

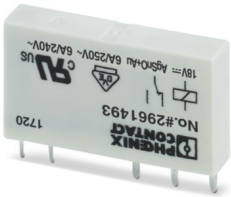
REL-MR- 18DC/21AU - Single relay



2961493

<https://www.phoenixcontact.com/gb/products/2961493>

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 multi-layer gold 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	2961493
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	CK6195
Product key	CK6195
Catalog page	Page 394 (C-5-2019)
GTIN	4017918936525
Weight per piece (including packing)	6.508 g
Weight per piece (excluding packing)	6.508 g
Customs tariff number	85364190
Country of origin	CZ

REL-MR- 18DC/21AU - Single relay

2961493

<https://www.phoenixcontact.com/gb/products/2961493>



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

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, hard gold-plated
Maximum switching voltage	30 V AC
	36 V DC
Minimum switching voltage	100 mV (at 10 mA)
Limiting continuous current	50 mA
Maximum inrush current	50 mA
Min. switching current	1 mA (at 24 V)
Interrupting rating (ohmic load) max.	1.2 W (at 24 V DC)
Switching capacity	3 A (at 24 V, AC15)

Switching: when the gold layer is destroyed

Note	the following values are applicable if a gold layer is destroyed
Contact material	AgSnO

REL-MR- 18DC/21AU - Single relay



2961493

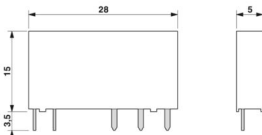
<https://www.phoenixcontact.com/gb/products/2961493>

Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 100 mA)
Limiting continuous current	6 A
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)
	1500 VA (for 250 V AC)
Switching capacity	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	0.1 A (at 220 V, DC13)
	3 A (at 120 V, AC15)
	3 A (at 230 V, AC15)

