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REL-OR3/LDP-24DC/3X21 - Single relay

2903693

https://www.phoenixcontact.com/pc/products/2903693

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Plug-in octal relays with power contacts, 3 changeover contacts, test button, freewheeling diode, mechanical switching position indicator, polarity: A1+, A2-, input voltage: 24 V DC

Commercial data

Item number	2903693
Packing unit	10 pc
Minimum order quantity	10 pc
Product key	DK6953
Catalog page	Page 308 (C-5-2019)
GTIN	4046356759069
Weight per piece (including packing)	90.29 g
Weight per piece (excluding packing)	90.29 g
Customs tariff number	85364190
Country of origin	PL

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Technical data

Notes

Notes on operation	The outputs are not suitable for switching different outer conductors.
Notes on operation	Do not use to separate SELV / PELV circuits from other circuits, because safe isolation is not guaranteed.

Product properties

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

Insulation characteristics

Insulation	Basic insulation
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	1.44 W
Test voltage (Winding/contact)	2.5 kV_{rms} (50 Hz, 1 min., winding/contact)
Test voltage (Changeover contact/changeover contact)	2.5 kV_{rms} (50 Hz, 1 min., changeover contact/changeover contact)
Rated insulation voltage	250 V AC
Rated surge voltage	4 kV

Input data

Coil side

Nominal input voltage U_N	24 V DC
Input voltage range	20.4 V DC ... 26.4 V DC (20 °C)
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at U_N	60 mA
Input power dissipation for U_N	1.44 W
Typical response time	18 ms
Typical release time	20 ms
Protective circuit	Freewheeling diode
Status display	LED (yellow)
Coil resistance	430 Ω ±10 %

Output data

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Switching

Contact switching type	3 changeover contacts
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V DC
	440 V AC
Minimum switching voltage	10 V (At 24 mA)
Limiting continuous current	10 A
Maximum inrush current	30 A (20 ms, N/O contacts)
Min. switching current	10 mA (at 24 V)
Interrupting rating (ohmic load) max.	240 W (at 24 V DC)
	124 W (at 48 V DC)
	108 W (at 60 V DC)
	52 W (at 110 V DC)
	48 W (at 220 V DC)
	2500 VA (for 250 V AC)
Motor load according to UL 508	1/2 HP, 240 V AC (N/O contact)

Connection data

Connection method	Plug-in connection

Dimensions

Width	35 mm
Height	35 mm
Depth	54.4 mm

Environmental and real-life conditions

Ambient conditions

Degree of protection	RT I
Degree of protection (Installation location)	≥ IP54 (Installation location)
Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	≤ 2000 m

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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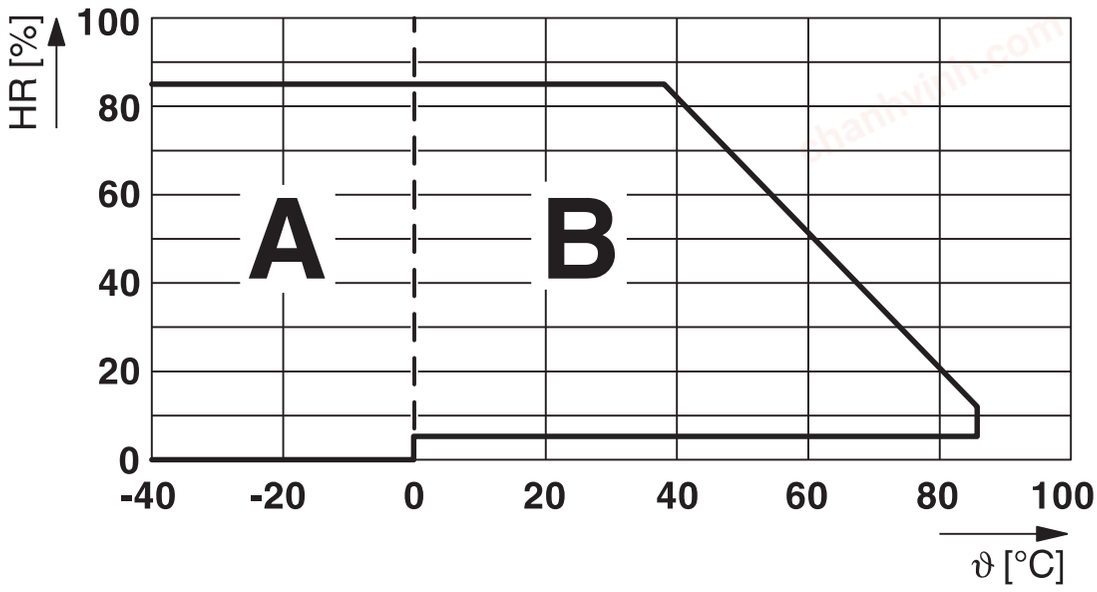
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Drawings

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.

