REL-IR4/L-120AC/4X21AU - Single relay

2903684

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Plug-in industrial relay with power contacts and additional hard gold plating, 4 changeover contacts, test button, status LED, mechanical switching position indicator, coil voltage: 120 V AC

Commercial data

Item number	2903684
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C460
Product key	DK694A
GTIN	4046356758970
Weight per piece (including packing)	34.2 g
Weight per piece (excluding packing)	33.7 g
Customs tariff number	85364900
Country of origin	PL

Technical data

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	II
Pollution degree	2

Data management status

Date of last data management	01.04.2026

Electrical properties

Service life electrical	see diagram
Maximum power dissipation for nominal condition	1.56 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)
Rated insulation voltage	250 V AC
Rated surge voltage	2.5 kV

Input data

Coil side

Nominal input voltage U_N	120 V AC
Input voltage range	93.6 V AC ... 165.6 V AC (20 °C)
Mains frequency	50/60 Hz
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at U_N	13 mA
Typical response time	5 ms ... 15 ms (depending on phase relation)
Typical release time range	5 ms ... 20 ms (depending on phase relation)
Status display	LED (yellow)

Output data

Switching

Contact switching type	4 changeover contacts
Type of switch contact	Single contact
Contact material	AgNi, hard gold-plated
Note	If the specified maximum values for multi-layer contact relays are exceeded, the gold plating is destroyed. The maximum values of the power contact relay are then valid. This can result in a shorter service life than with a pure power contact.

Maximum switching voltage	30 V AC
	36 V DC
Minimum switching voltage	2 V (At 24 mA)
Limiting continuous current	50 mA
Maximum inrush current	50 mA
Min. switching current	2 mA (24 V DC)
Interrupting rating (ohmic load) max.	1.2 W (at 24 V DC)
Switching power min.	48 mW

Switching: when the gold layer is destroyed

Note	the following values are applicable if a gold layer is destroyed
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (At 24 mA)
Limiting continuous current	6 A
Maximum inrush current	16 A (20 ms, N/O contacts)
Min. switching current	5 mA (at 24 V)
Interrupting rating (ohmic load) max.	144 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)
	1500 VA (for 250 V AC)
Switching capacity	2 A (at 24 V, DC13)
	0.22 A (at 120 V, DC13)
	0.11 A (at 250 V, DC13)
	1.5 A (at 24 V, AC15)
	1.5 A (at 120 V, AC15)
	1 A (at 240 V, AC15)

Connection data

Connection method	Plug-in connection

Dimensions

Width	21.2 mm
Height	27.5 mm
Depth	35.6 mm

Environmental and real-life conditions

Ambient conditions

Degree of protection	RT I
Ambient temperature (operation)	-40 °C ... 55 °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

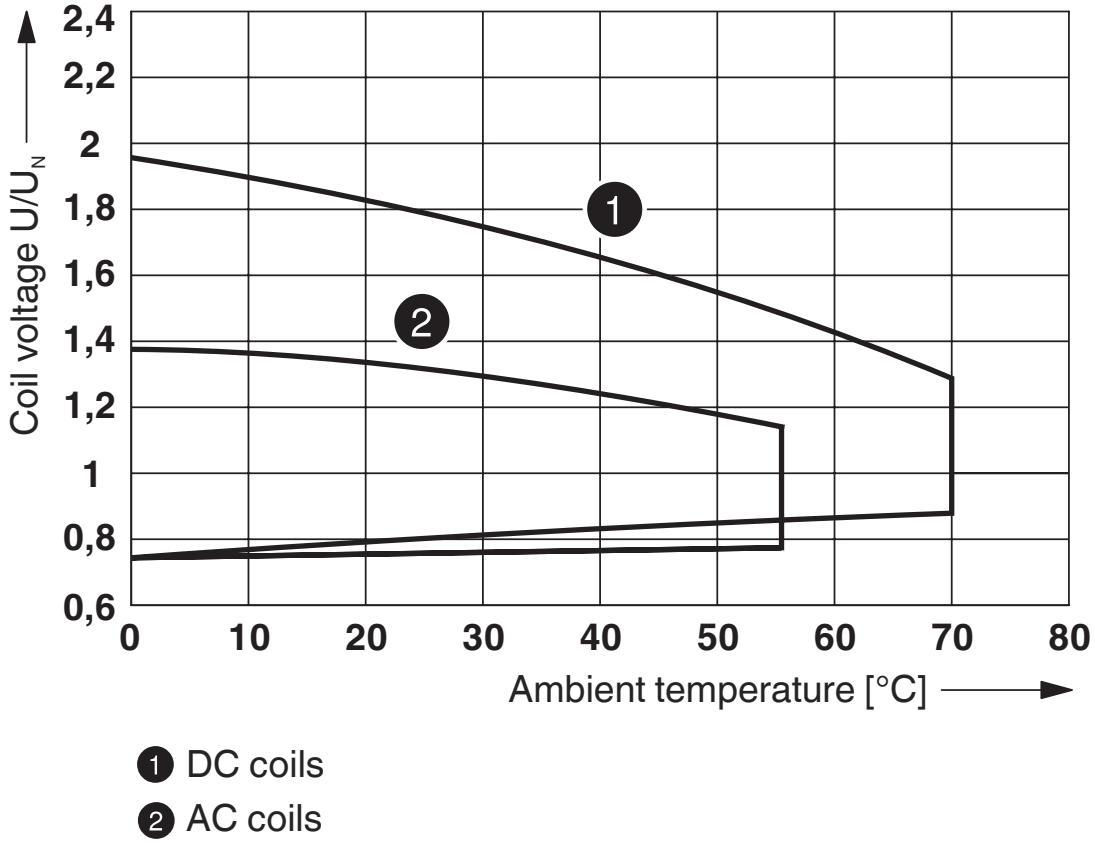
Standards/regulations	IEC 60664
	IEC 61810

