

Single relay - REL-MR- 24DC/21-21AU/MS - 2987985

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Plug-in miniature relay, with multi-layer contact with hard gold coating, 2 PDTs, test button, mechanical switch position indicator, status LED, freewheeling diode, polarity A1+, A2-, input voltage 24 V DC

Your advantages

- With detectable manual operation
- DC types with integrated freewheeling diode
- Integrated status LED
- Mechanical switch position indicator



Key Commercial Data

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	 4 046356 480994
GTIN	4046356480994
Weight per Piece (excluding packing)	18.410 g
Weight per piece (including packing)	18.900 g
Custom tariff number	85364190
Country of origin	China

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

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Technical data

Coil side

Nominal input voltage U_N	24 V DC
Typical input current at U_N	18 mA
Typical response time	9 ms
Typical release time	6 ms
Power dissipation for nominal condition	0.43 W

Contact side

Contact type	2 PDT
Type of switch contact	Single contact
Contact material	AgNi, hard gold-plated
Maximum switching voltage	30 V AC 36 V DC
Minimum switching voltage	12 V (At 1 mA)
Min. switching current	1 mA (at 12 V)
Maximum inrush current	50 mA
Limiting continuous current	50 mA
Switching capacity	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)

Contact side (with destroyed gold layer)

Contact material	AgNi
Note	the following values are applicable if a gold layer is destroyed
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	12 V (at 10 mA)
Limiting continuous current	8 A
Maximum inrush current	16 A (20 ms)
Min. switching current	10 mA (at 12 V)
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)

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	5×10^6 cycles
Service life, electrical	see diagram

Connection data

Connection method	Solder connection
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Technical data

Standards and Regulations

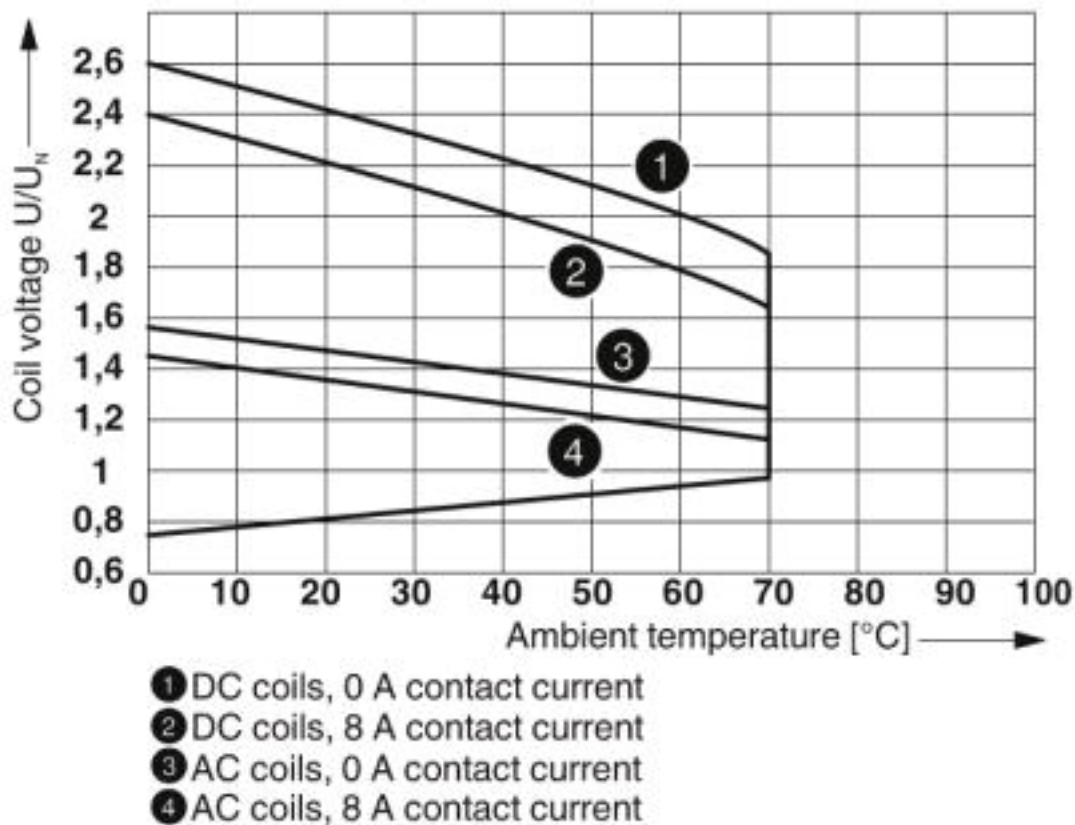
Connection in acc. with standard	CUL
Standards/regulations	EN 61810-1
	VDE 0435-201
	EN 50178

