

Single relay - REL-MR-24DC/21HC/EX



2908822

<https://www.phoenixcontact.com/us/products/2908822>

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Plug-in miniature power relay, RT III sealed with power contacts, 1 changeover contact, input voltage: 24 V DC, in connection with the corresponding PLC base approved in accordance with ATEX/IECEx (zone 2) and Ex zone class I, div. 2.

Your advantages

- Switching current of up to 16 A
- RT III-proof (wash-proof)

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Commercial Data

Item number	2908822
Packing unit	1 pc
Minimum order quantity	10 pc
Sales Key	C05
Product Key	CK6195
GTIN	4055626345161
Weight per Piece (including packing)	15.9 g
Weight per Piece (excluding packing)	15.9 g
Customs tariff number	85364190
Country of origin	AT

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Technical Data

Product properties

Product type	Single relay
Operating mode	100% operating factor
Mechanical service life	3x 10 ⁷ cycles

Insulation characteristics

Overvoltage category	III
Pollution degree	3

Electrical properties

Service life electrical	see diagram
Maximum power dissipation for nominal condition	0.41 W
Test voltage	5 kV AC (50 Hz, 1 min., winding/contact)

Input data

Coil side

Nominal input voltage U_N	24 V DC
Input voltage range	15.6 V DC ... 57.6 V DC
Typical input current at U_N	17 mA
Typical response time	7 ms
Typical release time	3 ms
Coil resistance	1440 Ω \pm 10 % (at 20 °C)

Output data

Switching

Contact type	1 changeover contact
Type of switch contact	Single contact
Drive and function	monostable
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	50 A (20 ms)
Min. switching current	10 mA (at 12 V)
Interrupting rating (ohmic load) max.	384 W (at 24 V DC)
	58 W (at 48 V DC)
	48 W (at 60 V DC)
	50 W (at 110 V DC)
	80 W (at 220 V DC)
	4000 VA (for 250 V AC)
	2 A (at 24 V, DC13)

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Switching capacity	0.2 A (at 110 V, DC13)
	0.2 A (at 250 V, DC13)
	6 A (at 24 V, AC15)
	6 A (at 120 V, AC15)
	6 A (at 250 V, AC15)

Connection data

Connection method	Solder connection
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Dimensions

Dimensional drawing	
Width	12.7 mm
Height	29 mm
Depth	15.7 mm

Environmental and real-life conditions

Ambient conditions

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

Approval data

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

Assembly instructions	Can be aligned without spacing (> 70 °C ≥ 2.5 mm)
Mounting position	any

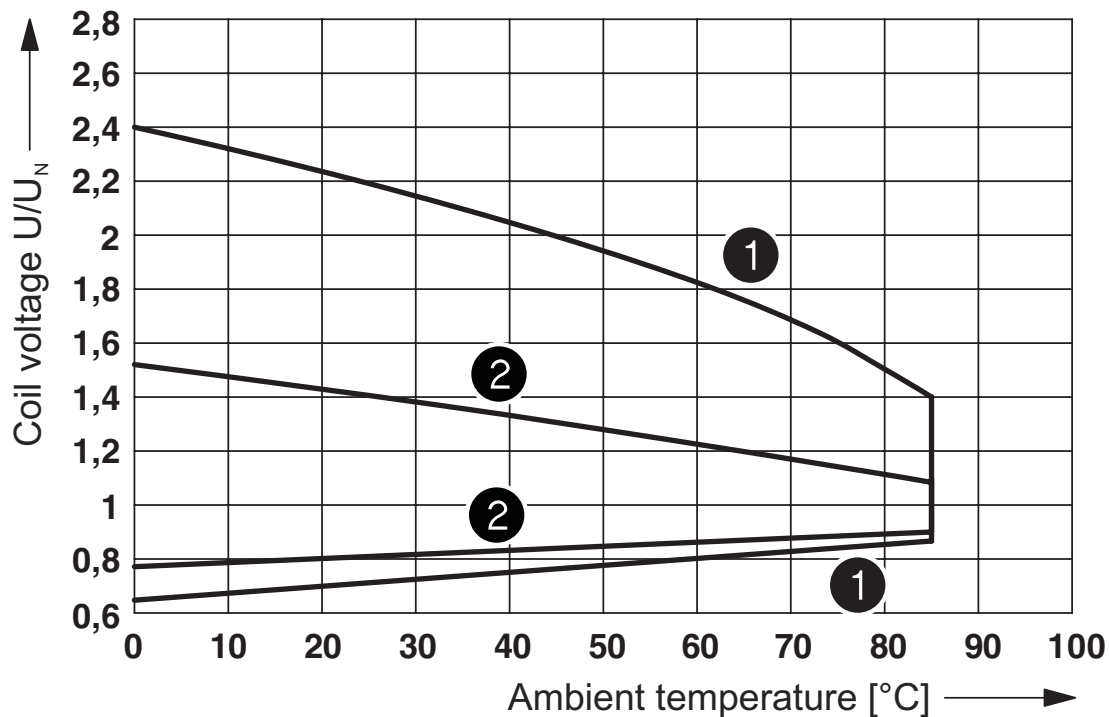
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Drawings

