

Single relay - REL-MR- 12DC/21 - 2961150

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Pluggable miniature relays, with power contact, 1 PDT, input voltage 12 V DC

The illustration shows the version REL-MR- 24DC/21

Product Features

- Safe isolation according to DIN EN 50178 between coil and contact
- High degree of protection, up to RT III (comparable with IP67) depending on type
- Power contacts up to 6 A

Key commercial data

package_quantity	10
GTIN	4017918159566

Technical data

Dimensions

Width	5 mm
Height	28 mm
Depth	15 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Coil side

Nominal input voltage U_N	12 V DC
Input voltage range in reference to U_N	(refer to the diagram)
Nominal input current at U_{IN}	14 mA
Typical response time	5 ms
Typical release time	2.5 ms
Coil resistance	848 Ω \pm 10% (at 20 °C)

Contact side

Contact type	Single contact, 1-PDT
Contact material	AgSnO
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 100 mA)

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Technical data

Contact side

Maximum inrush current	(on request)
Min. switching current	10 mA (at 12 V)
Limiting continuous current	6 A
Interrupting rating (ohmic load) max.	140 W (at 24 V DC)
Interrupting rating (ohmic load) max.	20 W (at 48 V DC)
Interrupting rating (ohmic load) max.	18 W (at 60 V DC)
Interrupting rating (ohmic load) max.	23 W (at 110 V DC)
Interrupting rating (ohmic load) max.	40 W (at 220 V DC)
Interrupting rating (ohmic load) max.	1500 VA (for 250 V AC)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	2 A (at 24 V, DC13)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	0.2 A (at 110 V, DC13)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	0.1 A (at 220 V, DC13)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	3 A (at 24 V, AC15)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	3 A (at 120 V, AC15)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	3 A (at 230 V, AC15)

General

Test voltage relay winding/relay contact	4 kV AC (50 Hz, 1 min.)
Operating mode	100% operating factor
Mechanical service life	2 x 10 ⁷ cycles
Standards/regulations	IEC 60664
Standards/regulations	EN 50178
Standards/regulations	IEC 62103
Pollution degree	3
Surge voltage category	III
Mounting position	Any
Assembly instructions	In rows with zero spacing

Connection data

Connection method	Plug / solder connection
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classifications

eCl@ss

eCl@ss 4.0	27371104
eCl@ss 4.1	27371104
eCl@ss 5.0	27371001
eCl@ss 5.1	27371001
eCl@ss 6.0	27371001
eCl@ss 7.0	27371001
eCl@ss 8.0	27371001

ETIM

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classifications

ETIM

ETIM 2.0	EC000196
ETIM 3.0	EC000196
ETIM 4.0	EC000196
ETIM 5.0	EC000196

UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121515
UNSPSC 11	39121515
UNSPSC 12.01	39121515
UNSPSC 13.2	39121515

approvals

UL Recognized / VDE Gutachten mit Fertigungsüberwachung / VDE Zeichengenehmigung / cUL Recognized / GOST / GL / UL Recognized / cUL Recognized / cULus Recognized /

Approval details

UL Recognized

VDE Gutachten mit Fertigungsüberwachung

Nominal voltage UN	
Nominal current IN	
mm ² /AWG/kcmil	

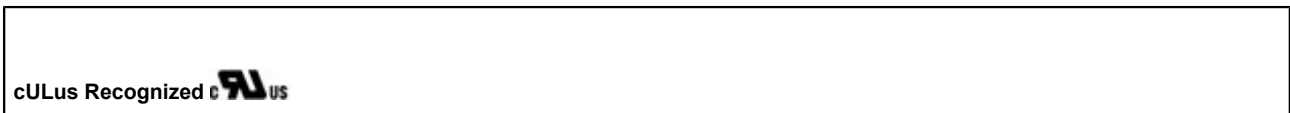
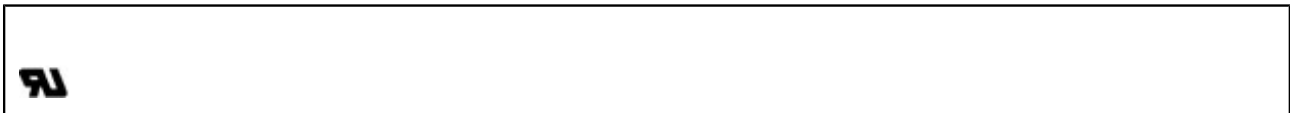
VDE Zeichengenehmigung