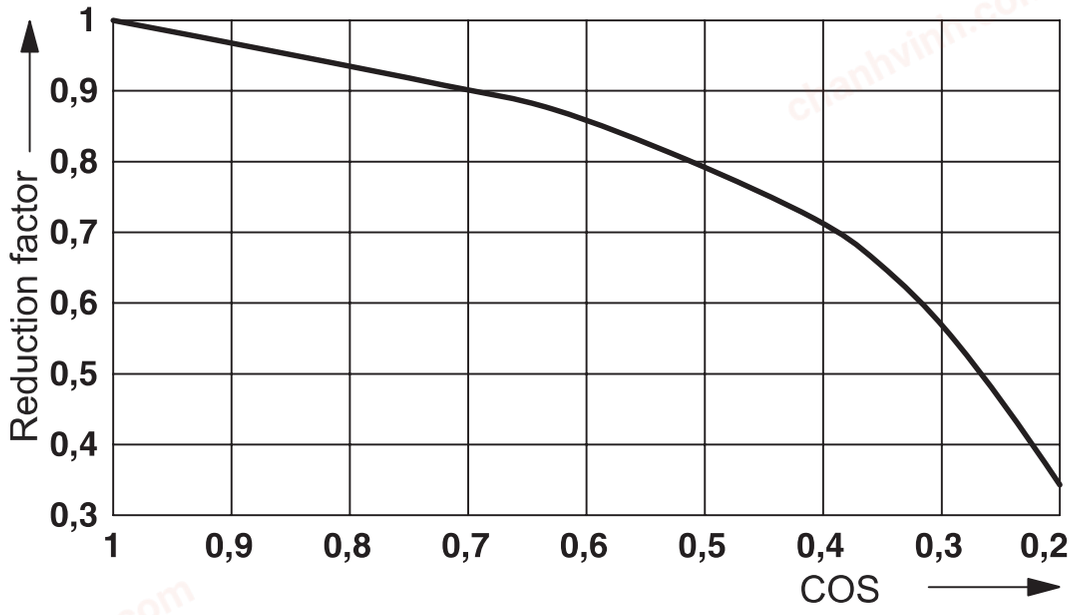
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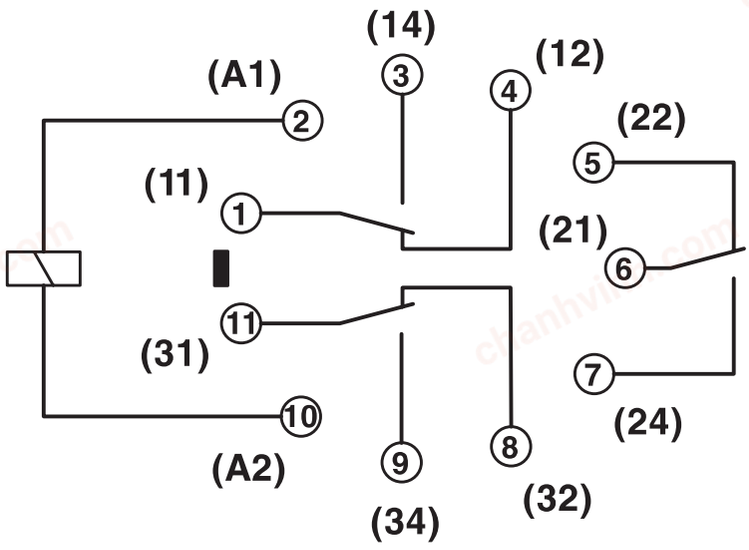
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Diagram



