

REL-MR- 18DC/21 - Single relay

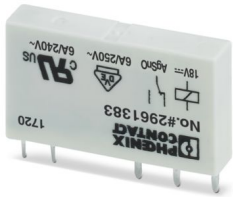


2961383

<https://www.phoenixcontact.com/au/products/2961383>

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 miniature power relay, with power contact, 1 changeover contact, input voltage 18 V DC



Your advantages

- Safe isolation between coil and contact side
- High degree of protection up to RT III depending on type (wash-proof)
- Power contacts up to 6 A

Commercial data

Item number	2961383
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	DK6921
Product key	DK6921
Catalog page	Page 394 (C-5-2019)
GTIN	4017918936419
Weight per piece (including packing)	6.659 g
Weight per piece (excluding packing)	4.91 g
Customs tariff number	85364190
Country of origin	CZ

REL-MR- 18DC/21 - Single relay



2961383

<https://www.phoenixcontact.com/au/products/2961383>

Technical data

Product properties

Product type	Single relay
Operating mode	100% operating factor
Mechanical service life	2x 10 ⁷ cycles

Insulation characteristics

Overvoltage category	III
Pollution degree	3

Data management status

Date of last data management	19.03.2025
------------------------------	------------

Electrical properties

Maximum power dissipation for nominal condition	0.16 W
---	--------

Input data

Coil side

Nominal input voltage U _N	18 V DC
Input voltage range	10.8 V DC ... 49.5 V DC
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at U _N	9 mA
Typical response time	5 ms
Typical release time	2.5 ms
Coil resistance	1906 Ω ±10 % (at 20 °C)

Output data

Switching

Contact switching type	1 changeover contact
Type of switch contact	Single contact
Contact material	AgSnO
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 100 mA)
Limiting continuous current	6 A
Maximum inrush current	10 A (4 s)
Min. switching current	10 mA (at 12 V)
Interrupting rating (ohmic load) max.	140 W (at 24 V DC)
	20 W (at 48 V DC)
	18 W (at 60 V DC)
	23 W (at 110 V DC)
	40 W (at 220 V DC)

REL-MR- 18DC/21 - Single relay



2961383

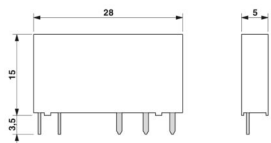
<https://www.phoenixcontact.com/au/products/2961383>

Switching capacity	1500 VA (for 250 V AC)
	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	0.1 A (at 220 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
Motor load according to UL 508	3 A (at 230 V, AC15)
	1/4 HP, 240 - 277 V AC (N/O contact)
	1/6 HP, 240 - 277 V AC (N/C contact)

Connection data

Connection method	Plug / solder connection
-------------------	--------------------------

Dimensions

Dimensional drawing	
Width	5 mm
Height	28 mm
Depth	15 mm

Material specifications

Color	white (RAL 9010)
-------	------------------

Environmental and real-life conditions

Ambient conditions

Degree of protection	RT III
Ambient temperature (operation)	-40 °C ... 85 °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
	EN 50178
	EN 61810-1

