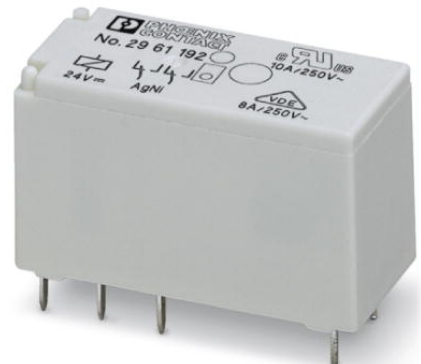


REL-MR-110DC/21-21AU

Order No.: 2961228



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2961228>

Pluggable miniature relays, with multi-layer contact, 2 PDT, input
voltage 110 V DC

Commercial data

GTIN (EAN)	 4 017918 157982
Note	Made-to-order
sales group	G084
Pack	10 pcs.
Customs tariff	85364900
Catalog page information	Page 54 (IF-2009)

Product notes

WEEE/RoHS-compliant since:
02/06/2007



[http://
www.download.phoenixcontact.com](http://www.download.phoenixcontact.com)
Please note that the data given
here has been taken from the
online catalog. For comprehensive
information and data, please refer
to the user documentation. The
General Terms and Conditions of
Use apply to Internet downloads.

Technical data

Coil side

Nominal input voltage U_N	110 V DC
Nominal input current at U_{IN}	4.1 mA
Typical response time	7 ms
Typical release time	3 ms

Coil resistance	26600 Ω +/-15% (at 20°C)
Contact side	
Contact type	Single contact, 2-PDT
Contact material	AgNi, hard gold-plated
Maximum switching voltage	30 V AC
	36 V DC
Minimum switching voltage	100 mV (at 10 mA)
Maximum inrush current	50 mA
Min. switching current	1 mA (at 24 V)
Limiting continuous current	50 mA
Interrupting rating (ohmic load) max.	1.2 W (at 24 V DC)
Note	the following values are applicable if a gold layer is destroyed
Maximum switching voltage	250 V
Limiting continuous current	8 A
Maximum inrush current	15 A (300 ms)
Interrupting rating (ohmic load) max.	190 W (at 24 V DC)
	85 W (for 48 V DC)
	60 W (for 60 V DC)
	44 W (for 110 V DC)
	60 W (for 220 V DC)
	2000 VA (for 250 V AC)
General data	
Width	12.7 mm
Height	29 mm
Depth	15.7 mm
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.)
Ambient temperature (operation)	-40 °C ... 85 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Operating mode	100% operating factor
Mechanical service life	3 x 10 ⁷ cycles
Standards/regulations	IEC 60664
	EN 50178
	IEC 62103

Rated surge voltage / insulation	Basic insulation
Pollution degree	3
Surge voltage category	III
Mounting position	Any
Assembly instructions	Can be aligned without spacing ($> 70\text{ °C} \geq 2.5\text{ mm}$)

Certificates / Approvals



Certification

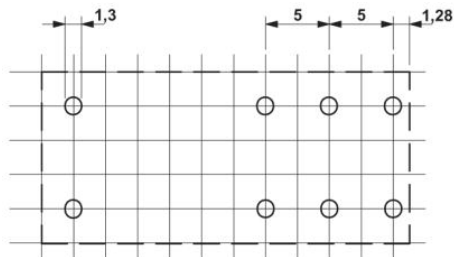
CUL, GL, GOST, UL, VDE-PZI

Additional products

Item	Designation	Description
General		
2967031	PLC-BSC-120UC/21-21	14 mm PLC basic terminal blocks with screw connection method, input voltage 120 V AC/DC(without relay or optocoupler)
2967044	PLC-BSC-230UC/21-21	14 mm PLC basic terminal blocks with screw connection method, input voltage 230 V AC/DC(without relay or optocoupler)
2912471	PLC-BSP-120UC/21-21	14 mm PLC basic terminal blocks with spring-cage connection method, input voltage 120 V AC/DC(without relay or optocoupler)
2912484	PLC-BSP-230UC/21-21	14 mm PLC basic terminal blocks with spring-cage connection method, input voltage 230 V AC/DC(without relay or optocoupler)
2833518	PR1-BSC2/2X21	Relay socket PR1..., for miniature power relay or miniature switching relay with 1 or 2 PDT or solid-state relay of same construction, 2/2 level design, screw connections, connection facility for input/interference suppression modules
2833521	PR1-BSC3/2X21	Relay socket 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
2833534	PR1-BSP3/2X21	Relay socket 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

