REL-PR3-120AC/3X1 - Single relay

2903708

https://www.phoenixcontact.com/us/products/2903708

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Plug-in high-power relay with power contacts, 3 N/O contacts, coil voltage: 120 V AC

Commercial data

Item number	2903708
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C460
Product key	DK6965
GTIN	4046356759205
Weight per piece (including packing)	83.8 g
Weight per piece (excluding packing)	83.8 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. 10^7 cycles

Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	3

Data management status

Date of last data management	01.04.2026

Electrical properties

Service life electrical	see diagram
Maximum power dissipation for nominal condition	2.76 W
Test voltage (Winding/contact)	2.5 kV_{rms} (50 Hz, 1 min., winding/contact)
Test voltage (Contact/contact)	2.5 kV_{rms} (50 Hz, 1 min., contact/contact)
Test voltage (N/O contact / N/O contact)	2.5 kV_{rms} (50 Hz, 1 min., N/O contact / N/O contact)
Rated insulation voltage	250 V AC
Rated surge voltage	4 kV

Input data

Coil side

Nominal input voltage U_N	120 V AC
Input voltage range	102 V AC ... 132 V AC (20 °C)
Mains frequency	50/60 Hz
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at U_N	23 mA
Typical response time	5 ms ... 25 ms (depending on phase relation)
Typical release time range	5 ms ... 20 ms (depending on phase relation)

Output data

Switching

Contact switching type	3 N/O contacts
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	440 V AC
	250 V DC
Minimum switching voltage	10 V (At 24 mA)

Limiting continuous current	16 A
Maximum inrush current	50 A (20 ms, N/O contacts)
Min. switching current	10 mA (at 24 V)
Interrupting rating (ohmic load) max.	384 W (at 24 V DC)
	720 W (at 48 V DC)
	600 W (at 60 V DC)
	660 W (at 110 V DC)
	183 W (at 220 V DC)
	4000 VA (for 250 V AC)
	4000 VA (at 440 V AC)
Switching capacity	1 A (at 24 V, DC13)
	1 A (at 120 V, DC13)
	1 A (at 220 V, DC13)
	1.5 A (at 24 V, AC15)
	1.5 A (at 120 V, AC15)
	1.5 A (at 240 V, AC15)
3-phase motor load	1500 W (at 400 V, AC3)
Motor load according to UL 508	1/3 HP, 120 V AC (N/O contact)
	1/2 HP, 240 V AC (N/O contact)

Connection data

Connection method	Plug-in connection

Dimensions

Width	38.6 mm
Height	36.1 mm
Depth	45.5 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

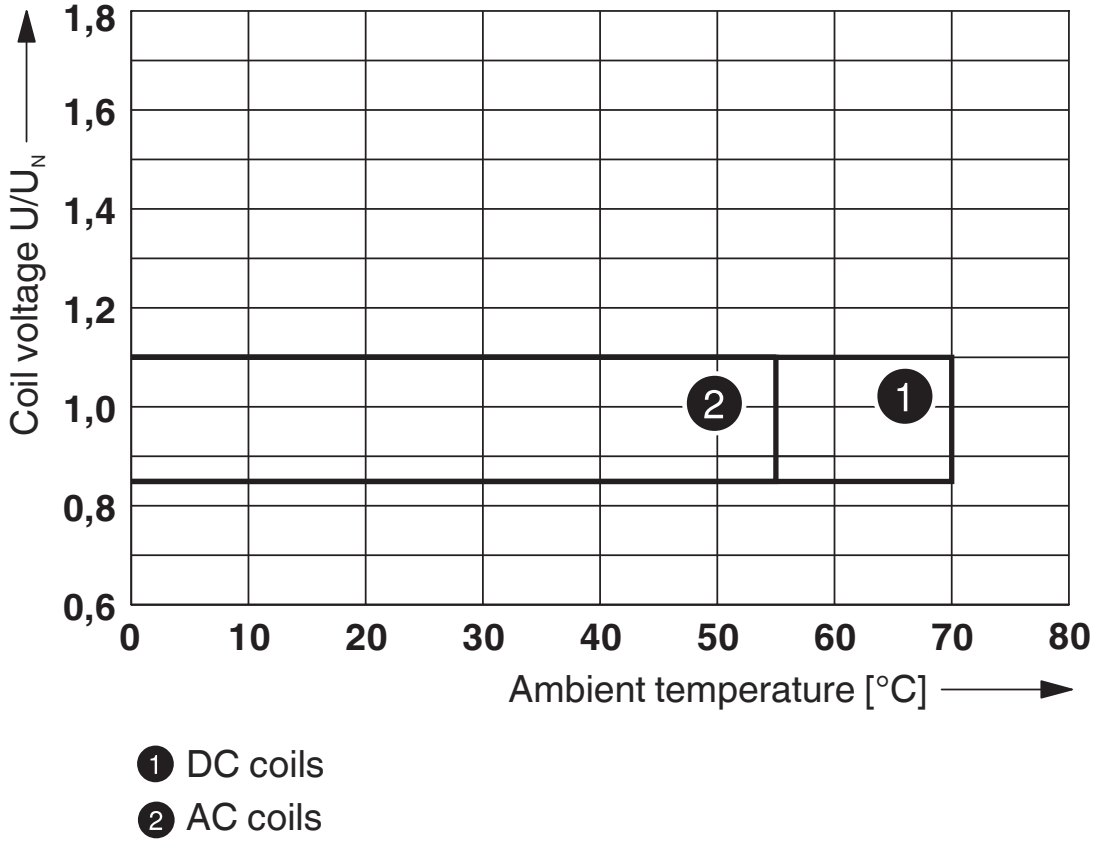
Standards/regulations	IEC 60664
	IEC 61810

