

# REL-MR- 60DC/21 - Single relay

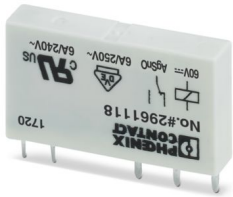


2961118

<https://www.phoenixcontact.com/pc/products/2961118>

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Plug-in miniature power relay, with power contact, 1 changeover contact, input voltage 60 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	2961118
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	08
Product key	CK6195
Catalog page	Page 394 (C-5-2019)
GTIN	4017918130886
Weight per piece (including packing)	6.86 g
Weight per piece (excluding packing)	6.6 g
Customs tariff number	85364900
Country of origin	CZ

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## 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

### Electrical properties

Maximum power dissipation for nominal condition	0.18 W
Test voltage (Winding/contact)	4 kV AC (50 Hz, 1 min., winding/contact)

### Input data

#### Coil side

Nominal input voltage $U_N$	60 V DC
Input voltage range	36 V DC ... 165 V DC
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at $U_N$	3 mA
Typical response time	5 ms
Typical release time	2.5 ms
Coil resistance	20500 $\Omega$ $\pm$ 15 % (at 20 °C)

### Output data

#### Switching

Contact switching type	1 changeover contact
Type of switch contact	Single contact
Contact material	AgSnO
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 100 mA)
Limiting continuous current	6 A
Maximum inrush current	10 A (4 s)
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)
	2 A (at 24 V, DC13)

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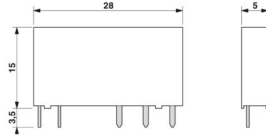
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Switching capacity	0.2 A (at 110 V, DC13)
	0.1 A (at 220 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 A (at 230 V, AC15)
Motor load according to UL 508	1/4 HP, 240 - 277 V AC (N/O contact)
	1/6 HP, 240 - 277 V AC (N/C contact)

## Connection data

Connection method	Plug / solder connection
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## Dimensions

Dimensional drawing	
Width	5 mm
Height	28 mm
Depth	15 mm

## Material specifications

Color	white (RAL 9010)
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## 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

Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1

## Mounting

Assembly instructions	in rows with zero spacing
Mounting position	any

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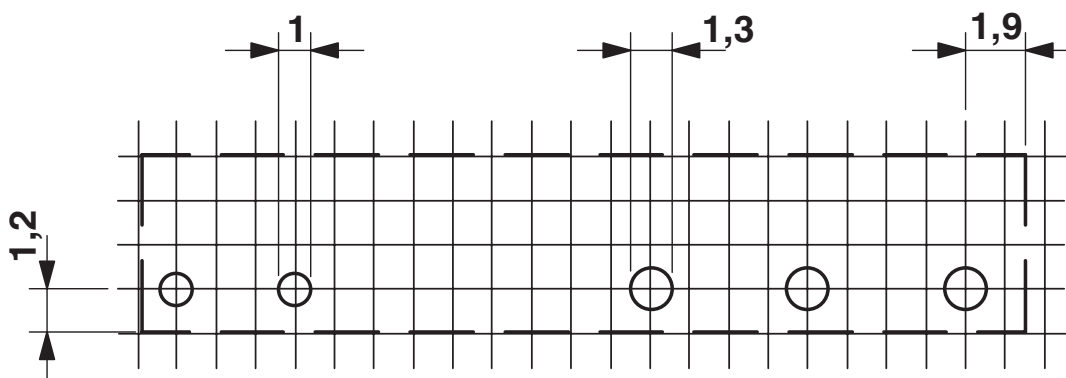


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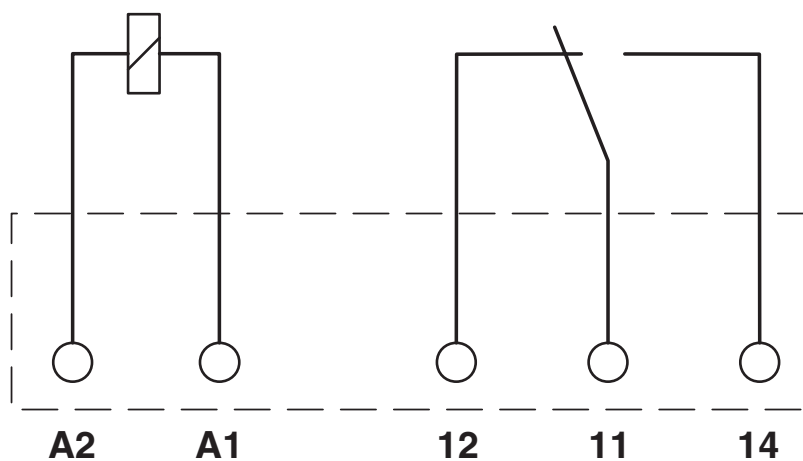
## Drawings

