

REL-MR- 12DC/21AU - Single relay

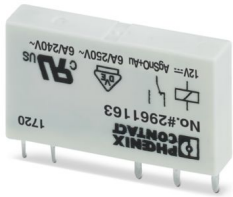


2961163

<https://www.phoenixcontact.com/us/products/2961163>

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 12 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	2961163
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C460
Product key	DK6922
GTIN	4017918146870
Weight per piece (including packing)	6.58 g
Weight per piece (excluding packing)	6.58 g
Customs tariff number	85364190
Country of origin	CZ

REL-MR- 12DC/21AU - Single relay



2961163

<https://www.phoenixcontact.com/us/products/2961163>

Technical data

Product properties

Product type	Single relay
Set comprises	2903369 RIF-0-RPT-12DC/21AU
	2903360 RIF-0-RPT-12DC/ 1AU
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	01.04.2026
------------------------------	------------

Electrical properties

Maximum power dissipation for nominal condition	0.17 W
Test voltage (Winding/contact)	4 kV AC (50 Hz, 1 min., winding/contact)

Input data

Coil side

Nominal input voltage U_N	12 V DC
Input voltage range	7.2 V DC ... 33 V DC
Input voltage range in reference to U_N	see diagram
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at U_N	14 mA
Typical response time	5 ms
Typical release time	2.5 ms
Coil resistance	848 Ω \pm 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)

REL-MR- 12DC/21AU - Single relay



2961163

<https://www.phoenixcontact.com/us/products/2961163>

Interrupting rating (ohmic load) max.	1.2 W (at 24 V DC)
Switching: when the gold layer is destroyed	
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 24 V, AC15)
	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

