

REL-OR3/LDP-12DC/3X21 - Single relay



2909211

<https://www.phoenixcontact.com/gb/products/2909211>

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Plug-in octal relays with power contacts, 3 changeover contacts, test button, freewheeling diode, mechanical switch position indicator, polarity A1+, A2-, input voltage: 12 V DC

Commercial data

Item number	2909211
Packing unit	10 pc
Minimum order quantity	50 pc
Sales key	CK6193
Product key	CK6193
GTIN	4055626360218
Weight per piece (including packing)	92.02 g
Weight per piece (excluding packing)	92.02 g
Customs tariff number	85364190
Country of origin	PL

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Technical data

Notes

General	The outputs are not suitable for switching different outer conductors.
General	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. 2×10^7 cycles

Insulation characteristics

Insulation	Basic insulation
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Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	3

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	12 V DC
Input voltage range	10.2 V DC ... 13.2 V DC (see diagram)
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at U_N	112 mA
Input power dissipation for U_N	1.35 W
Typical response time	18 ms
Typical release time	20 ms
Protective circuit	Freewheeling diode
Status display	Yellow LED
Coil resistance	110 $\Omega \pm 10\%$

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
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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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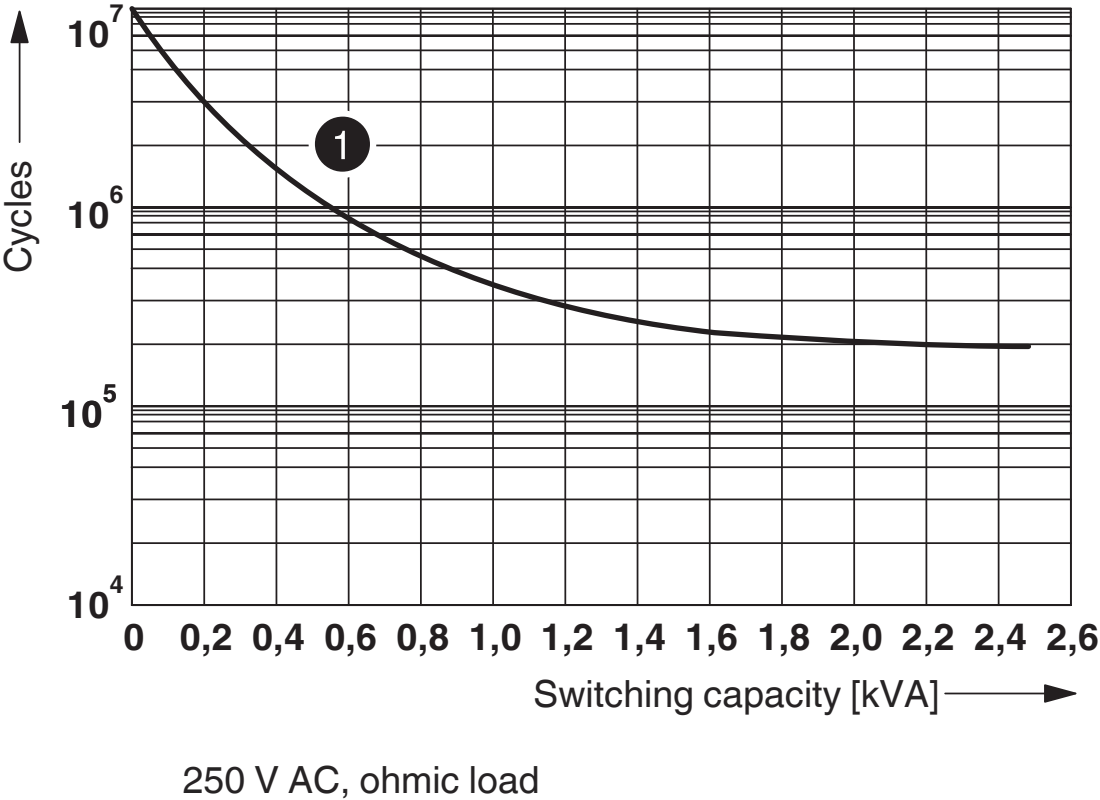
<https://www.phoenixcontact.com/gb/products/2909211>