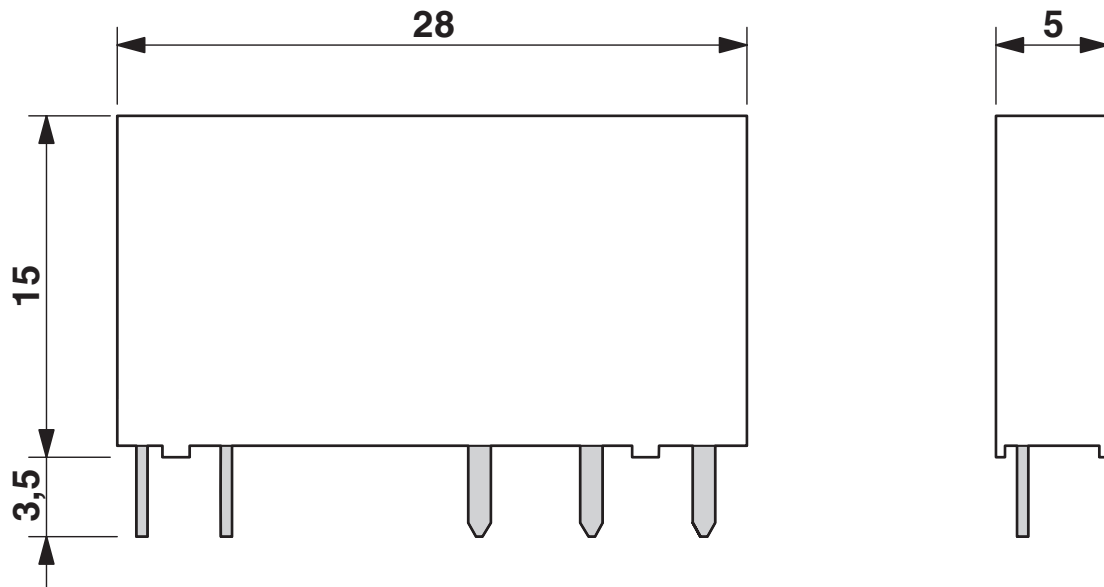
REL-MR- 18DC/21 - Single relay

2961383

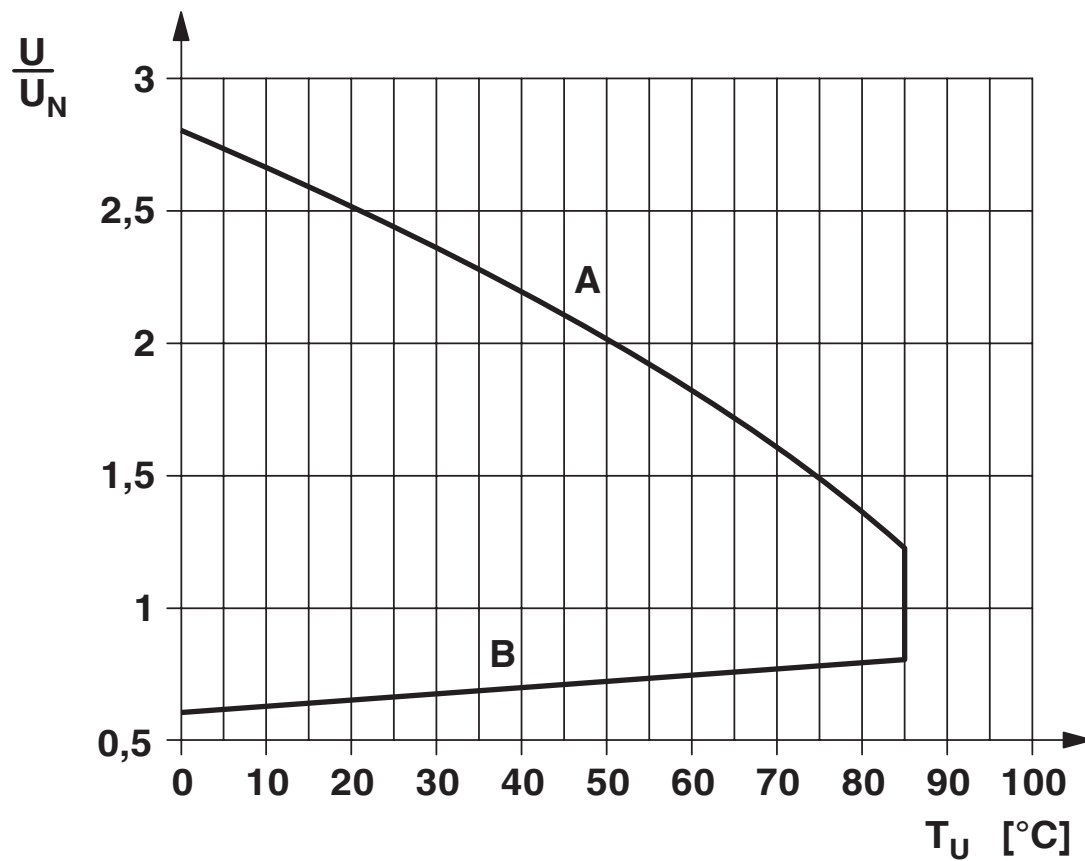
<https://www.phoenixcontact.com/au/products/2961383>

