REL-PR3-125DC/3X21 - Single relay

2909056

https://www.phoenixcontact.com/us/products/2909056

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Plug-in high-power relay with power contacts, 3 changeover contacts, coil voltage: 125 V DC

Commercial data

Item number	2909056
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C460
Product key	CK6965
GTIN	4055626358796
Weight per piece (including packing)	84.2 g
Weight per piece (excluding packing)	84.2 g
Customs tariff number	85364900
Country of origin	PL

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. 10^7 cycles

Insulation characteristics

Insulation	Basic insulation

Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	3

Electrical properties

Service life electrical	see diagram
Maximum power dissipation for nominal condition	1.34 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	125 V DC
Input voltage range	106.25 V DC ... 137.5 V DC (see diagram)
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at U_N	11 mA
Input power dissipation for U_N	1.38 W
Typical response time	20 ms
Typical release time	15 ms

Output data

Switching

Contact switching type	3 changeover 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)
	124 W (at 48 V DC)
	108 W (at 60 V DC)
	52 W (at 110 V DC)
	70 W (at 220 V DC)
	4000 VA (for 250 V AC)
	4000 VA (at 440 V AC)
3-phase motor load	1500 W (at 400 V, AC3)
Motor load according to UL 508	1/3 HP, 120 V AC (single-phase AC motor)
	1/2 HP, 240 V AC (single-phase AC motor)
	1/2 HP, 240 V AC (three-phase induction motor)

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
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

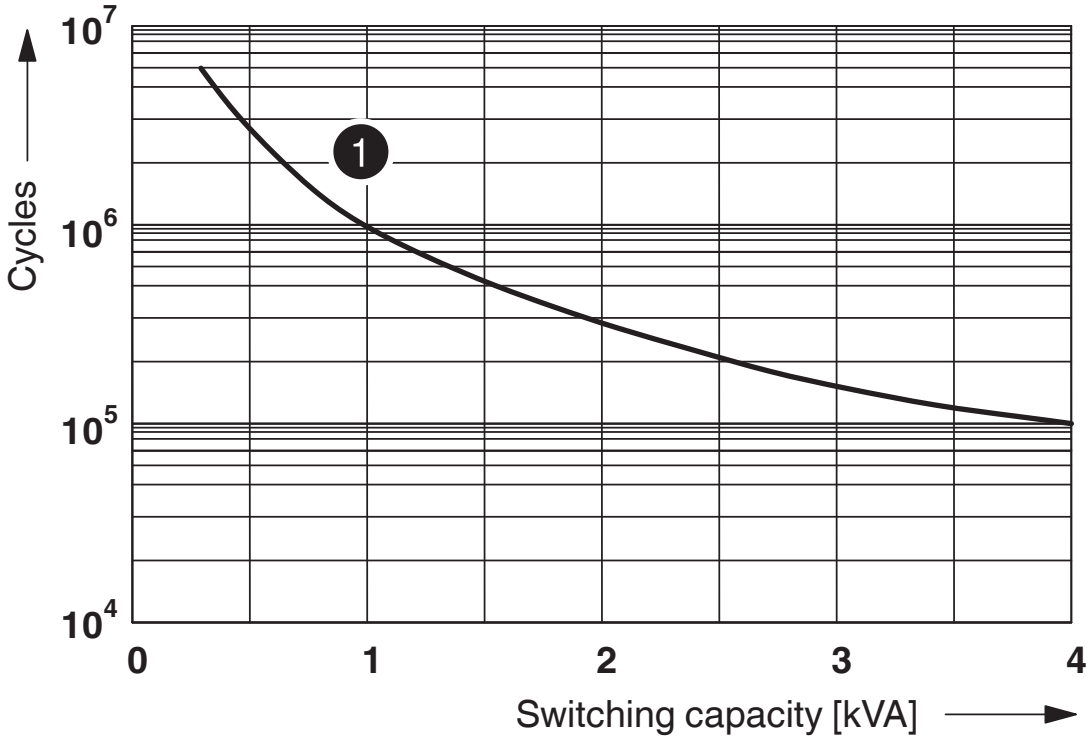
Standards/regulations	IEC 60664
	IEC 61810