Mounting

Mounting position	any

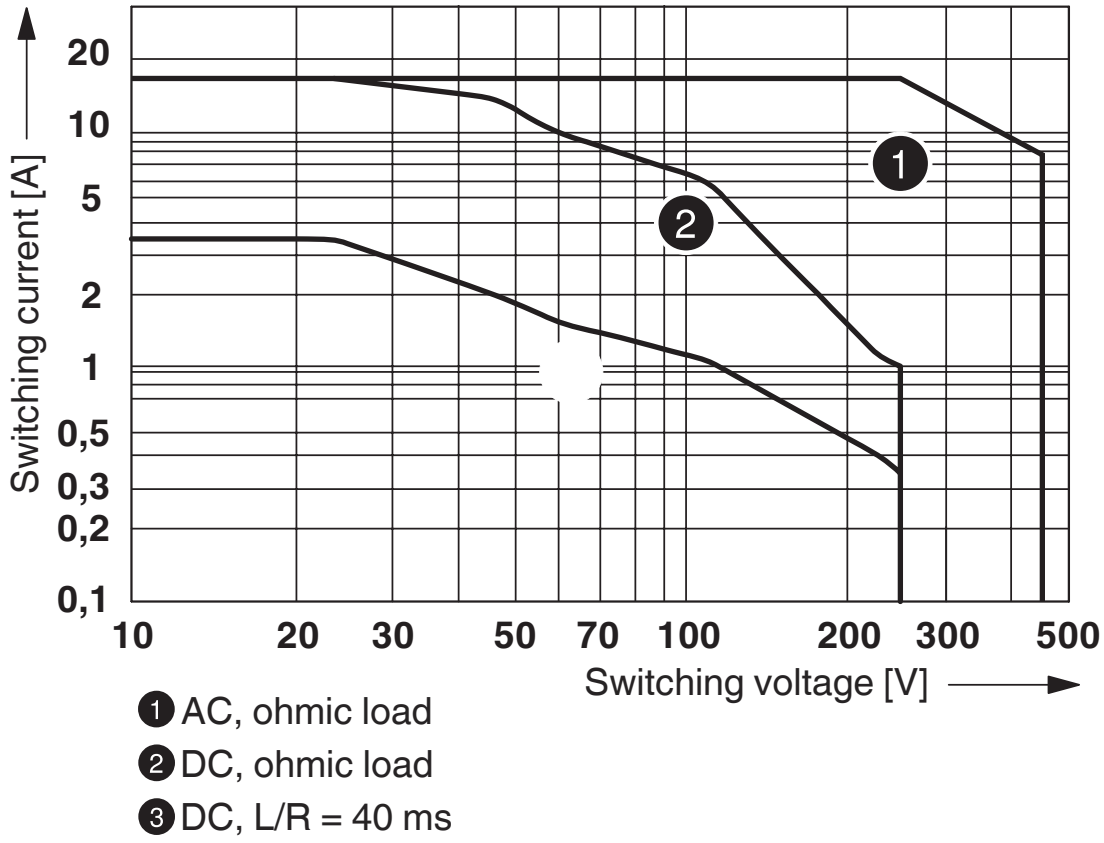
Drawings

Diagram



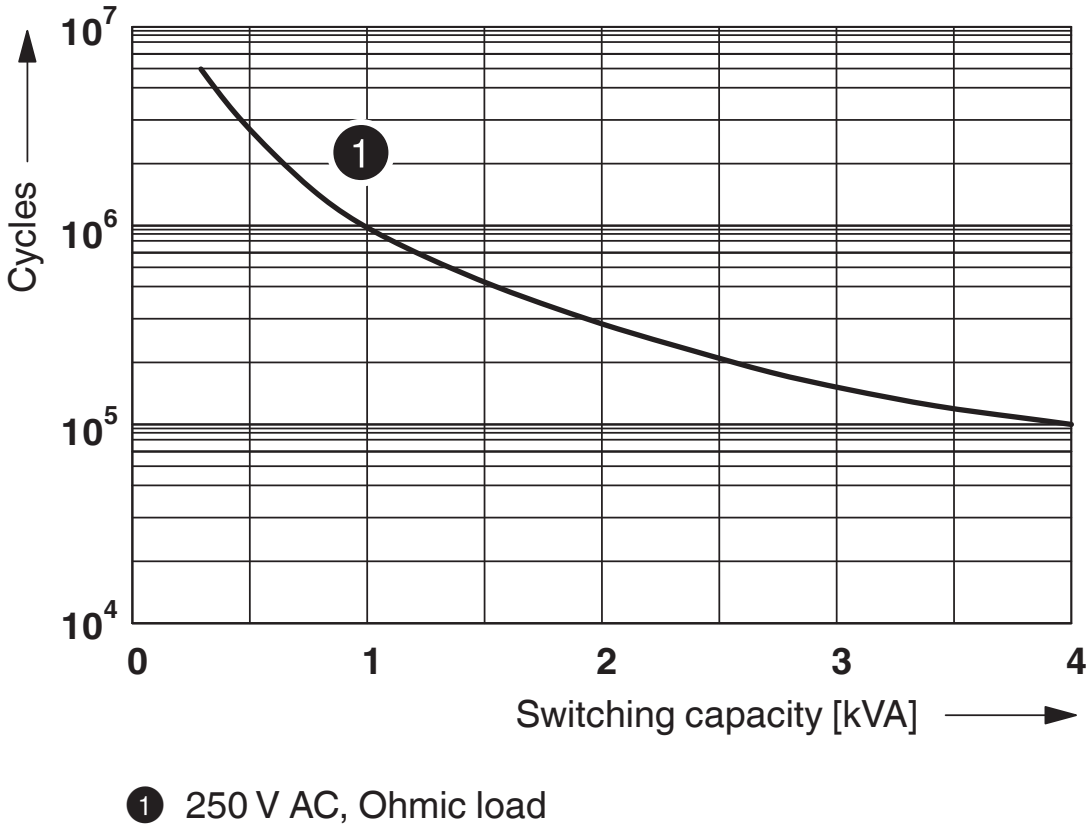
Operating voltage range

Diagram



Interrupting rating

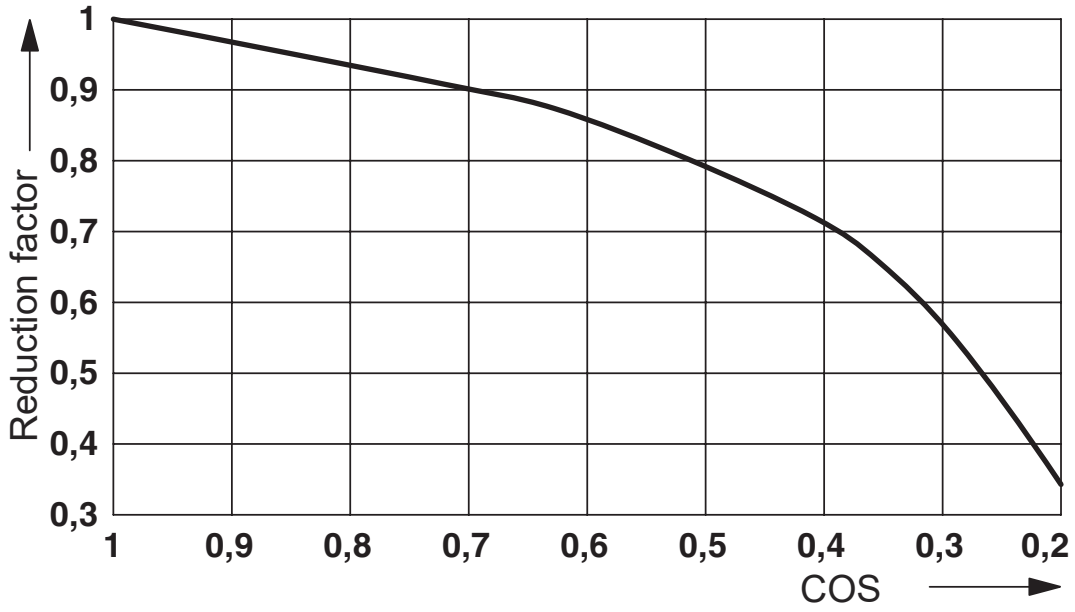
Diagram



1 250 V AC, Ohmic load