Environmental Product Compliance

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

Drawings

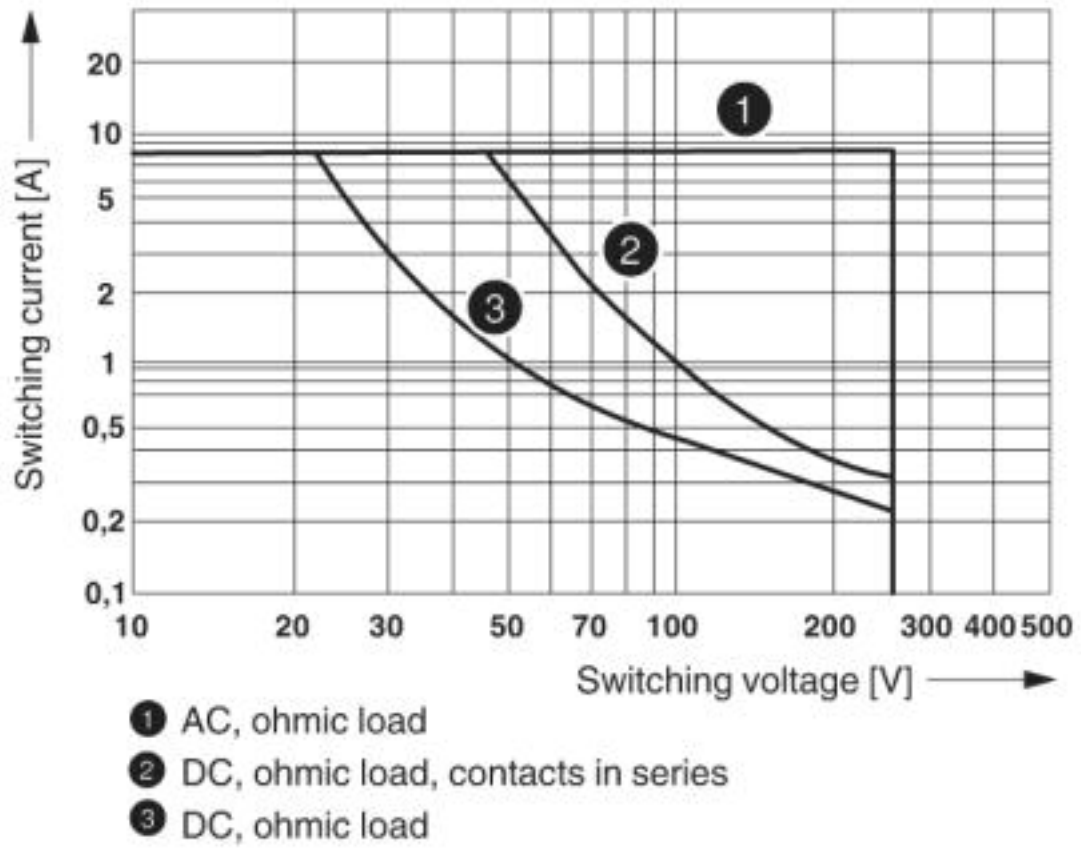
Diagram



Operating voltage range

