

REL-MR-230AC/21HC AU - Single relay



2961529

<https://www.phoenixcontact.com/us/products/2961529>

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 for high continuous currents, 1 changeover contact, input voltage 230 V AC

Your advantages

- RT III-proof (wash-proof)
- Switching current of up to 16 A

Commercial data

Item number	2961529
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C460
Product key	CK6932
Catalog page	Page 290 (C-5-2019)
GTIN	4017918937928
Weight per piece (including packing)	16.852 g
Weight per piece (excluding packing)	15 g
Customs tariff number	85364900
Country of origin	AT

Technical data

Product properties

Product type	Single relay
Operating mode	100% operating factor
Mechanical service life	1x 10 ⁷ cycles

Insulation characteristics

Overvoltage category	III
Pollution degree	3

Data management status

Date of last data management	20.06.2024
------------------------------	------------

Electrical properties

Service life electrical	see diagram
Maximum power dissipation for nominal condition	0.69 W
Test voltage (Winding/contact)	5 kV AC (50 Hz, 1 min., winding/contact)

Input data

Coil side

Nominal input voltage U _N	230 V AC
Input voltage range	179.4 V AC ... 356.5 V AC
Mains frequency	50/60 Hz
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at U _N	3 mA (at 50 Hz) 2.5 mA (At 60 Hz)
Typical response time	3 ms ... 12 ms (depending on phase relation)
Typical release time range	2 ms ... 9 ms (depending on phase relation)
Coil resistance	32500 Ω ±15 % (at 20 °C)

Output data

Switching

Contact switching type	1 changeover contact
Type of switch contact	Single contact
Contact material	AgNi, 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-230AC/21HC AU - Single relay



2961529

<https://www.phoenixcontact.com/us/products/2961529>

Interrupting rating (ohmic load) max.	1.2 W (at 24 V DC)
Switching capacity	2 A (at 24 V, AC15)

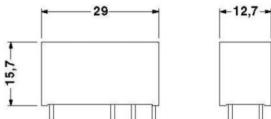
Switching: when the gold layer is destroyed

Note	the following values are applicable if a gold layer is destroyed
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	12 V (at 10 mA)
Limiting continuous current	16 A
Maximum inrush current	50 A (20 ms)
Min. switching current	10 mA (at 12 V)
Interrupting rating (ohmic load) max.	384 W (at 24 V DC)
	58 W (at 48 V DC)
	48 W (at 60 V DC)
	50 W (at 110 V DC)
	80 W (at 220 V DC)
Switching capacity	4000 VA (for 250 V AC)
	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	0.2 A (at 250 V, DC13)
	2 A (at 24 V, AC15)
	2 A (at 120 V, AC15)
	2 A (at 250 V, AC15)

