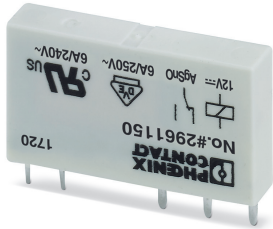


## Single relay - REL-MR- 12DC/21 - 2961150

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Plug-in miniature power relay, with power 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



### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	10 pc
GTIN	 4 017918 159566
GTIN	4017918159566
Weight per Piece (excluding packing)	9.550 g
Custom tariff number	85364900
Country of origin	Czech Republic

### Technical data

#### Dimensions

Width	5 mm
Height	28 mm
Depth	15 mm

#### Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
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# Single relay - REL-MR- 12DC/21 - 2961150

## Technical data

### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 85 °C
Degree of protection	RT III

### Coil side

Nominal input voltage $U_N$	12 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 $\Omega$ $\pm$ 10 % (at 20 °C)
Power dissipation for nominal condition	0.17 W

### Contact side

Contact 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)
Min. switching current	10 mA (at 12 V)
Maximum inrush current	10 A (4 s)
Limiting continuous current	6 A
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)
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)

### General

Test voltage	4 kV AC (50 Hz, 1 min., winding/contact)
Operating mode	100% operating factor

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

## Technical data

### General

Mechanical service life	2x 10 <sup>7</sup> cycles
Mounting position	any
Assembly instructions	in rows with zero spacing

### Connection data

Connection method	Solder connection
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### Standards and Regulations

Connection in acc. with standard	CUL
Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1
Pollution degree	3
Overvoltage category	III

### Conformance/approvals

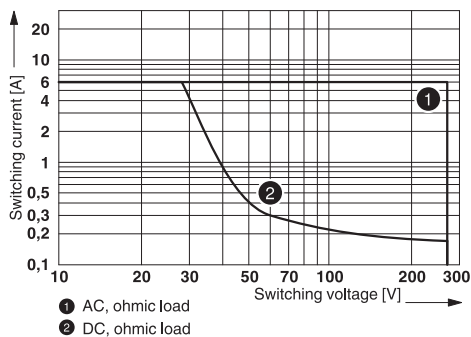
Designation	Corrosive gas test
Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

### Environmental Product Compliance

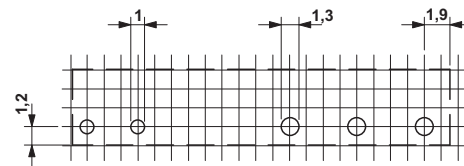
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

Diagram



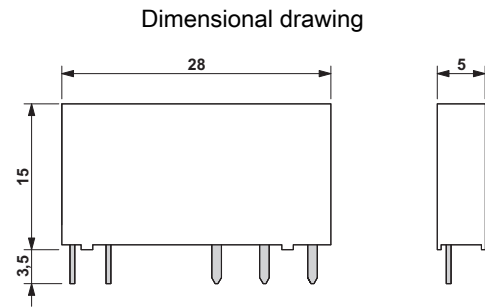
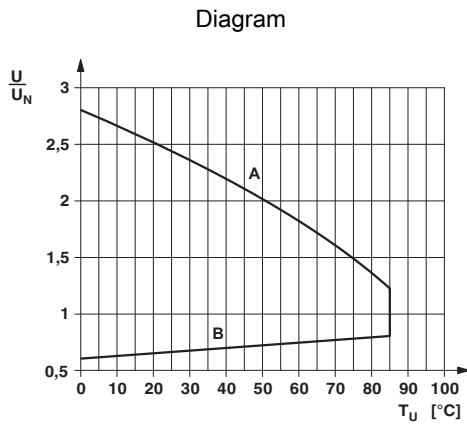
Drilling diagram



a = pitch division 1.25 mm and 1.27 mm

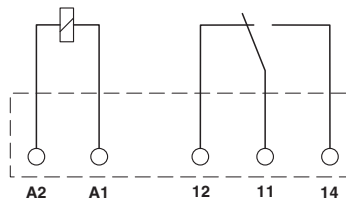
### Interrupting rating

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



Input voltage range

Circuit diagram



## Classifications

eCl@ss

eCl@ss 10.0.1	27371601
eCl@ss 11.0	27371601
eCl@ss 4.0	27371100
eCl@ss 4.1	27371100
eCl@ss 5.0	27371600
eCl@ss 5.1	27371600
eCl@ss 6.0	27371600
eCl@ss 7.0	27371601
eCl@ss 9.0	27371601

ETIM

ETIM 2.0	EC001437
ETIM 3.0	EC001437
ETIM 4.0	EC001437
ETIM 6.0	EC001437

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

## Classifications

### ETIM

ETIM 7.0	EC001437
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### UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121515
UNSPSC 11	39121515
UNSPSC 12.01	39121515
UNSPSC 13.2	39122334
UNSPSC 18.0	39122334
UNSPSC 19.0	39122334
UNSPSC 20.0	39122334
UNSPSC 21.0	39122334

## Approvals

### Approvals

#### Approvals

PRS / EAC / EAC / UL Recognized / UL Recognized / cUL Recognized / cUL Recognized / VDE Zeichengenehmigung / VDE Zeichengenehmigung

#### Ex Approvals

### Approval details

PRS		<a href="http://www.prs.pl/">http://www.prs.pl/</a>	TE/2109/880590/16
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EAC			TR_TS_D_00573_c
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EAC			RU*C- DE.*08.B.00010
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# Single relay - REL-MR- 12DC/21 - 2961150

## Approvals

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 172140
UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 172140
cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 172140
cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 172140
VDE Zeichengenehmigung		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40010212
VDE Zeichengenehmigung		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40032864

## Accessories

### Additional products

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

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

### Accessories

Relay base - PLC-BSP- 12DC/21 - 2967426



6.2 mm PLC basic terminal block with spring-cage 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 - PLC-BSC- 12DC/21 - 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 - RIF-0-BPT/21 - 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

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Relay base - RIF-0-BSC/21 - 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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