Service life reduction factor

Circuit diagram



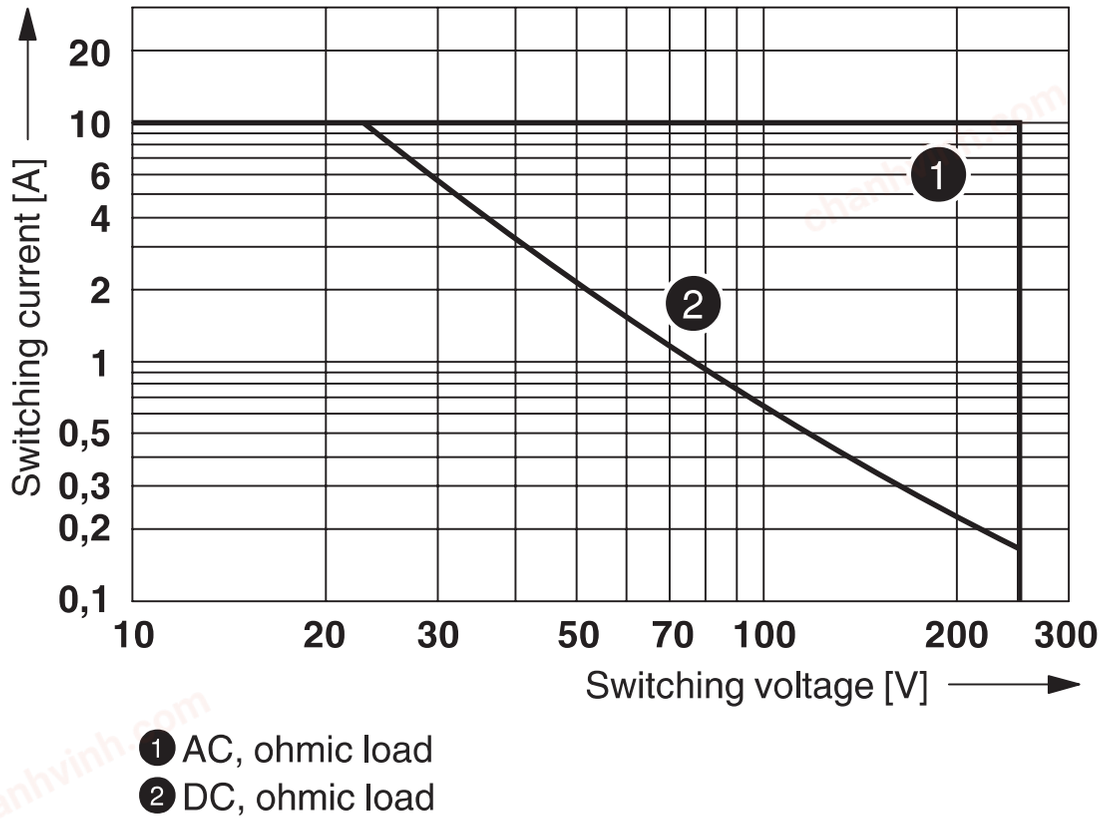
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Diagram



1 AC, ohmic load
2 DC, ohmic load

Interrupting rating

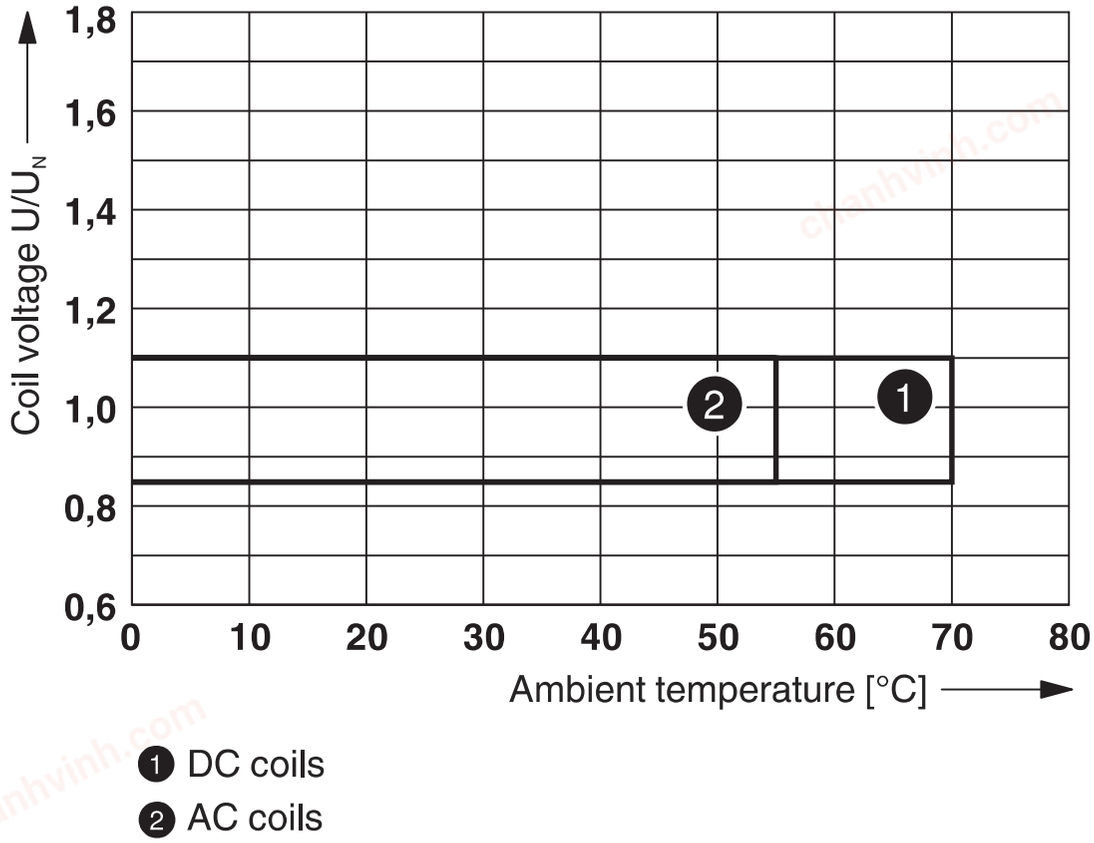
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Diagram