Connection data

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

Dimensions

Dimensional drawing	
Width	12.7 mm
Height	29 mm
Depth	15.7 mm

Material specifications

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

REL-MR-230AC/21HC AU - Single relay



2961529

<https://www.phoenixcontact.com/us/products/2961529>

Environmental and real-life conditions

Ambient conditions

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

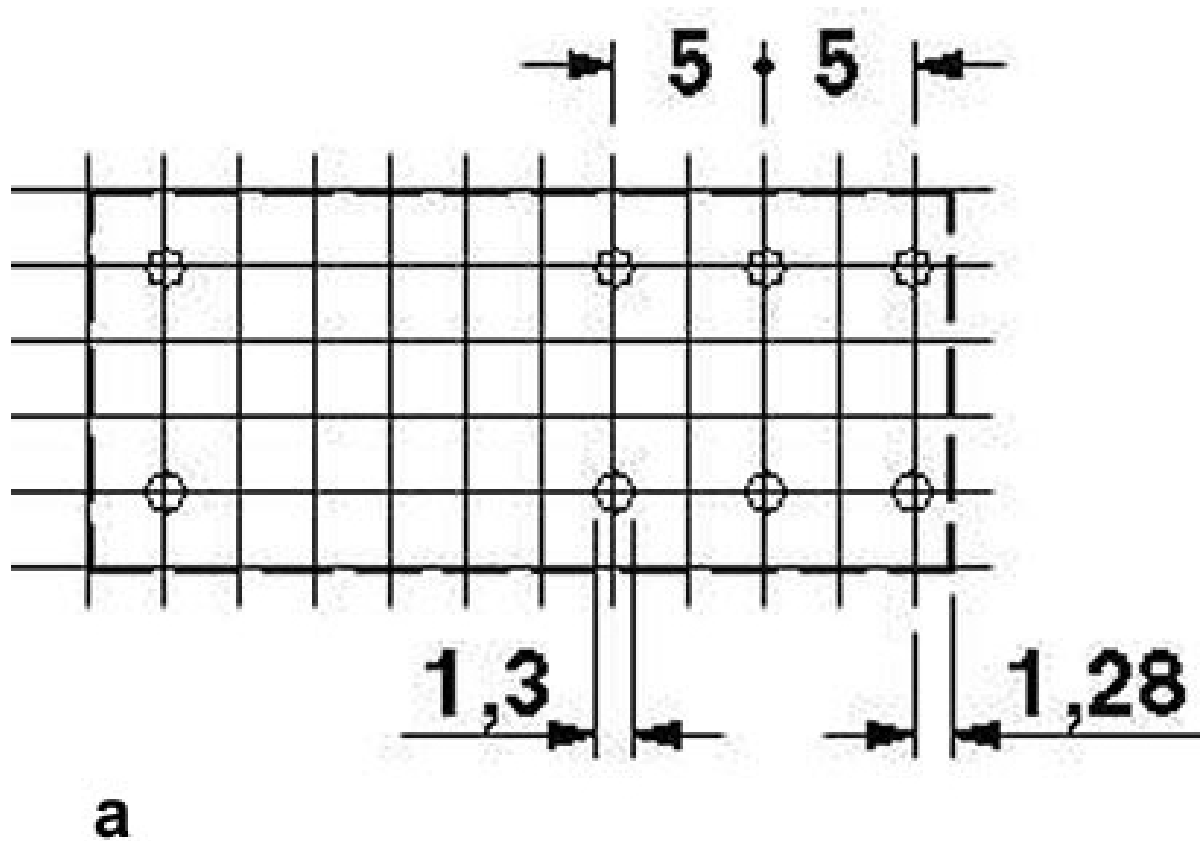
Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1

Mounting

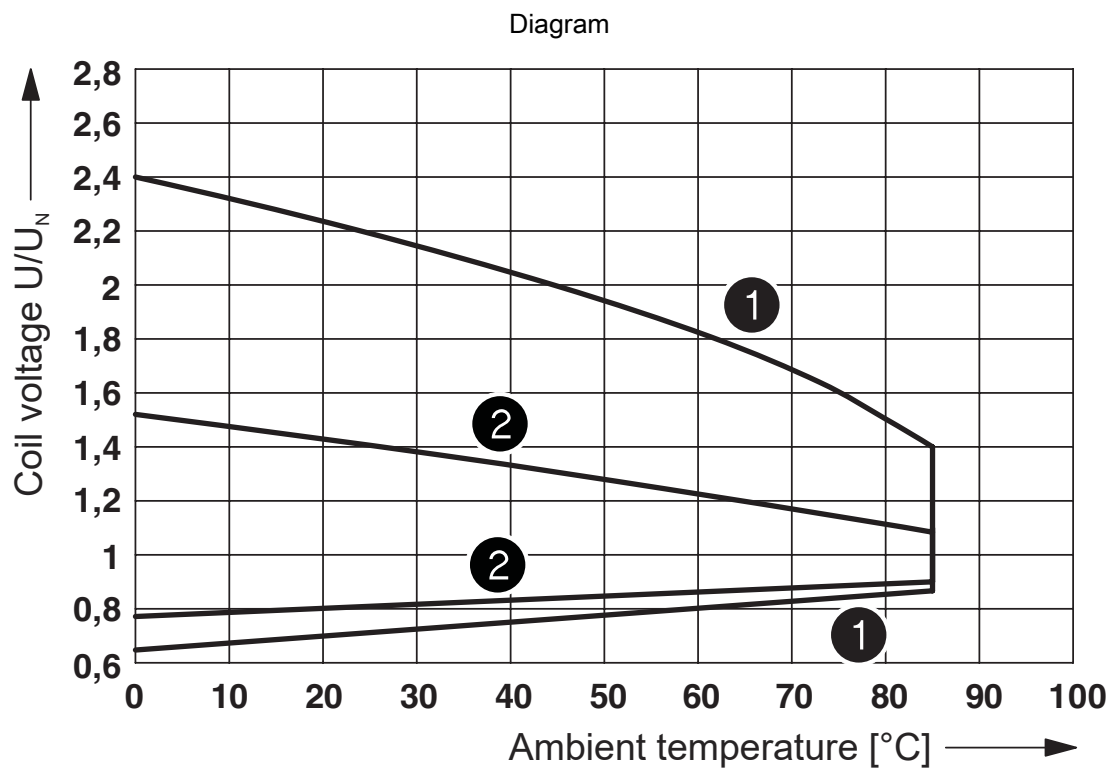
Assembly note	Can be aligned without spacing ($> 70\text{ °C} \geq 2.5\text{ mm}$)
Mounting position	any

