

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

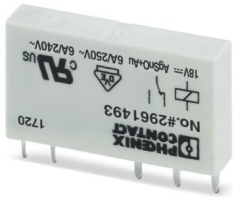


2961493

<https://www.phoenixcontact.com/us/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	C460
Product key	DK6922
GTIN	4017918936525
Weight per piece (including packing)	6.508 g
Weight per piece (excluding packing)	6.508 g
Customs tariff number	85364900
Country of origin	CZ

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



2961493

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

## Technical data

### Product properties

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

### Insulation characteristics

Overvoltage category	III
Pollution degree	3

### Data management status

Date of last data management	01.04.2026
------------------------------	------------

### Electrical properties

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

### Input data

#### Coil side

Nominal input voltage U <sub>N</sub>	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 <sub>N</sub>	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

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



2961493

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

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

### Item dimensions

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/us/products/2961493>

Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1

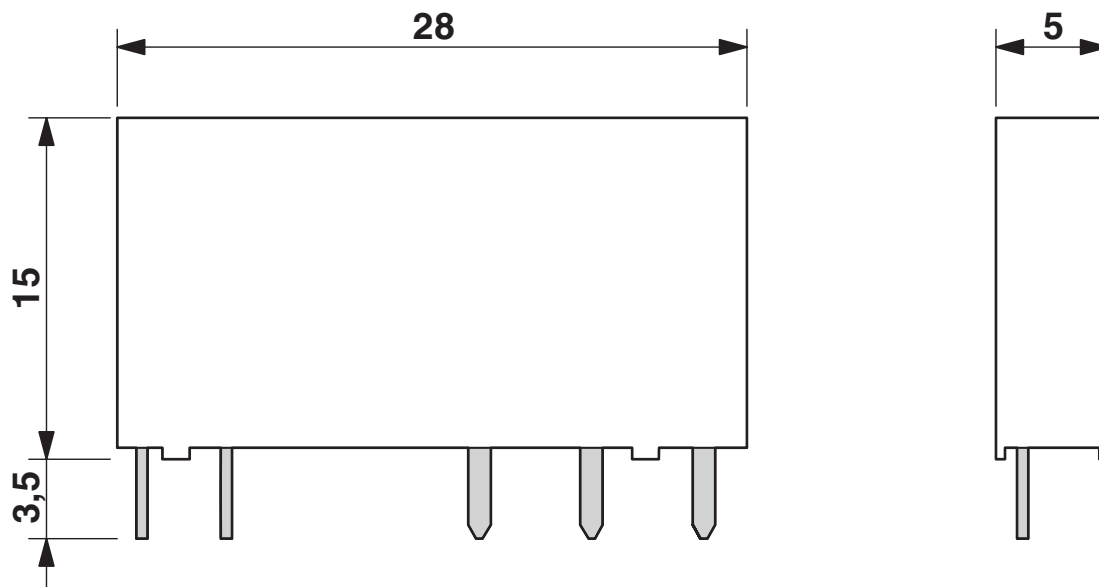
# REL-MR- 18DC/21AU - Single relay

2961493

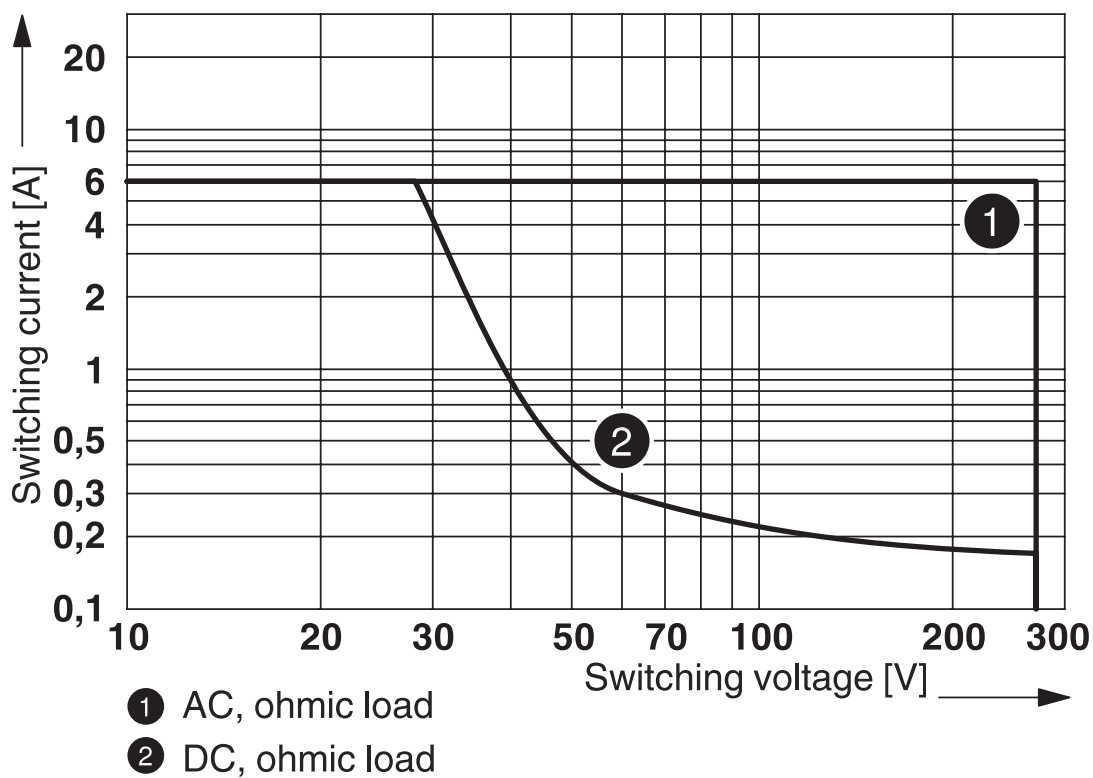
<https://www.phoenixcontact.com/us/products/2961493>

## Drawings

Dimensional drawing



Diagram



Interrupting rating

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



2961493

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

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/21AU - Single relay



2961493

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

Drilling plan/solder pad geometry



a = pitch division 1.25 mm and 1.27 mm

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



2961493

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

## Approvals

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



**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/21AU - Single relay



2961493

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

## Classifications

### ECLASS

ECLASS-13.0	27371601
ECLASS-15.0	27371601

### ETIM

ETIM 10.0	EC001437
-----------	----------

### UNSPSC

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

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



2961493

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

## 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%
-------------------------------------	----------------------------

### EF3.1 Climate Change

CO2e kg	1.8 kg CO2e
---------	-------------

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](mailto:info@phoenixcon.com)