REL-MR- 12DC/21AU - Single relay



2961163

<https://www.phoenixcontact.com/us/products/2961163>

Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

Standards and regulations

Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1

Mounting

Assembly note	in rows with zero spacing
Mounting position	any

REL-MR- 12DC/21AU - Single relay

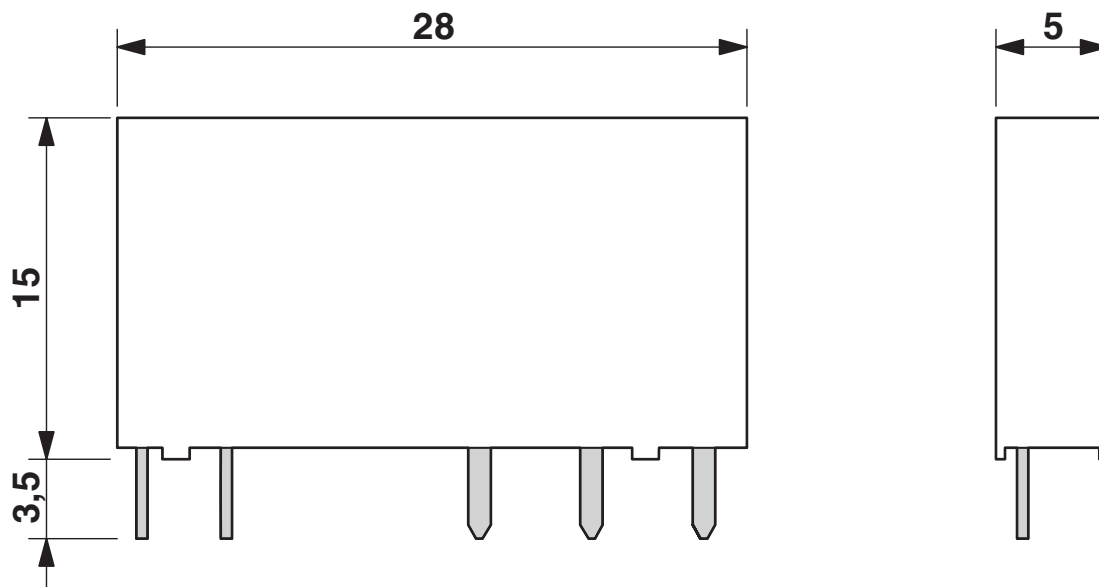


2961163

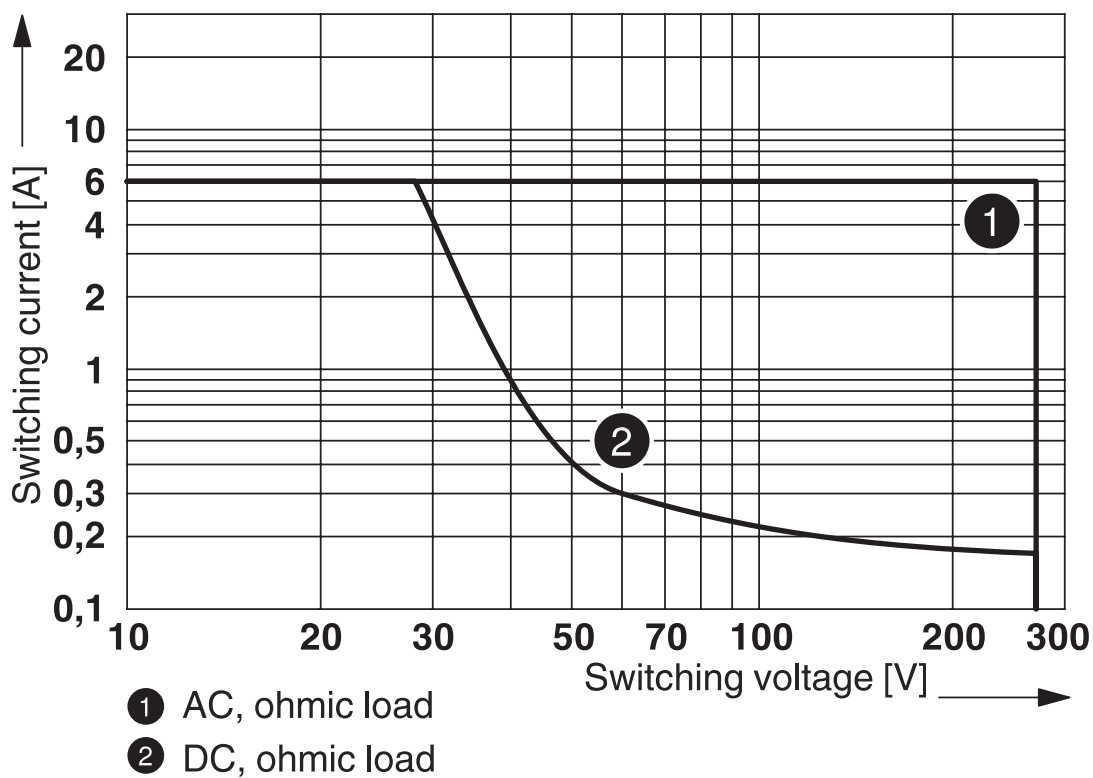
<https://www.phoenixcontact.com/us/products/2961163>

Drawings

Dimensional drawing



Diagram



Interrupting rating

REL-MR- 12DC/21AU - Single relay



2961163

<https://www.phoenixcontact.com/us/products/2961163>

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 ≤ 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



REL-MR- 12DC/21AU - Single relay



2961163

<https://www.phoenixcontact.com/us/products/2961163>

Drilling plan/solder pad geometry



a = pitch division 1.25 mm and 1.27 mm

REL-MR- 12DC/21AU - Single relay



2961163

<https://www.phoenixcontact.com/us/products/2961163>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2961163>



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- 12DC/21AU - Single relay



2961163

<https://www.phoenixcontact.com/us/products/2961163>

Classifications

ECLASS

ECLASS-13.0	27371601
ECLASS-15.0	27371601

ETIM

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

UNSPSC

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

REL-MR- 12DC/21AU - Single relay



2961163

<https://www.phoenixcontact.com/us/products/2961163>

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	0.045 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