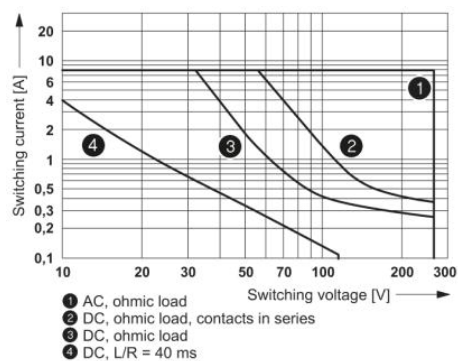
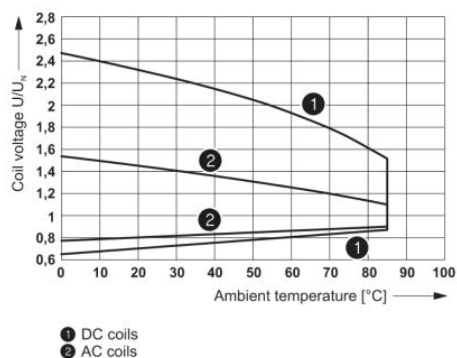
Diagrams/Drawings

Drilling plan/solder pad geometry

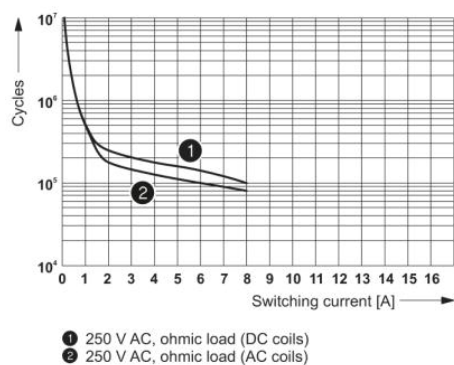


a = pitch division 2.5 mm

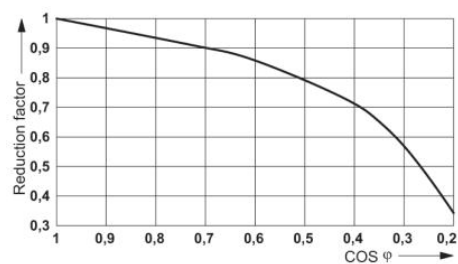
Diagram



Operating voltage range



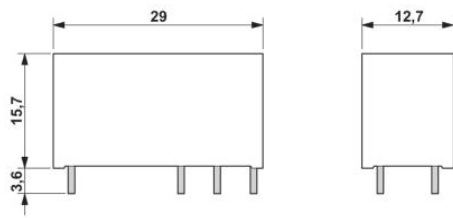
Interrupting rating



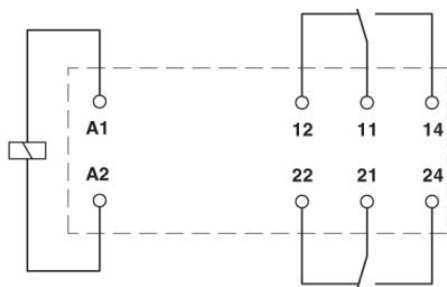
Service life reduction factor with various $\cos \varphi$

Electrical service life

Dimensioned drawing



Circuit diagram



Address

PHOENIX CONTACT Deutschland GmbH
Flachsmarktstr. 8
32825 Blomberg, Germany
Phone +49 5235 3 12000
Fax +49 5235 3 41200
<http://www.phoenixcontact.de>



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