Mounting

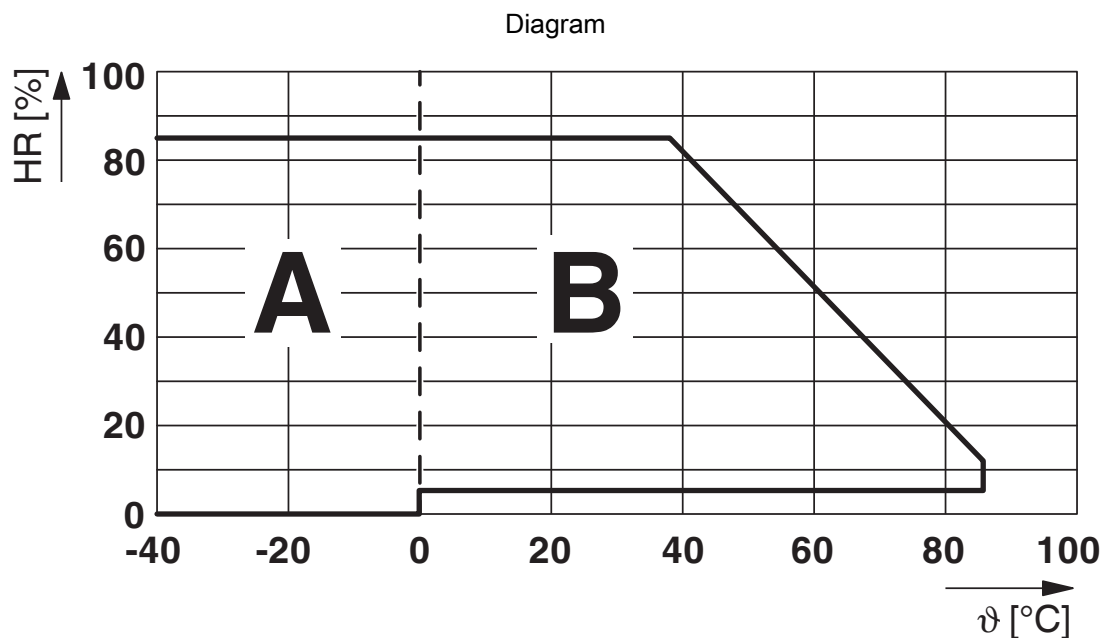
Mounting position	any
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Drawings

Diagram



Electrical service life



Permissible humidity for operation and storage.

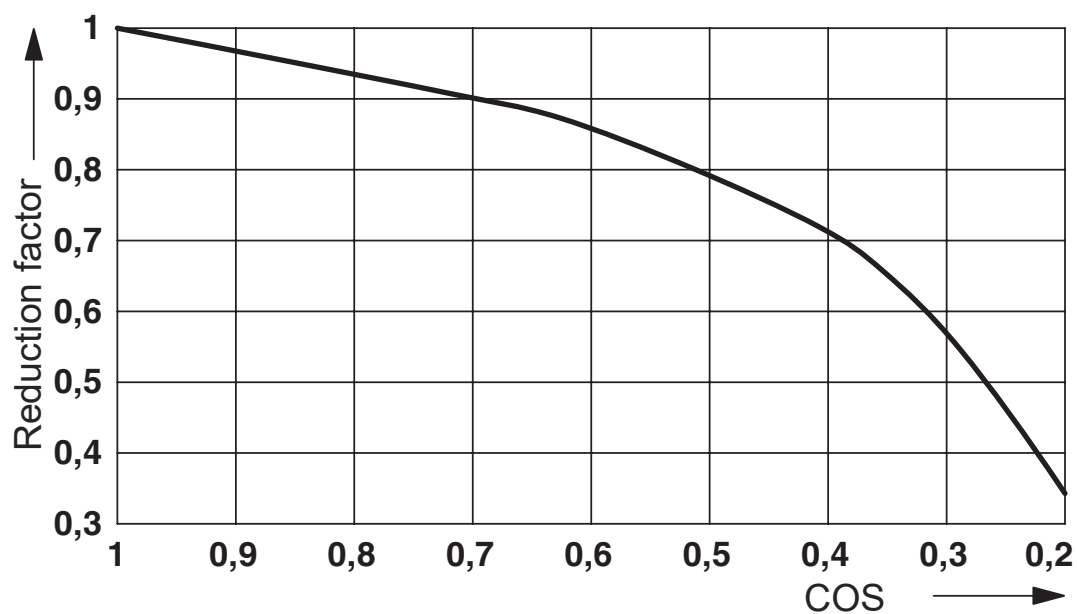
The maximum permissible ambient temperature as specified in the data sheet must be observed.

