

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

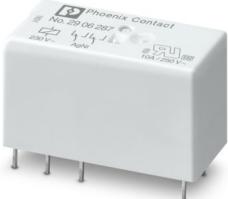
2906287

<https://www.phoenixcontact.com/us/products/2906287>



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Plug-in miniature power relay in basic design, with power contact, 2 changeover contacts, input voltage 230 V AC



Commercial data

Item number	2906287
Packing unit	20 pc
Minimum order quantity	20 pc
Sales key	C460
Product key	DKF935
GTIN	4055626066929
Weight per piece (including packing)	13 g
Weight per piece (excluding packing)	13 g
Customs tariff number	85364900
Country of origin	AT

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Technical data

Product properties

Product type	Single relay
Product family	ESSENTIAL edition
Operating mode	100% operating factor
Mechanical service life	5×10^6 cycles

Insulation characteristics

Insulation	Basic insulation
Oversupply category	III
Pollution degree	3

Data management status

Date of last data management	05.09.2025
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Electrical properties

Service life electrical	see diagram
Maximum power dissipation for nominal condition	0.4 W
Test voltage (Winding/contact)	5 kV AC (50 Hz, 1 min.)
Test voltage (Contact/contact)	2.5 kV AC (50 Hz, 1 min.)
Test voltage (open contact)	1 kV (50 Hz, 1 min.)
Rated insulation voltage	250 V AC
Rated surge voltage	4 kV

Input data

Coil side

Nominal input voltage U_N	230 V AC
Input voltage range	184 V AC ... 333.5 V AC
Mains frequency	50/60 Hz
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at U_N	3 mA
Typical response time	3 ms ... 12 ms (depending on phase relation)
Typical release time range	2 ms ... 9 ms (depending on phase relation)

Output data

Switching

Contact switching type	2 changeover contacts
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 10 mA)

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Limiting continuous current	8 A
Maximum inrush current	12 A (20 ms)
Min. switching current	10 mA (At 5 V)
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	2 A (at 24 V, DC13) 1.5 A (at 230 V, AC15)

Connection data

Connection method	Solder connection
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Dimensions

Dimensional drawing	
Width	12.7 mm
Height	29 mm
Depth	15.7 mm

Material specifications

Color	white (RAL 9010)
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Environmental and real-life conditions

Ambient conditions	
Degree of protection	RT II
Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Standards and regulations

Standards/regulations	IEC 60664 EN 61810-1
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Mounting

Mounting type	Plug-in mounting
Mounting position	any

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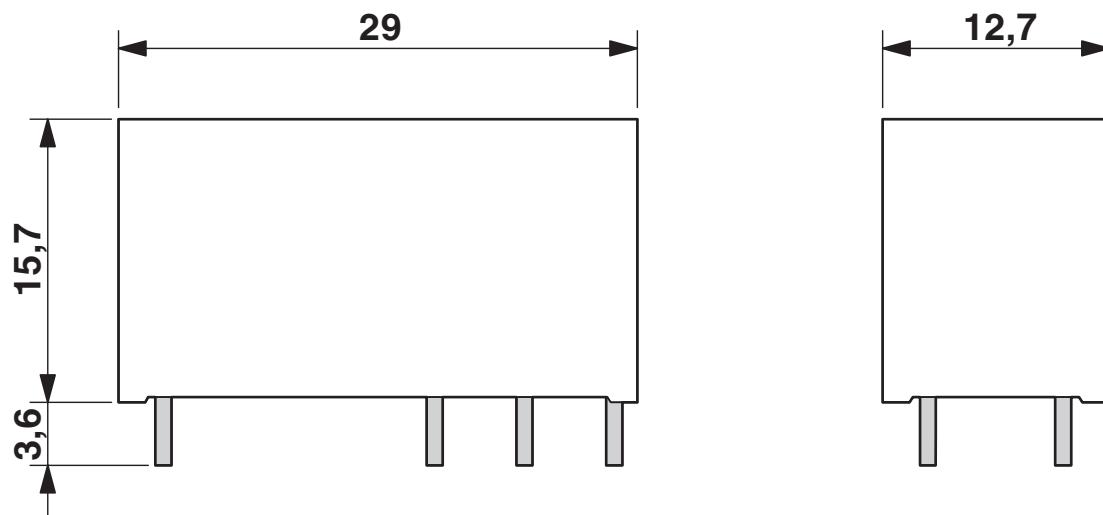