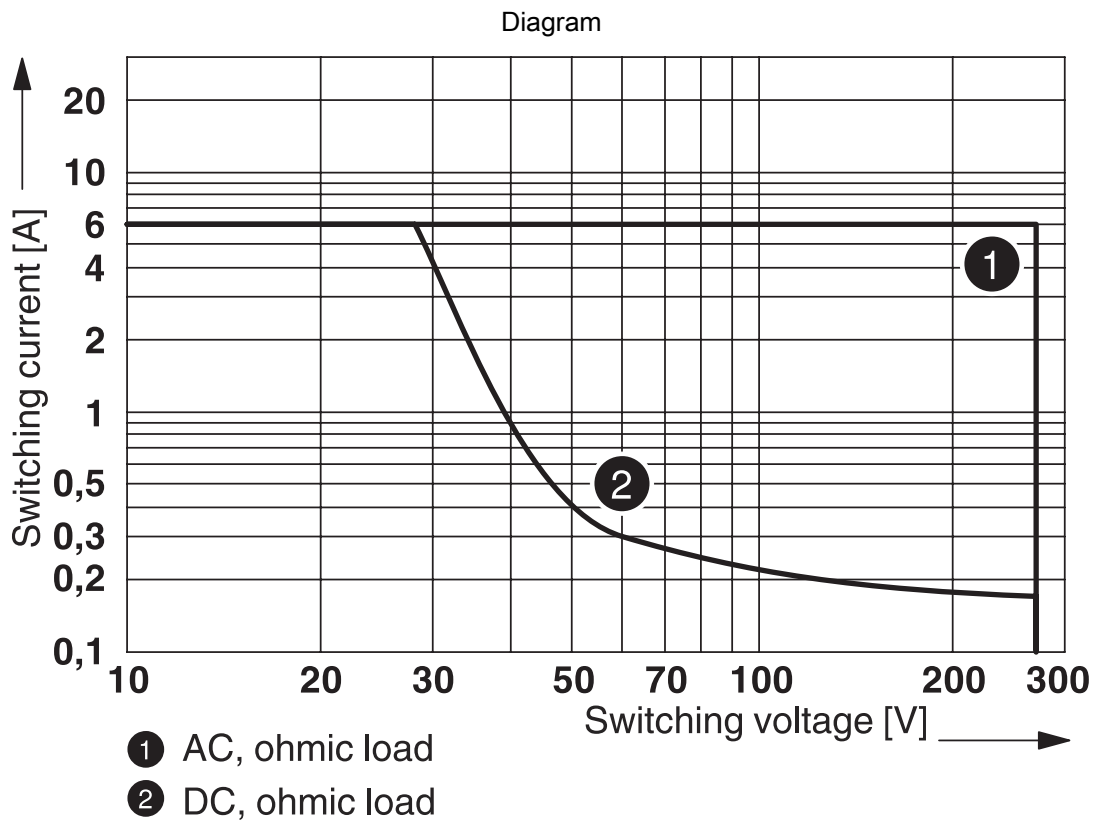
Drawings

Dimensional drawing



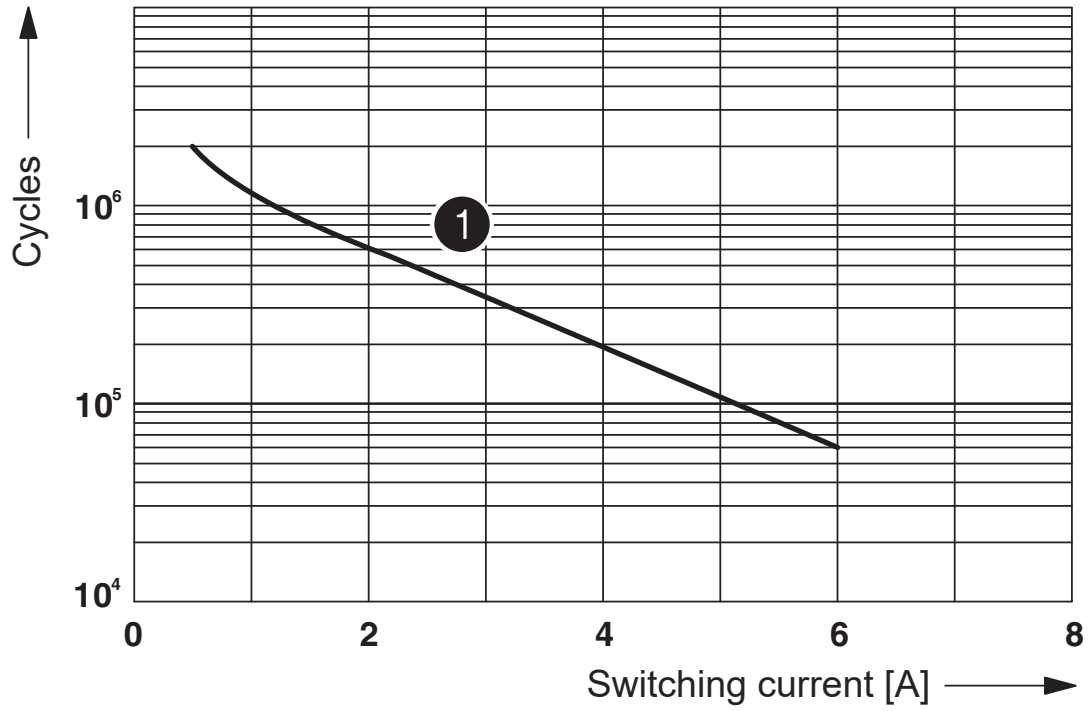
Diagram





Interrupting rating