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

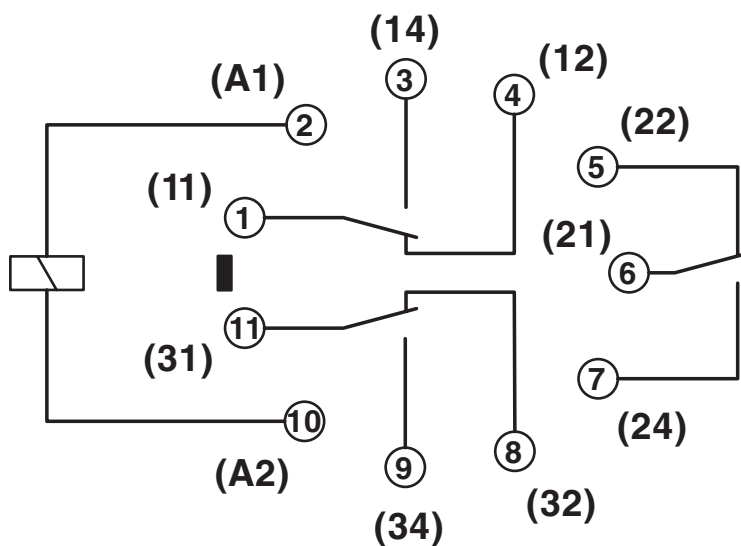
On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature $\leq 25^{\circ}\text{C}$.