Nominal voltage UN	
Nominal current IN	
mm ² /AWG/kcmil	

cUL Recognized

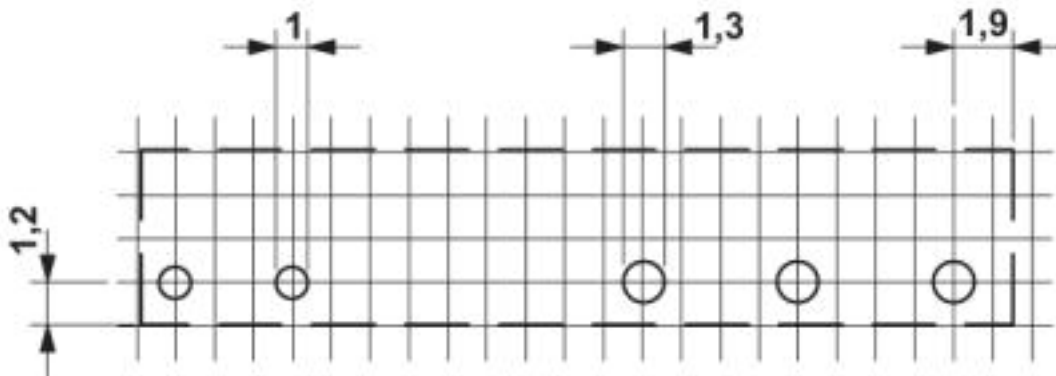
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approvals



