

Single relay - REL-MR-110DC/21HC - 2961338

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Plug-in miniature power relay, with power contact for high continuous currents, 1 changeover contact, input voltage 110 V DC

Your advantages

- Switching current of up to 16 A



Key Commercial Data

Packing unit	1 pc
Minimum order quantity	10 pc
GTIN	 4 017918 187590
GTIN	4017918187590
Weight per Piece (excluding packing)	16.940 g
Custom tariff number	85364900
Country of origin	Austria

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 II

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Technical data

Coil side

Nominal input voltage U_N	110 V DC
Typical input current at U_N	4.1 mA
Typical response time	7 ms
Typical release time	3 ms
Coil resistance	26600 Ω $\pm 15\%$ (at 20 °C)
Power dissipation for nominal condition	0.45 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)
Motor load according to UL 508	1/2 HP, 120 V AC (N/O contact)
	1 HP, 240 V AC (N/O contact)
	1/3 HP, 120 V AC (N/C contact)
	3/4 HP, 240 V AC (N/C contact)
	1/4 HP, 200 ... 250 V AC

General

Test voltage	5 kV AC (50 Hz, 1 min., winding/contact)
Operating mode	100% operating factor
Mechanical service life	3×10^7 cycles

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Technical data

General

Service life, electrical	see diagram
Mounting position	any
Assembly instructions	Can be aligned without spacing ($> 70^{\circ}\text{C} \geq 2.5\text{ mm}$)

Connection data

Connection method	Solder connection
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Standards and Regulations

Connection in acc. with standard	CUL
Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1
Pollution degree	3
Overvoltage category	III

Conformance/approvals

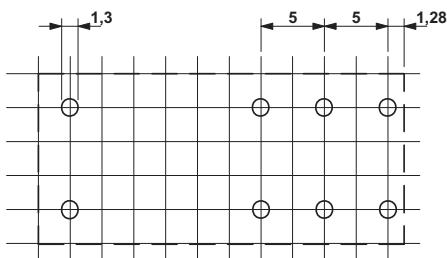
Designation	Corrosive gas test
Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

Environmental Product Compliance

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

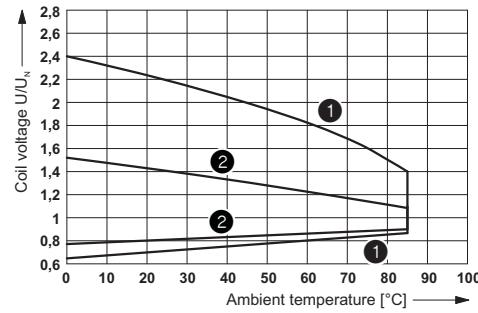
Drawings

Drilling diagram



$a = \text{pitch division } 2.5\text{ mm}$

Diagram

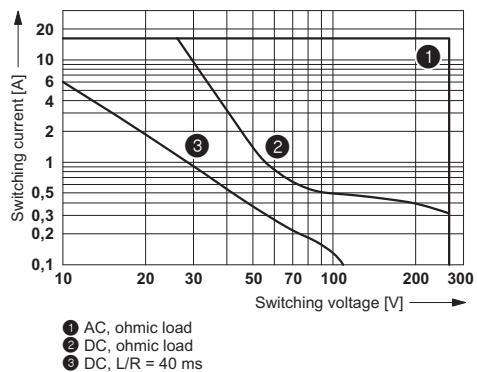


① DC coils
② AC coils

Operating voltage range

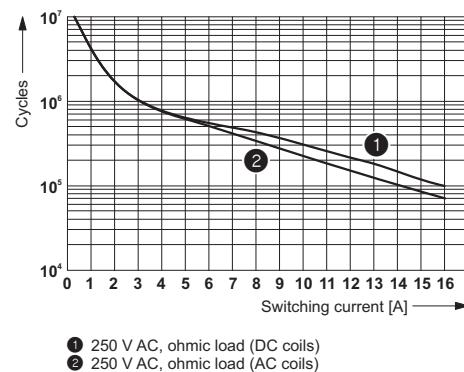
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Diagram