Mounting

Mounting position	any

Drawings

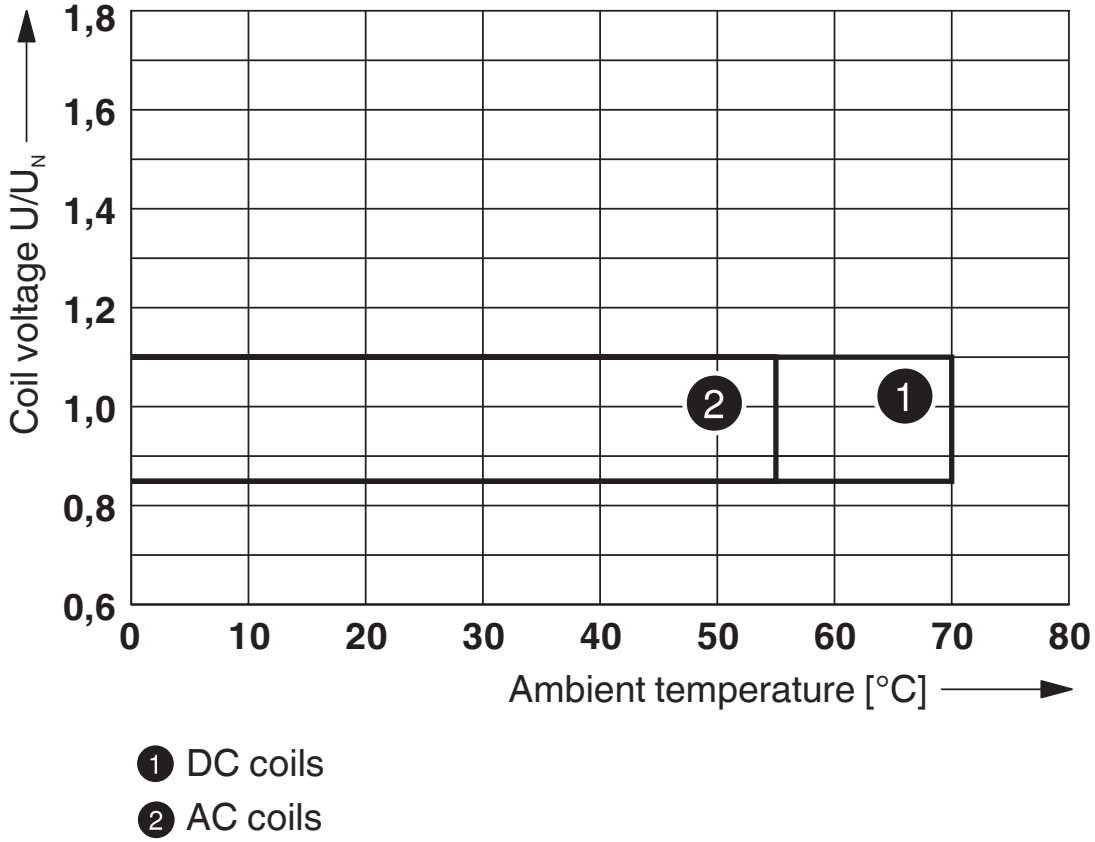
Diagram



1 250 V AC, Ohmic load

Electrical service life

Diagram

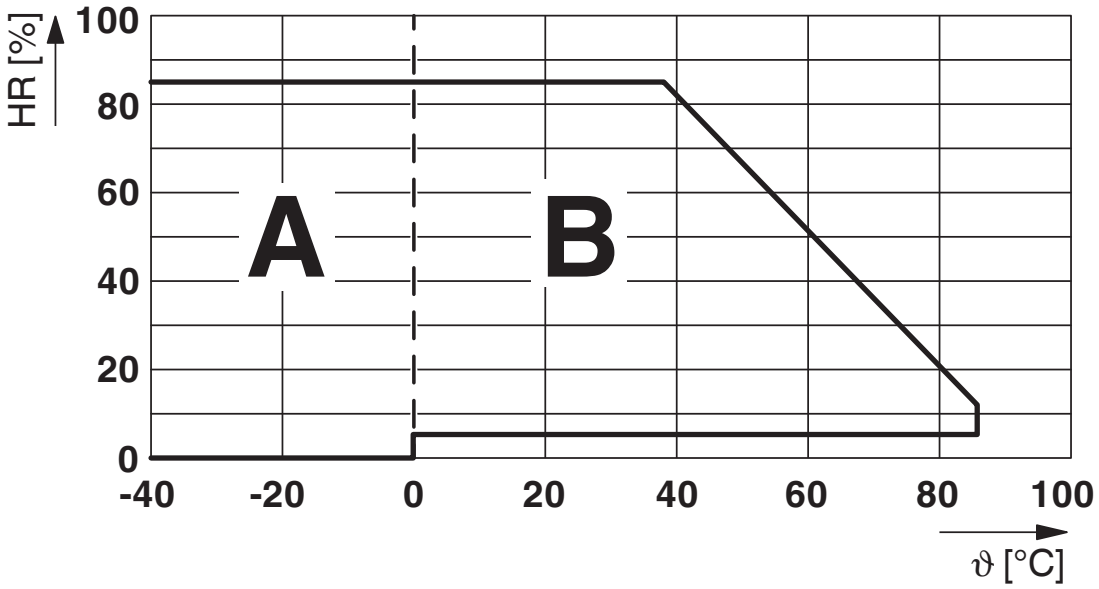


1 DC coils

2 AC coils

Operating voltage range

Diagram

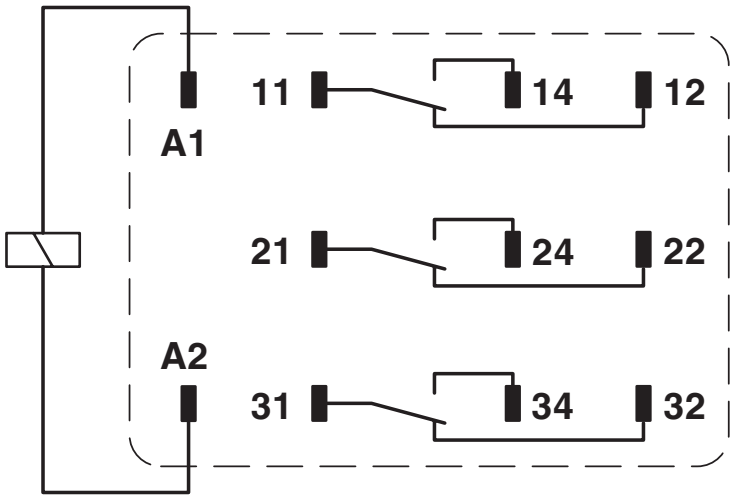