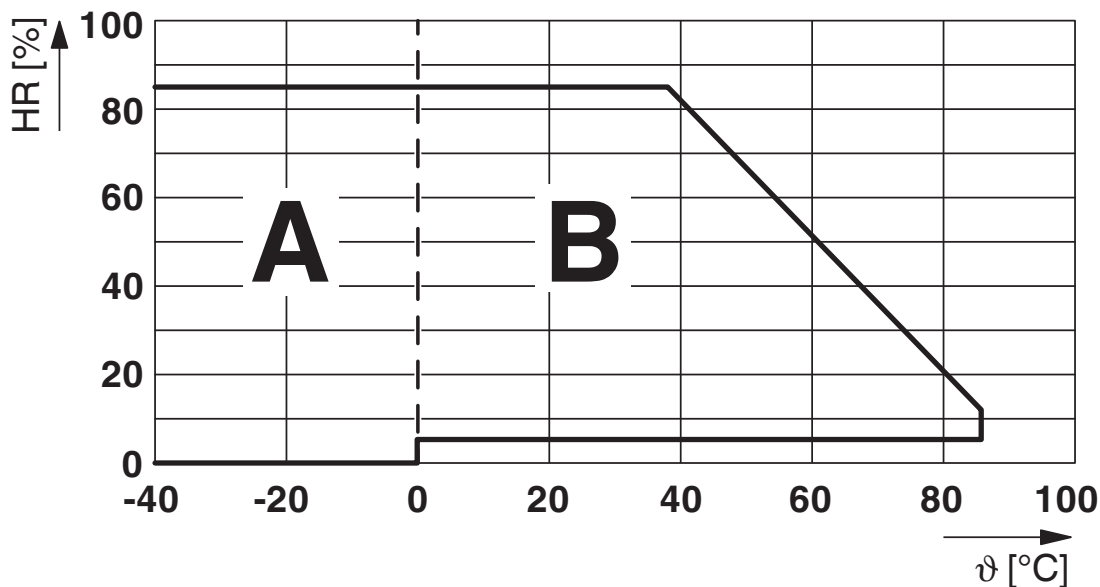
Diagram



① 250 V AC, ohmic load

Electrical service life

Diagram



Permissible humidity for operation and storage.

