

RIF-4-RPT-LDP-24DC/3X21 - Relay module



2903278
<https://www.phoenixcontact.com/us/products/2903278>

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Preamsembled relay module with Push-in connection, consisting of: relay base, power contact relay, and retaining bracket. Contact switching type: 3 changeover contacts. Input voltage: 24 V DC

Product description

The pluggable electromechanical and solid-state relays in the RIFLINE complete product range and the base are recognized and approved in accordance with UL 508. The relevant approvals can be called up at the individual components in question.

Commercial data

Item number	2903278
Packing unit	5 pc
Minimum order quantity	5 pc
Sales key	C465
Product key	DK652C
Catalog page	Page 351 (C-5-2019)
GTIN	4046356731652
Weight per piece (including packing)	211 g
Weight per piece (excluding packing)	211 g
Customs tariff number	85364110
Country of origin	US

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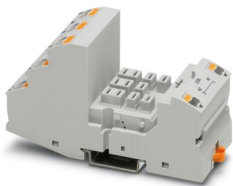
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Set consists of

RIF-4-BPT/3X21 - Relay base

2900961

<https://www.phoenixcontact.com/us/products/2900961>



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

REL-PR3- 24DC/3X21 - Single relay

2903702

<https://www.phoenixcontact.com/us/products/2903702>



Plug-in high-power relay with power contacts, 3 changeover contacts, coil voltage: 24 V DC

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RIF-LDP-12-24 DC - Plug-in module

2900939

<https://www.phoenixcontact.com/us/products/2900939>



Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with freewheeling diode and yellow LED, polarity: A1+, A2-, input voltage: 12 V DC ... 24 V DC $\pm 30\%$

RIF-RH-4 - Retaining bracket

2900956

<https://www.phoenixcontact.com/us/products/2900956>



Relay retaining bracket, with holder for marking material, suitable for RIF-4 relay base, for high-power relay

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Technical data

Product properties

Product type	Relay Module
Product family	RIFLINE complete
Application	Universal
Operating mode	100% operating factor
Mechanical service life	approx. 10^7 cycles

Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

Data management status

Date of last data management	20.03.2025
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Electrical properties

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 (Contact/contact)	2.5 kV _{rms} (50 Hz, 1 min., contact/contact)
Rated insulation voltage	250 V AC
Rated surge voltage	4 kV

Input data

Coil side

Nominal input voltage U_N	24 V DC
Input voltage range	20.4 V DC ... 26.4 V DC (20 °C)
Input voltage range in reference to U_N	see diagram
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at U_N	56 mA
Typical response time	20 ms
Typical release time	20 ms
Coil voltage	24 V DC
Protective circuit	Freewheeling diode
Operating voltage display	Yellow LED

Output data

Switching

Contact switching type	3 changeover contacts
Type of switch contact	Single contact
Contact material	AgNi

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Maximum switching voltage	440 V AC
	250 V DC
Minimum switching voltage	10 V (24 mA)
Limiting continuous current	10 A (see diagram)
Maximum inrush current	50 A (20 ms, N/O contacts)
Min. switching current	10 mA (24 V)
Interrupting rating (ohmic load) max.	240 W (24 V DC)
	124 W (48 V DC)
	108 W (60 V DC)
	52 W (110 V DC)
	70 W (220 V DC)
	2500 VA (250 V AC)
	4000 VA (440 V AC)
3-phase motor load	1500 W
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)
Utilization category CB Scheme (IEC 60947-5-1)	AC15, 1.5 A/240 V (N/O contact)
	DC13, 2 A/240 V (N/O contact)

Connection data

Coil side

Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section rigid	0.14 mm ² ... 1.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 1.5 mm ²
	0.14 mm ² ... 1.5 mm ² (Ferrule with plastic sleeve)
	0.14 mm ² ... 1 mm ² (Ferrule with plastic sleeve, two conductors on double terminal block)
Conductor cross section AWG	26 ... 16 (solid)
	26 ... 16 (flexible)