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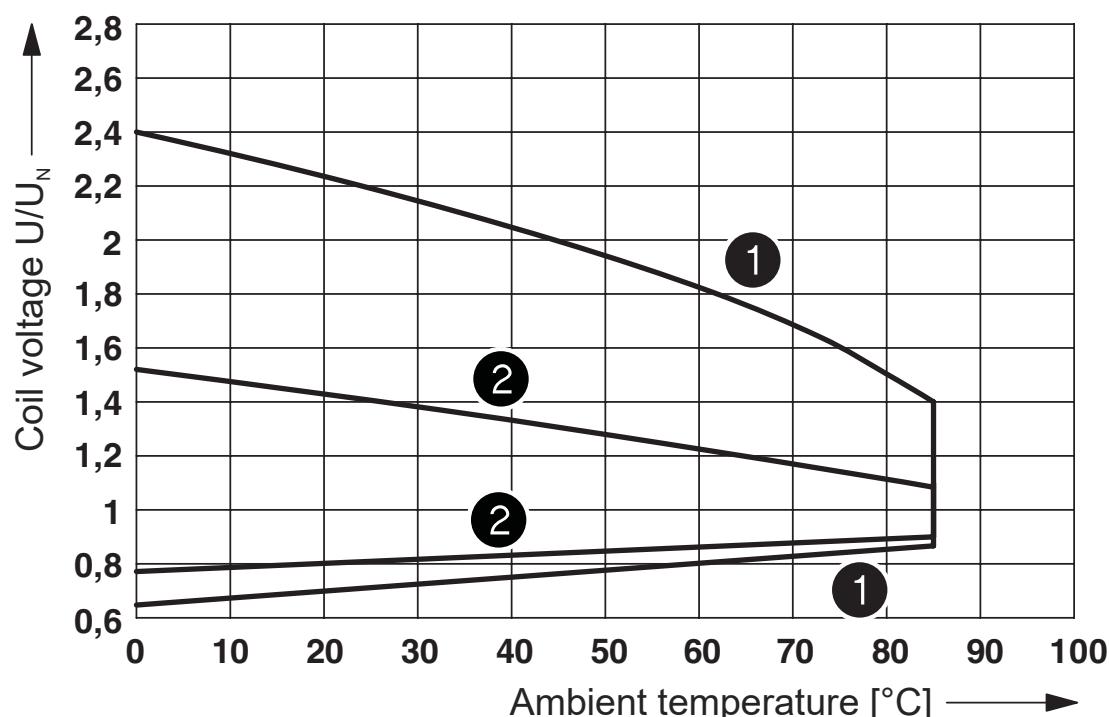
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Drawings