Drilling plan/solder pad geometry

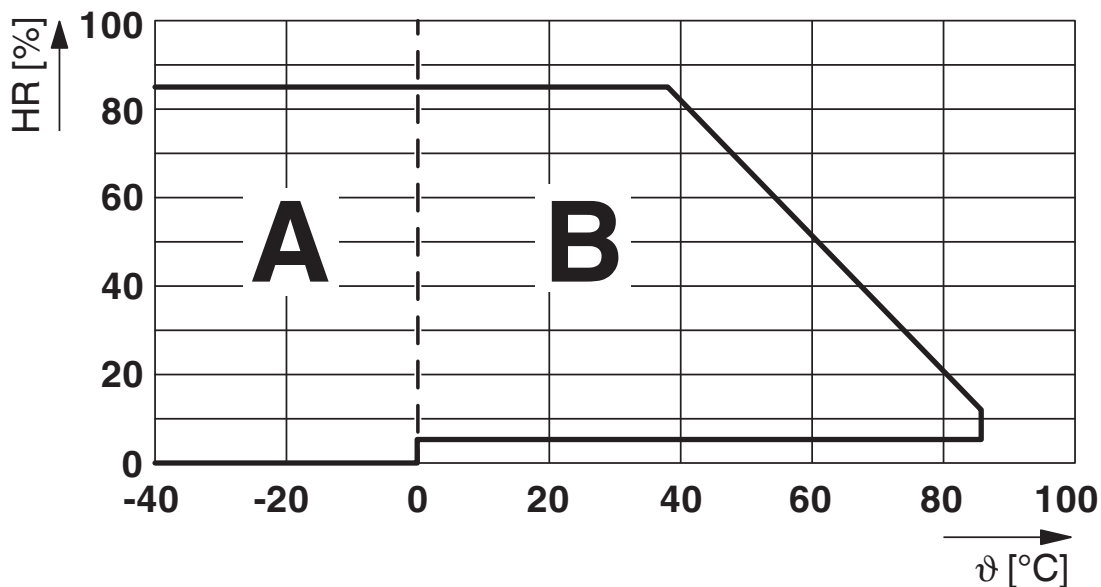


a = pitch division 1.25 mm and 1.27 mm

Circuit diagram



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

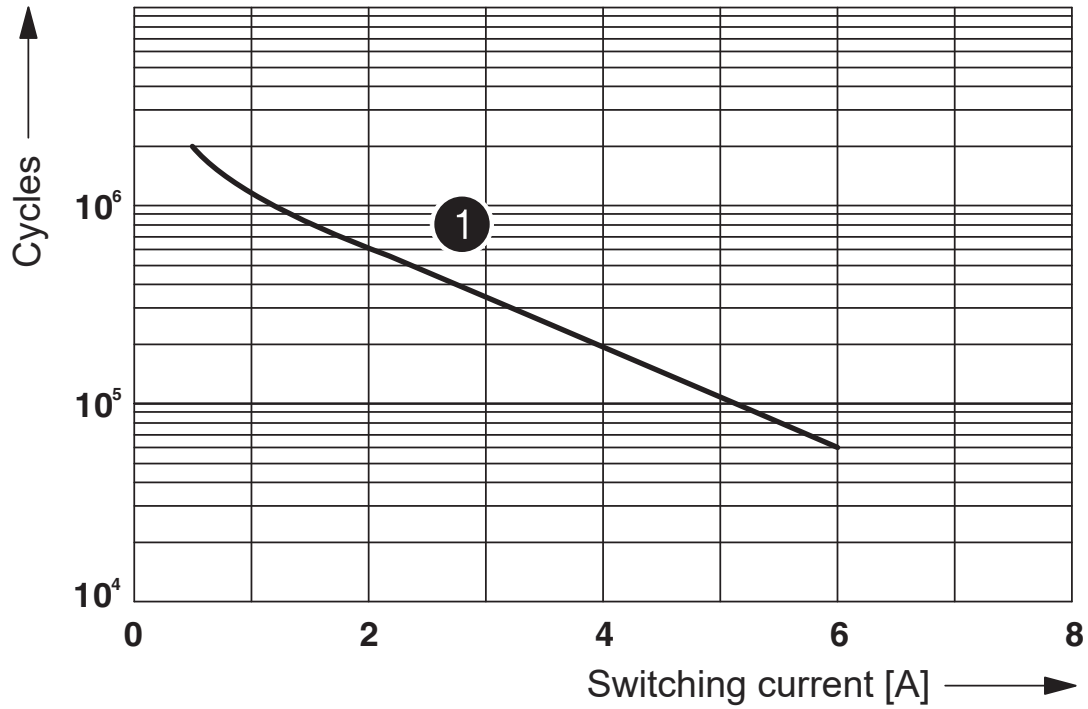
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Diagram