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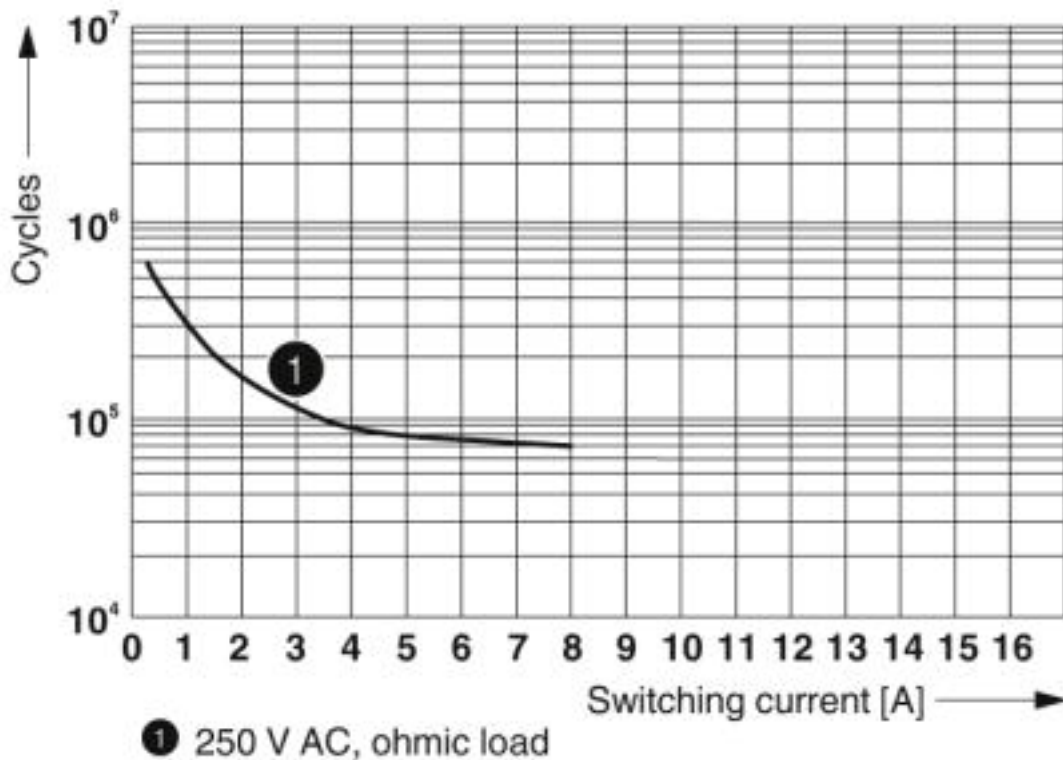
Diagram



Interrupting rating

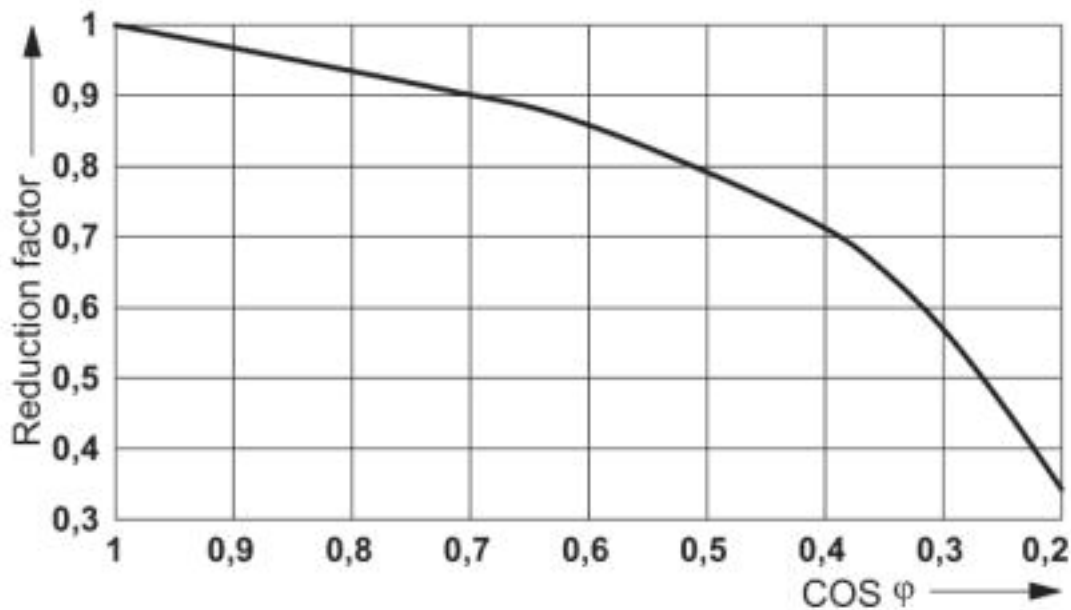
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Diagram