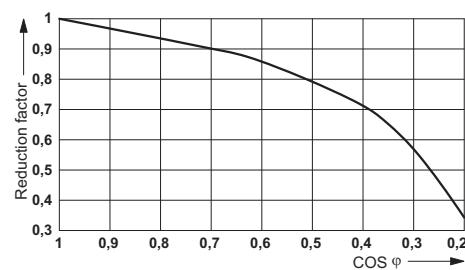
Interrupting rating

Diagram



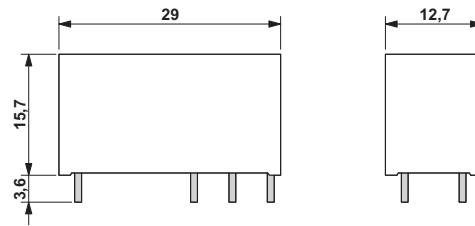
Electrical service life

Diagram

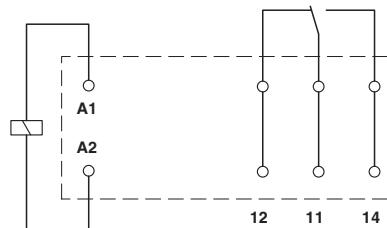


Service life reduction factor with various $\cos \phi$

Dimensional drawing



Circuit diagram



Classifications

eCl@ss

eCl@ss 10.0.1

27371601

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Classifications

eCl@ss

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
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

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UL Recognized / cUL Recognized / PRS / UL Recognized / cUL Recognized / EAC / EAC / VDE Zeichengenehmigung

Ex Approvals

Approval details

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Approvals

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>

FILE E 228652

PRS



<http://www.prs.pl/>

TE/2109/880590/16

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>

FILE E 228652

EAC



TR_TS_D_00573_C

EAC



RU*C-
DE.*08.B.00010

VDE Zeichengenehmigung



[http://www2.vde.com/de/Institut/Online-Service/
VDE-gepruefteProdukte/Seiten/Online-Suche.aspx](http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx)

40007758

Accessories

Additional products

Single relay - REL-MR-110DC/21HC - 2961338

Accessories

Relay base - PLC-BPT-120UC/21HC - 2900258



14 mm PLC basic terminal block for high continuous currents with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 120 V AC/DC

Relay base - PLC-BSP-120UC/21HC - 2912387



14 mm PLC basic terminal block for high continuous currents with spring-cage connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 120 V AC/DC

Relay base - PLC-BSC-120UC/21HC - 2967811



14 mm PLC basic terminal block for high continuous currents with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 120 V AC/DC

Relay base - PLC-BPT-230UC/21HC - 2900259



14 mm PLC basic terminal block for high continuous currents with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 230 V AC/DC

Relay base - PLC-BSP-230UC/21HC - 2912390



14 mm PLC basic terminal block for high continuous currents with spring-cage connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 230 V AC/DC

Single relay - REL-MR-110DC/21HC - 2961338

Accessories

Relay base - PLC-BSC-230UC/21HC - 2967824



14 mm PLC basic terminal block for high continuous currents with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 230 V AC/DC

Relay base - PLC-BSC-120UC/21HC/SO46 - 2980432



14 mm PLC basic terminal block with protection against interference currents/voltages on the control side, with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, for high continuous currents, 1 changeover contact, input voltage 120 V AC

Relay base - PLC-BSC-230UC/21HC/SO46 - 2980445



14 mm PLC basic terminal block with protection against interference currents/voltages on the control side, with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, for high continuous currents, 1 changeover contact, input voltage 230 V AC

Relay base - PR1-BSC2/2X21 - 2833518



PR1... relay base, for miniature power relays or miniature switching relays with 1 or 2 changeover contacts or solid-state relays of the same design, 2/2-level version, screw connections, plug-in option for input/interference suppression modules

Relay base - PR1-BSC3/2X21 - 2833521



PR1... relay base, for miniature power relays or miniature switching relays with 1 or 2 changeover contacts or solid-state relays of the same design, 1/3-level version, screw connections, plug-in option for input/interference suppression modules

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Accessories

Relay base - PR1-BSP3/2X21 - 2833534



PR1... relay base, for miniature power relays or miniature switching relays with 1 or 2 changeover contacts or solid-state relays with the same design, 1/3-level version, spring-cage connections, plug-in option for input/interference suppression modules

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