① 250 V AC, ohmic load

Electrical service life

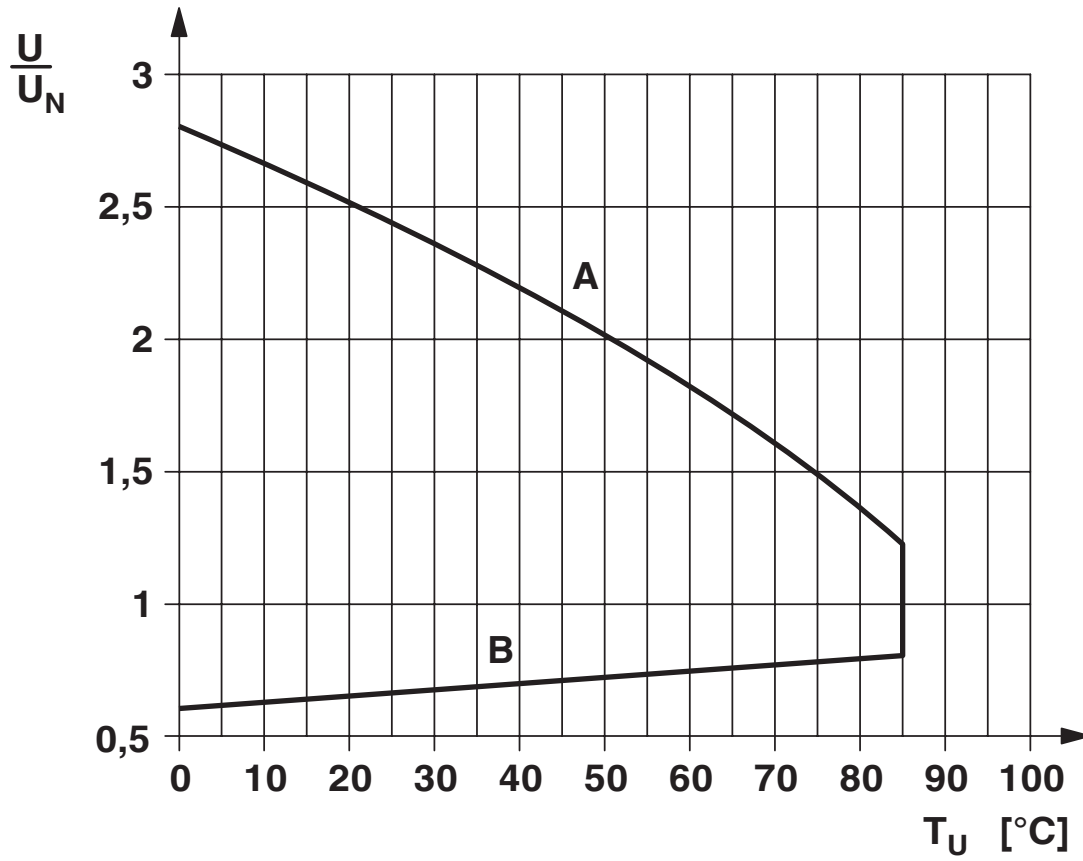
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Diagram