Drawings

Drilling plan/solder pad geometry

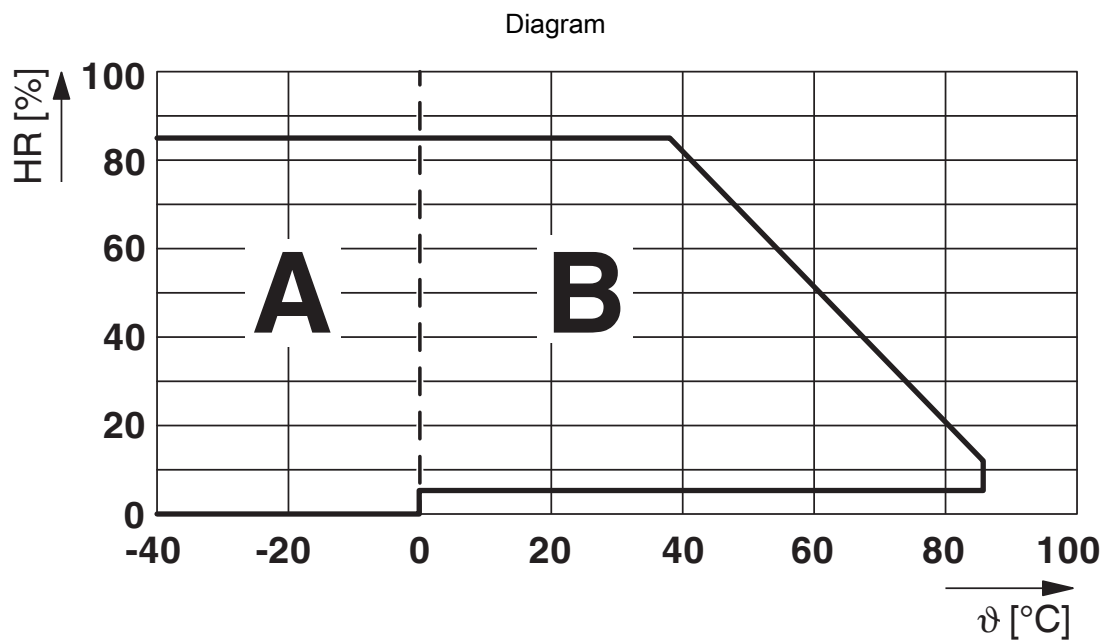


a = pitch division 2.5 mm



- ① DC coils
- ② AC coils

Operating voltage range



Permissible humidity for operation and storage.