Contact side

Connection method	Push-in connection
Stripping length	10 mm
Conductor cross section rigid	0.14 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 2.5 mm ²
	0.14 mm ² ... 2.5 mm ² (Ferrule with plastic sleeve)
	0.14 mm ² ... 1 mm ² (Ferrule with plastic sleeve, two conductors on double terminal block)
Conductor cross section AWG	26 ... 14 (solid)
	26 ... 14 (flexible)

Dimensions

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Item dimensions

Width	43 mm
Height	111 mm
Depth	90 mm

Drill hole

Diameter	3.2 mm
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Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94	V2 (Housing)

Environmental and real-life conditions

Ambient conditions

Degree of protection (Relay base)	IP20 (Relay base)
Degree of protection (Relay)	RT I (Relay)
Ambient temperature (operation)	-40 °C ... 60 °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

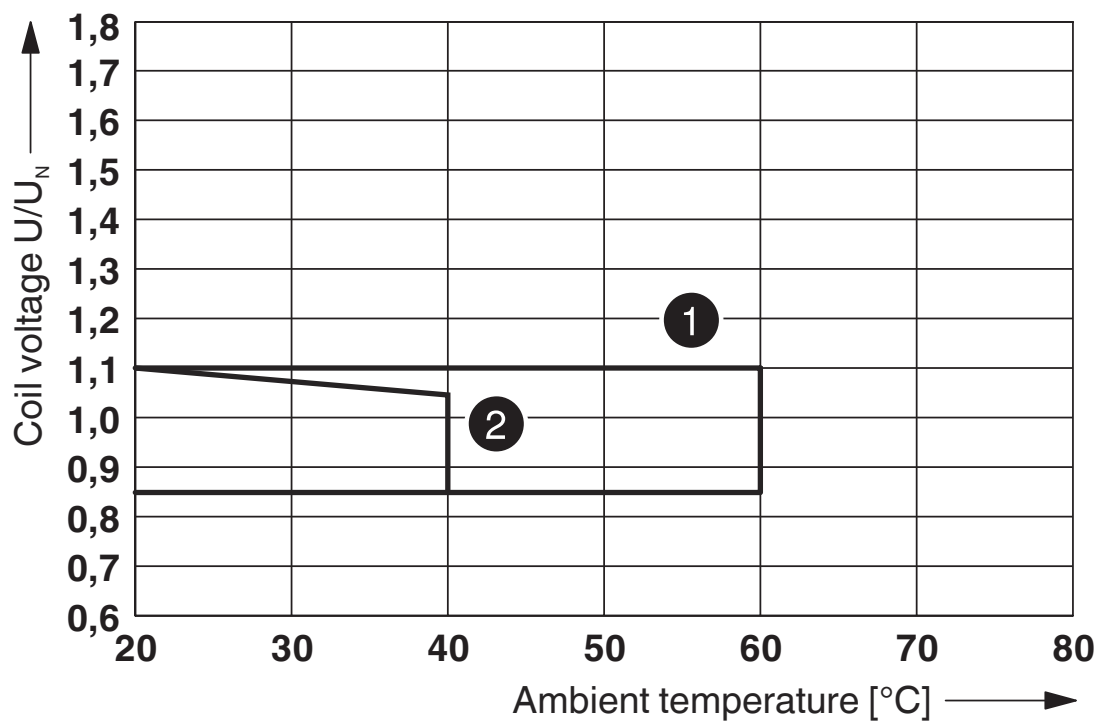
Standards/regulations	IEC 60947-5-1
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Mounting

Mounting type	DIN rail mounting
Assembly note	in rows with zero spacing
Mounting position	any

