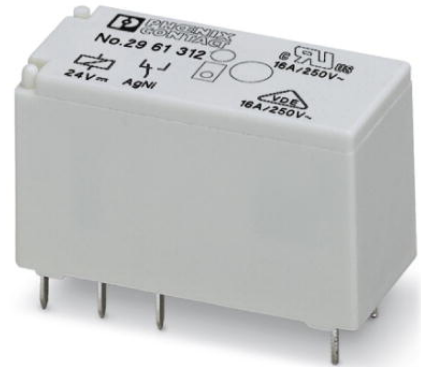



REL-MR- 12DC/21HC

Order No.: 2961309



<http://catalog.phoenixcontact.net/phoenix/treeViewClick.do?UID=2961309>

Pluggable miniature relays, with power contact for high continuous current, 1 PDT, input voltage 12 V DC

Commercial data	
EAN	 4 017918 187552
sales group	G084
Pack	10 Pcs.
Customs tariff	85364190
Gross weight in pieces	0.0165 KG
Net weight per piece	0.0157 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	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
Coil resistance	360 Ω \pm 10 % (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 °C ≥ 2.5 mm)

Certificates / Approvals



Certification

cULus Recognized, GOST, VDE Gutachten mit
 Fertigungsüberwachung, GL

Certifications applied for:

Certification Ex:

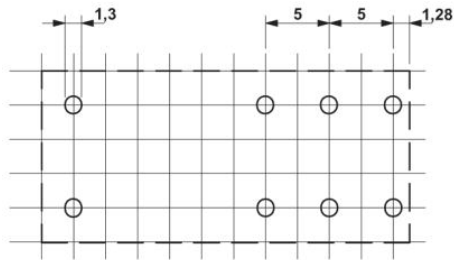
Additional products

Item	Designation	Description
General		
2967769	PLC-BSC- 12DC/21HC	14 mm PLC-HC basic terminal blocks with screw connection, 12 V DC input voltage (without relay or optocoupler)
Relay base		
2900253	PLC-BPT- 12DC/21HC	14 mm PLC-HC basic terminal blocks with push-in connection, input voltage 12 V DC (without relay or optocoupler)
2912332	PLC-BSP- 12DC/21HC	14 mm PLC basic terminal blocks with spring-cage connection, 12 V 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
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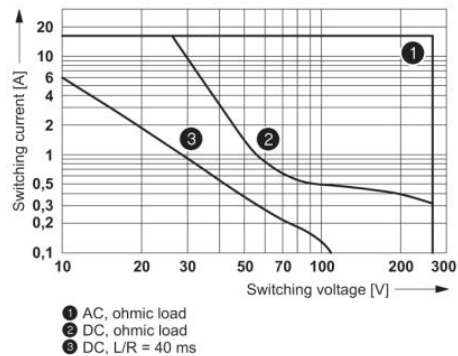
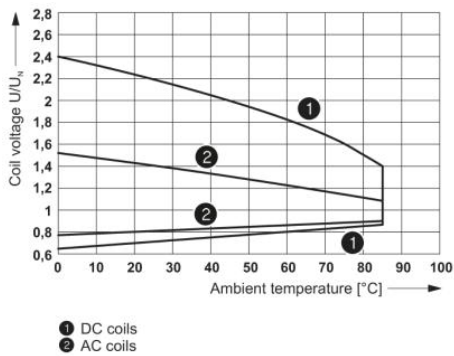
Drawings

Drilling plan/solder pad geometry

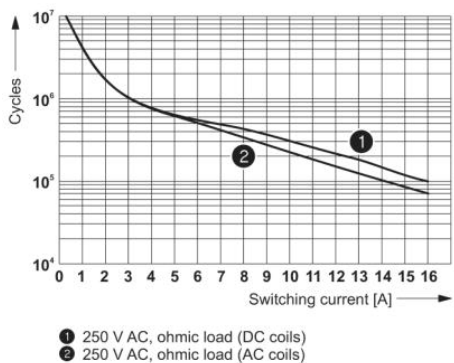


a = pitch division 2.5 mm

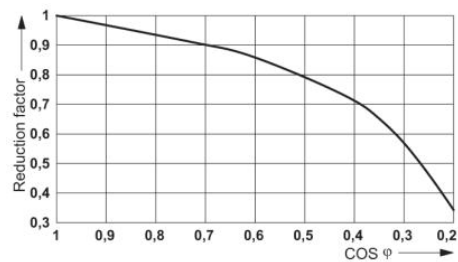
Diagram



Operating voltage range



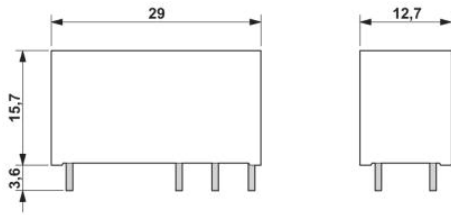
Interrupting rating



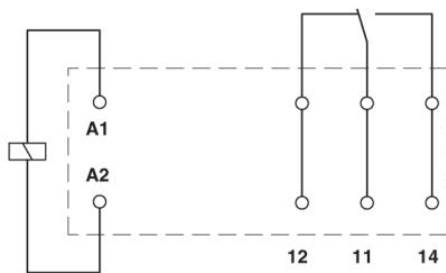
Service life reduction factor with various cos phi

Electrical service life

Dimensioned drawing



Circuit diagram



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