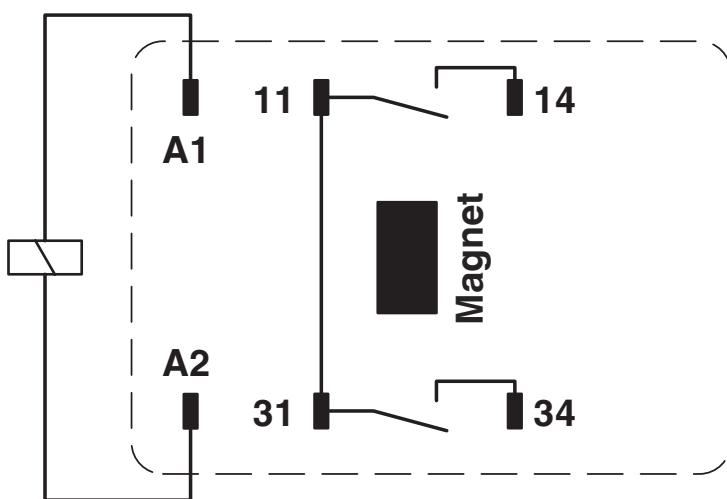
Diagram



① 250 V AC, Ohmic load

Electrical service life

Circuit diagram



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Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2908044>



CSA

Approval ID: 256725



EAC

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



cULus Recognized

Approval ID: E172140

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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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