REL-IR-BL/L- 24AC/4X21 - Single relay

1109563

https://www.phoenixcontact.com/us/products/1109563

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Plug-in industrial relay in basic design with power contacts, 4 changeover contacts, test button, status LED, mechanical switch position indicator, input voltage: 24 V AC

Commercial data

Item number	1109563
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C460
Product key	CKF947
GTIN	4063151021085
Weight per piece (including packing)	32.068 g
Weight per piece (excluding packing)	30 g
Customs tariff number	85364900
Country of origin	AT

Technical data

Notes

Notes on operation	Do not connect adjacent channels to SELV/ PELV and voltages dangerous to the touch.
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	2x 10^7 cycles

Data management status

Date of last data management	18.01.2024
Article revision	01

Insulation characteristics: Air clearances and creepage distances between coil and contact side

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

Electrical properties

Service life electrical	see diagram
Maximum power dissipation for nominal condition	1 W
Test voltage (Winding/contact)	2.5 kV_{rms} (50 Hz, 1 min., winding/contact)
Test voltage (Changeover contact/changeover contact)	2 kV_{rms} (50 Hz, 1 min., changeover contact/changeover contact)

Air clearances and creepage distances between coil and contact side

Rated insulation voltage	250 V AC
Rated surge voltage	5 kV

Input data

Coil side

Nominal input voltage U_N	24 V AC
Input voltage range	19.2 V AC ... 39.6 V AC (20 °C)
Mains frequency	50/60 Hz
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at U_N	45 mA (50 Hz)
Typical response time	5 ms ... 15 ms
Typical release time range	5 ms ... 20 ms
Coil voltage	24 V AC

Status display	LED (yellow)
Coil resistance	192 Ω ±10 %

Output data

Switching

Contact switching type	4 changeover contacts
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	12 V (10 mA)
Limiting continuous current	6 A
Maximum inrush current	12 A (20 ms, N/O contacts)
Min. switching current	10 mA (12 V)
Interrupting rating (ohmic load) max.	144 W (24 V DC)
	130 W (48 V DC)
	90 W (60 V DC)
	66 W (110 V DC)
	88 W (220 V DC)
	1500 VA (250 V AC)
Switching capacity min.	120 mW