Drawings

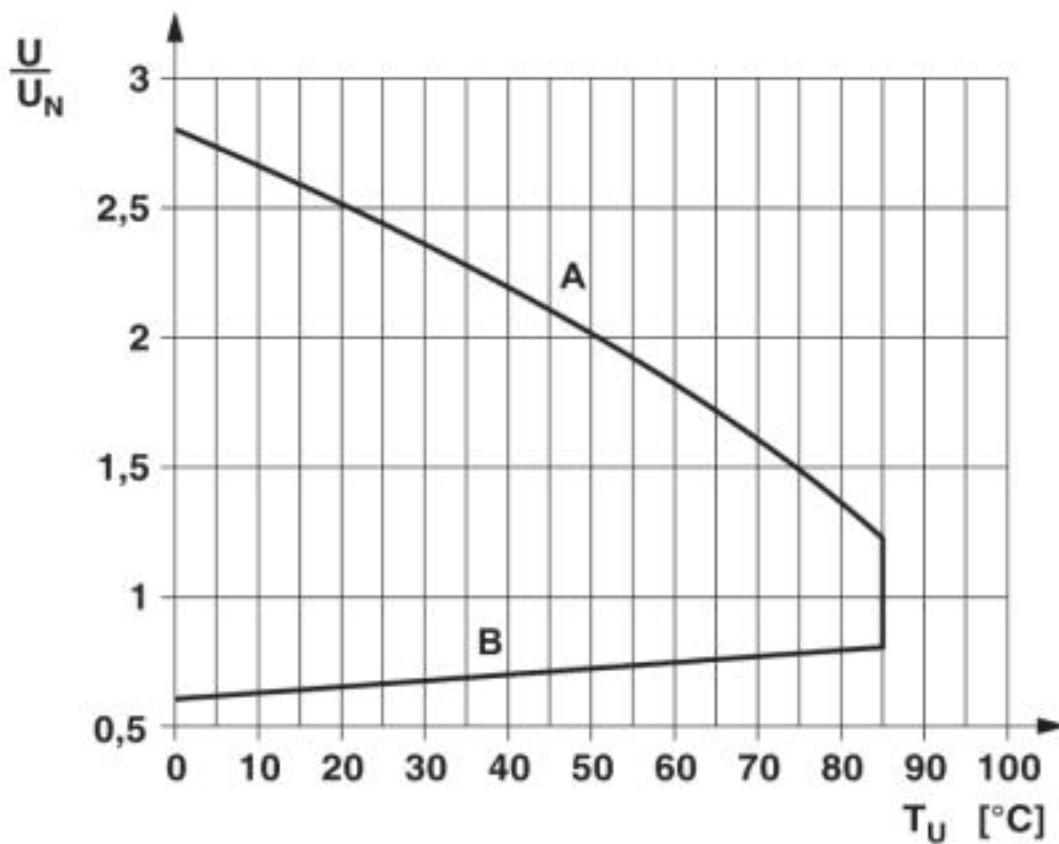
Drilling diagram



a = pitch division 1.25 mm and 1.27 mm

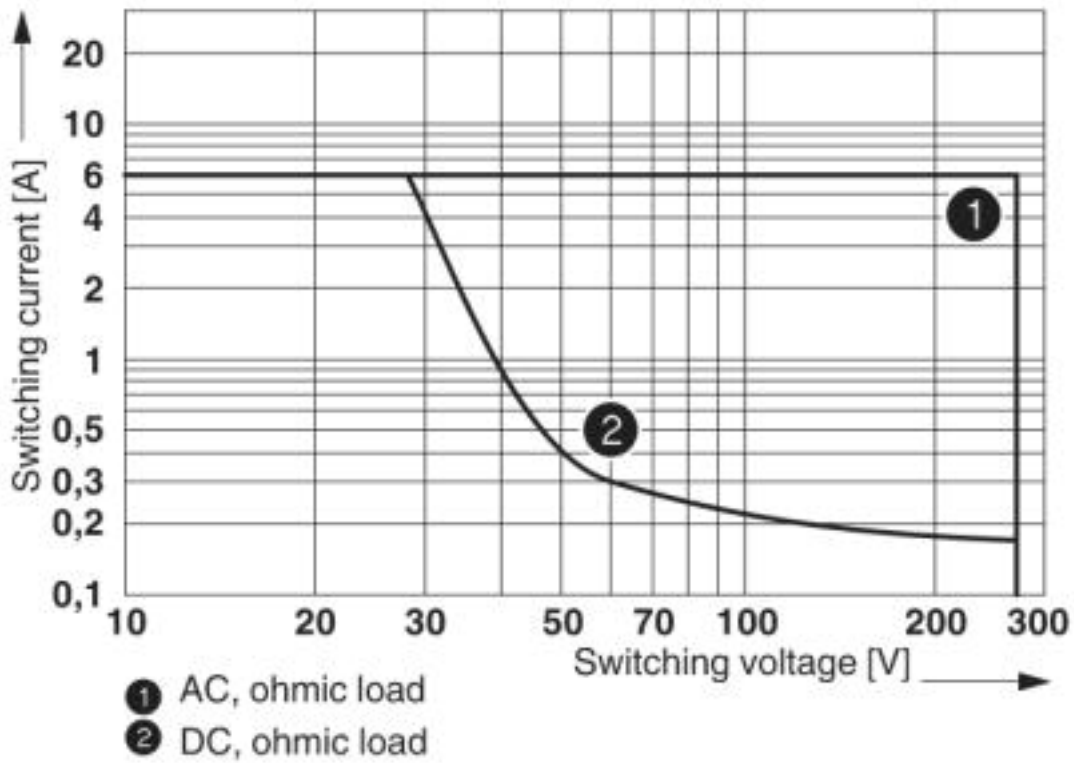
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Diagram