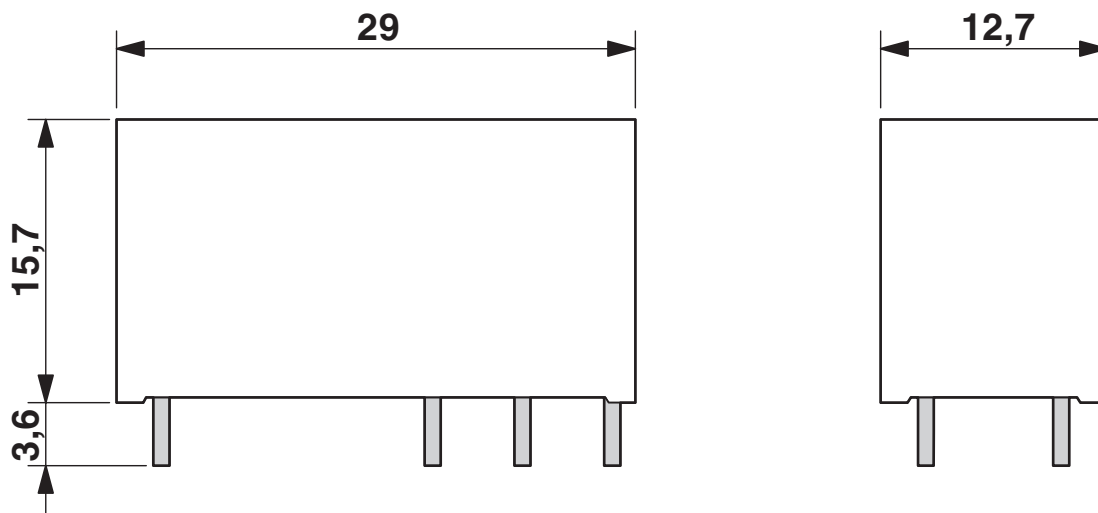
Diagram



- ① DC coils
- ② AC coils

Operating voltage range

Dimensional drawing



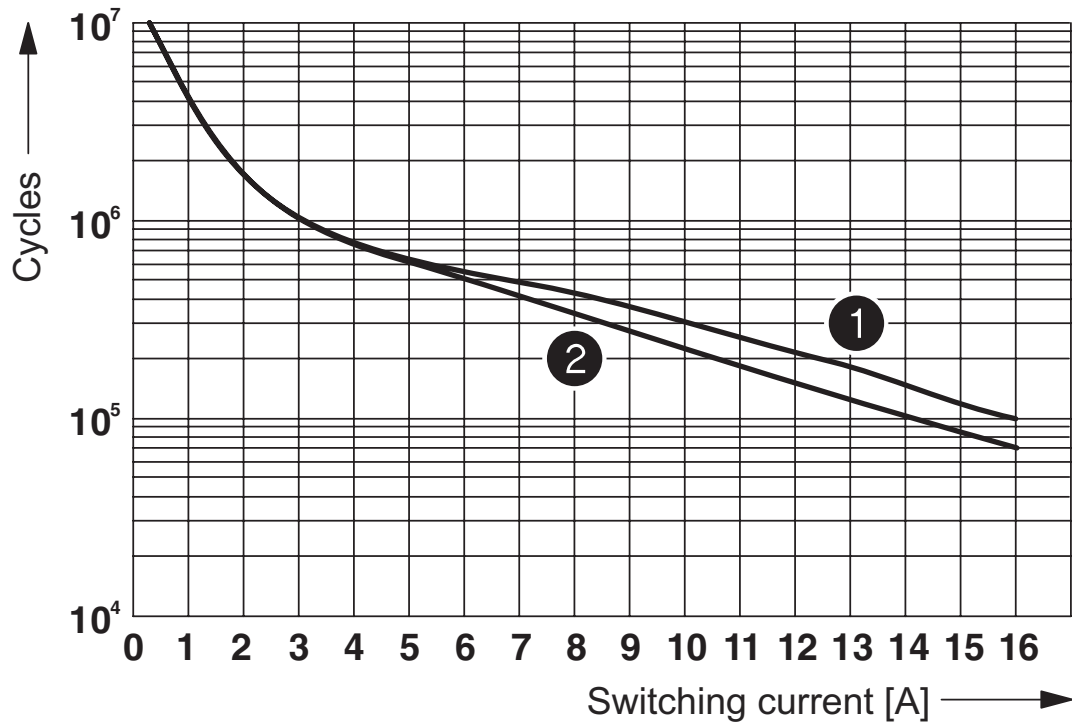
