

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

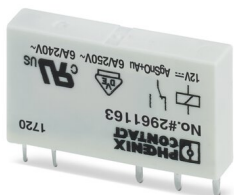
2961163

<https://www.phoenixcontact.com/de/produkte/2961163>



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Plug-in miniature power relay, with multi-layer gold contact, 1 changeover contact, input voltage 12 V DC



Your advantages

- Safe isolation according to DIN EN 50178 between coil and contact
- High degree of protection up to RT III depending on type (wash-proof)
- Power contacts up to 6 A

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Commercial Data

Item number	2961163
Packing unit	10 pc
Minimum order quantity	10 pc
Sales Key	G1 - Relais
Product Key	CK6195
Catalog Page	Page 284 (C-5-2019)
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

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Technical Data

Product properties

Product type	Single relay
Set comprises	2966919 PLC-RSC- 12DC/21AU
	2967442 PLC-RSP- 12DC/21AU
	2900317 PLC-RPT- 12DC/21AU
	2987024 PLC-RSP- 24UC/21AU/RW
	2900321 PLC-RPT- 24UC/21AU/RW
	2903369 RIF-0-RPT-12DC/21AU
	2903373 RIF-0-RSC-12DC/21AU
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	0.17 W
Test voltage	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
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 type	1 changeover contact
Type of switch contact	Single contact
Drive and function	monostable
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

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Min. switching current	1 mA (at 24 V)
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	Solder connection
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Dimensions

Dimensional drawing	
Width	5 mm
Height	28 mm
Depth	15 mm

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

Approval data

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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 instructions	in rows with zero spacing
Mounting position	any

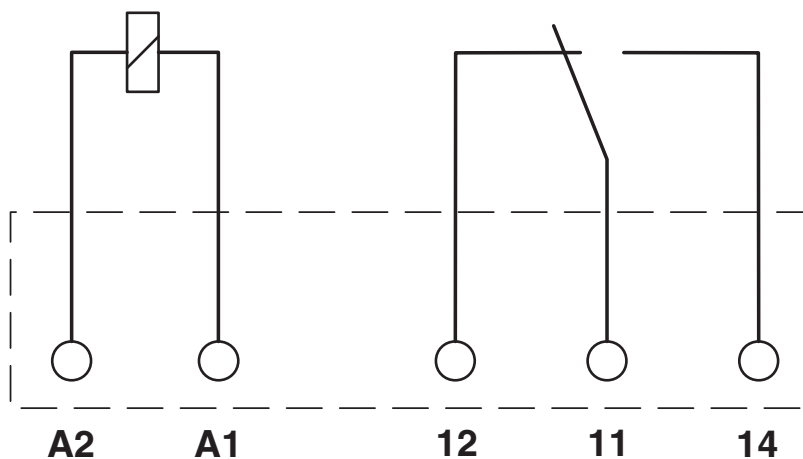
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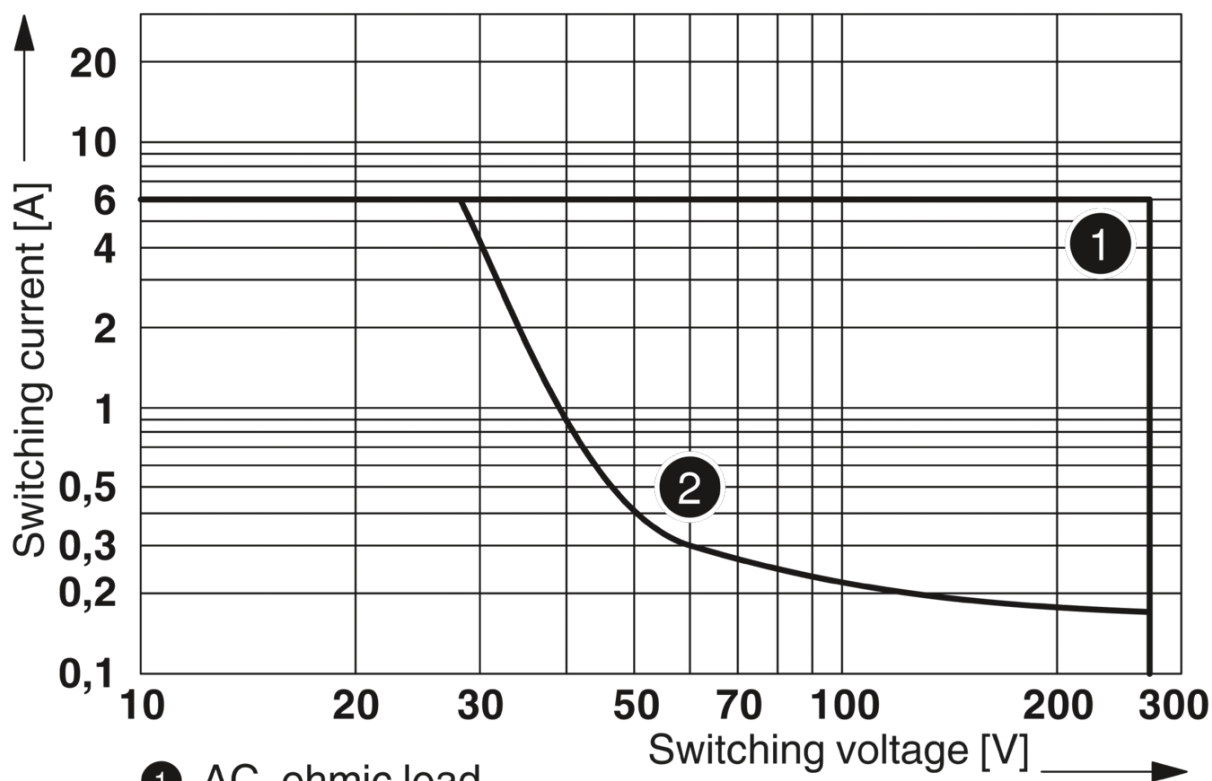
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Drawings

