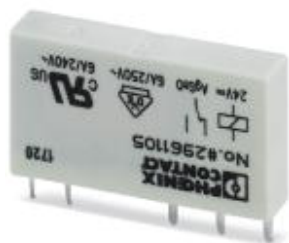


## Single relay - REL-MR- 24DC/21 - 2961105

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Plug-in miniature power relay, with power contact, 1 PDT, input voltage 24 V DC

### Why buy this product

- 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	10 STK
Minimum order quantity	10 STK
GTIN	 4 017918 130893
GTIN	4017918130893
Weight per Piece (excluding packing)	6.686 g
Weight per piece (including packing)	6.760 g
Custom tariff number	85364190
Country of origin	Czech Republic
Sales Key	08

### 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

# Single relay - REL-MR- 24DC/21 - 2961105

## Technical data

### Coil side

Nominal input voltage $U_N$	24 V DC
Input voltage range in reference to $U_N$	see diagram
Typical input current at $U_N$	7 mA
Typical response time	5 ms
Typical release time	2.5 ms
Coil resistance	3390 $\Omega$ $\pm$ 10 % (at 20 °C)
Power dissipation for nominal condition	0.17 W

### Contact side

Contact type	1 PDT
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 in acc. with DIN VDE 0660/IEC 60947	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)

### General

Test voltage relay winding/relay contact	4 kV AC (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	RT III (wash-proof)
Mechanical service life	2 x 10 <sup>7</sup> cycles
Mounting position	any
Assembly instructions	In rows with zero spacing

### Standards and Regulations

Connection in acc. with standard	CUL
Standards/regulations	IEC 60664
	EN 50178

# Single relay - REL-MR- 24DC/21 - 2961105

## Technical data

### Standards and Regulations

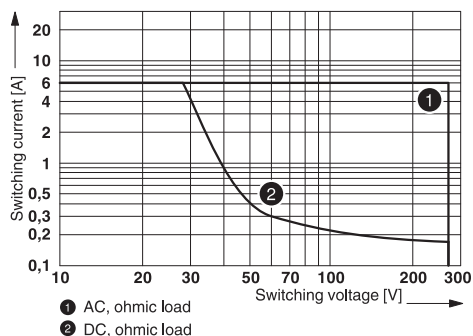
	EN 61810-1
Degree of pollution	3
Overvoltage category	III

### Environmental Product Compliance

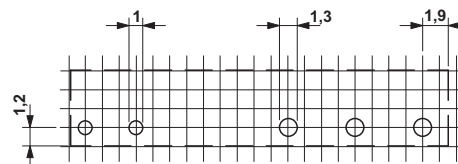
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

Diagram



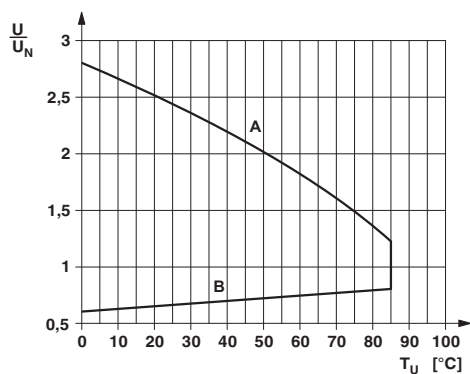
Drilling diagram



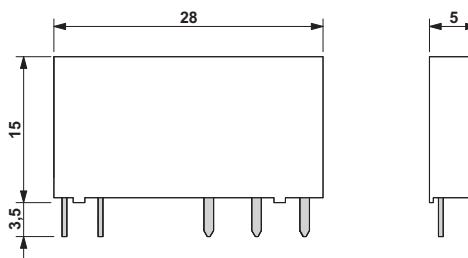
a = pitch division 1.25 mm and 1.27 mm

### Interrupting rating

Diagram

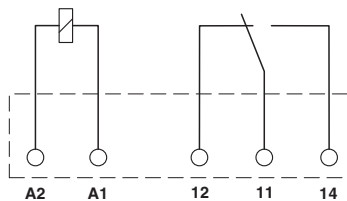


Dimensional drawing



# Single relay - REL-MR- 24DC/21 - 2961105

Circuit diagram



## Classifications

### eCl@ss

eCl@ss 5.0	27371601
eCl@ss 5.1	27371601
eCl@ss 6.0	27371601
eCl@ss 7.0	27371601
eCl@ss 8.0	27371601
eCl@ss 9.0	27371601

