

Single relay - REL-MR-230AC/21-21/MS - 2987972

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 PDTs, test button, mechanical switch position indicator, status LED, coil voltage 230 V AC

Your advantages

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



Key Commercial Data

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	
GTIN	4046356480987

Technical data

Dimensions

Width	12.7 mm
Height	29 mm
Depth	25 mm

Ambient conditions

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

Coil side

Nominal input voltage U_N	230 V AC
Mains frequency	50/60 Hz

Single relay - REL-MR-230AC/21-21/MS - 2987972

Technical data

Coil side

Typical input current at U_N	3.5 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	0.81 W

Contact side

Contact type	2 PDT
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 relay winding/relay contact	5 kV AC (50 Hz, 1 min.)
Test voltage relay contact/relay contact	2.5 kV AC (50 Hz, 1 min.)
Mechanical service life	5x 10 ⁶ cycles
Service life, electrical	see diagram

Connection data

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

Standards and Regulations

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

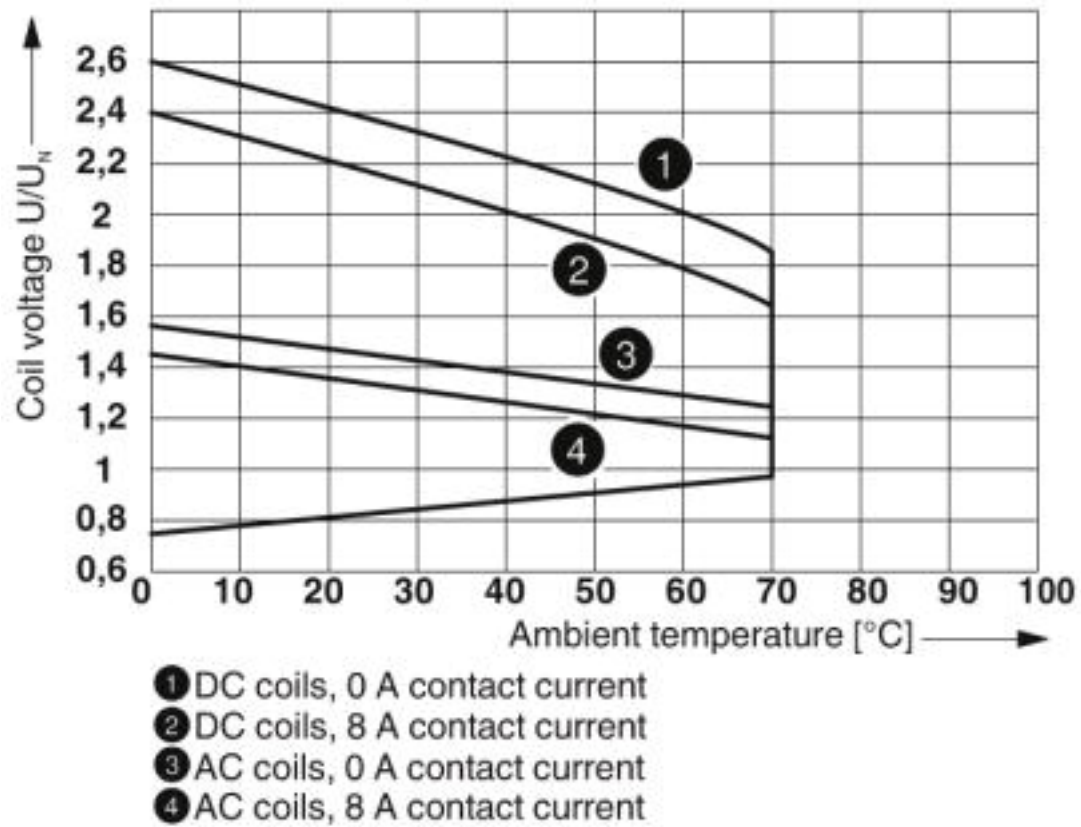
Environmental Product Compliance

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

Single relay - REL-MR-230AC/21-21/MS - 2987972

Drawings

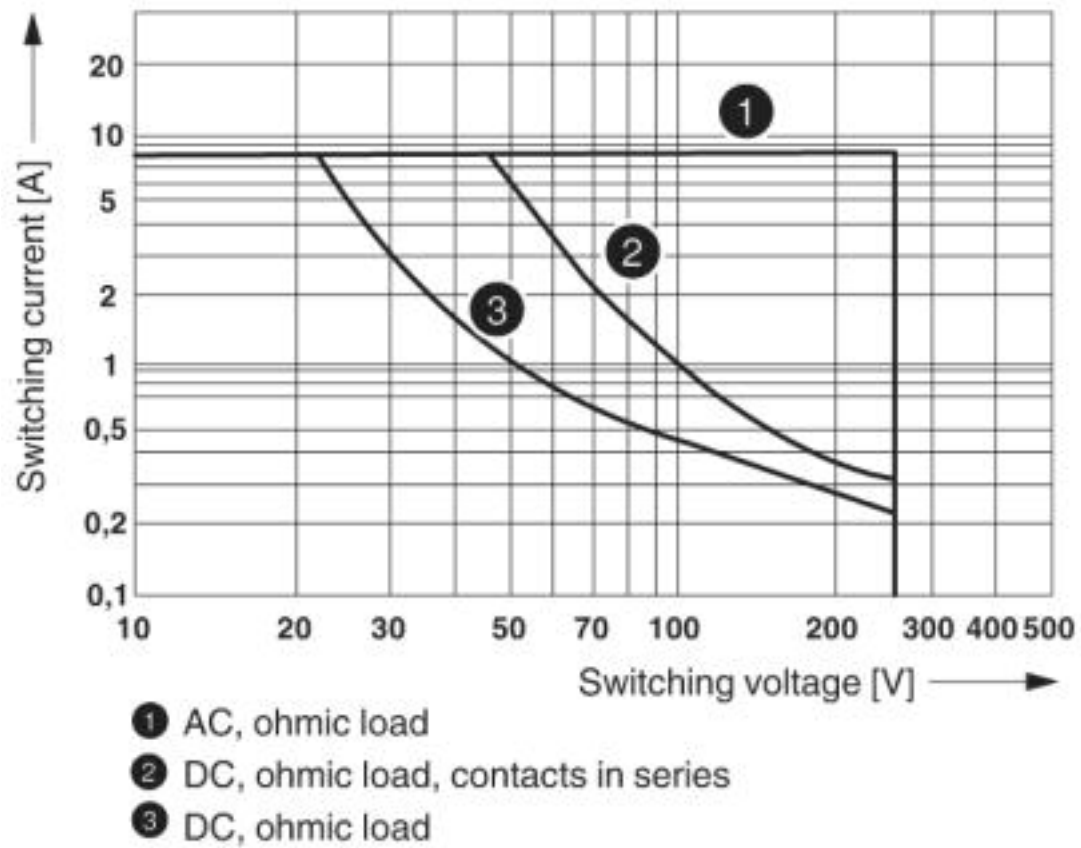
Diagram



Operating voltage range

Single relay - REL-MR-230AC/21-21/MS - 2987972

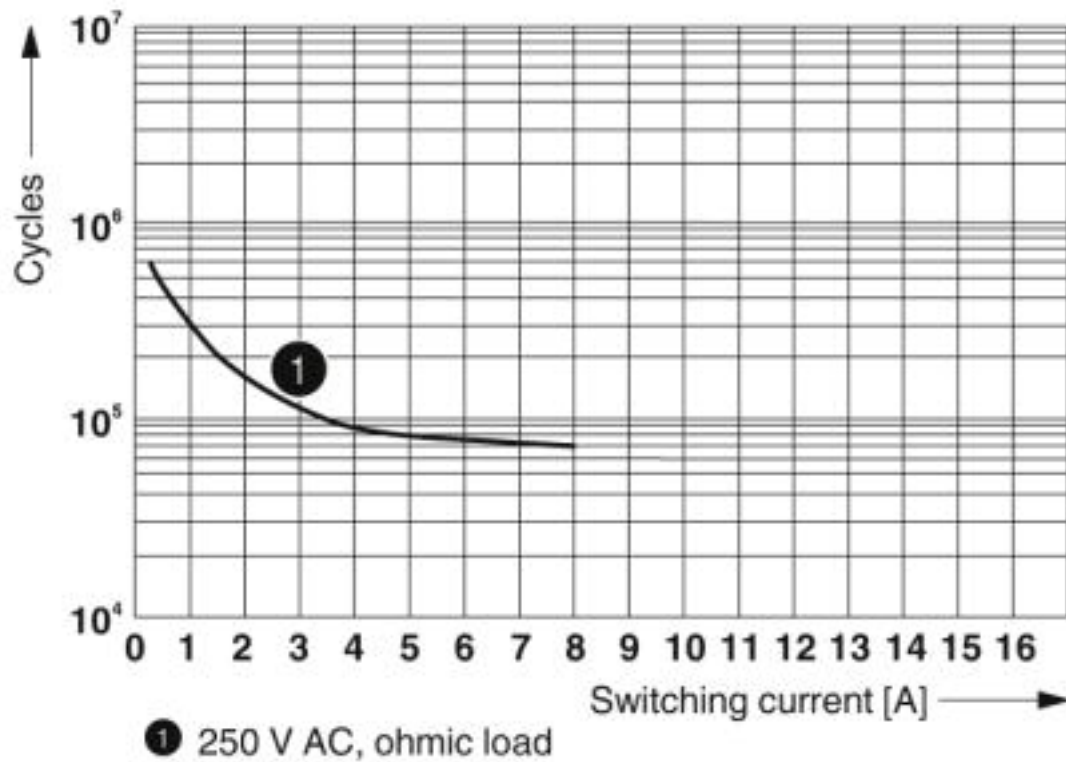
Diagram



Interrupting rating

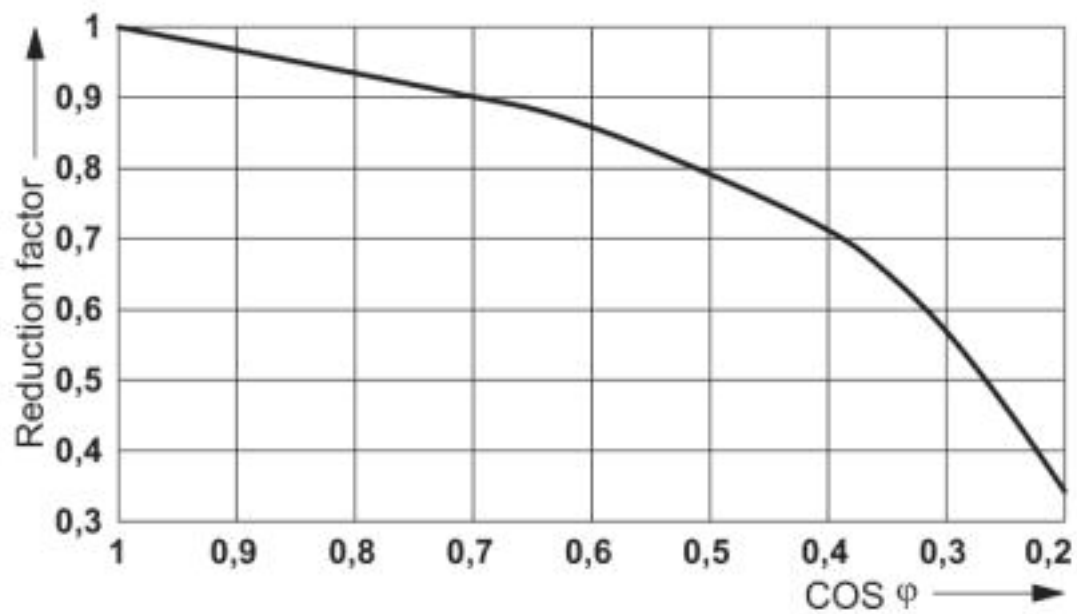
Single relay - REL-MR-230AC/21-21/MS - 2987972