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Diagram



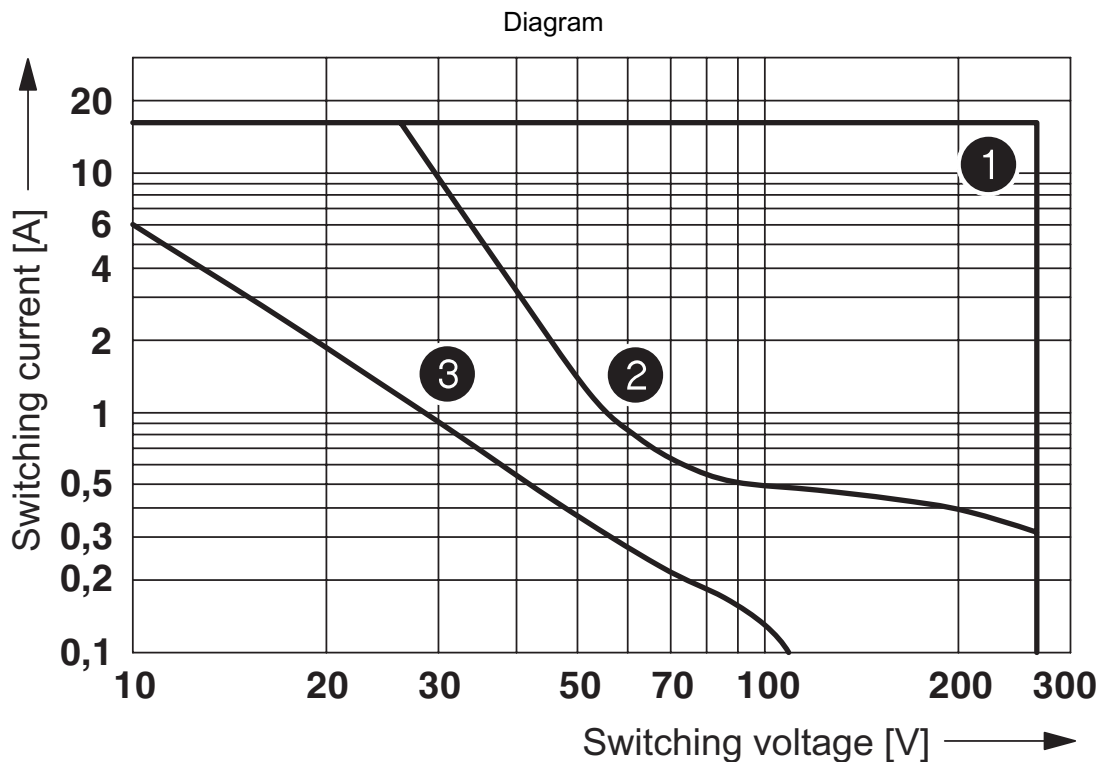
- ① 250 V AC, ohmic load (DC coils)
- ② 250 V AC, ohmic load (AC coils)