Mounting

Mounting position	any

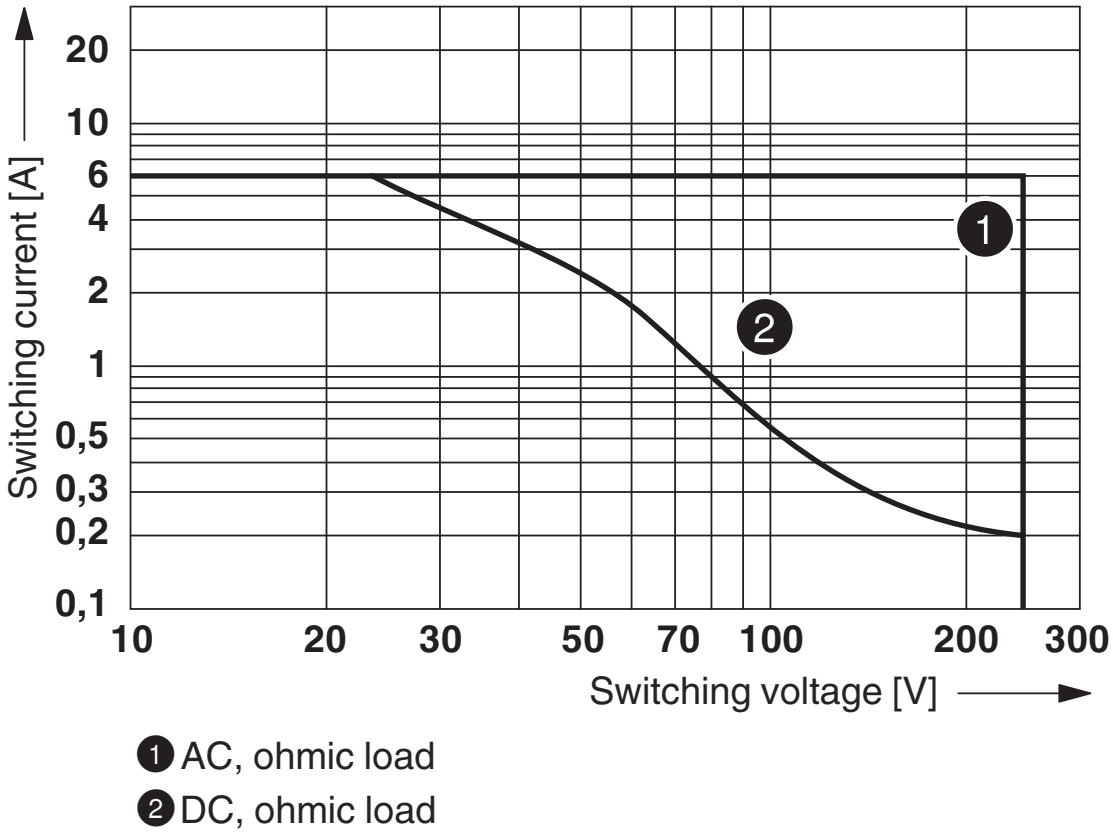
Drawings

Diagram



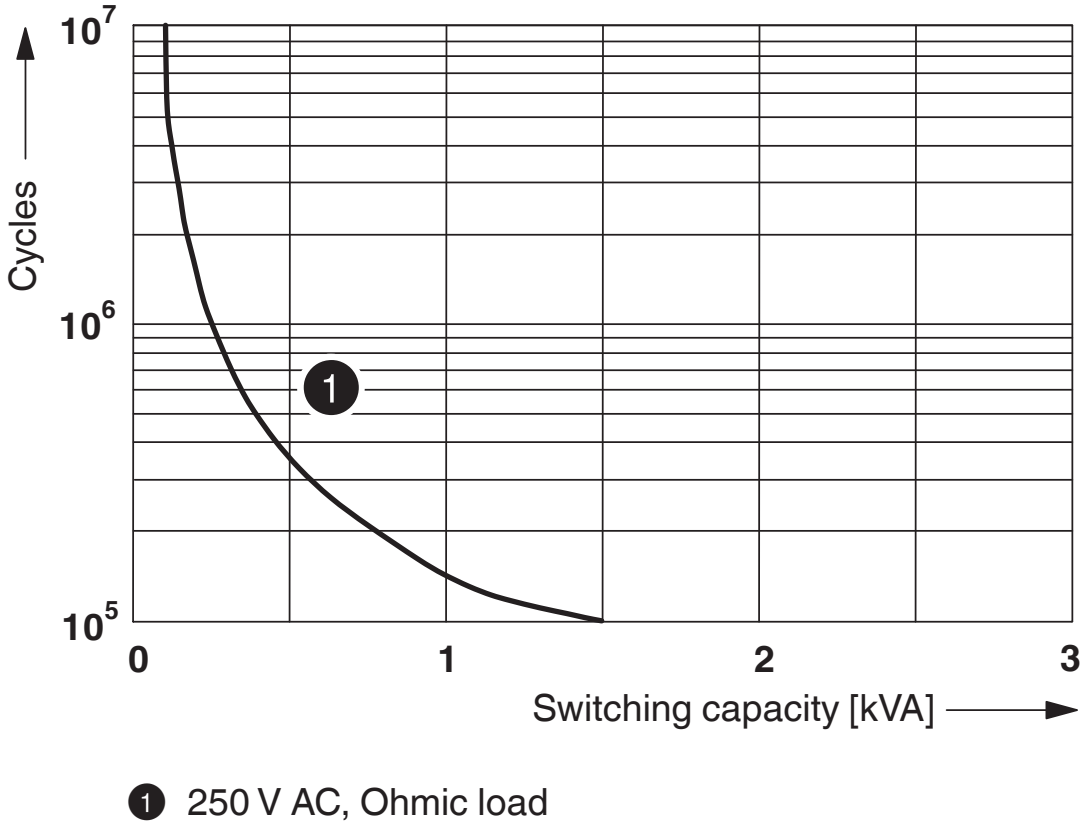
Operating voltage range

Diagram



Interrupting rating

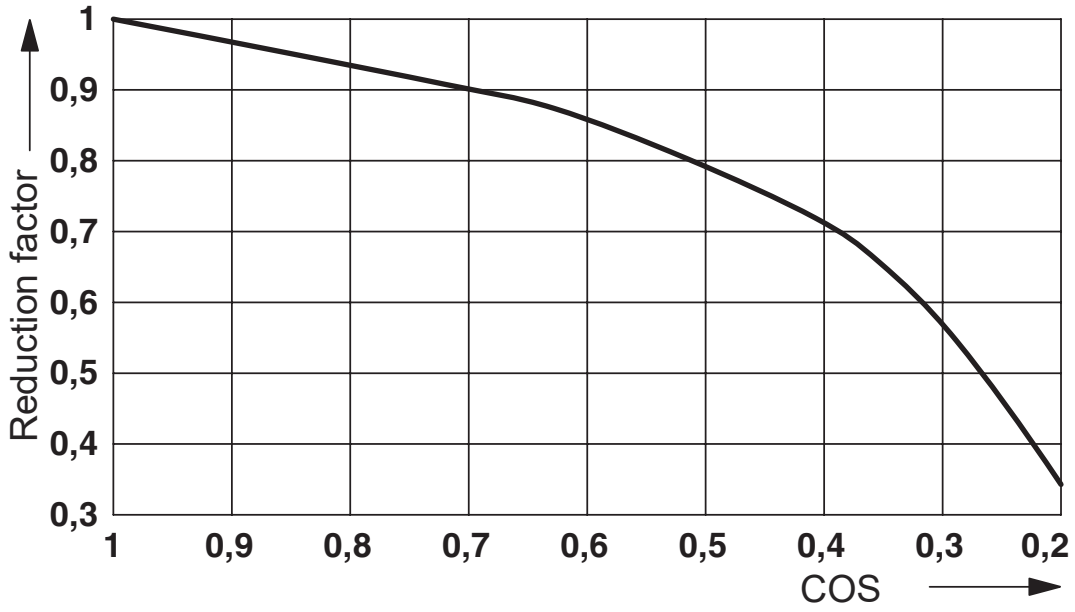
Diagram



1 250 V AC, Ohmic load

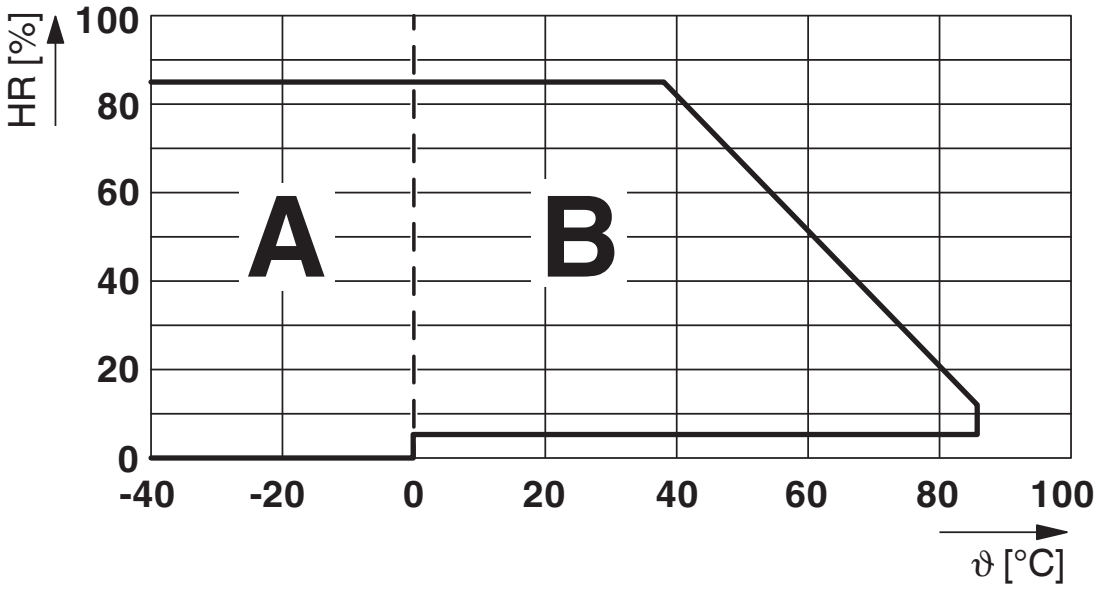
Electrical service life