Permissible humidity for operation and storage.
The maximum permissible ambient temperature as specified in the data sheet must be observed.

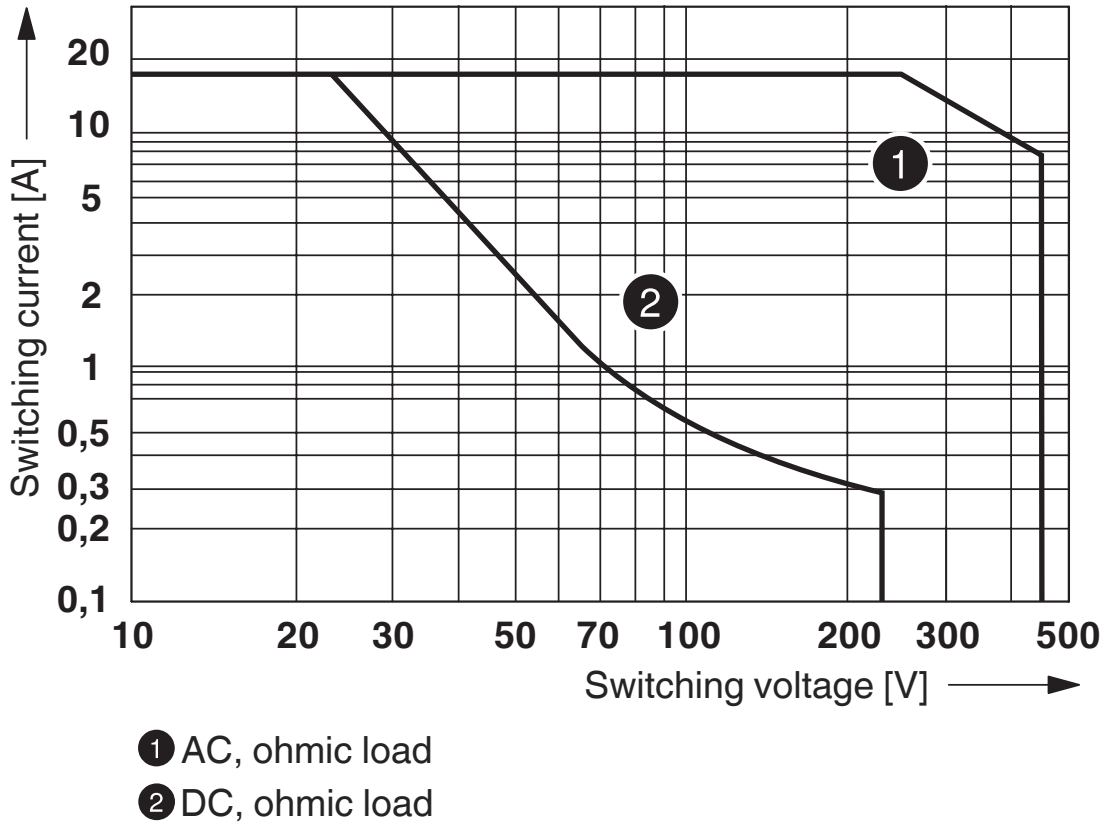
Area A: Ice buildup at ambient temperatures ≤ 0°C must be prevented
Area B: Condensation at ambient temperatures > 0°C must be prevented