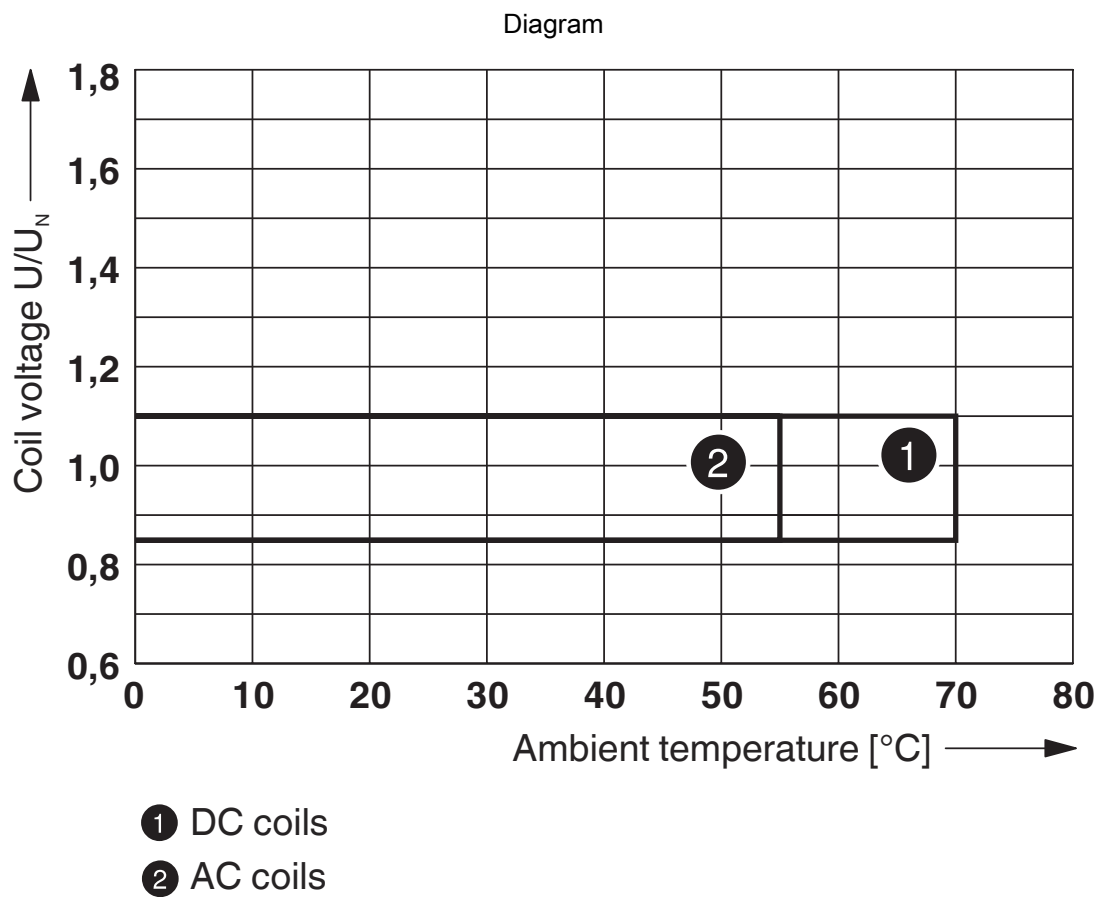
Diagram



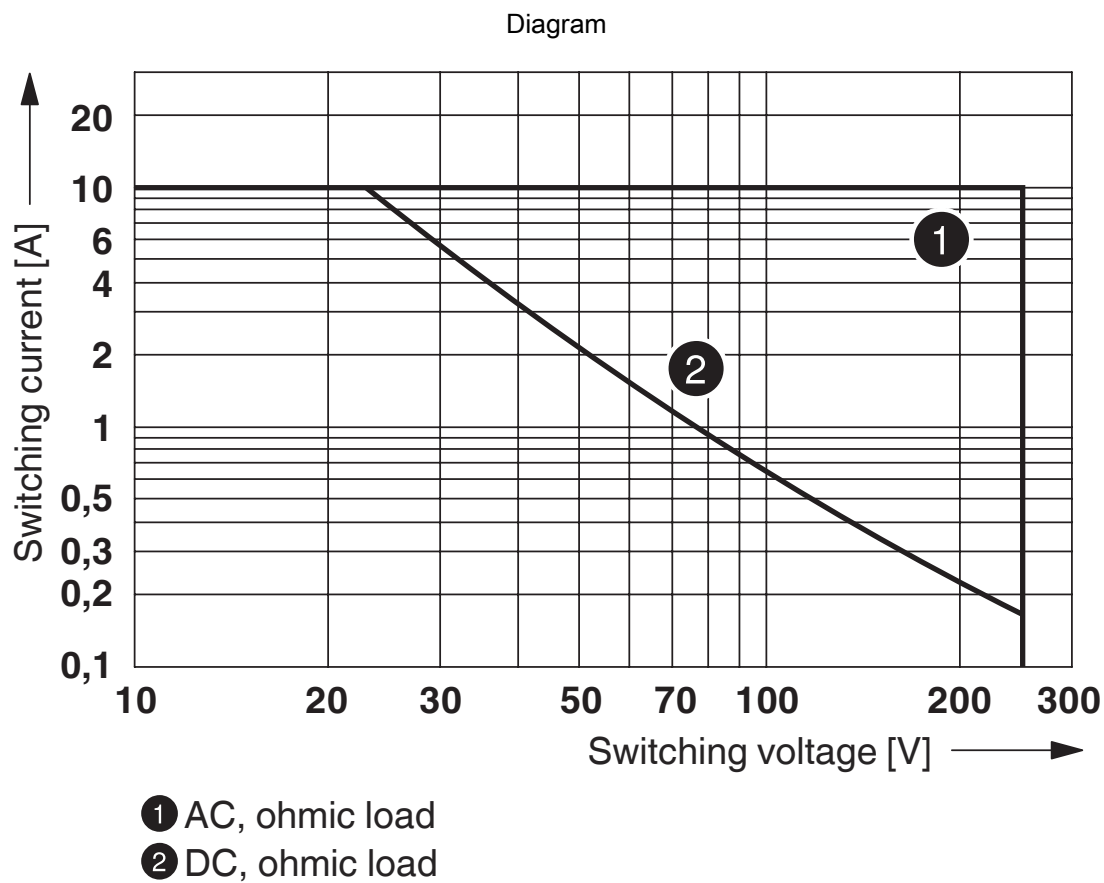
Service life reduction factor

Circuit diagram





Operating voltage range



Interrupting rating

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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



EAC
Approval ID: TR_TS_D_00573_c



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

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
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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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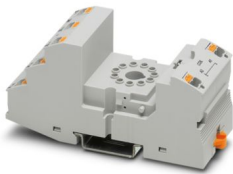
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Mandatory accessories

RIF-3-BPT/3X21 - Relay base

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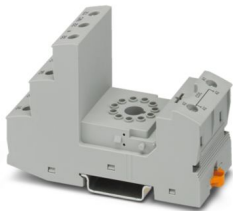


Relay base RIF-3..., for octal relays with 3 changeover contacts, Push-in connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

RIF-3-BSC/3X21 - Relay base

2900936

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RIF-3... relay base, for octal relay with 3 changeover contacts, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

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