Drawings

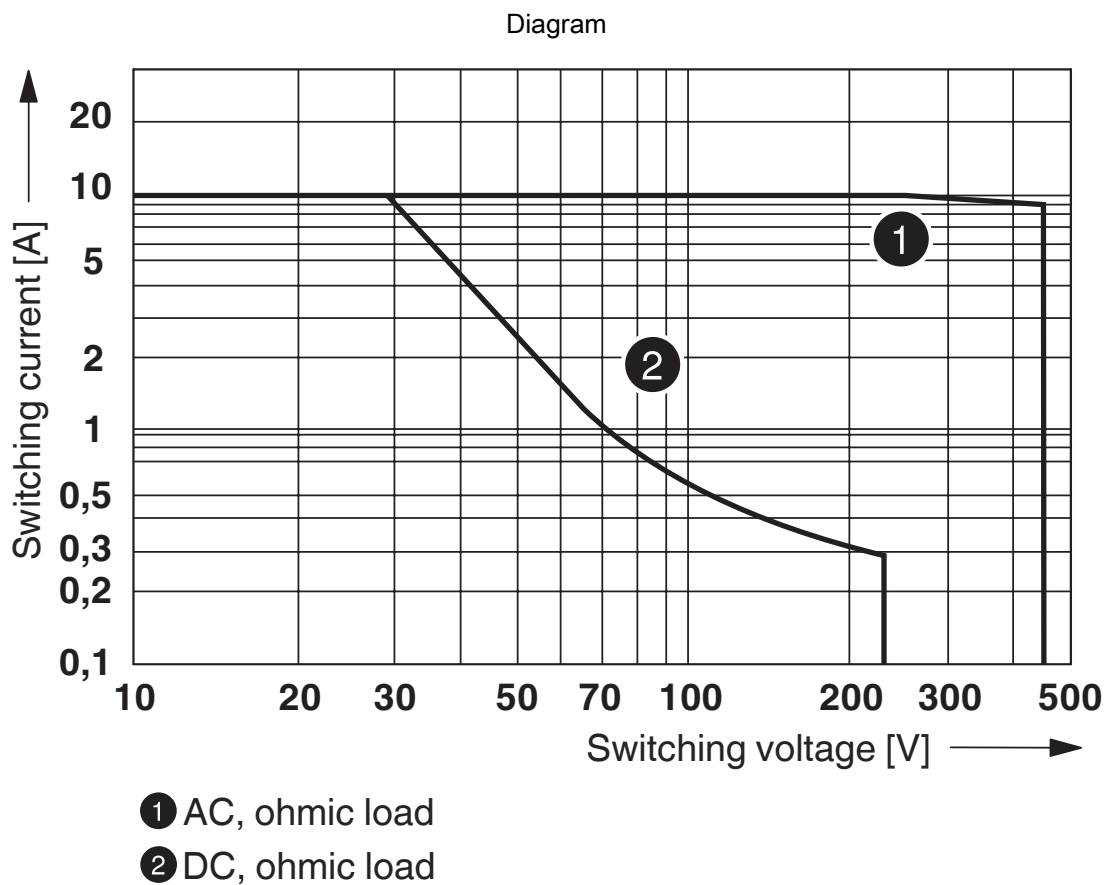
Diagram



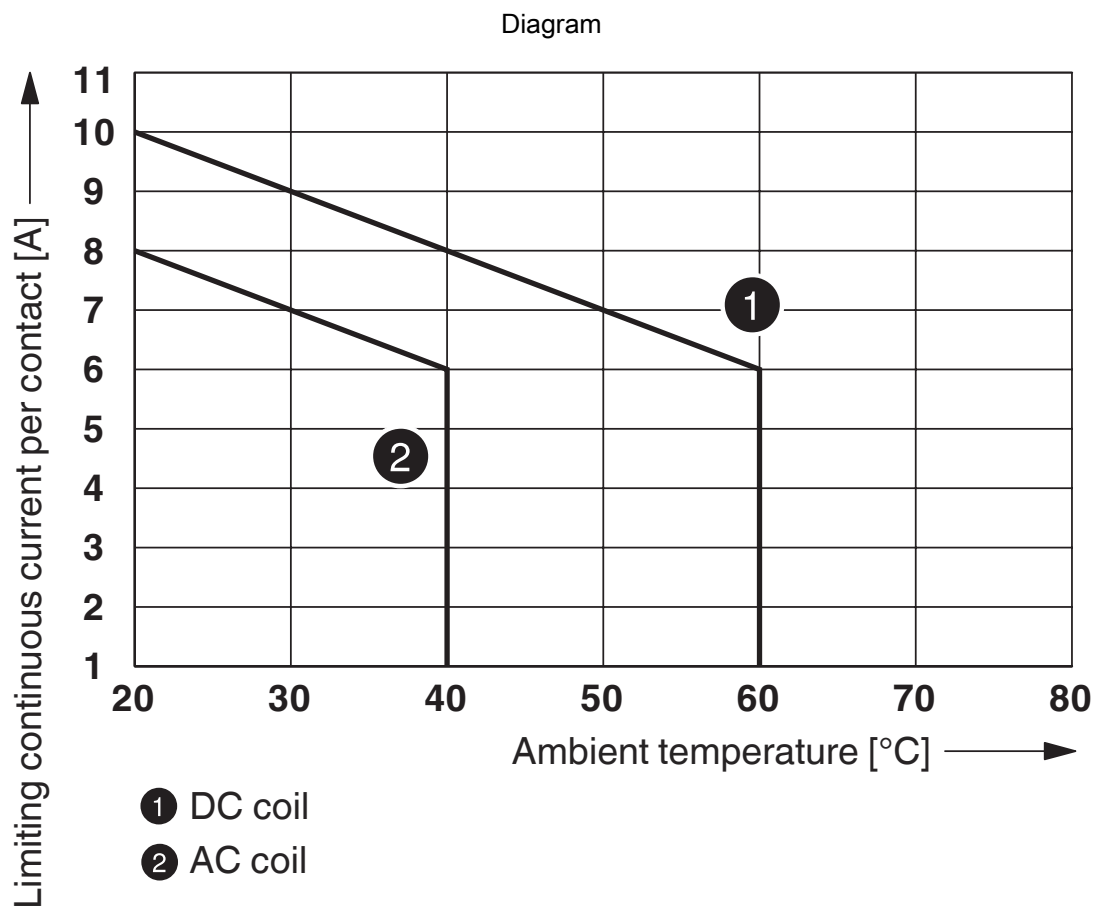
① DC coil (observe contact derating)

② AC coil (observe contact derating)

