

Single relay - REL-MR- 24AC/21-21/MS - 2987956

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 relay, with power contact, 2 changeover contacts, test button, mechanical switching position indicator, status LED, input voltage 24 V AC

Your advantages

- ✓ With detectable manual operation
- ✓ Switching current of up to 16 A
- ✓ DC types with integrated freewheeling diode
- ✓ Integrated status LED
- ✓ Mechanical switch position indicator



Key Commercial Data

Packing unit	1 pc
Minimum order quantity	10 pc
GTIN	 4 046356 480666
GTIN	4046356480666
Weight per Piece (excluding packing)	3.600 g
Custom tariff number	85364190
Country of origin	China

Technical data

Dimensions

Width	12.7 mm
Height	29 mm
Depth	25 mm

Single relay - REL-MR- 24AC/21-21/MS - 2987956

Technical data

Ambient conditions

Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Coil side

Nominal input voltage U_N	24 V AC
Mains frequency	50/60 Hz
Typical input current at U_N	32 mA
Typical response time	3 ms ... 12 ms (depending on phase relation)
Typical release time range	2 ms ... 8 ms (depending on phase relation)
Power dissipation for nominal condition	0.77 W

Contact side

Contact type	2 changeover contacts
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	12 V (at 10 mA)
Min. switching current	10 mA (at 12 V)
Maximum inrush current	16 A (20 ms)
Limiting continuous current	8 A
Interrupting rating (ohmic load) max.	2000 VA (for 250 V AC)
Switching capacity	1 A (at 24 V, DC13)
	1.5 A (at 24 V, AC15)
	1.5 A (at 120 V, AC15)
	1.5 A (at 240 V, AC15)
Motor load according to UL 508	1/4 HP, 120 V AC (N/O contact)
	1/2 HP, 240 V AC (N/O contact)
	1/4 HP, 120 V AC (N/C contact)
	1/3 HP, 240 V AC (N/C contact)

General

Test voltage	5 kV AC (50 Hz, 1 min., winding/contact)
	2.5 kV AC (50 Hz, 1 min., contact/contact)
Mechanical service life	5x 10 ⁶ cycles
Service life electrical	see diagram

Connection data

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

Standards and Regulations

Single relay - REL-MR- 24AC/21-21/MS - 2987956

Technical data

Standards and Regulations

Connection in acc. with standard	CUL
Standards/regulations	EN 61810-1
	VDE 0435-201
	EN 50178

Conformance/approvals

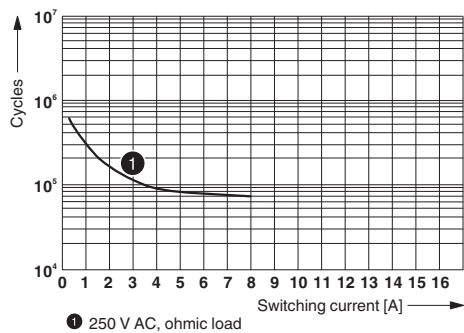
Designation	Corrosive gas test
Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

Environmental Product Compliance

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

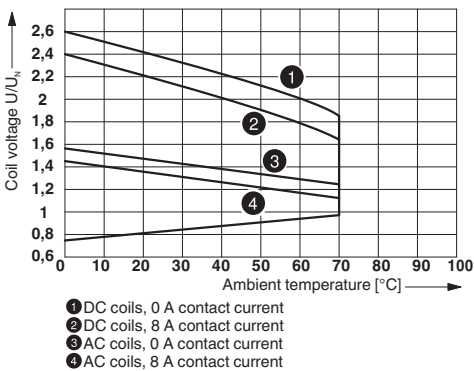
Drawings

Diagram



Electrical service life

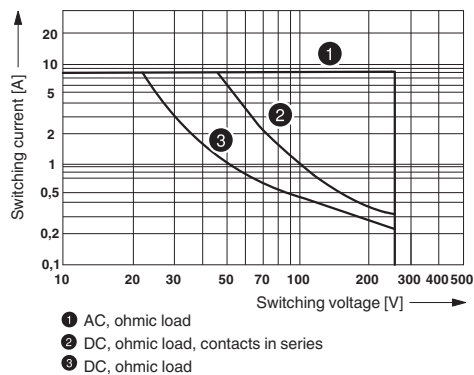
Diagram



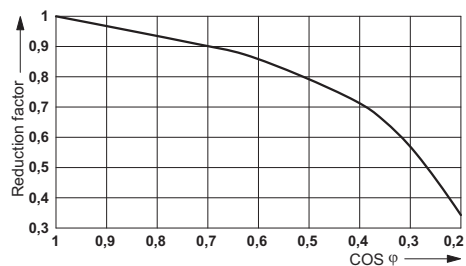
Operating voltage range

Single relay - REL-MR- 24AC/21-21/MS - 2987956

Diagram



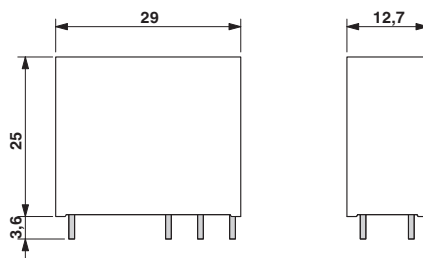
Diagram



Interrupting rating

Service life reduction factor with various cos phi

Dimensional drawing



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- 24AC/21-21/MS - 2987956

Classifications

ETIM

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

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 195083
---------------	---	---	---------------

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 195083
----------------	---	---	---------------

EAC		TR_TS_D_00573_c
-----	---	-----------------

Single relay - REL-MR- 24AC/21-21/MS - 2987956

Approvals

EAC		RU*C- DE.*08.B.00010
VDE Zeichengenehmigung		http://www2.vde.com/de/Institut/Online-Service/ VDE-gepruefteProdukte/Seiten/Online-Suche.aspx
cULus Recognized		

Accessories

Additional products

Relay base - RIF-1-BPT/2X21 - 2900931



Relay base RIF-1..., for miniature power relay with 1 or 2 changeover contacts or solid-state relays of the same design, Push-in connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

Relay base - RIF-1-BSC/2X21 - 2900930



RIF-1... relay base, for miniature power relay with 1 or 2 changeover contacts or identical solid-state relays, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5