



# REL-MR- 48DC/21-21

Order No.: 2834834



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2834834>

Plug-in miniature relay, with power contact, 2 PDT, input voltage 48 V DC

Commercial data		Product notes
GTIN (EAN)		WEEE/RoHS-compliant since: 04/20/2007 
Note	Made-to-order	
sales group	G084	
Pack	10 pcs.	
Customs tariff	85364900	
Catalog page information	Page 54 (IF-2009)	

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Technical data	
<b>Coil side</b>	
Nominal input voltage $U_N$	48 V DC
Nominal input current at $U_N$	8.7 mA
Typical response time	7 ms
Typical release time	3 ms

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Coil resistance	5520 $\Omega$ $\pm$ 10 % (at 20°C)
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**Contact side**

Contact type	Single contact, 2-PDT
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 10 mA)
Maximum inrush current	15 A (300 ms)
Min. switching current	10 mA (At 5 V)
Limiting continuous current	8 A
Interrupting rating (ohmic load) max.	190 W (at 24 V DC)
	85 W (for 48 V DC)
	60 W (for 60 V DC)
	40 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
Operating mode	100% operating factor
Mechanical service life	3 x 10 <sup>7</sup> 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 $\geq$ 2.5 mm)

**Certificates / Approvals**



Certification

CUL, UL, VDE-PZI

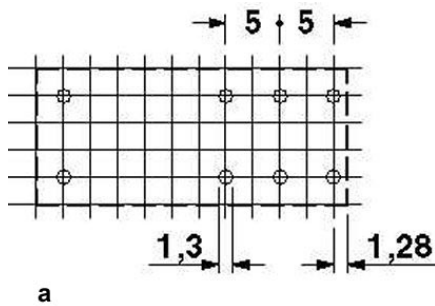
**Additional products**

Item	Designation	Description
<b>General</b>		
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

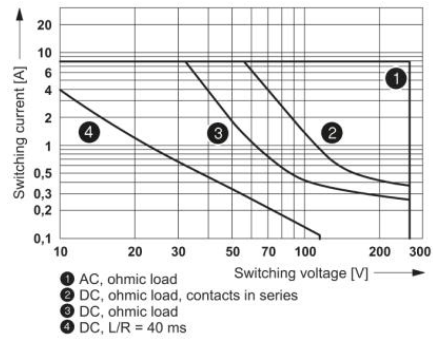
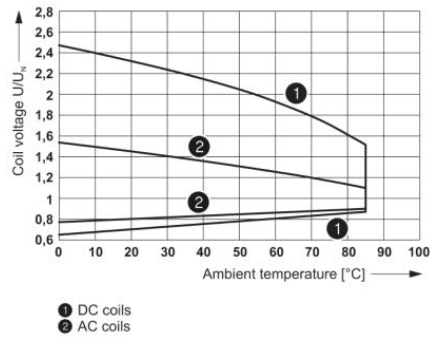
**Diagrams/Drawings**

Drilling plan/solder pad geometry

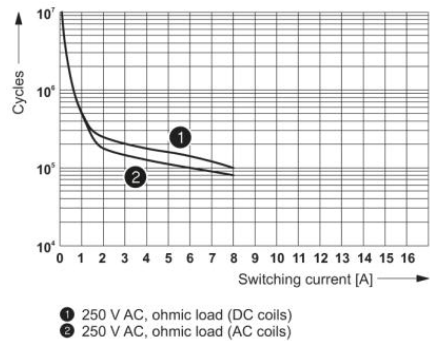
a = pitch division 2.5 mm



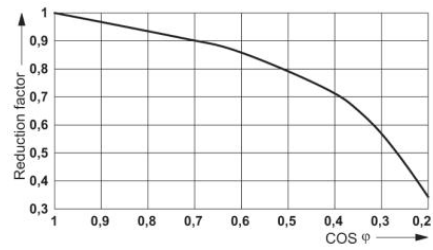
Diagram



Operating voltage range



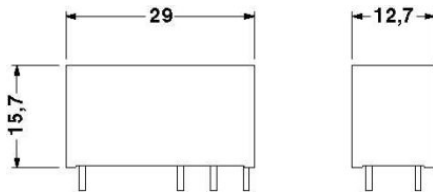
Interrupting rating



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

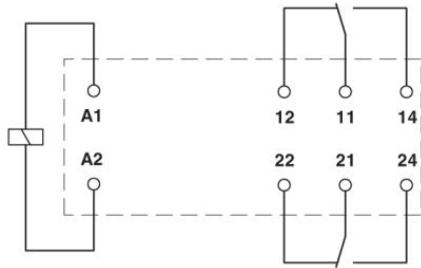
Electrical service life

Dimensioned drawing



Circuit diagram

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