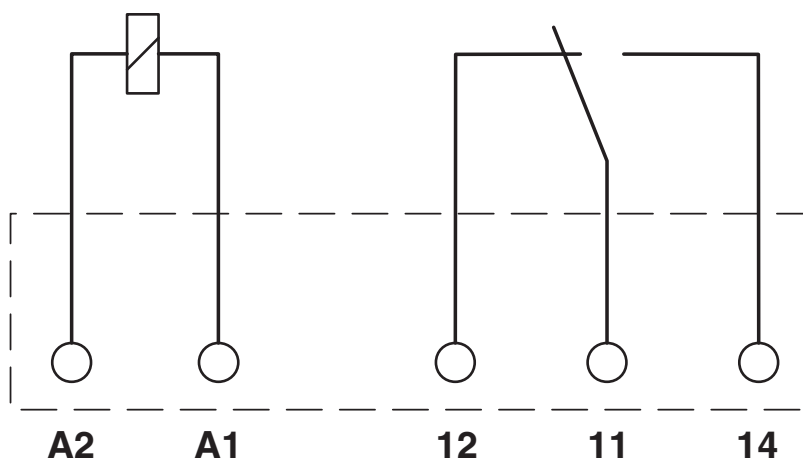
The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures $\leq 0^{\circ}\text{C}$ 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



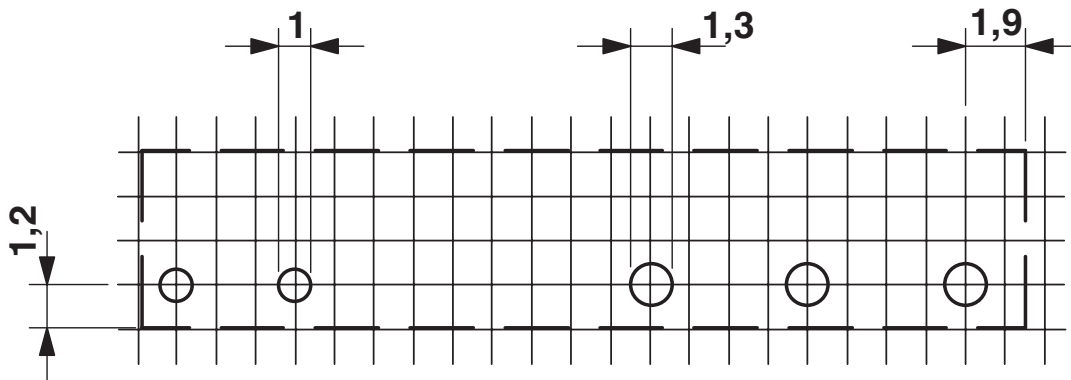
REL-MR- 18DC/21 - Single relay



2961383

<https://www.phoenixcontact.com/au/products/2961383>

Drilling plan/solder pad geometry



a = pitch division 1.25 mm and 1.27 mm

2961383

<https://www.phoenixcontact.com/au/products/2961383>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/au/products/2961383>



cUL Recognized
Approval ID: FILE E 172140



UL Recognized
Approval ID: FILE E 172140



EAC
Approval ID: RU*C-DE.*08.B.00010



UL Recognized
Approval ID: FILE E 172140



VDE approval of drawings
Approval ID: 40032864



VDE approval of drawings
Approval ID: 40054426



cUL Recognized
Approval ID: FILE E 172140



VDE approval of drawings
Approval ID: 40010212



cUL Recognized
Approval ID: FILE E 172140



UL Recognized
Approval ID: FILE E 172140

REL-MR- 18DC/21 - Single relay



2961383

<https://www.phoenixcontact.com/au/products/2961383>

Classifications

ECLASS

ECLASS-13.0

27371601

ETIM

ETIM 9.0

EC001437

UNSPSC

UNSPSC 21.0

39122300

REL-MR- 18DC/21 - Single relay



2961383

<https://www.phoenixcontact.com/au/products/2961383>

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 2025 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT PTY Ltd
Unit 7, 2-8 South Street
Rydalmere NSW 2116
1300 786 411
customerservice@phoenixcontact.com.au