Dimensional drawing



Diagram



- 1 DC coils
- 2 AC coils

Operating voltage range

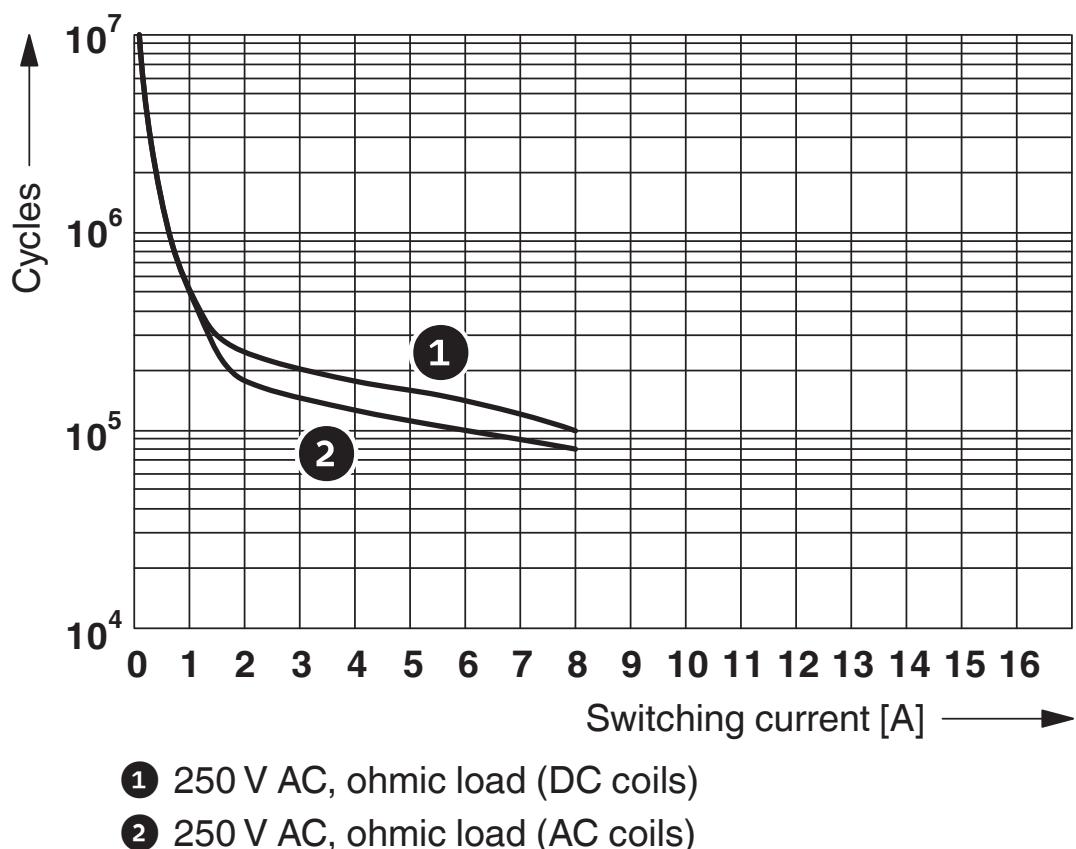
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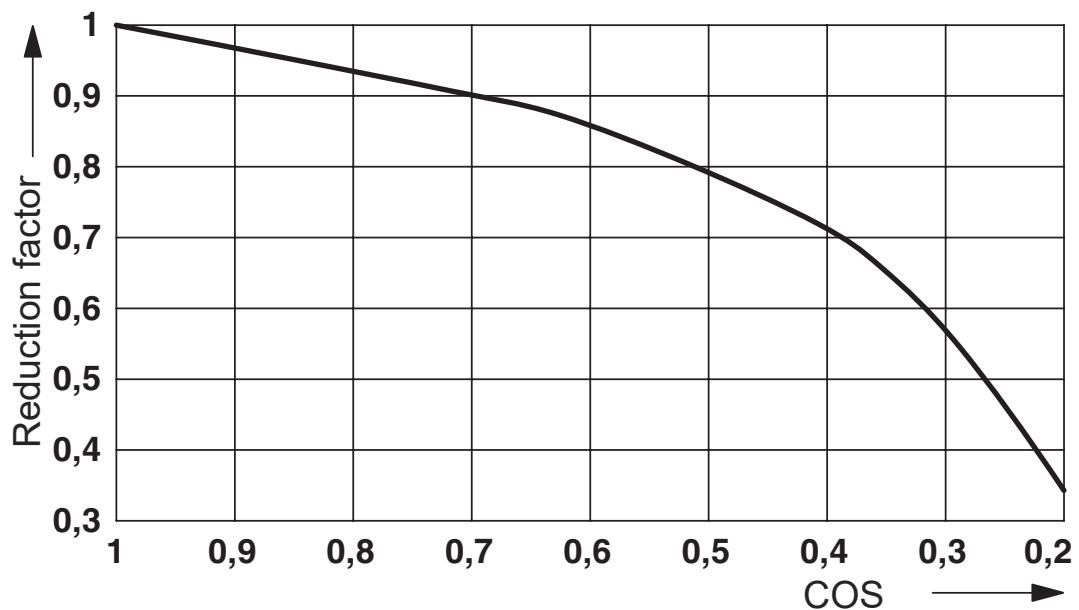


