

REL-IR-BL/L-110DC/2X21 - Single relay



1109550

<https://www.phoenixcontact.com/us/products/1109550>

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Plug-in industrial relay in basic design with power contacts, 2 changeover contacts, test button, status LED, mechanical switch position indicator, polarity A1+, A2-, input voltage: 110 V DC

Commercial data

Item number	1109550
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C460
Product key	CKF943
GTIN	4063151021818
Weight per piece (including packing)	29.7 g
Weight per piece (excluding packing)	28 g
Customs tariff number	85364900
Country of origin	AT

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Technical data

Notes

Notes on operation	Do not connect adjacent channels to SELV/ PELV and voltages dangerous to the touch.
Notes on operation	The outputs are not suitable for switching different outer conductors.
Notes on operation	Do not use to separate SELV / PELV circuits from other circuits, because safe isolation is not guaranteed.

Product properties

Product type	Single relay
Operating mode	100% operating factor
Mechanical service life	3x 10 ⁷ cycles

Insulation characteristics

Insulation	Basic insulation
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Insulation characteristics: Air clearances and creepage distances between coil and contact side

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

Electrical properties

Service life electrical	see diagram
Maximum power dissipation for nominal condition	0.85 W
Test voltage (Winding/contact)	2.5 kV _{rms} (50 Hz, 1 min., winding/contact)
Test voltage (Changeover contact/changeover contact)	2.5 kV _{rms} (50 Hz, 1 min., changeover contact/changeover contact)

Air clearances and creepage distances between coil and contact side

Rated insulation voltage	250 V AC
Rated surge voltage	5 kV

Input data

Coil side

Nominal input voltage U _N	110 V DC
Input voltage range	88 V DC ... 187 V DC (20 °C)
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at U _N	6.9 mA
Typical response time	15 ms
Typical release time	10 ms
Coil voltage	110 V DC
Status display	Yellow LED
Coil resistance	16.1 kΩ ±12 %

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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	12 V (10 mA)
Limiting continuous current	12 A
Maximum inrush current	24 A (20 ms, N/O contacts)
Min. switching current	10 mA (12 V)
Interrupting rating (ohmic load) max.	288 W (24 V DC)
	130 W (48 V DC)
	90 W (60 V DC)
	66 W (110 V DC)
	88 W (220 V DC)
	3000 VA (250 V AC)
Switching capacity min.	120 mW

Connection data

Connection method	Plug-in connection
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Dimensions

Width	22.5 mm
Height	28 mm
Depth	35.5 mm

Environmental and real-life conditions

Ambient conditions

Degree of protection	RT II
Degree of protection (Installation location)	≥ IP54 (Installation location)
Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Altitude	≤ 2000 m

Standards and regulations

Air clearances and creepage distances between coil and contact side

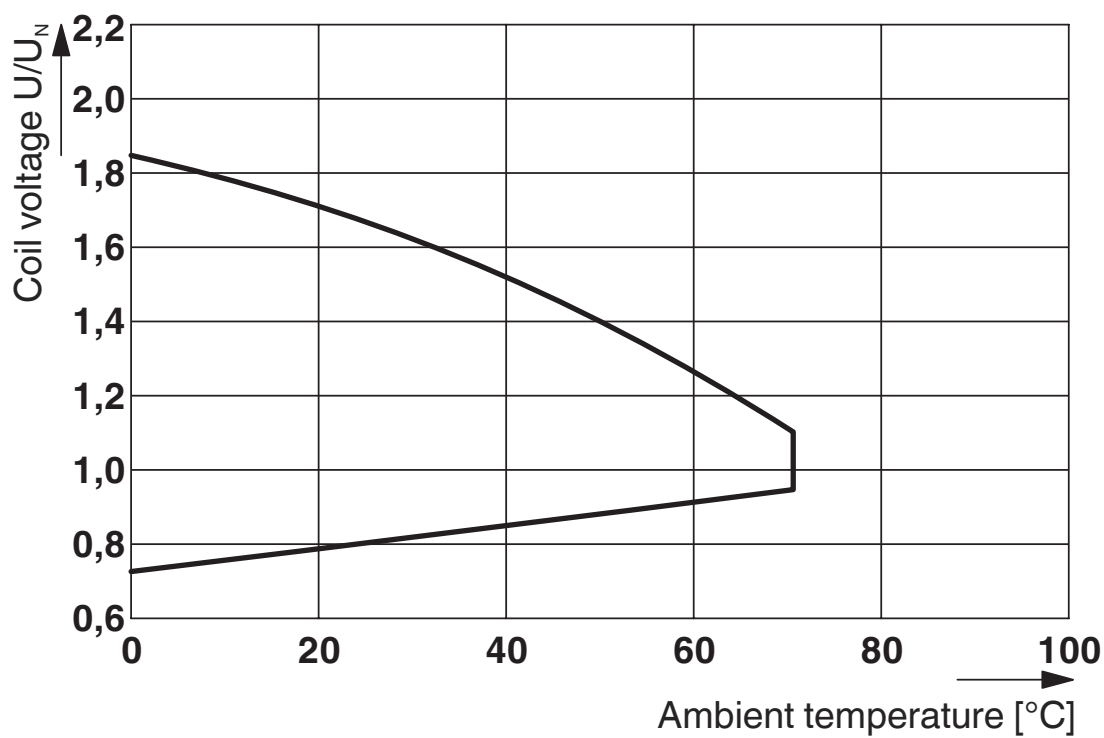
Standards/regulations	EN 61810-1
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Mounting

