


REL-MR-120AC/21-21AU

Order No.: 2961477



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2961477>

Pluggable miniature relay with power contact and additional hard gold plating, 2 PDT, coil voltage 120 V AC

Commercial data	
GTIN (EAN)	 4 017918 937881
Note	Made-to-order
sales group	G084
Pack	10 pcs.
Customs tariff	85364190
Catalog page information	Page 60 (IF-2011)

Product notes

WEEE/RoHS-compliant since:
07/27/2006



<http://www.download.phoenixcontact.com>
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Technical data

Coil side	
Nominal input voltage U_N	120 V AC
Nominal input current at U_{IN}	7 mA (at 50 Hz) 5 mA (At 60 Hz)
Typical response time	3 ms ... 12 ms (depending on phase relation)

Typical release time range	2 ms ... 9 ms (depending on phase relation)
Coil resistance	8100 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 AC/DC
Minimum switching voltage	5 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 °C ≥ 2.5 mm)

Certificates / Approvals



Certification

CUL, UL, VDE-PZI

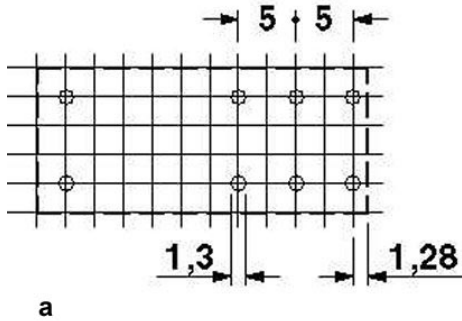
Additional products

Item	Designation	Description
General		
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

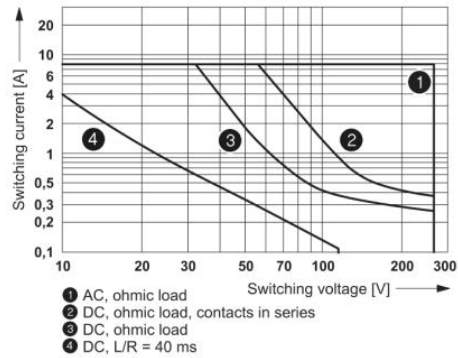
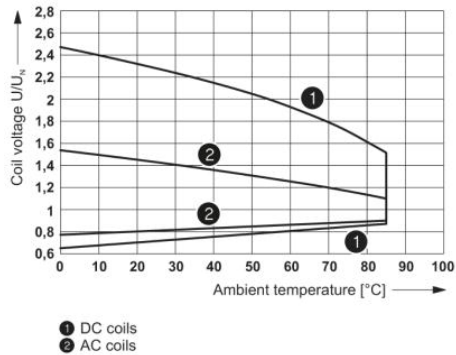
Diagrams/Drawings

Drilling plan/solder pad geometry

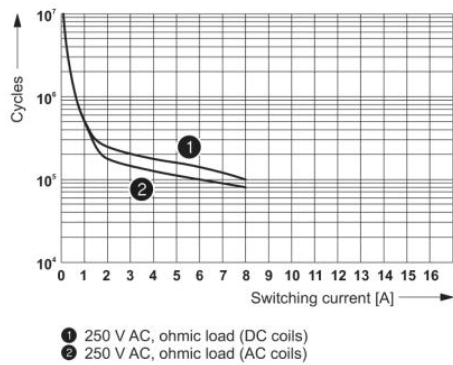
a = pitch division 2.5 mm



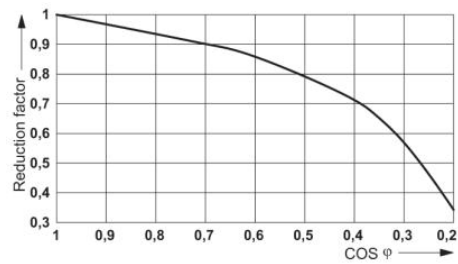
Diagram



Operating voltage range



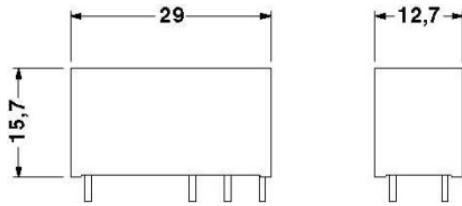
Interrupting rating



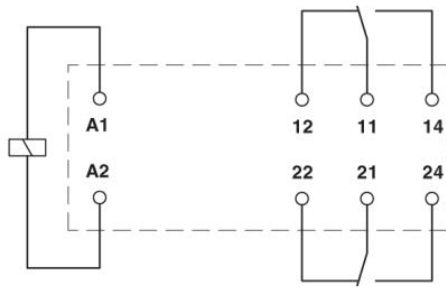
Service life reduction factor with various $\cos \phi$

Electrical service life

Dimensioned drawing



Circuit diagram



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