Diagram



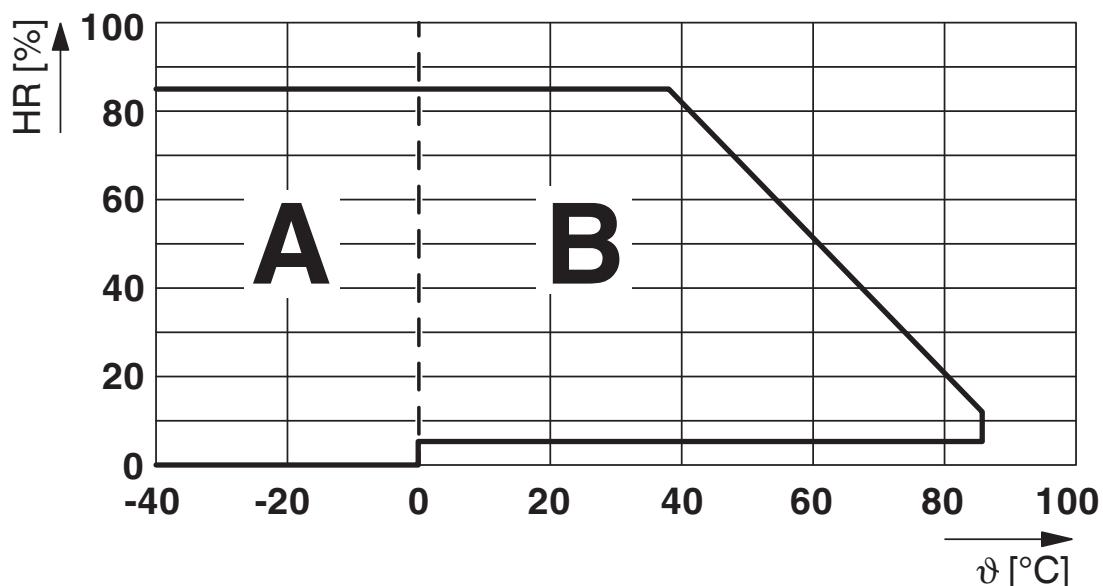
Electrical service life

Diagram



Service life reduction factor with various cos phi

Diagram



Permissible humidity for operation and storage.

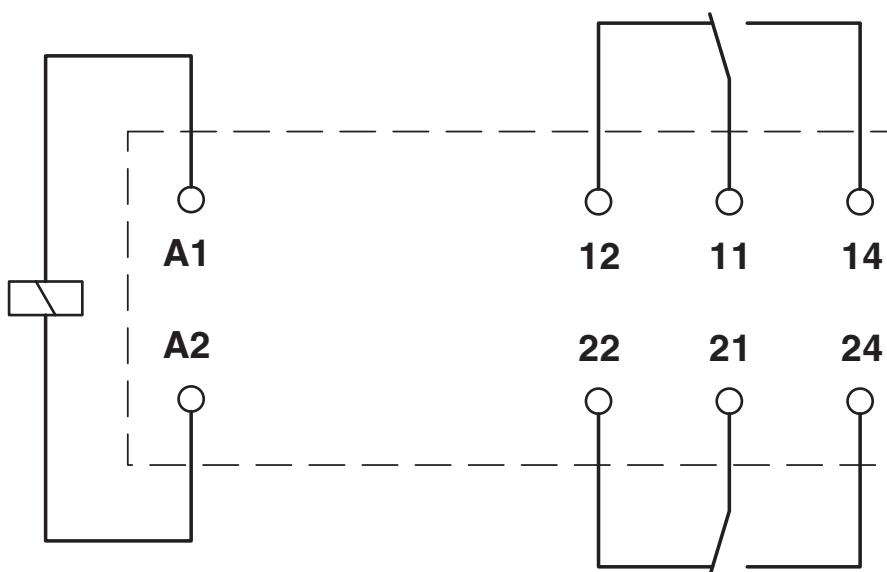
The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures $\leq 0^{\circ}\text{C}$ must be prevented

