

Single relay - REL-MR-230AC/21-21 - 2961451

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Plug-in miniature power relay, with power contact, 2 PDTs, input voltage 230 V AC

Why buy this product

- ✓ RT III-proof (wash-proof)
- ✓ Switching current of up to 8 A

RoHS

Key Commercial Data

Packing unit	10 STK
Minimum order quantity	10 STK
GTIN	
GTIN	4017918937867

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	230 V AC
Mains frequency	50/60 Hz
Typical input current at U_N	3 mA (at 50 Hz)
	2.5 mA (At 60 Hz)
Typical response time	3 ms ... 12 ms (depending on phase relation)

Single relay - REL-MR-230AC/21-21 - 2961451

Technical data

Coil side

Typical release time range	2 ms ... 9 ms (depending on phase relation)
Coil resistance	32500 Ω $\pm$ 15 % (at 20 °C)
Power dissipation for nominal condition	0.4 W

Contact side

Contact type	2 PDT
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 10 mA)
Min. switching current	10 mA (At 5 V)
Maximum inrush current	12 A (20 ms)
Limiting continuous current	8 A
Interrupting rating (ohmic load) max.	190 W (at 24 V DC)
	85 W (at 48 V DC)
	60 W (at 60 V DC)
	44 W (at 110 V DC)
	60 W (at 220 V DC)
	2000 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 250 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 A (at 250 V, AC15)

General

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.)
Operating mode	100% operating factor
Degree of protection	RT III (wash-proof)
Mechanical service life	1 x 10 ⁷ cycles
Mounting position	any
Assembly instructions	Can be aligned without spacing (> 70 °C $\geq$ 2.5 mm)

Standards and Regulations

Connection in acc. with standard	CUL
Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1
Degree of pollution	3
Overvoltage category	III

Environmental Product Compliance

Single relay - REL-MR-230AC/21-21 - 2961451

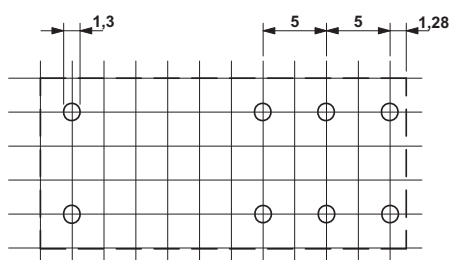
Technical data

Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

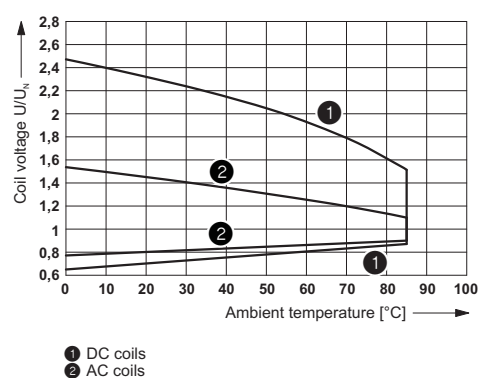
Drawings

Drilling diagram



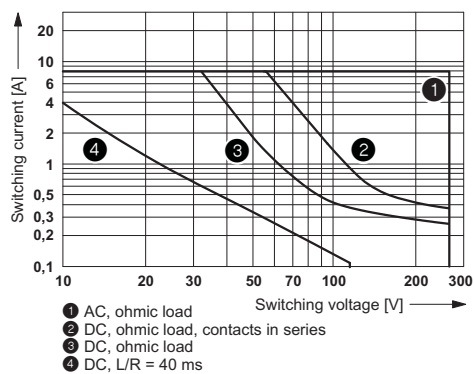
Basic pitch 2.5 mm

Diagram



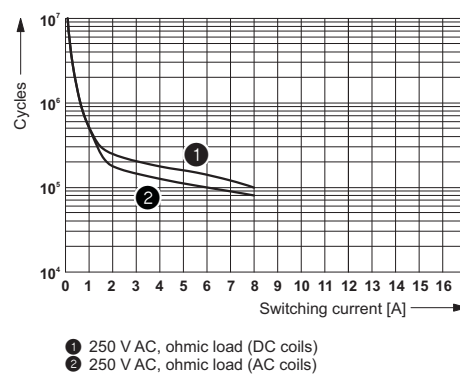
Operating voltage range

Diagram



Interrupting rating

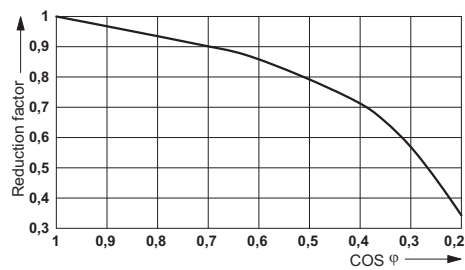
Diagram



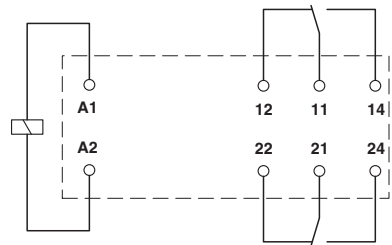
Electrical service life

Single relay - REL-MR-230AC/21-21 - 2961451

Diagram



Circuit diagram



Service life reduction factor with various cos phi

Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / EAC / EAC / VDE approval of drawings / UL Recognized / cUL Recognized / cULus Recognized

Ex Approvals

Approval details

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 228652
cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 228652
EAC			EAC-Zulassung
EAC			RU C- DE.A*30.B.01082

Single relay - REL-MR-230AC/21-21 - 2961451

Approvals

VDE approval of drawings



[http://www.vde.com/en/Institute/OnlineService/
VDE-approved-products/Pages/Online-Search.aspx](http://www.vde.com/en/Institute/OnlineService/VDE-approved-products/Pages/Online-Search.aspx)

40007758

UL Recognized



<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

FILE E 172140

cUL Recognized



<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

FILE E 172140

cULus Recognized



<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

Phoenix Contact 2018 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>