### ETIM

ETIM 2.0	EC001437
ETIM 3.0	EC001437
ETIM 4.0	EC001437
ETIM 5.0	EC001437
ETIM 6.0	EC001437

### UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121515
UNSPSC 11	39121515
UNSPSC 12.01	39121515
UNSPSC 13.2	39122334

## Approvals

### Approvals

#### Approvals

UL Recognized / VDE Zeichengenehmigung / cUL Recognized / GL / EAC / UL Recognized / cUL Recognized / VDE approval of drawings / PRS / VDE approval of drawings / cULus Recognized

#### Ex Approvals

# Single relay - REL-MR- 24DC/21 - 2961105

## Approvals

### Approval details

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
VDE Zeichengenehmigung		<a href="http://www.vde.com/en/Institute/OnlineService/VDE-approved-products/Pages/Online-Search.aspx">http://www.vde.com/en/Institute/OnlineService/VDE-approved-products/Pages/Online-Search.aspx</a>	40032864
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
GL		<a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a>	46016-03 HH
EAC			RU C-DE.A*30.B.01082
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
VDE approval of drawings		<a href="http://www.vde.com/en/Institute/OnlineService/VDE-approved-products/Pages/Online-Search.aspx">http://www.vde.com/en/Institute/OnlineService/VDE-approved-products/Pages/Online-Search.aspx</a>	40010212
PRS		<a href="http://www.prs.pl/">http://www.prs.pl/</a>	TE/2109/880590/16
VDE approval of drawings		<a href="http://www.vde.com/en/Institute/OnlineService/VDE-approved-products/Pages/Online-Search.aspx">http://www.vde.com/en/Institute/OnlineService/VDE-approved-products/Pages/Online-Search.aspx</a>	40032864

# Single relay - REL-MR- 24DC/21 - 2961105

## Approvals

cULus Recognized



<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

## Accessories

### Additional products

Relay base - PLC-BPT- 24DC/21 - 2900445



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 PDT, input voltage 24 V DC

Relay base - PLC-BSP- 24DC/21 - 2967219



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 PDT, input voltage 24 V DC

Relay base - PLC-BSC- 24DC/21 - 2966016



6.2 mm PLC basic terminal block with screw connection, without relays or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 24 V DC

Relay base - PLC-BPT- 24UC/21 - 2900446



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 PDT, input voltage 24 V AC/DC

## Single relay - REL-MR- 24DC/21 - 2961105

### Accessories

Relay base - PLC-BSP- 24UC/21 - 2967222



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 PDT, input voltage 24 V AC/DC

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Relay base - PLC-BSC- 24UC/21 - 2966029



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 PDT, input voltage 24 V AC/DC

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Basic terminal block - PLC-BSC- 36DC/21 - 2966964

Basic terminal block

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Relay base - PLC-BPT- 48DC/21 - 2900447



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 PDT, input voltage 48 V DC

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Relay base - PLC-BSP- 48DC/21 - 2967329



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 PDT, input voltage 48 V DC

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Relay base - PLC-BSC- 48DC/21 - 2966090



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 PDT, input voltage 48 V DC

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## Single relay - REL-MR- 24DC/21 - 2961105

### Accessories

Relay base - PLC-BPT- 24DC/ 1/SEN - 2900262



6.2 mm PLC basic terminal block for input functions with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 24 V DC

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Relay base - PLC-BSP- 24DC/ 1/SEN - 2967206



6.2 mm PLC basic terminal block for input functions with spring-cage connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 24 V DC

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Relay base - PLC-BSC- 24DC/ 1/SEN - 2966061



6.2 mm PLC basic terminal block for input functions with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 24 V DC

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Relay base - PLC-BPT- 24UC/ 1/ACT - 2900450



6.2 mm PLC basic terminal block for output functions with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with load return line connection (BB), 1 N/O contact, input voltage 24 V AC/DC

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Relay base - PLC-BSP- 24UC/ 1/ACT - 2982809



6.2 mm PLC basic terminal block for output functions with spring-cage connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with load return line connection (BB), 1 N/O contact, input voltage 24 V AC/DC

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## Single relay - REL-MR- 24DC/21 - 2961105

### Accessories

Relay base - PLC-BSC- 24UC/ 1/ACT - 2982799



6.2 mm PLC basic terminal block for output functions with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with load return line connection (BB), 1 N/O contact, input voltage 24 V AC/DC

Relay base - PLC-BSC- 24DC/21/SO46 - 2980458



6.2 mm PLC basic terminal block with protection against interference currents and interference voltages on the control side, with screw connection, without relay or solid-state relay, for mounting on NS 35/7,5 DIN rail, with increased input current consumption, 1 PDT, 24 V DC input voltage

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



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

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