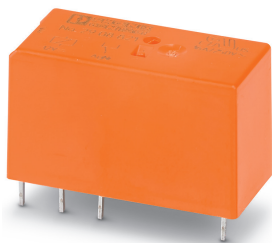


Single relay - REL-MR-12DC/21HC/EX - 2908821

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Plug-in miniature power relay, RT III sealed with power contacts, 1 changeover contact, input voltage: 12 V DC, in connection with the corresponding PLC base approved in accordance with ATEX/IECEX (zone 2) and Ex zone class I, div. 2.

Your advantages

- Switching current of up to 16 A
- RT III-proof (wash-proof)



Key Commercial Data

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	 4 0 5 5 6 2 6 3 4 5 1 5 4
GTIN	4055626345154

Technical data

Dimensions

Width	12.7 mm
Height	29 mm
Depth	15.7 mm

Ambient conditions

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

Coil side

Nominal input voltage U_N	12 V DC
Input voltage range in reference to U_N	see diagram
Typical input current at U_N	33 mA
Typical response time	7 ms

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Technical data

Coil side

Typical release time	3 ms
Coil resistance	360 Ω ±10 % (at 20 °C)
Power dissipation for nominal condition	0.4 W

Contact side

Contact type	1 changeover contact
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	50 A (20 ms)
Limiting continuous current	16 A
Interrupting rating (ohmic load) max.	384 W (at 24 V DC)
	58 W (at 48 V DC)
	48 W (at 60 V DC)
	50 W (at 110 V DC)
	80 W (at 220 V DC)
	4000 VA (for 250 V AC)
Switching capacity	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	0.2 A (at 250 V, DC13)
	6 A (at 24 V, AC15)
	6 A (at 120 V, AC15)
	6 A (at 250 V, AC15)

General

Test voltage	5 kV AC (50 Hz, 1 min., winding/contact)
Operating mode	100% operating factor
Mechanical service life	3x 10 ⁷ cycles
Service life, electrical	see diagram
Mounting position	any
Assembly instructions	Can be aligned without spacing (> 70 °C ≥ 2.5 mm)

Connection data

Connection method	Solder connection
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Standards and Regulations

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

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Technical data

Conformance/approvals

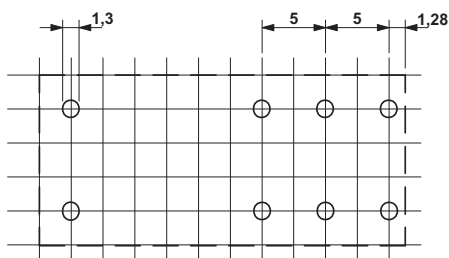
Designation	Corrosive gas test
Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

Environmental Product Compliance

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

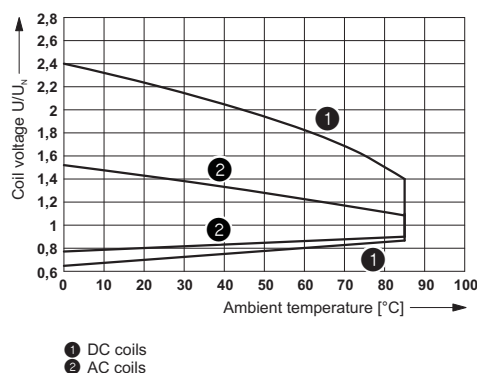
Drawings

Drilling diagram



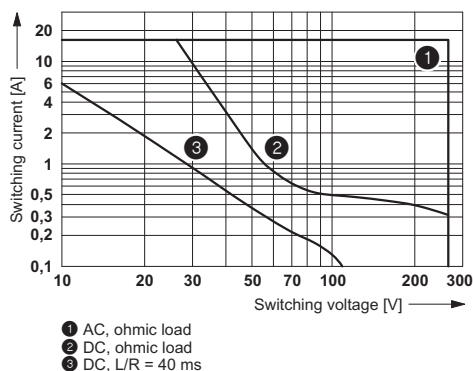
a = pitch division 2.5 mm

Diagram



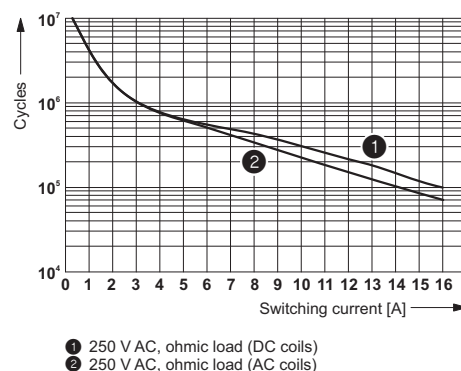
Operating voltage range

Diagram



Interrupting rating

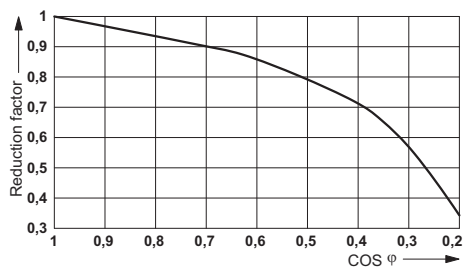
Diagram



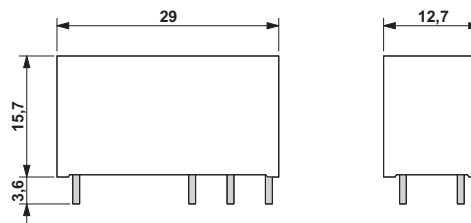
Electrical service life

Single relay - REL-MR-12DC/21HC/EX - 2908821

Diagram

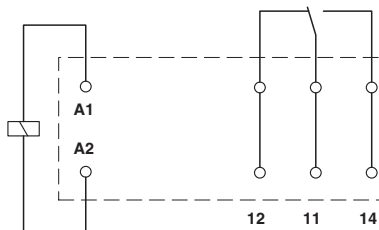


Dimensional drawing



Service life reduction factor with various cos phi

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 5.0	EC001437
ETIM 6.0	EC001437
ETIM 7.0	EC001437

UNSPSC

UNSPSC 13.2	39122334
UNSPSC 18.0	39122334

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Classifications

UNSPSC

UNSPSC 19.0	39122334
UNSPSC 20.0	39122334
UNSPSC 21.0	39122334

Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / 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
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cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 228652
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EAC			RU C- DE.A*30.B.01082
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VDE Zeichengenehmigung		http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40007758
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cULus Recognized			
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