Area B: Condensation at ambient temperatures $> 0^{\circ}\text{C}$ must be prevented

On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature $\leq 25^{\circ}\text{C}$.

Circuit diagram



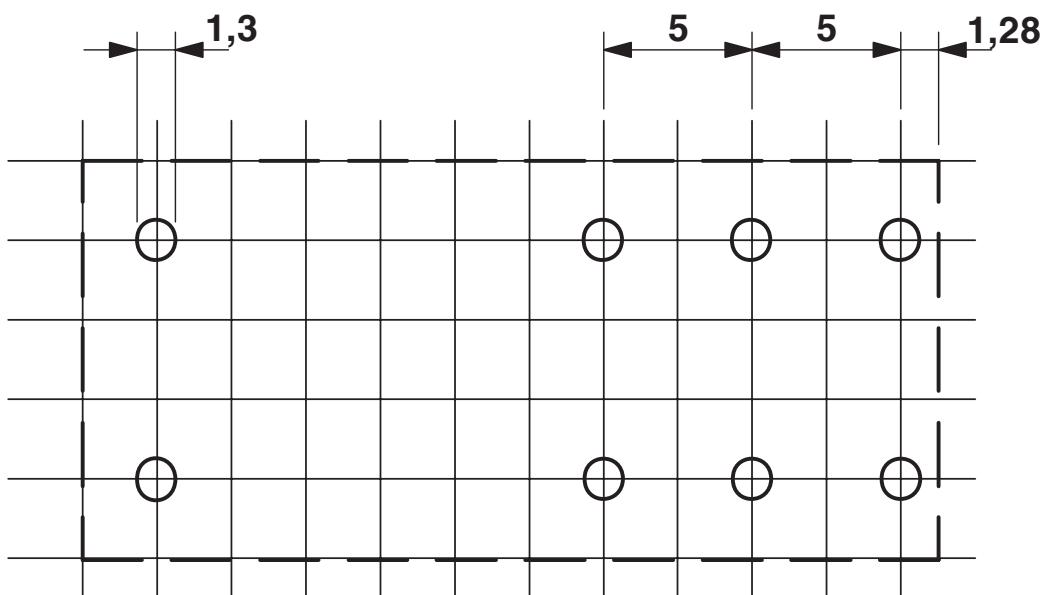
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Drilling plan/solder pad geometry



Basic pitch 2.5 mm

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Approvals

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cUL Recognized

Approval ID: FILE E 228652



UL Recognized

Approval ID: FILE E 228652



EAC

Approval ID: RU*C-DE.*08.B.00010

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Classifications

ECLASS

ECLASS-13.0	27371601
ECLASS-15.0	27371601

ETIM

ETIM 9.0	EC001437
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UNSPSC

UNSPSC 21.0	39122300
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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EF3.0 Climate Change

CO2e kg	0.194 kg CO2e
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Mandatory accessories

ECOR-1-BSC2-RT/2X21 - Relay base

1027546

<https://www.phoenixcontact.com/us/products/1027546>

ECOR-1... relay base, for miniature power relays or miniature switching relays with 1 or 2 changeover contacts, bolt connection, for mounting on NS 35/7,5.



ECOR-1-BSC3/2X21 - Relay base

2907518

<https://www.phoenixcontact.com/us/products/2907518>

ECOR-1... relay base, for miniature power relay or miniature switching relay with 1 or 2 changeover contacts, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5



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