



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



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.

Why buy this product

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

RoHS

Key Commercial Data

Packing unit	10 STK
Minimum order quantity	10 STK
GTIN	 4 055626 345154
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

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
Typical release time	3 ms

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Technical data

Coil side

Coil resistance	360 Ω $\pm$ 10 % (at 20 °C)
Power dissipation for nominal condition	0.4 W

Contact side

Contact type	1 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	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 in acc. with DIN VDE 0660/IEC 60947	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 relay winding/relay contact	5 kV AC (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	RT III (wash-proof)
Mechanical service life	3x 10 ⁷ cycles
Mounting position	any
Assembly instructions	Can be aligned without spacing (> 70 °C $\geq$ 2.5 mm)

Standards and Regulations

Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1
Degree of pollution	3
Overvoltage category	III

Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
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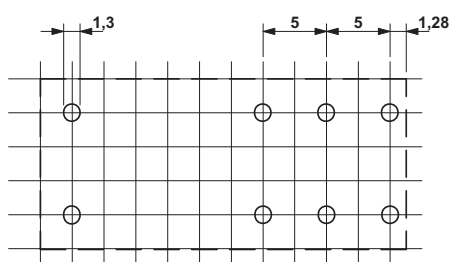
Technical data

Environmental Product Compliance

For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

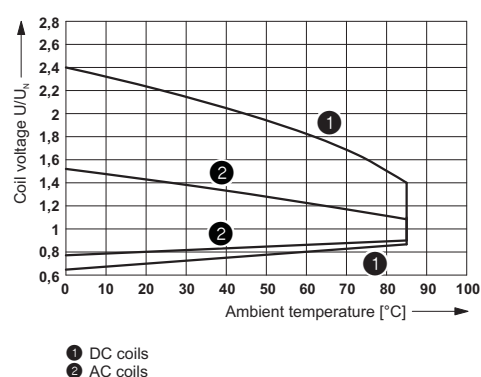
Drawings

Drilling diagram



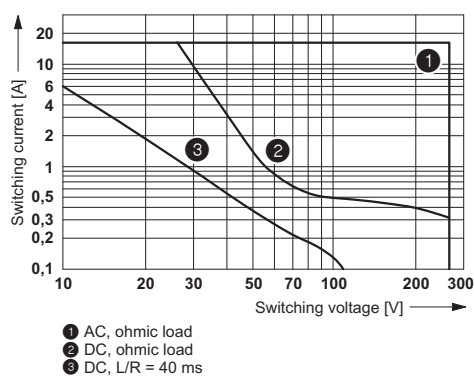
a = pitch division 2.5 mm

Diagram



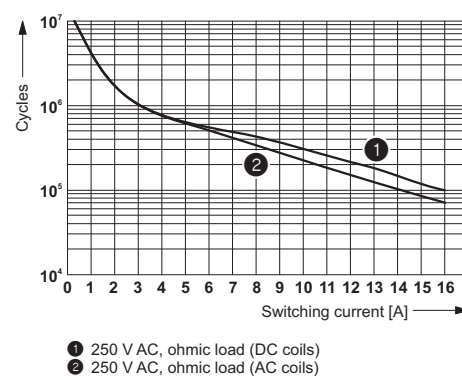
Operating voltage range

Diagram



Interrupting rating

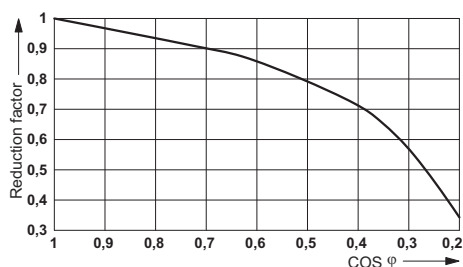
Diagram



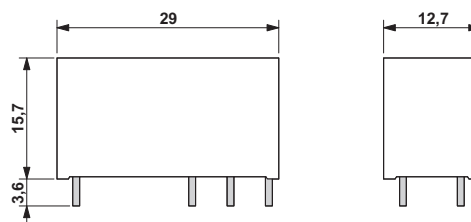
Electrical service life

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Diagram

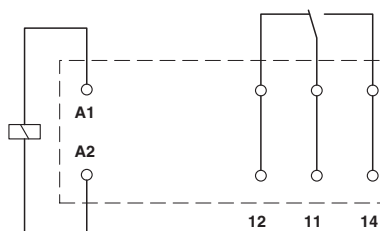


Dimensional drawing



Service life reduction factor with various cos phi

Circuit diagram



Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / VDE approval of drawings / EAC / 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>

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Approvals

VDE approval of drawings



<http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx>

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EAC



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