Connection data

Connection method	Plug-in connection

Dimensions

Width	22.5 mm
Height	28 mm
Depth	35.5 mm

Environmental and real-life conditions

Ambient conditions

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

Approvals

Corrosive gas test

Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

Standards and regulations

Air clearances and creepage distances between coil and contact side

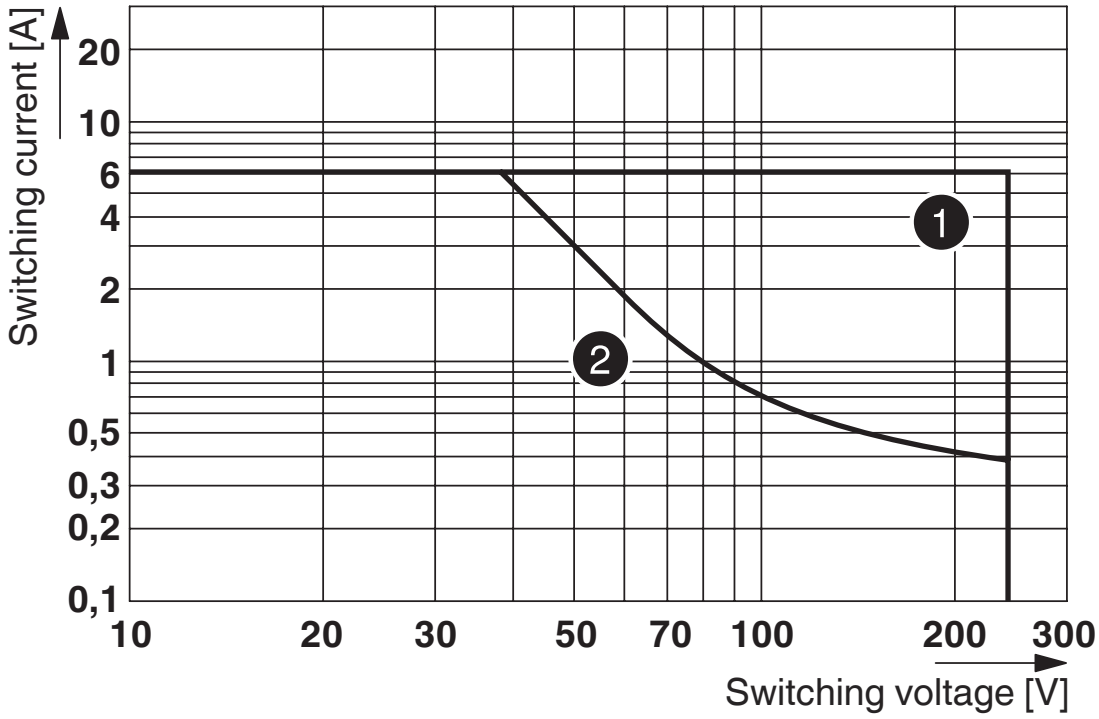
Standards/regulations	EN 61810-1

Mounting

Mounting type	Plug-in mounting
Assembly note	in rows with zero spacing
Mounting position	any

