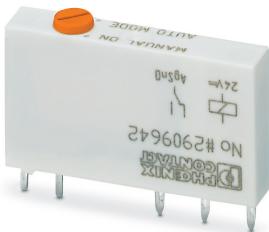


## Single relay - REL-MR- 24DC/21/MS - 2909642

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Plug-in miniature power relay, with power contact, 1 changeover contact, manual operation, 24 V DC input voltage



### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	10 pc
GTIN	 4 055626 377674
GTIN	4055626377674
Weight per Piece (excluding packing)	6.000 g
Custom tariff number	85364190
Country of origin	Czech Republic

### Technical data

#### Dimensions

Width	5 mm
Height	28 mm
Depth	16 mm

#### Ambient conditions

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

#### Coil side

Nominal input voltage $U_N$	24 V DC
-----------------------------	---------

# Single relay - REL-MR- 24DC/21/MS - 2909642

## Technical data

### Coil side

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	$3390 \Omega \pm 10\% \text{ (at } 20^\circ\text{C)}$
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
Mechanical service life	$1 \times 10^7$ cycles
Mounting position	any
Assembly instructions	in rows with zero spacing

### Connection data

# Single relay - REL-MR- 24DC/21/MS - 2909642

## Technical data

### Connection data

Connection method	Solder connection
-------------------	-------------------

### Standards and Regulations

Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1
Pollution degree	3
Overvoltage category	III

### Conformance/approvals

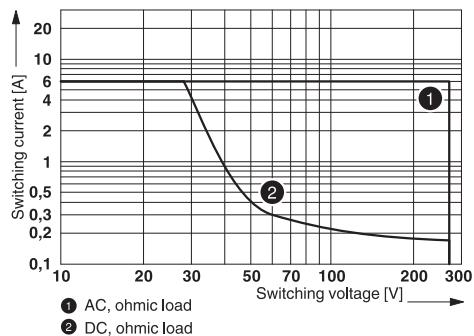
Designation	Corrosive gas test
Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

### Environmental Product Compliance

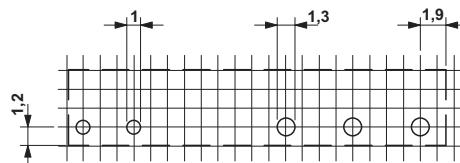
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

Diagram



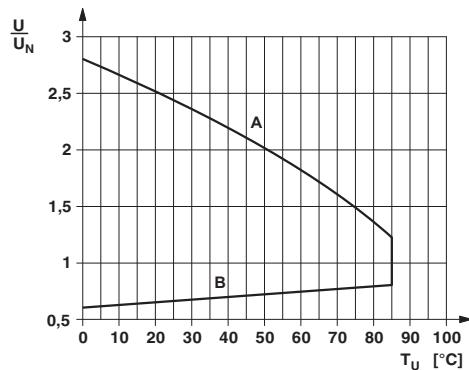
Drilling diagram



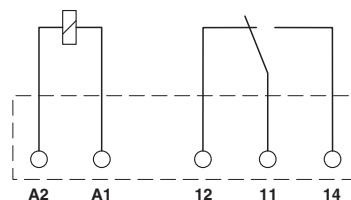
Interrupting rating

## Single relay - REL-MR- 24DC/21/MS - 2909642

Diagram



Circuit diagram



### Classifications

#### eCl@ss

eCl@ss 10.0.1	27371601
eCl@ss 11.0	27371601
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
ETIM 7.0	EC001437

#### 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

## Single relay - REL-MR- 24DC/21/MS - 2909642

### Approvals

#### Approvals

##### Approvals

UL Recognized / cUL Recognized / EAC / EAC / VDE Zeichengenehmigung / cULus Recognized

##### Ex Approvals

#### Approval details

UL Recognized



<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm> FILE E 228652

cUL Recognized



<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm> FILE E 228652

EAC



TR\_TS\_D\_00573\_c

EAC



RU\*C-  
DE.\*08.B.00010

VDE Zeichengenehmigung



[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)

40032864

cULus Recognized



### Accessories

### Additional products

## Single relay - REL-MR- 24DC/21/MS - 2909642

### Accessories

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 changeover contact, input voltage 24 V DC

---

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



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 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 changeover contact, input voltage 24 V AC/DC

---

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 changeover contact, input voltage 24 V AC/DC

---

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 changeover contact, input voltage 48 V DC

## Single relay - REL-MR- 24DC/21/MS - 2909642

### Accessories

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 changeover contact, input voltage 48 V DC

---

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

---

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

---

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

---

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

## Single relay - REL-MR- 24DC/21/MS - 2909642

### Accessories

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



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

---

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

---

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