Electrical service life

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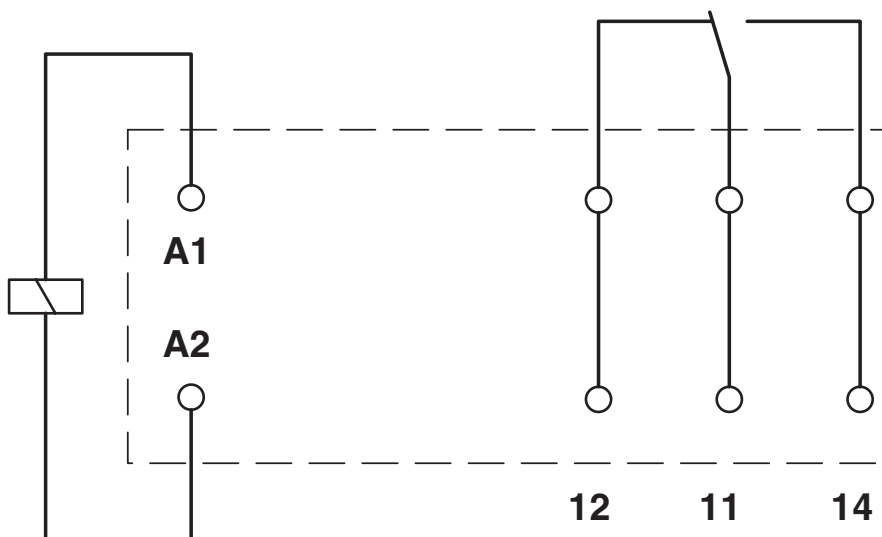
<https://www.phoenixcontact.com/us/products/2908822>