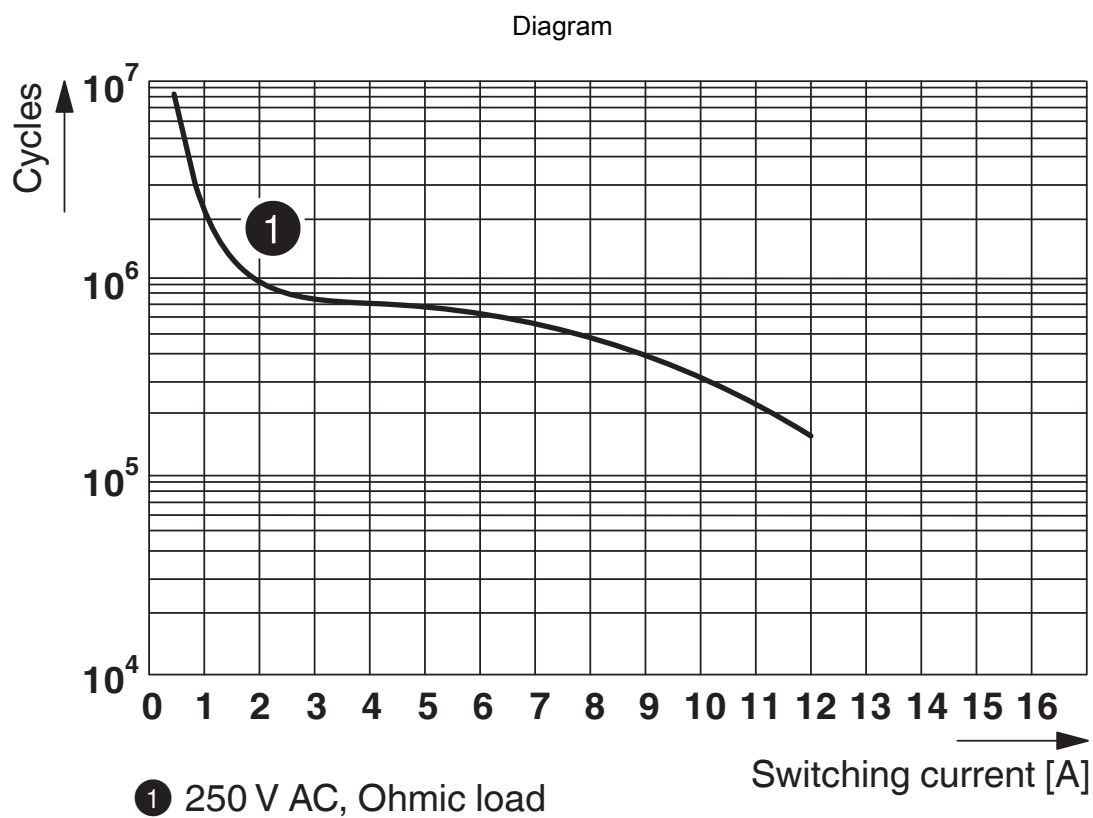
Mounting type	Plug-in mounting
Assembly note	in rows with zero spacing
Mounting position	any

