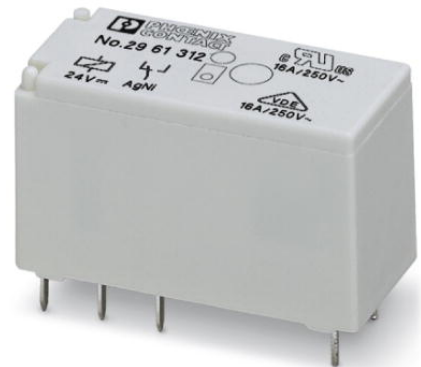


REL-MR-110DC/21HC

Order No.: 2961338



<http://catalog.phoenixcontact.net/phoenix/treeViewClick.do?UID=2961338>

Pluggable miniature relays, with power contact for high continuous current, 1 PDT, input voltage 110 V DC

Commercial data

EAN	 4 017918 187590
sales group	G084
Pack	10 Pcs.
Customs tariff	85364900
Gross weight in pieces	0.01711 KG
Net weight per piece	0.01711 KG
Catalog page information	Page 284 (C-7-2013)

Product notes

WEEE/RoHS-compliant since:
02/09/2006



<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

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	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 $\Omega \pm 15\%$ (at 20 °C)

Contact side

Contact type	1 PDT
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	12 V (at 10 mA)
Maximum inrush current	50 A (20 ms)
Min. switching current	10 mA (at 12 V)
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
Mechanical service life	3 x 10 ⁷ cycles

Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
Pollution degree	3
Surge voltage category	III
Mounting position	any
Assembly instructions	Can be aligned without spacing ($> 70^{\circ}\text{C} \geq 2.5\text{ mm}$)

Certificates / Approvals



Certification

cULus Recognized, GOST, VDE Gutachten mit
Fertigungsüberwachung, GL

Certifications applied for:

Certification Ex:

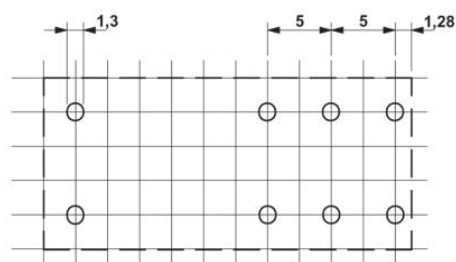
Additional products

Item	Designation	Description
General		
2967811	PLC-BSC-120UC/21HC	14 mm PLC-HC basic terminal blocks with screw connection, 120 V AC/DC input voltage (without relay or optocoupler)
2980432	PLC-BSC-120UC/21HC/SO46	14 mm PLC-HC basic terminal blocks with screw connection and integrated RCZ filter against interference currents and voltages on the control side, 120 V AC input voltage (without relay or optocoupler)
2967824	PLC-BSC-230UC/21HC	14 mm PLC-HC basic terminal blocks with screw connection, 230 V AC/DC input voltage (without relay or optocoupler)
2980445	PLC-BSC-230UC/21HC/SO46	14 mm PLC-HC basic terminal blocks with screw connection and integrated RCZ filter against interference currents and voltages on the control side, 230 V AC input voltage (without relay or optocoupler)
Relay base		
2900258	PLC-BPT-120UC/21HC	14 mm PLC-HC basic terminal blocks with push-in connection, input voltage 120 V AC/DC (without relay or optocoupler)

2900259	PLC-BPT-230UC/21HC	14 mm PLC-HC basic terminal blocks with push-in connection, input voltage 230 V AC/DC (without relay or optocoupler)
2912387	PLC-BSP-120UC/21HC	14 mm PLC basic terminal blocks with spring-cage connection, 120 V AC/DC input voltage (without relay or optocoupler)
2912390	PLC-BSP-230UC/21HC	14 mm PLC basic terminal blocks with spring-cage connection, 230 V AC/DC input voltage (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

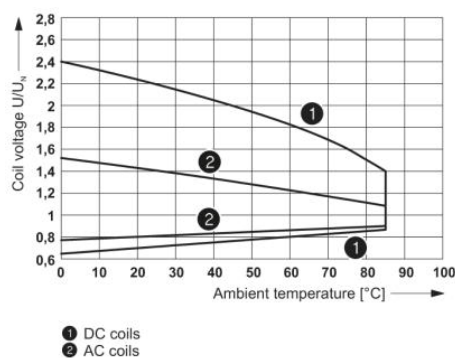
Drawings

Drilling plan/solder pad geometry

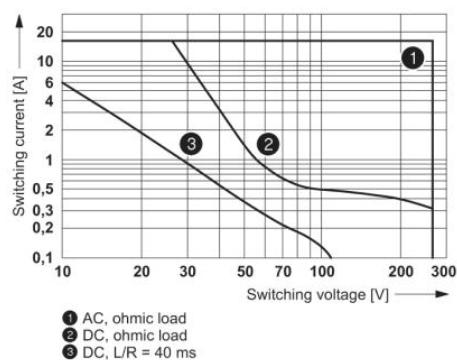


a = pitch division 2.5 mm

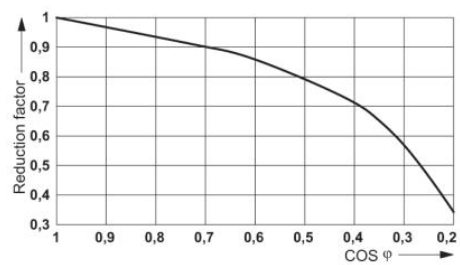
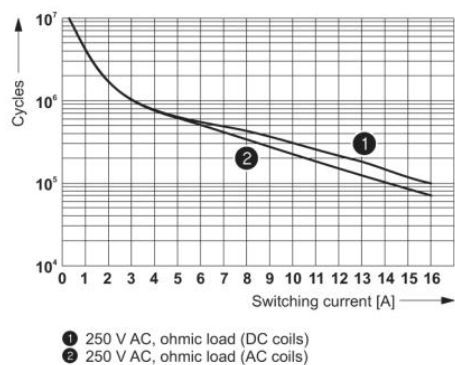
Diagram



Operating voltage range



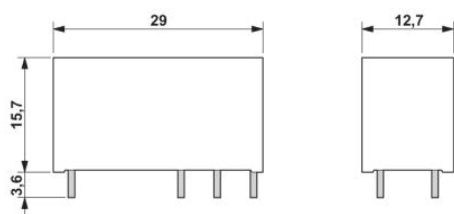
Interrupting rating



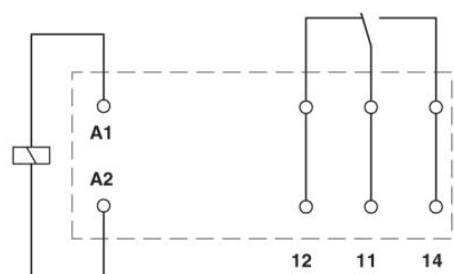
Service life reduction factor with various $\cos \varphi$

Electrical service life

Dimensioned drawing



Circuit diagram



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