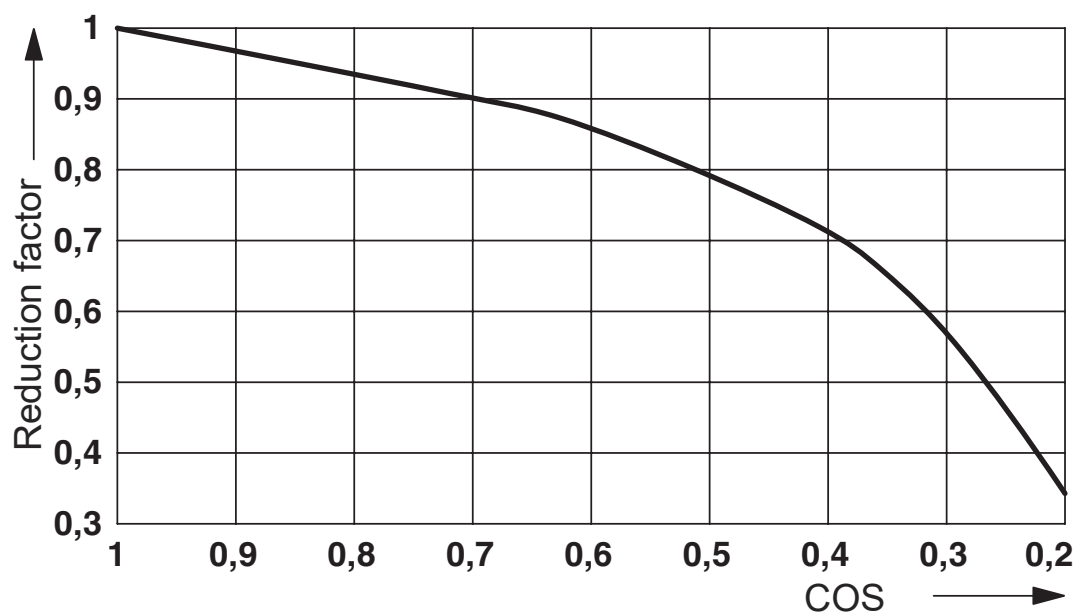
The maximum permissible ambient temperature as specified in the data sheet must be observed.

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

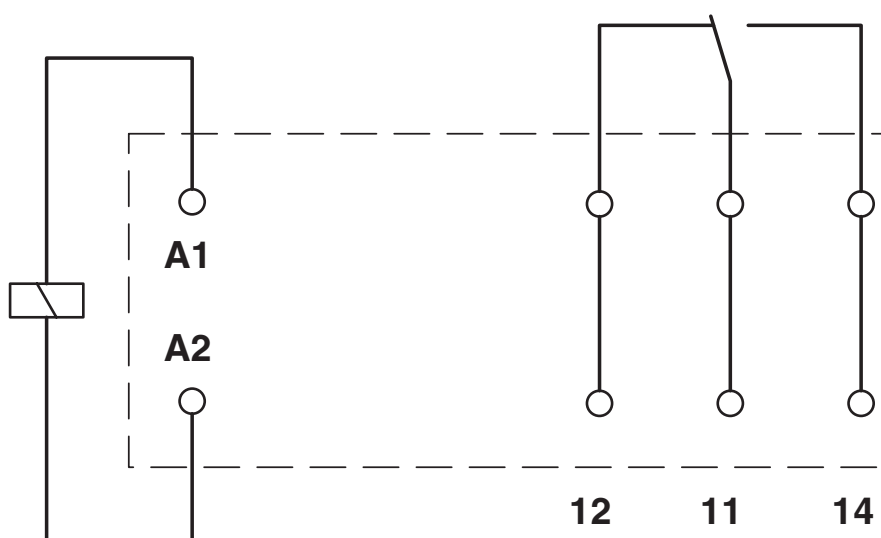
On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature $\leq 25^{\circ}\text{C}$.