Drawings

Diagram

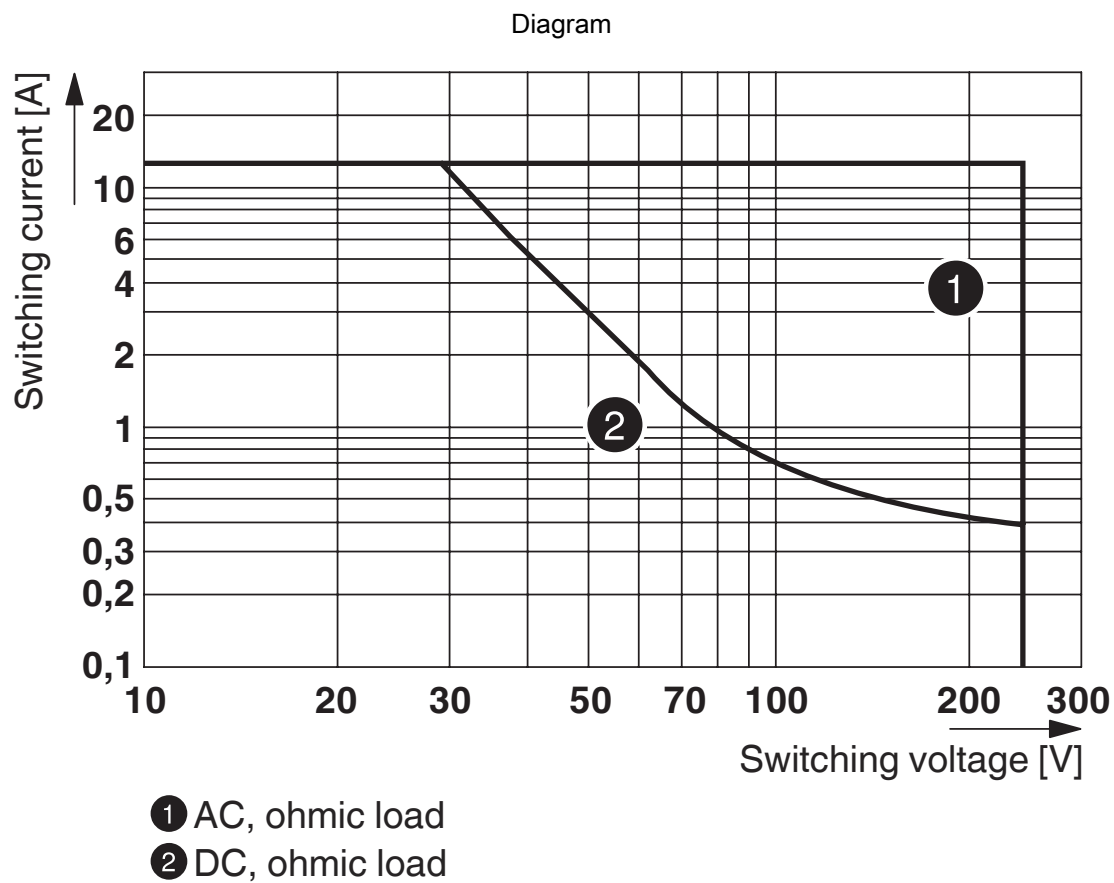


Operating voltage range



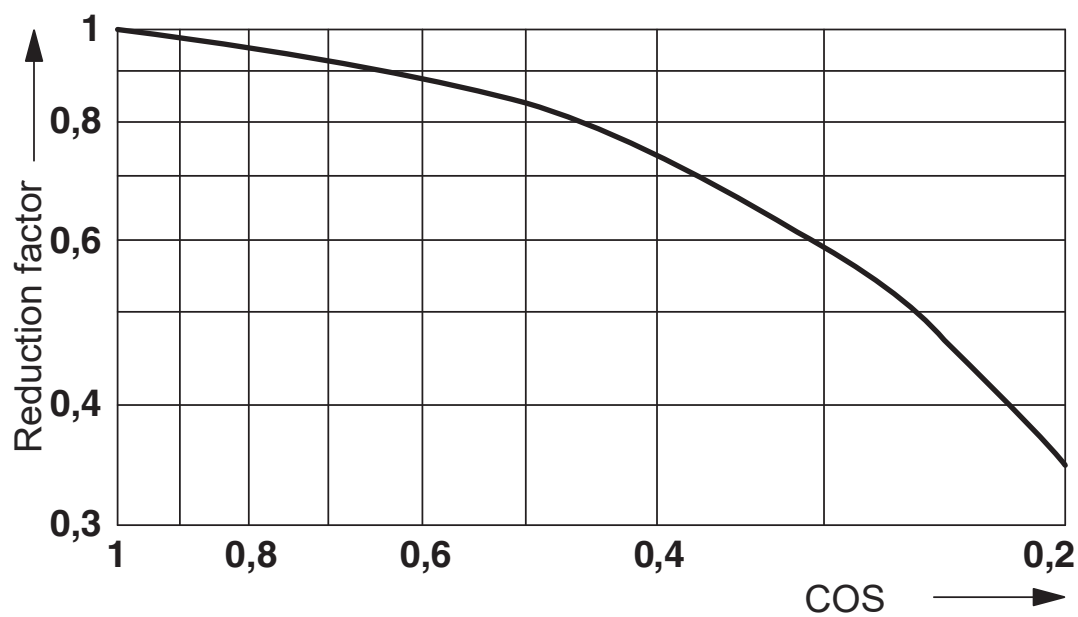
Electrical service life

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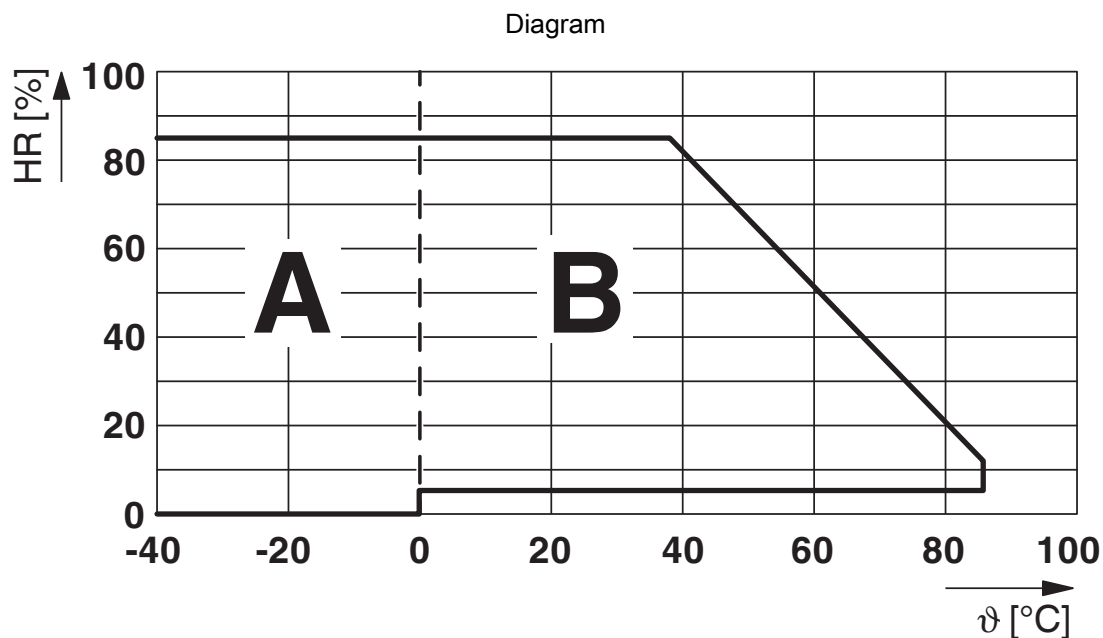
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Interrupting rating

Diagram



Service life reduction factor



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 $\leq 25^{\circ}\text{C}$.

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Approvals

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cUL Recognized
Approval ID: FILE E 228652



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Classifications

ECLASS

ECLASS-11.0	27371601
ECLASS-12.0	27371601
ECLASS-13.0	27371601

ETIM

ETIM 8.0	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
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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Mandatory accessories

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

2908341

<https://www.phoenixcontact.com/us/products/2908341>

ECOR-2 relay base, for industrial relays with two changeover contacts, bolt connection, for mounting on NS 35/7,5



ECOR-2-BSC2-RT/4X21 - Relay base

2908214

<https://www.phoenixcontact.com/us/products/2908214>

ECOR-2 relay base, for industrial relays with four changeover contacts, bolt connection, for mounting on NS 35/7,5



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ECOR-2-BSC3/4X21 - Relay base

2907521

<https://www.phoenixcontact.com/us/products/2907521>



ECOR-2 relay base, for industrial relay with 2 or 4 changeover contacts, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

ECOR-2-BSC2/4X21 - Relay base

1089994

<https://www.phoenixcontact.com/us/products/1089994>



ECOR-2 relay base, for industrial relay with 2 or 4 changeover contacts, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

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