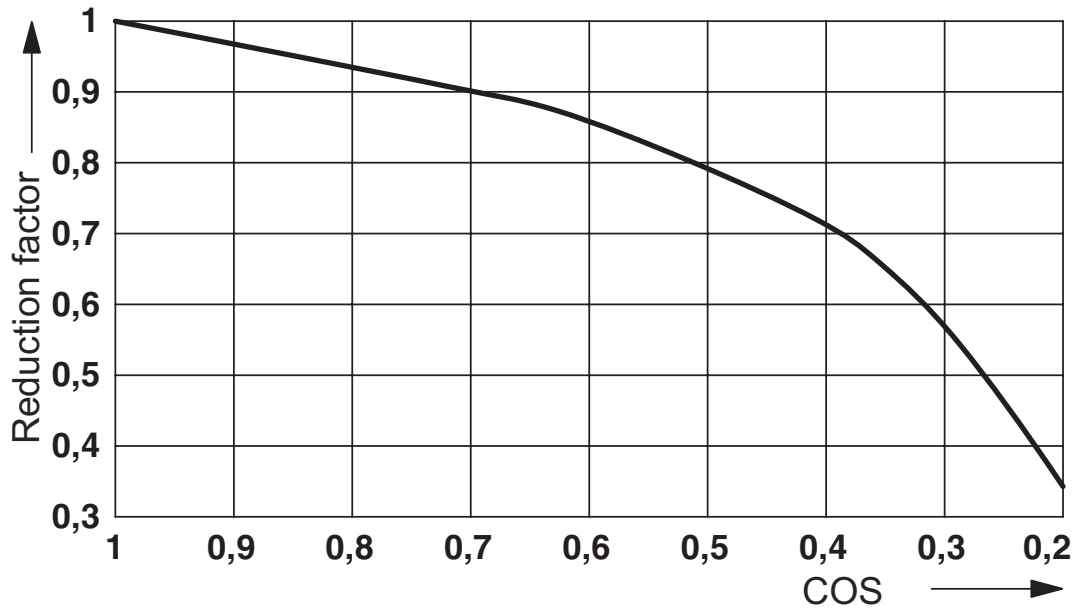
- ① AC, ohmic load
- ② DC, ohmic load
- ③ DC, L/R = 40 ms

Interrupting rating

Circuit diagram

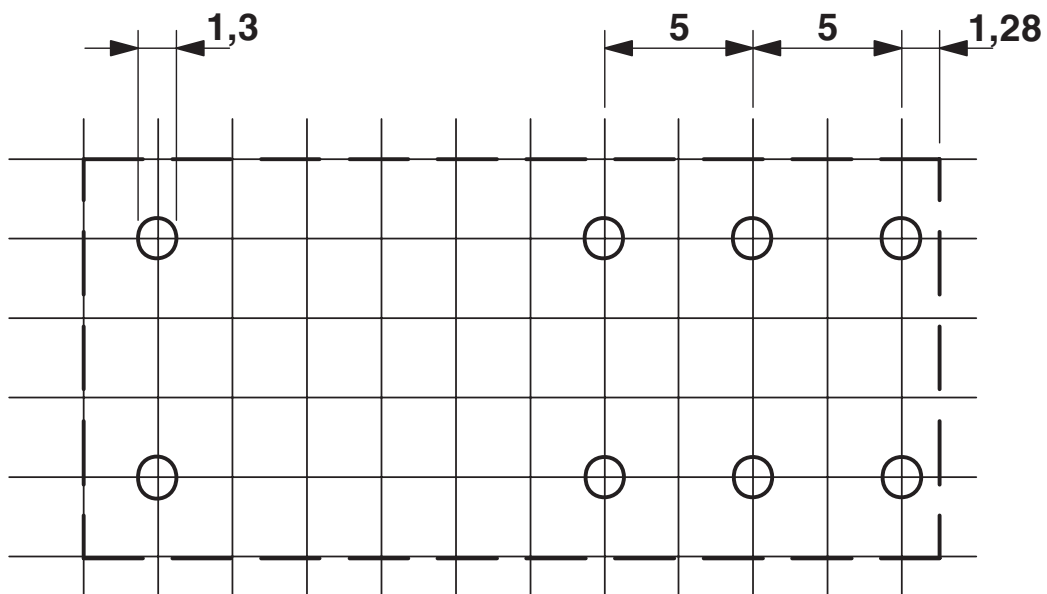


Diagram



Service life reduction factor with various cos phi

Drilling plan/solder pad geometry



Basic pitch 2.5 mm

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Approvals



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: 40007758

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Reports with production monitoring			-	-

cULus Recognized

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Classifications

ECLASS

ECLASS-9.0	27371601
ECLASS-10.0.1	27371601
ECLASS-11.0	27371601

ETIM

ETIM 8.0	EC001437
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UNSPSC

UNSPSC 21.0	39122300
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Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e No hazardous substances above threshold values
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