Circuit diagram



Diagram



- ① AC, ohmic load
- ② DC, ohmic load

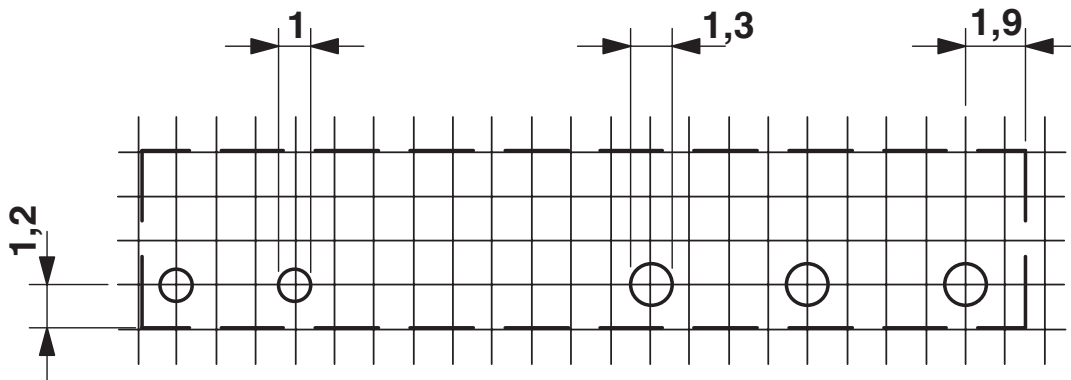
Interrupting rating

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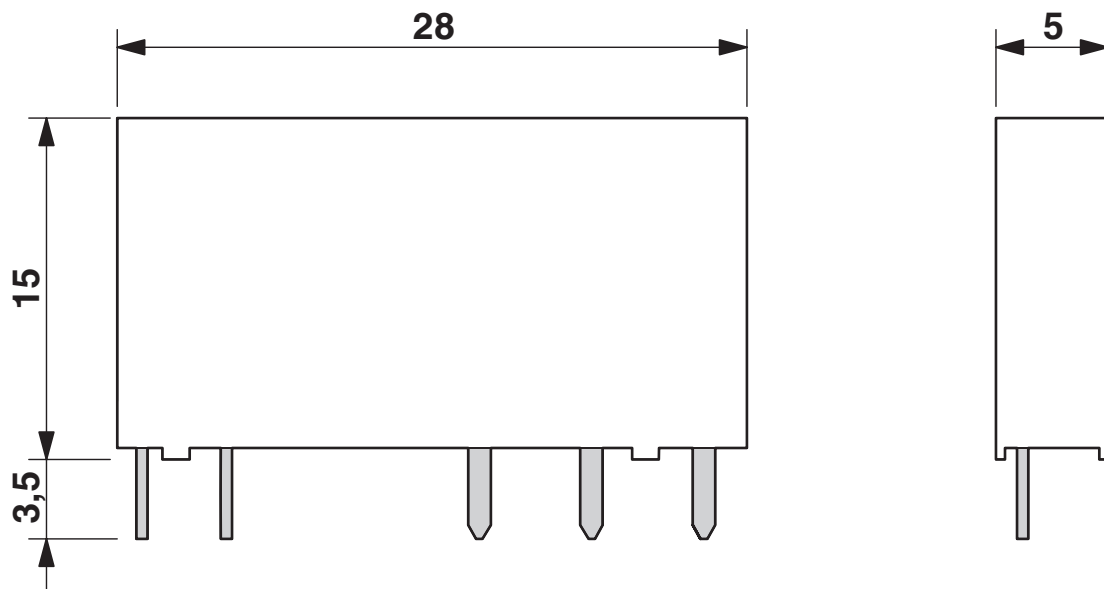
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Drilling plan/solder pad geometry



a = pitch division 1.25 mm and 1.27 mm

Dimensional drawing



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Approvals



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

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Reports with production monitoring			-	-



VDE Zeichengenehmigung
Approval ID: 40032864

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Mark approval certificate			-	-



PRS
Approval ID: TE/2109/880590/16



cUL Recognized
Approval ID: FILE E 172140



VDE Zeichengenehmigung
Approval ID: 40054426

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Classifications

ECLASS

ECLASS-9.0	27371601
ECLASS-10.0.1	27371601
ECLASS-11.0	27371601

ETIM

ETIM 8.0	EC001437
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UNSPSC

UNSPSC 21.0	39122300
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Environmental Product Compliance

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

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Accessories

Relay base

Relay base - PLC-BPT- 12DC/21 - 2900444

<https://www.phoenixcontact.com/de/produkte/2900444>



6.2 mm PLC basic terminal block with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 12 V DC

Relay base

Relay base - PLC-BSC- 12DC/21 - 2966896

<https://www.phoenixcontact.com/de/produkte/2966896>



6.2 mm PLC basic terminal block with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 12 V DC

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Relay base

Relay base - RIF-0-BPT/21 - 2900958

<https://www.phoenixcontact.com/de/produkte/2900958>



Relay base RIF-0..., for miniature power relay with 1 changeover contact or solid-state relays of the same design, Push-in connection, for mounting on NS 35/7,5

Relay base

Relay base - RIF-0-BSC/21 - 2900957

<https://www.phoenixcontact.com/de/produkte/2900957>



RIF-0... relay base, for miniature power relay with 1 changeover contact or identical solid-state relays, screw connection, for mounting on NS 35/7,5

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