Operating voltage range

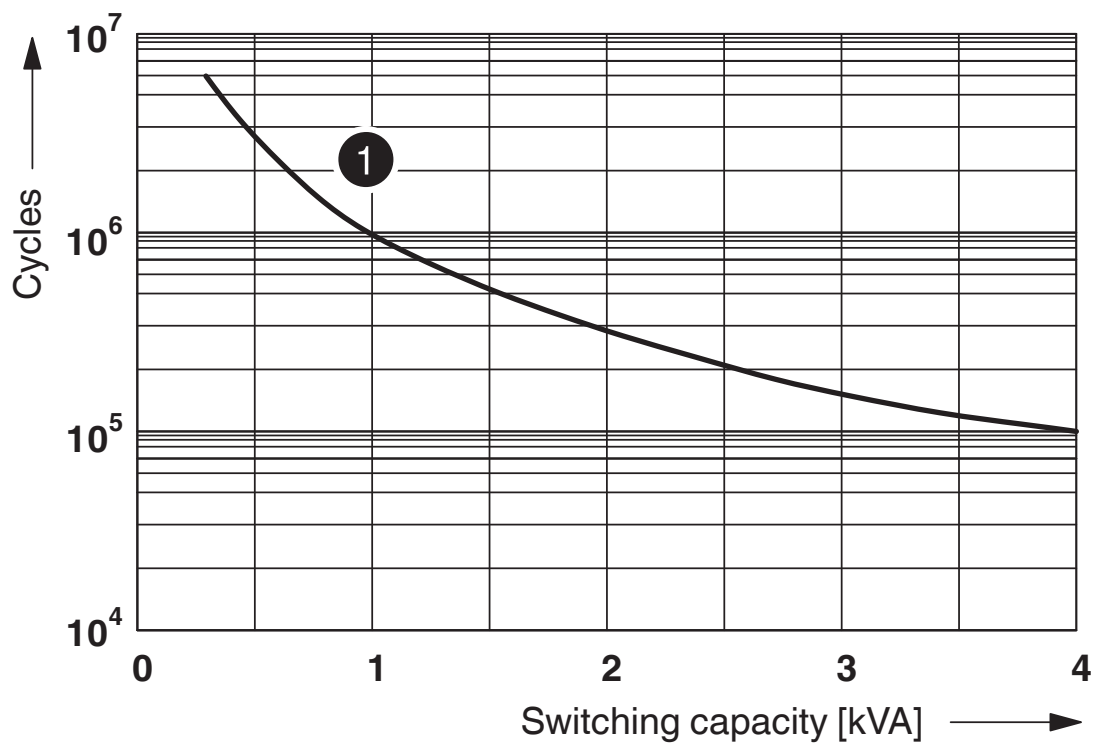


Interrupting rating



Contact derating

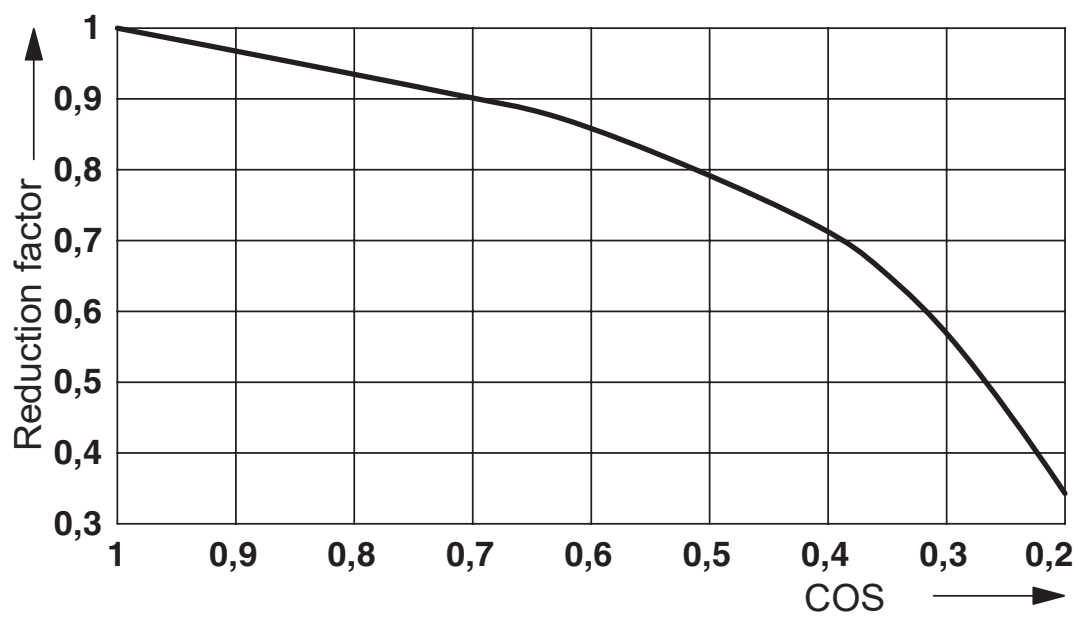
Diagram



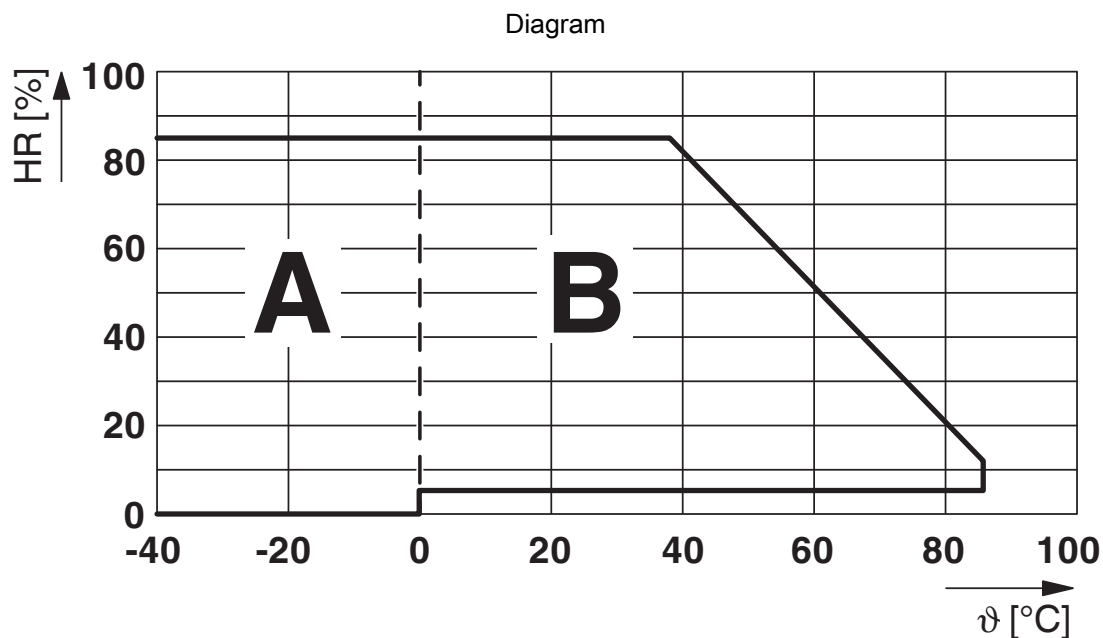
① 250 V AC, Ohmic load

Electrical service life

Diagram



Service life reduction factor



Permissible humidity for operation and storage.

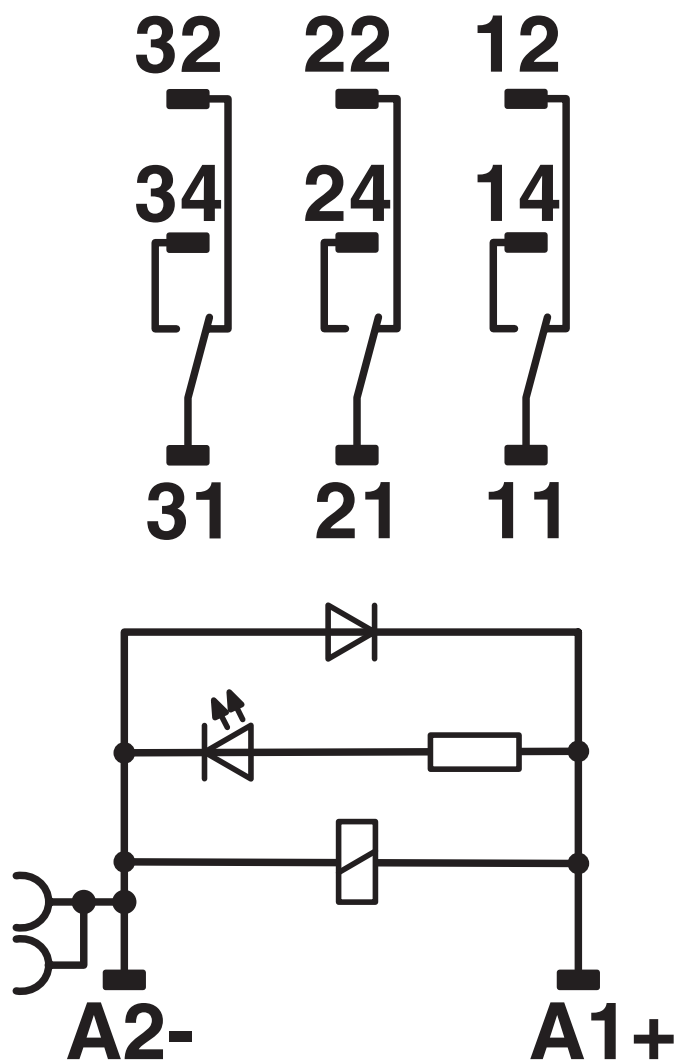
The maximum permissible ambient temperature as specified in the data sheet must be observed.

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 $\leq 25^{\circ}\text{C}$.

Circuit diagram



DC coils

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Approvals

 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2903278>



CSA

Approval ID: 76787

DNV

Approval ID: TAA000018V

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Classifications

ECLASS

ECLASS-13.0	27371601
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ETIM

ETIM 9.0	EC001437
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UNSPSC

UNSPSC 21.0	39122300
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	6bb19d4e-8624-4b92-9e09-f608d6016f7c

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