Diagram



Electrical service life

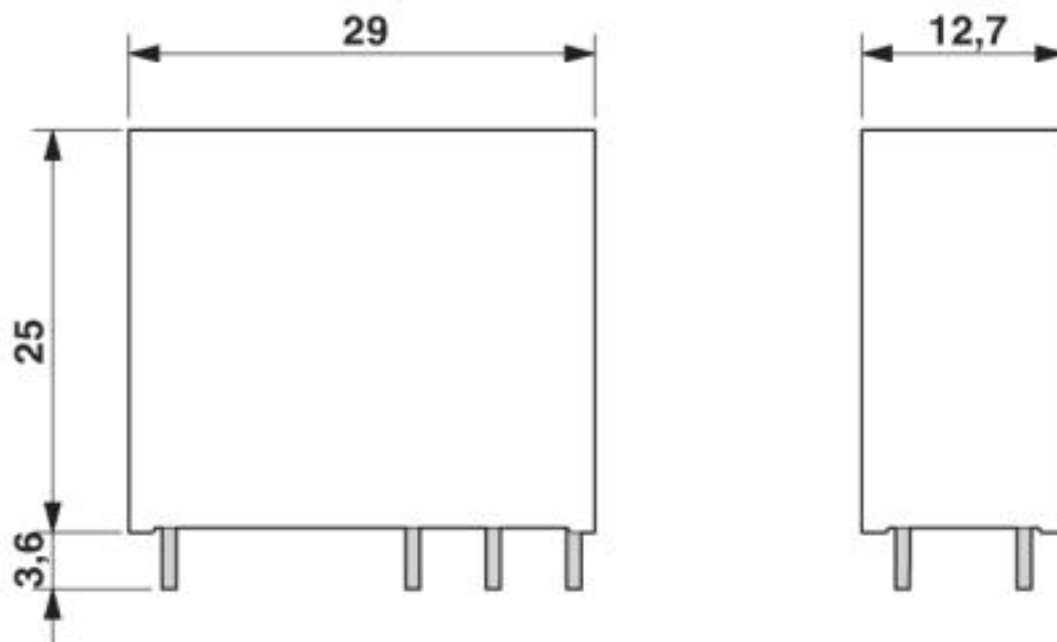
Diagram



Service life reduction factor with various cos phi

Single relay - REL-MR-230AC/21-21/MS - 2987972

Dimensional drawing



Classifications

eCl@ss

eCl@ss 10.0.1	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 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
ETIM 7.0	EC001437

UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121515
UNSPSC 11	39121515

Single relay - REL-MR-230AC/21-21/MS - 2987972

Classifications

UNSPSC

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 / VDE Zeichengenehmigung / EAC / EAC / 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
VDE Zeichengenehmigung		http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40027210
EAC			TR_TS_D_00573_c
EAC			RU*C- DE.*08.B.00010

Single relay - REL-MR-230AC/21-21/MS - 2987972

Approvals

cULus Recognized



Accessories

Additional products

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



RIF-1... relay base, for miniature power relay with 1 or 2 PDTs or solid-state relays of the same design, push-in connection, plug-in option for input/suppressor 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

Relay base - PR1-BSC3/2X21 - 2833521



Relay base PR1..., for miniature power relay or miniature switching relay with 1 or 2 PDT or solid-state relay of same construction, 1/3 level design, screw connections, connection facility for input/interference suppression modules

Relay base - PR1-BSP3/2X21 - 2833534



Relay base PR1..., for miniature power relay or miniature switching relay with 1 or 2 PDT or solid-state relay of same construction, 1/3 level design, spring-cage connections, connection facility for input/interference suppression modules

Phoenix Contact 2020 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>