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

REL-MR- 18DC/21AU - Single relay



2961493

<https://www.phoenixcontact.com/gb/products/2961493>

Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1

REL-MR- 18DC/21AU - Single relay

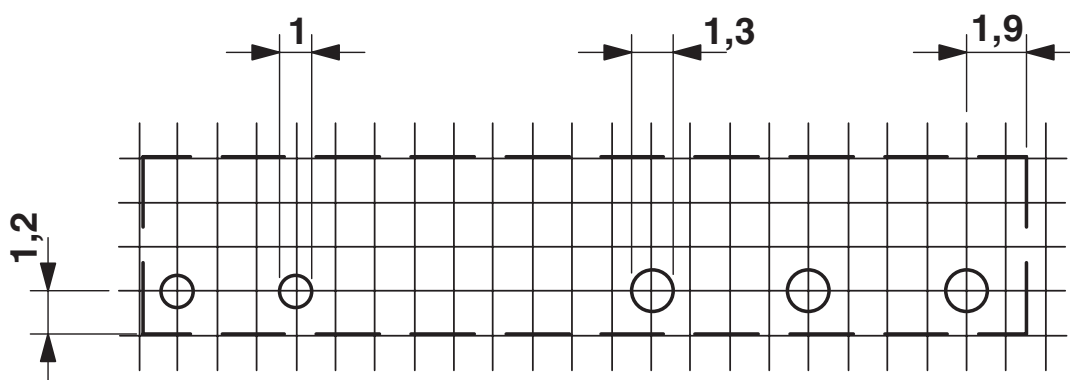


2961493

<https://www.phoenixcontact.com/gb/products/2961493>

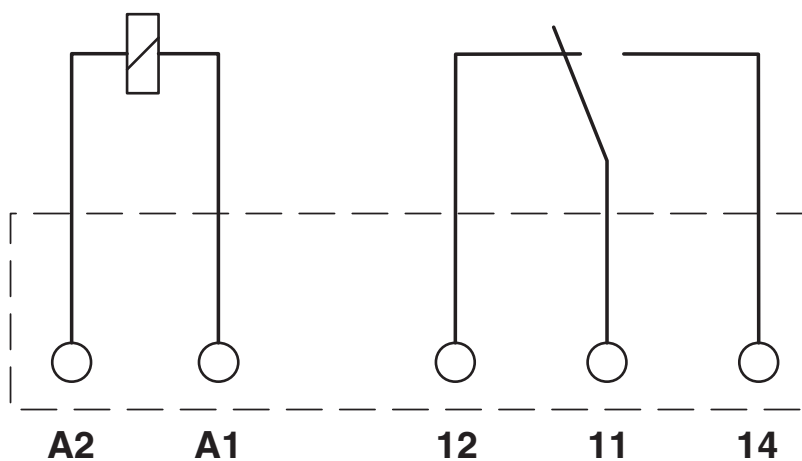
Drawings

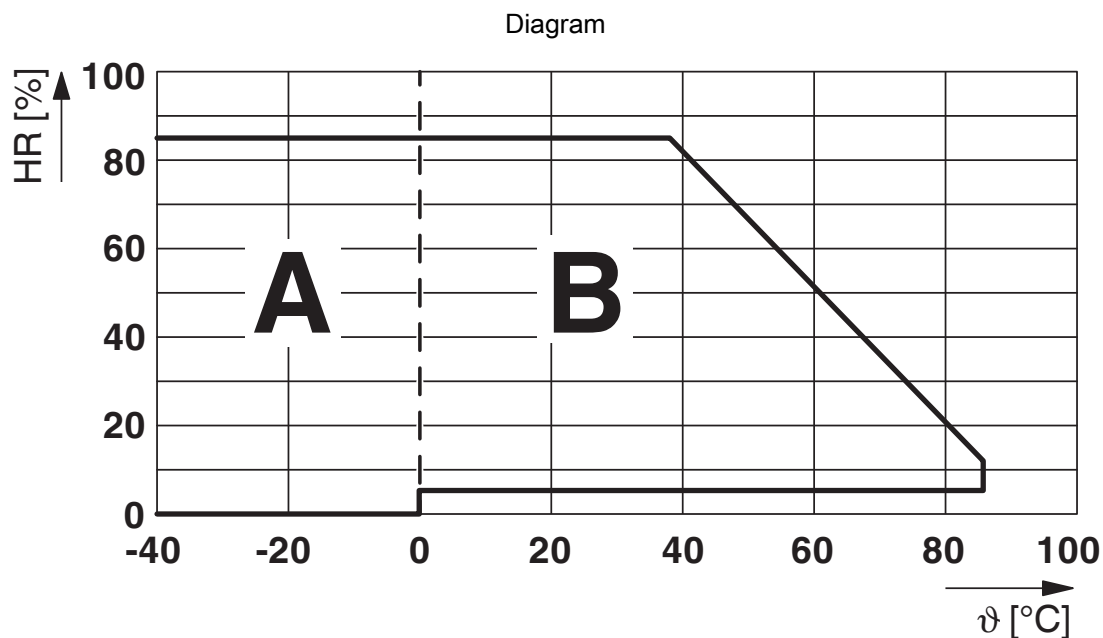
Drilling plan/solder pad geometry



a = pitch division 1.25 mm and 1.27 mm

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

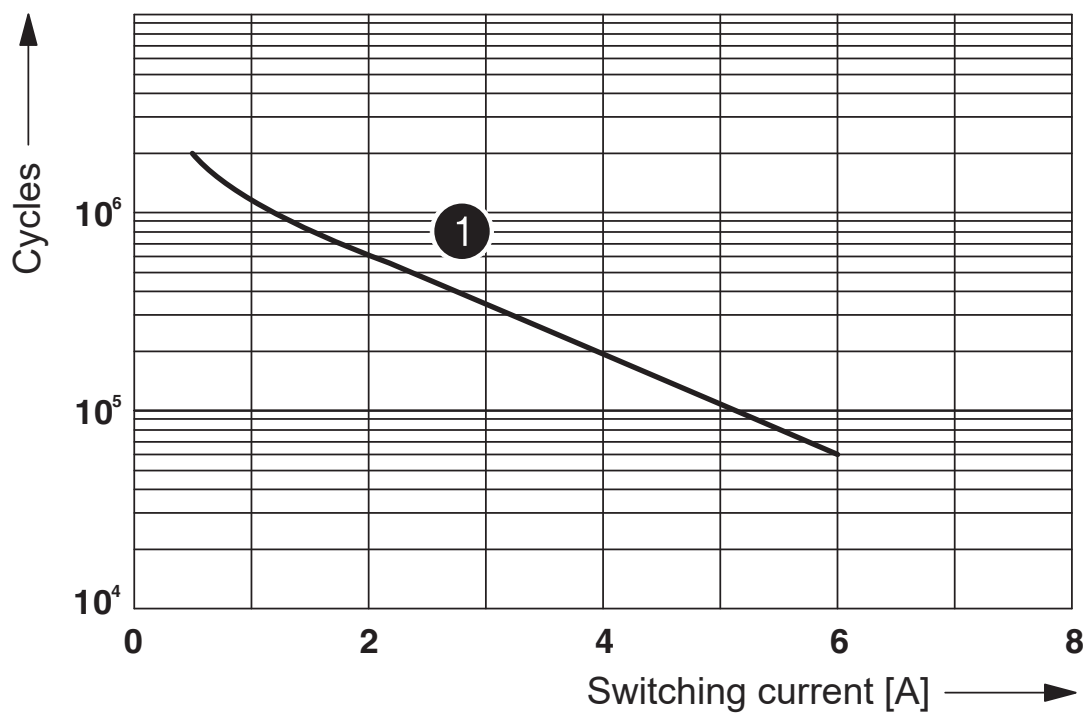
REL-MR- 18DC/21AU - Single relay

2961493

<https://www.phoenixcontact.com/gb/products/2961493>



Diagram



① 250 V AC, ohmic load

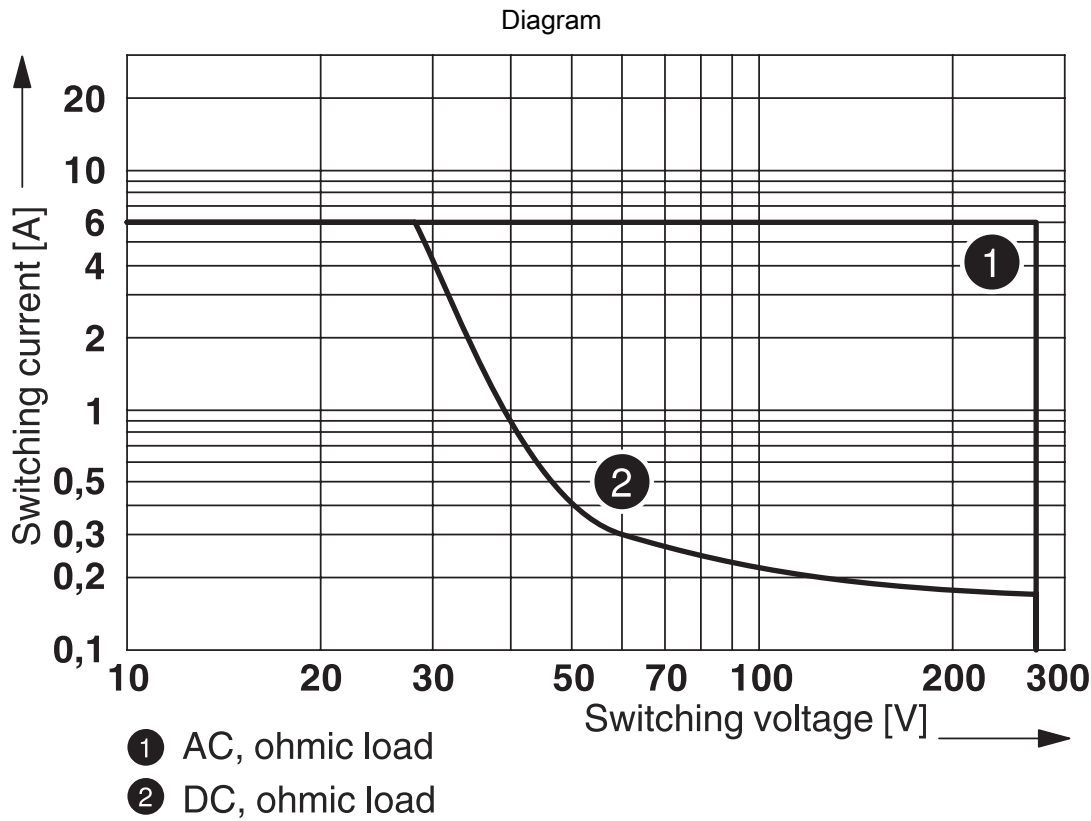
Electrical service life

REL-MR- 18DC/21AU - Single relay

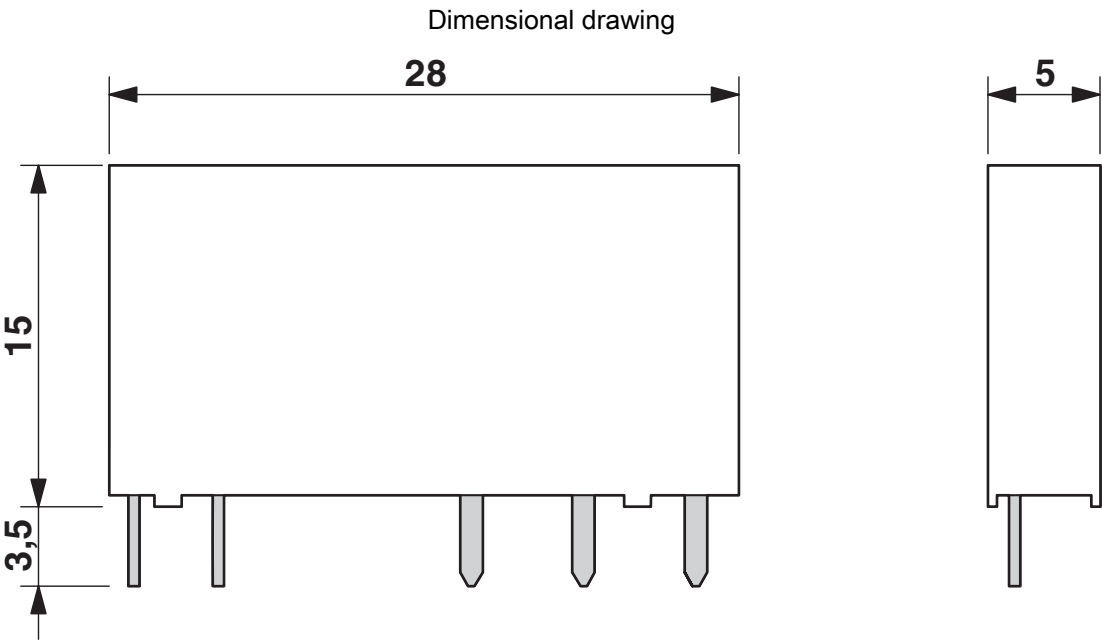


2961493