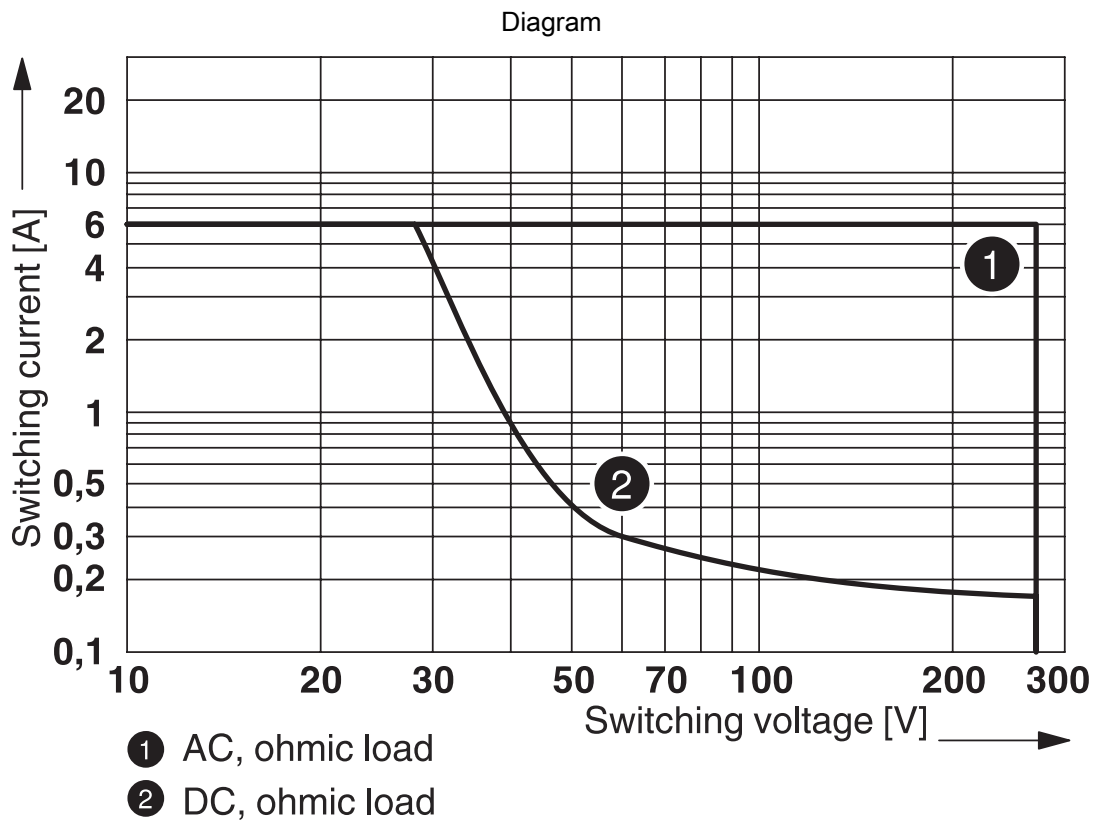


Operating voltage range

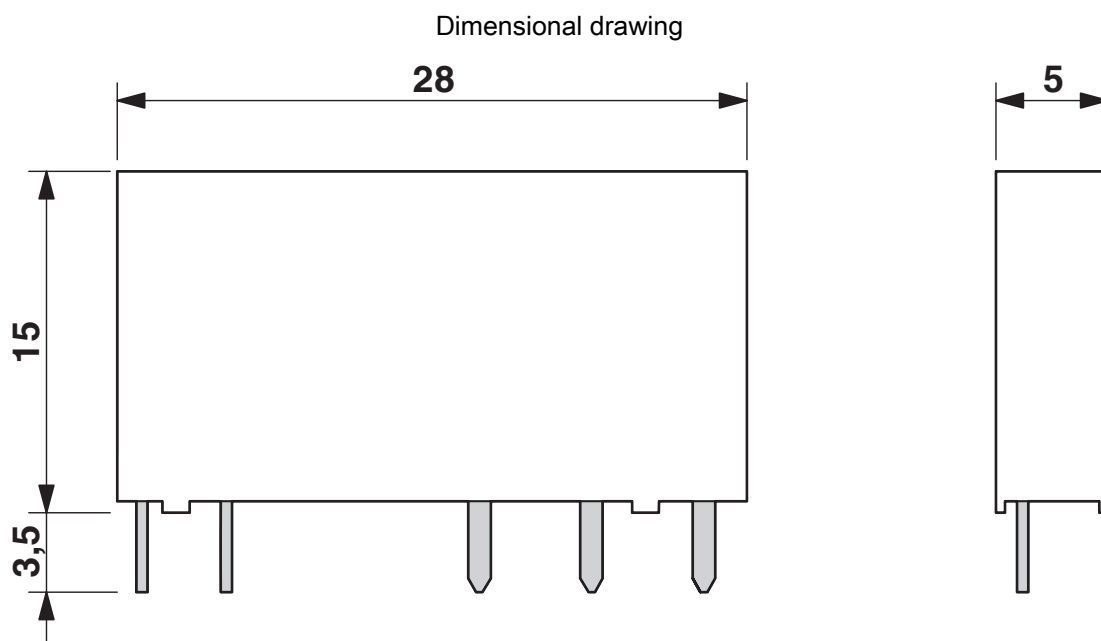
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Interrupting rating





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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/2961118>



**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



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## Classifications

### ECLASS

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

### ETIM

ETIM 9.0	EC001437
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### UNSPSC

UNSPSC 21.0	39122300
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### 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%
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