Electrical service life

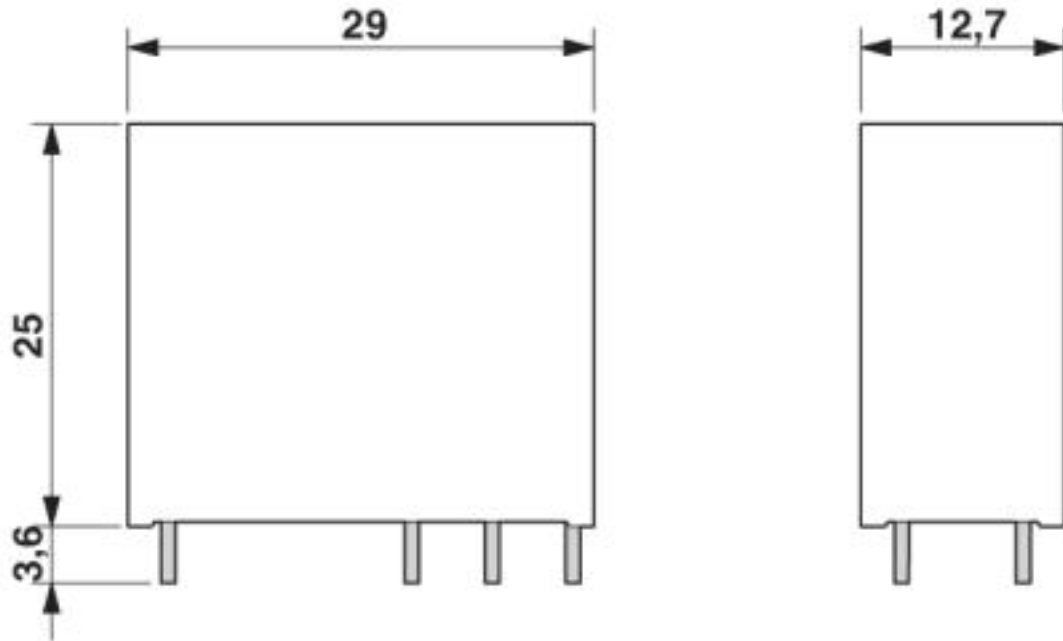
Diagram



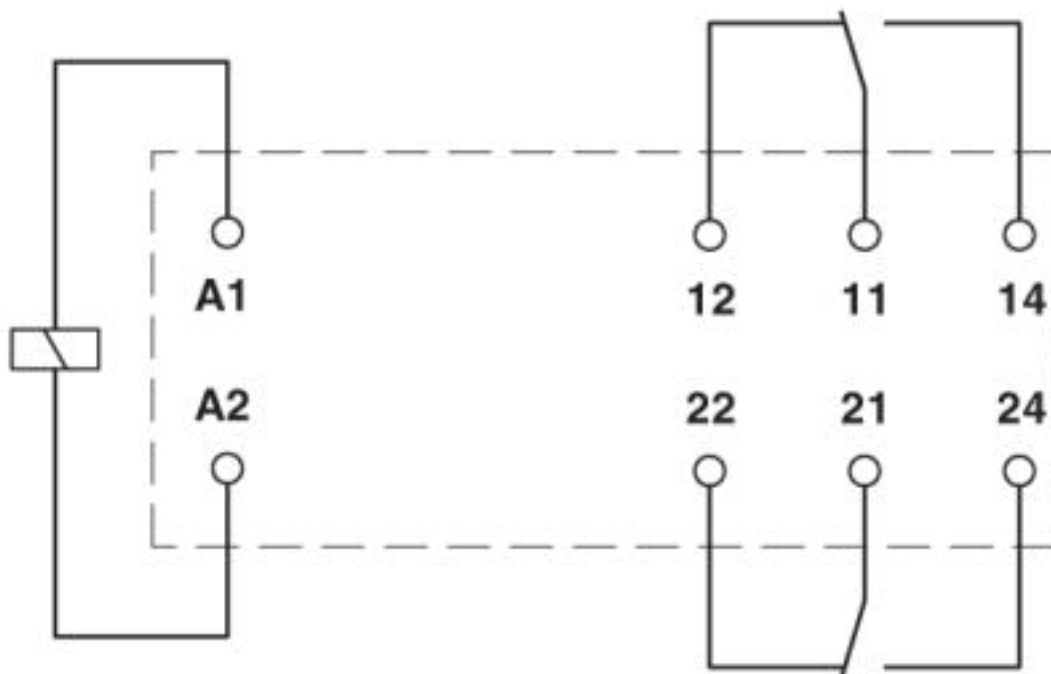
Service life reduction factor with various cos phi

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Dimensional drawing



Circuit diagram



Classifications

eCl@ss

eCl@ss 4.0

27371100

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Classifications

eCl@ss

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
UNSPSC 12.01	39121515
UNSPSC 13.2	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
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Approvals

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 195083
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VDE Zeichengenehmigung		http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40027210
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EAC			TR_TS_D_00573_c
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EAC			TR_TS_S_00010_c
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cULus Recognized			
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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

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Accessories

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