1 DC coils

2 AC coils

Operating voltage range

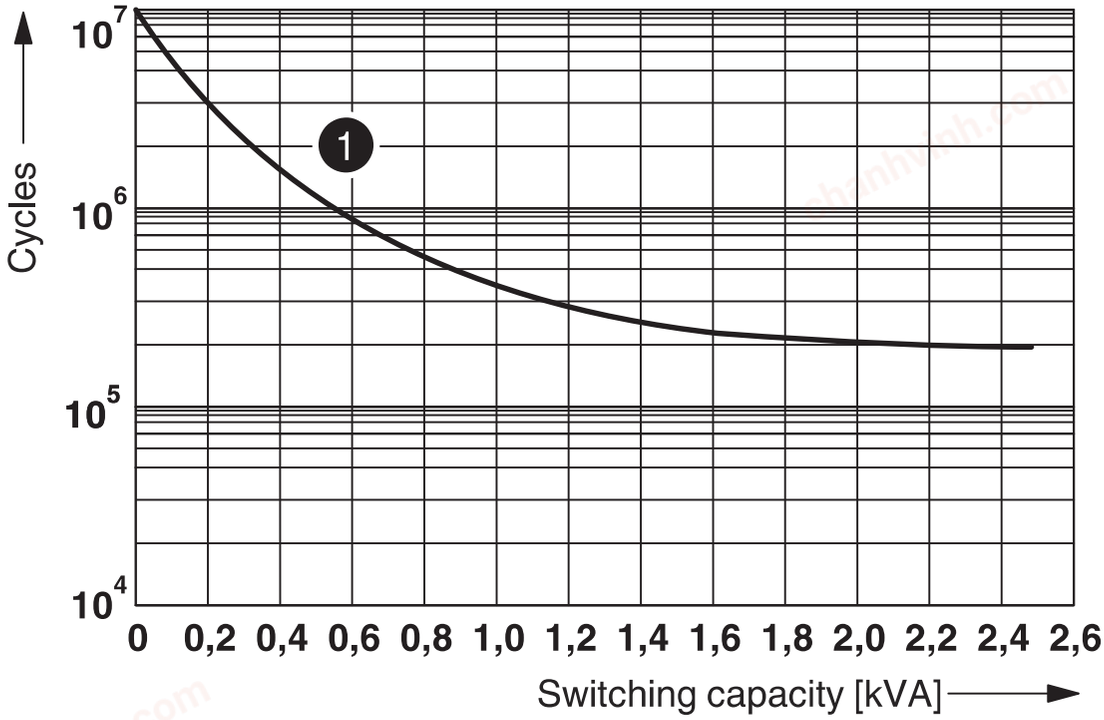
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Diagram



250 V AC, ohmic load

Electrical service life

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Approvals

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CSA
Approval ID: 256725

cUL Recognized
Approval ID: FILE E 172140

UL Recognized
Approval ID: FILE E 172140

VDE approval of drawings
Approval ID: 40036588

cULus Recognized

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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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