Drawings

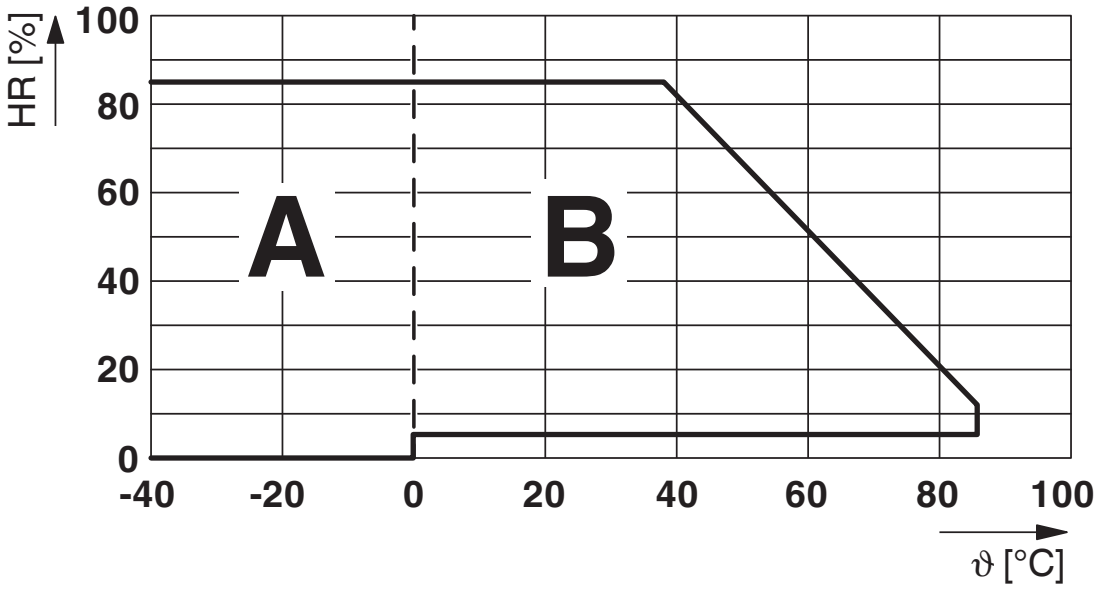
Diagram



1 AC, ohmic load
2 DC, ohmic load

Interrupting rating

Diagram

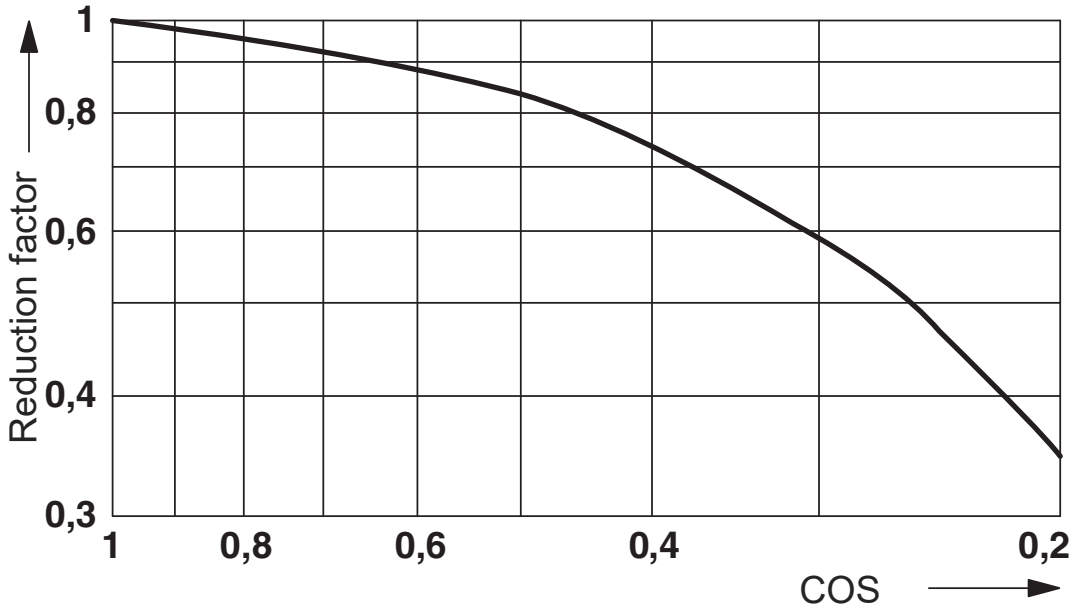


Permissible humidity for operation and storage.
The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures ≤ 0°C must be prevented
Area B: Condensation at ambient temperatures > 0°C must be prevented

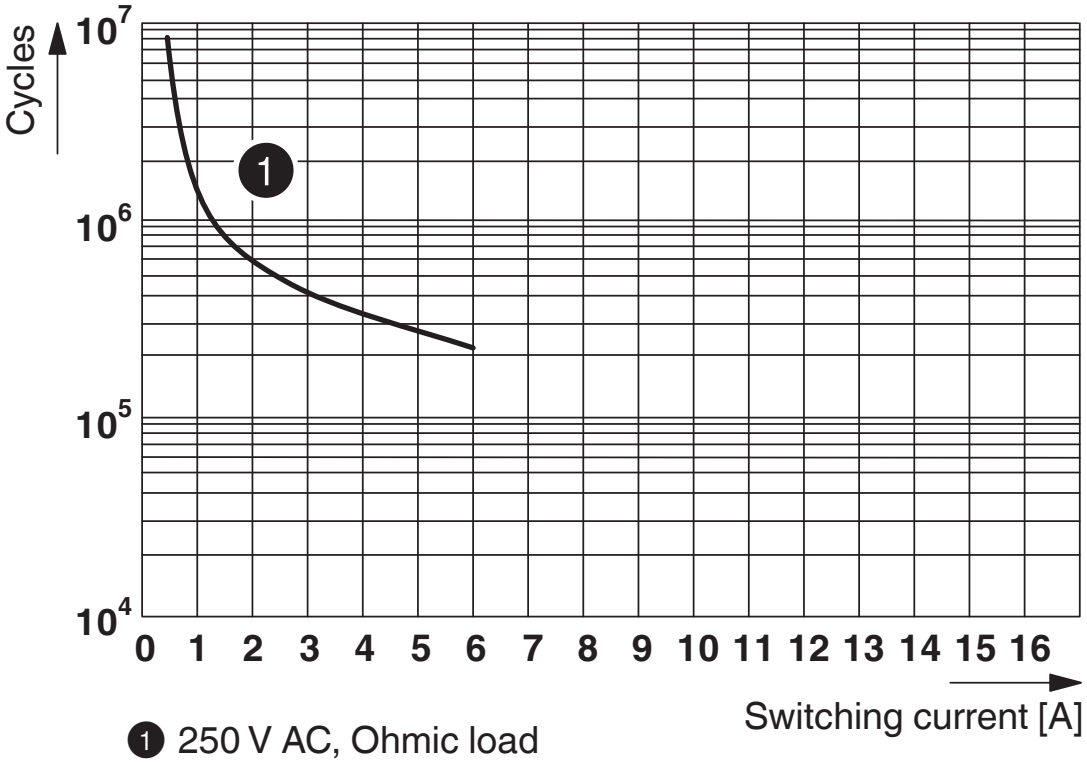
On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature ≤ 25°C.