Diagram



Service life reduction factor

Diagram

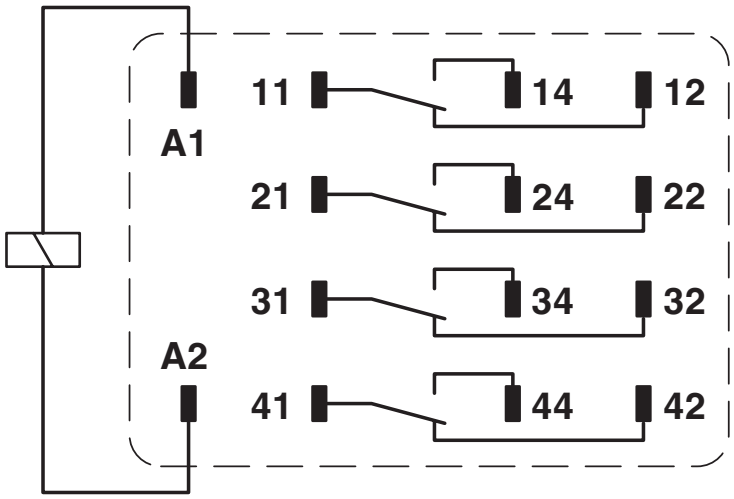


Permissible humidity for operation and storage.
The maximum permissible ambient temperature as specified in the data sheet must be observed.

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.

Circuit diagram



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2903684

CSA
Approval ID: 256725

VDE Zeichengenehmigung
Approval ID: 40040427

cULus Recognized
Approval ID: E172140

Classifications

ECLASS

ECLASS-13.0	27371601
ECLASS-15.0	27371601

ETIM

ETIM 10.0	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%

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