Diagram



Service life reduction factor with various cos phi

Circuit diagram



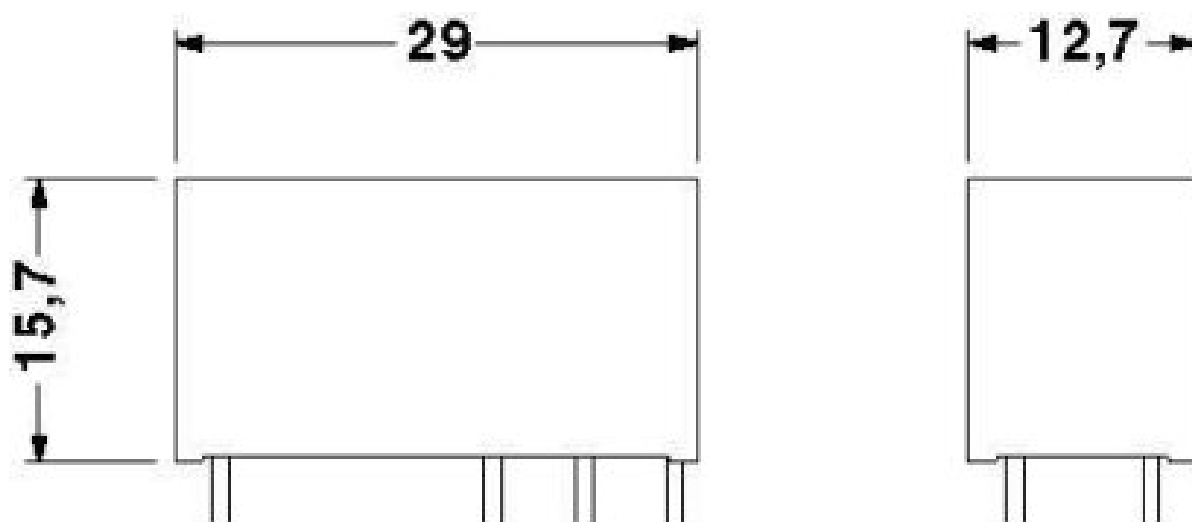
REL-MR-230AC/21HC AU - Single relay

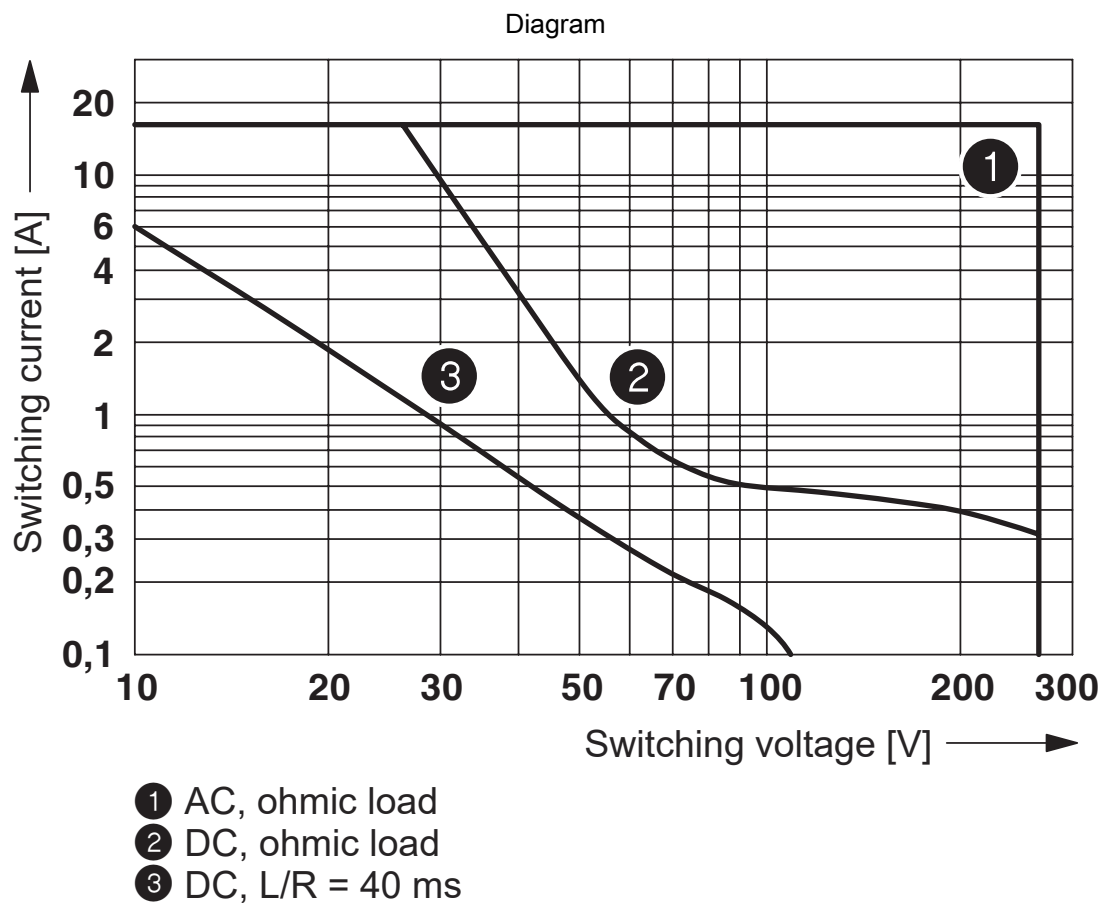
2961529

<https://www.phoenixcontact.com/us/products/2961529>

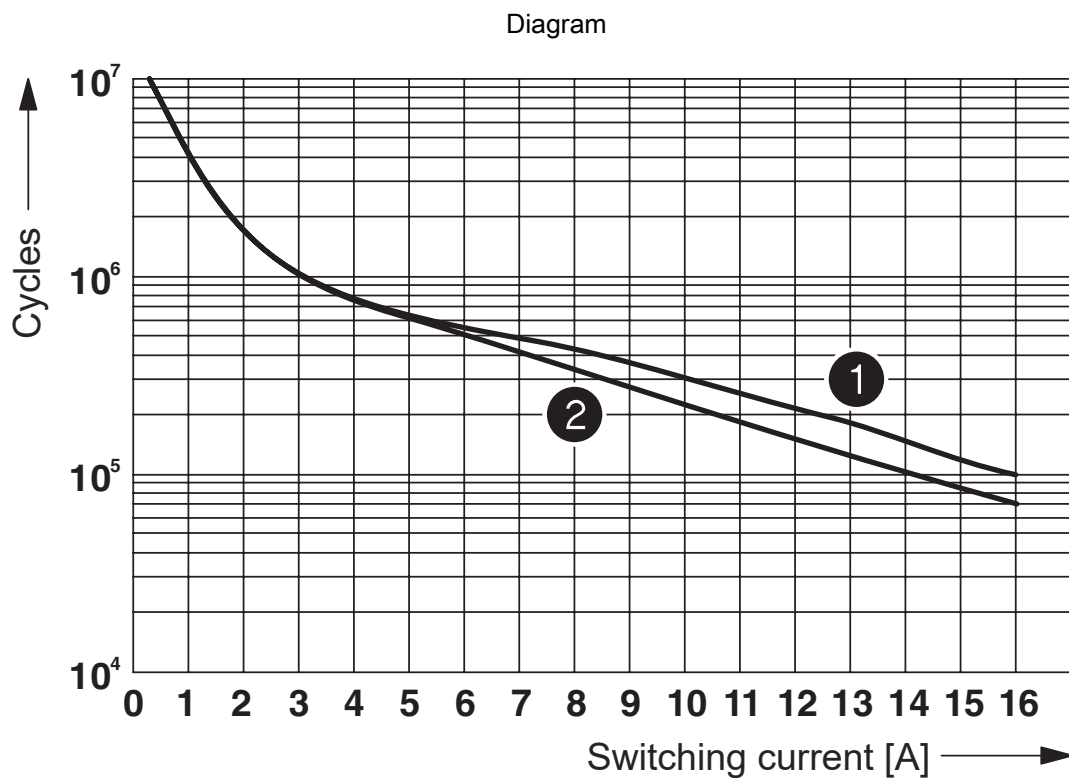


Dimensional drawing





Interrupting rating



- ① 250 V AC, ohmic load (DC coils)
- ② 250 V AC, ohmic load (AC coils)

Electrical service life

REL-MR-230AC/21HC AU - Single relay



2961529

<https://www.phoenixcontact.com/us/products/2961529>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2961529>



cUL Recognized
Approval ID: FILE E 228652



UL Recognized
Approval ID: FILE E 228652



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



UL Recognized
Approval ID: FILE E 172140



VDE approval of drawings
Approval ID: 40048281



VDE approval of drawings
Approval ID: 40007758



cUL Recognized
Approval ID: FILE E 172140

REL-MR-230AC/21HC AU - Single relay



2961529

<https://www.phoenixcontact.com/us/products/2961529>

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-230AC/21HC AU - Single relay



2961529
<https://www.phoenixcontact.com/us/products/2961529>

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 USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com