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



Diagram

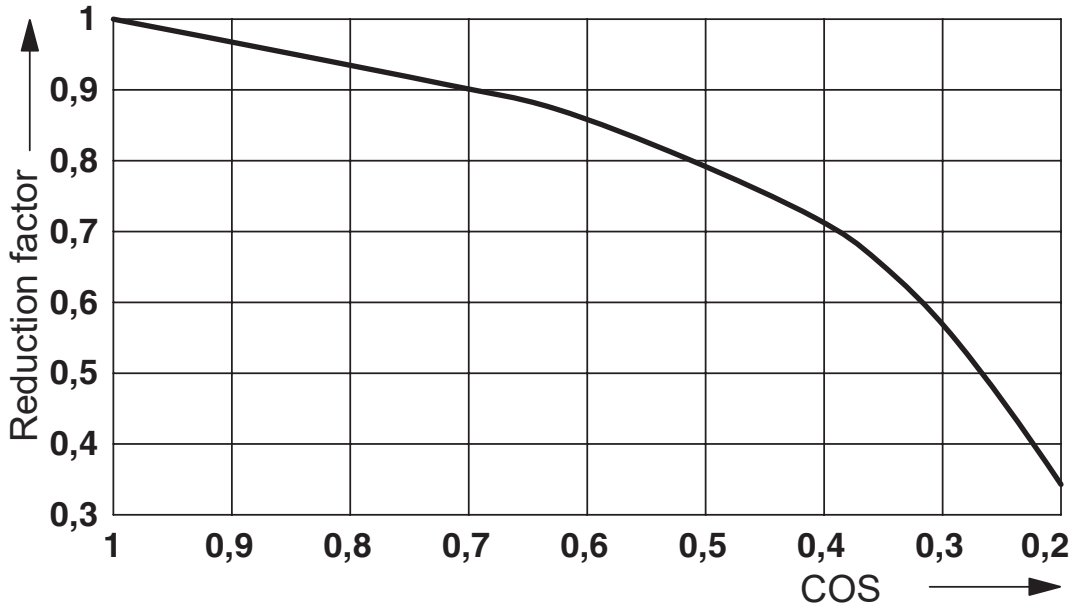


1 AC, ohmic load

2 DC, ohmic load

Interrupting rating

Diagram



Service life reduction factor

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2909056

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

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

RIF-4-BPT/3X21 - Relay base

2900961

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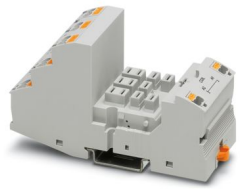

Relay base RIF-4..., for high-power relay with 2 or 3 changeover contacts or 3 N/O contacts, Push-in connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

RIF-4-BSC/3X21 - Relay base

2900960

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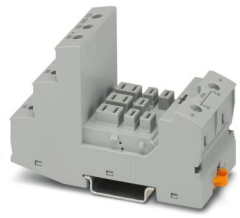

RIF-4... relay base, for high-power relay with 2 or 3 changeover contacts or 3 N/O contacts, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

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