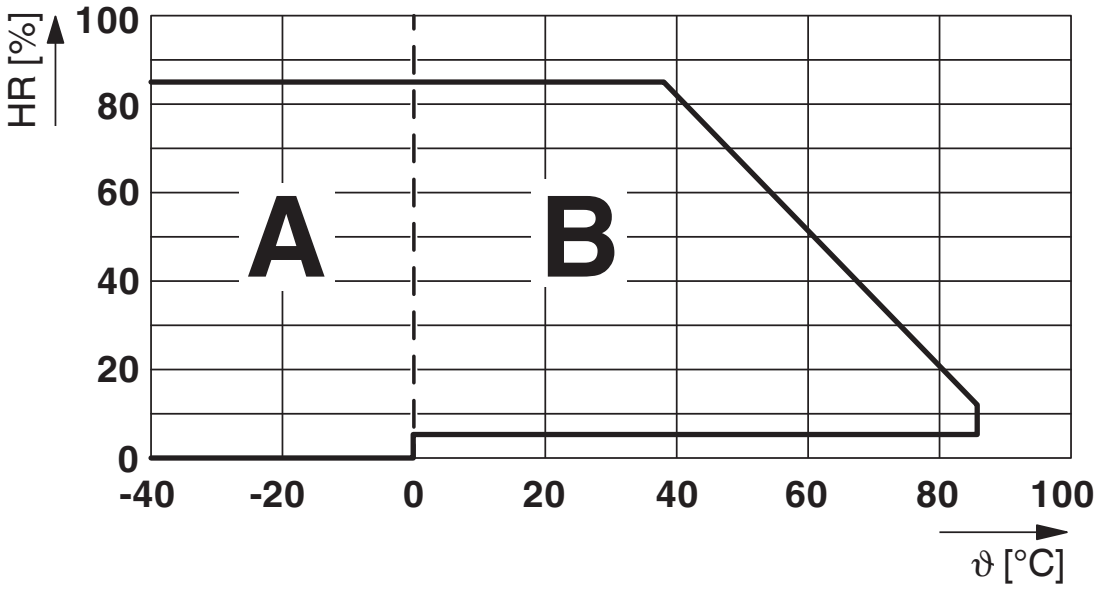
Electrical service life

Diagram



Service life reduction factor

Diagram

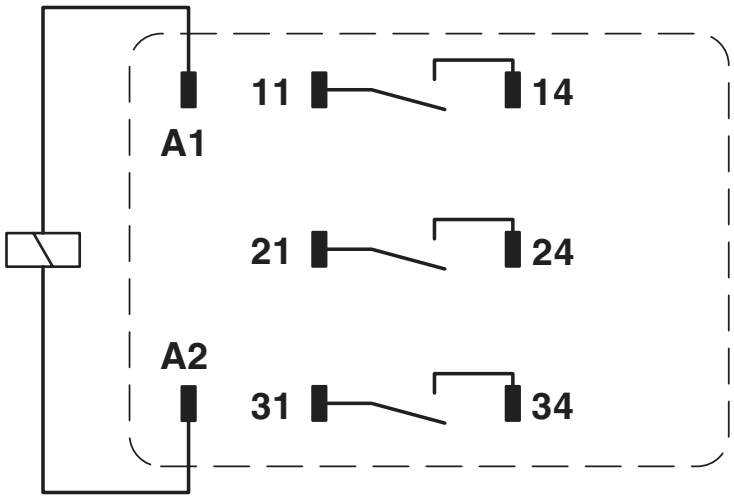


Permissible humidity for operation and storage.
The maximum permissible ambient temperature as specified in the data sheet must be observed.

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/2903708

CSA
Approval ID: 256725

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%

Phoenix Contact 2026 © - all rights reserved
https://www.phoenixcontact.com

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com