Diagram



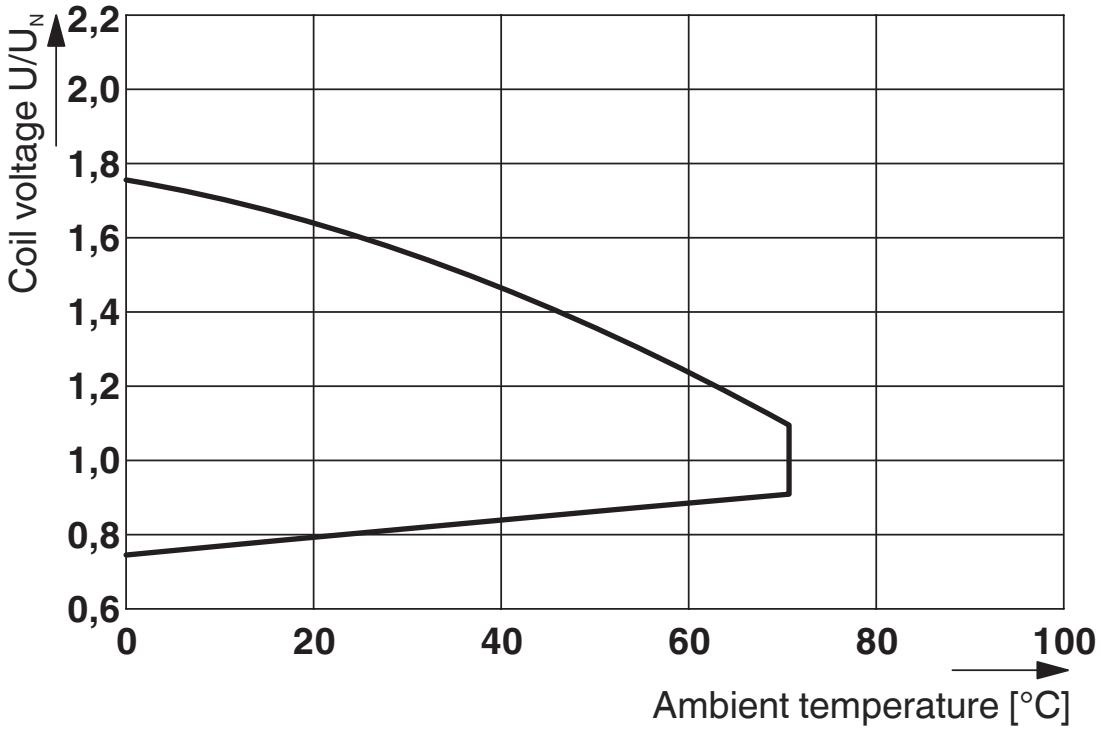
Service life reduction factor

Diagram



Electrical service life

Diagram



Operating voltage range

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1109563

cUL Recognized
Approval ID: FILE E 228652

UL Recognized
Approval ID: FILE E 228652

VDE Zeichengenehmigung
Approval ID: 40058034

cULus Recognized

Classifications

ECLASS

ECLASS-11.0	27371601
ECLASS-12.0	27371601
ECLASS-13.0	27371601

ETIM

ETIM 9.0	EC001437

UNSPSC

UNSPSC 21.0	39122300

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%

Mandatory accessories

ECOR-2-BSC2-RT/4X21 - Relay base

2908214

https://www.phoenixcontact.com/us/products/2908214



ECOR-2 relay base, for industrial relays with four changeover contacts, bolt connection, for mounting on NS 35/7,5

ECOR-2-BSC3/4X21 - Relay base

2907521

https://www.phoenixcontact.com/us/products/2907521



ECOR-2 relay base, for industrial relay with 2 or 4 changeover contacts, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

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ECOR-2-BSC2/4X21 - Relay base

1089994

https://www.phoenixcontact.com/us/products/1089994



ECOR-2 relay base, for industrial relay with 2 or 4 changeover contacts, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

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