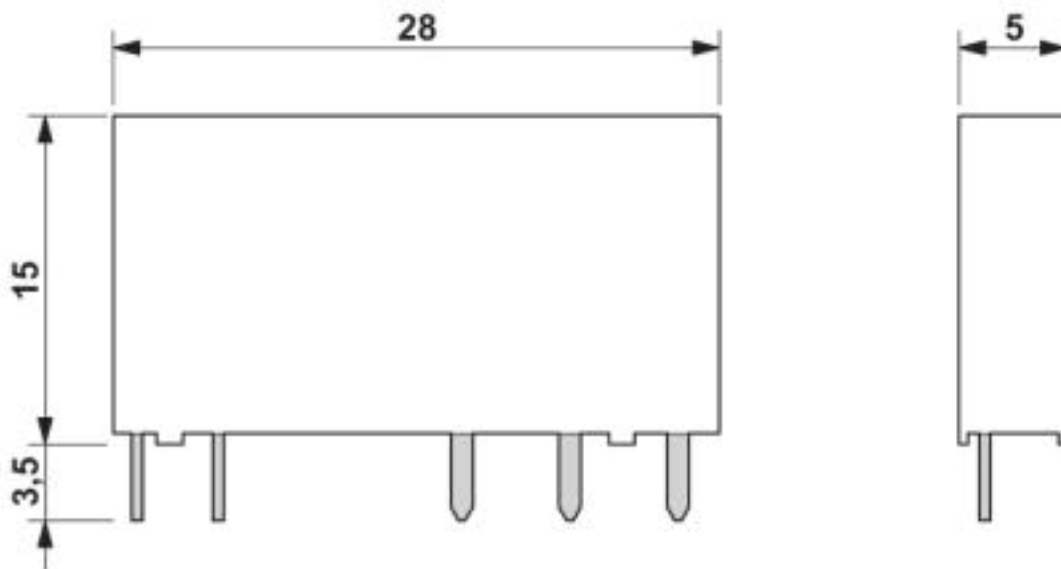
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Diagram



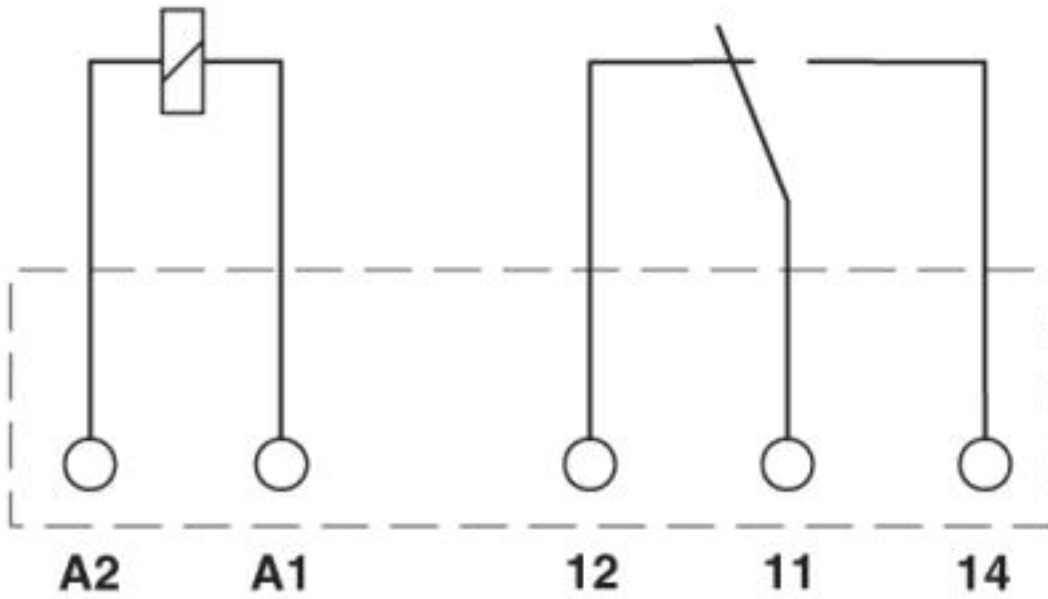
Interrupting rating

Dimensioned drawing



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Circuit diagram



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