<https://www.phoenixcontact.com/gb/products/2961493>



Interrupting rating



REL-MR- 18DC/21AU - Single relay



2961493

<https://www.phoenixcontact.com/gb/products/2961493>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/2961493>



cUL Recognized
Approval ID: FILE E 172140



UL Recognized
Approval ID: FILE E 172140



EAC
Approval ID: TR_TS_D_00573_c



UL Recognized
Approval ID: FILE E 172140



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



VDE Zeichengenehmigung
Approval ID: 40010212



VDE Zeichengenehmigung
Approval ID: 40032864



cUL Recognized
Approval ID: FILE E 172140



VDE Zeichengenehmigung
Approval ID: 40054426



cUL Recognized
Approval ID: FILE E 172140



UL Recognized
Approval ID: FILE E 172140

REL-MR- 18DC/21AU - Single relay



2961493

<https://www.phoenixcontact.com/gb/products/2961493>

Classifications

ECLASS

ECLASS-11.0	27371601
ECLASS-12.0	27371601
ECLASS-13.0	27371601

ETIM

ETIM 9.0	EC001437
----------	----------

UNSPSC

UNSPSC 21.0	39122300
-------------	----------

REL-MR- 18DC/21AU - Single relay



2961493

<https://www.phoenixcontact.com/gb/products/2961493>

Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

REL-MR- 18DC/21AU - Single relay

2961493

<https://www.phoenixcontact.com/gb/products/2961493>



Mandatory accessories

PLC-BPT- 24DC/21RW - Relay base

2900261

<https://www.phoenixcontact.com/gb/products/2900261>



6.2 mm PLC basic terminal block for railway applications with Push-in connection, without relay or solid-state relay, range from $0.7 \times U_N$ to $1.25 \times U_N$, temperature range from -25°C to $+70^{\circ}\text{C}$, 1 changeover contact, input voltage 24 V DC

Phoenix Contact 2024 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT Ltd
Halesfield 13, Telford
Shropshire, TF7 4PG
01952 681700
info@phoenixcontact.co.uk