

# EMG 22-REL/KSR-G 24/TRN 5 - Hybrid relay



2949787

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Relay module, with miniature switching relay, with integrated NPN transistor control, for low control currents, contact (AgNi): medium to large loads, 1 changeover contact, 5 V DC nominal control voltage

## Your advantages

- Low control current (terminal block B), type-dependent from 0.5 mA
- Safe isolation between coil and contact side
- Type-dependent positive or negative control current
- Integrated input circuit and interference suppression circuit

## Commercial data

Item number	2949787
Packing unit	10 pc
Minimum order quantity	1 pc
Sales key	C460
Product key	DK61C2
GTIN	4017918083861
Weight per piece (including packing)	62.14 g
Weight per piece (excluding packing)	62.14 g
Customs tariff number	85364190
Country of origin	DE

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## Technical data

### Notes

#### Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
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### Product properties

Product type	Relay Module
Product family	EMG
Application	Universal
Operating mode	100% operating factor
Mechanical service life	approx. $5 \times 10^7$ cycles

#### Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

#### Data management status

Date of last data management	12.09.2025
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### Electrical properties

Maximum power dissipation for nominal condition	0.5 W
Test voltage (Winding/contact)	4 kV AC (50 Hz, 1 min., winding/contact)

### Input data

#### Coil side

Nominal input voltage $U_N$	24 V DC
Input voltage range	21.6 V DC ... 26.4 V DC (20 °C)
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at $U_N$	21 mA
Typical response time	9 ms
Typical release time	10 ms
Protective circuit	Reverse polarity protection; Polarity protection diode Freewheeling diode; Freewheeling diode
Operating voltage display	Yellow LED
Nominal control voltage	5 V DC
Minimum control voltage	2.7 V DC
Maximum control voltage	5.25 V DC
Minimum control current	2.6 mA
Maximum control current	7.7 mA

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## Control

Nominal control voltage	5 V DC
Minimum control voltage	2.7 V DC
Maximum control voltage	5.25 V DC
Minimum control current	2.6 mA
Maximum control current	7.7 mA

## Output data

### Switching

Contact switching type	1 changeover contact
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Limiting continuous current	5 A
Maximum inrush current	8 A
Interrupting rating (ohmic load) max.	120 W (at 24 V DC)
	60 W (at 48 V DC)
	50 W (at 60 V DC)
	50 W (at 110 V DC)
	80 W (at 220 V DC)
	1250 VA (for 250 V AC)

## Connection data

### Coil side

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross-section rigid	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross-section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section AWG	24 ... 12

### Contact side

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross-section rigid	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross-section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section AWG	24 ... 12

## Dimensions

Width	22.5 mm
Height	75 mm
Depth	62.5 mm

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## Material specifications

Color	green (RAL 6021)
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## Environmental and real-life conditions

### Ambient conditions

Ambient temperature (operation)	-20 °C ... 50 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C

## Standards and regulations

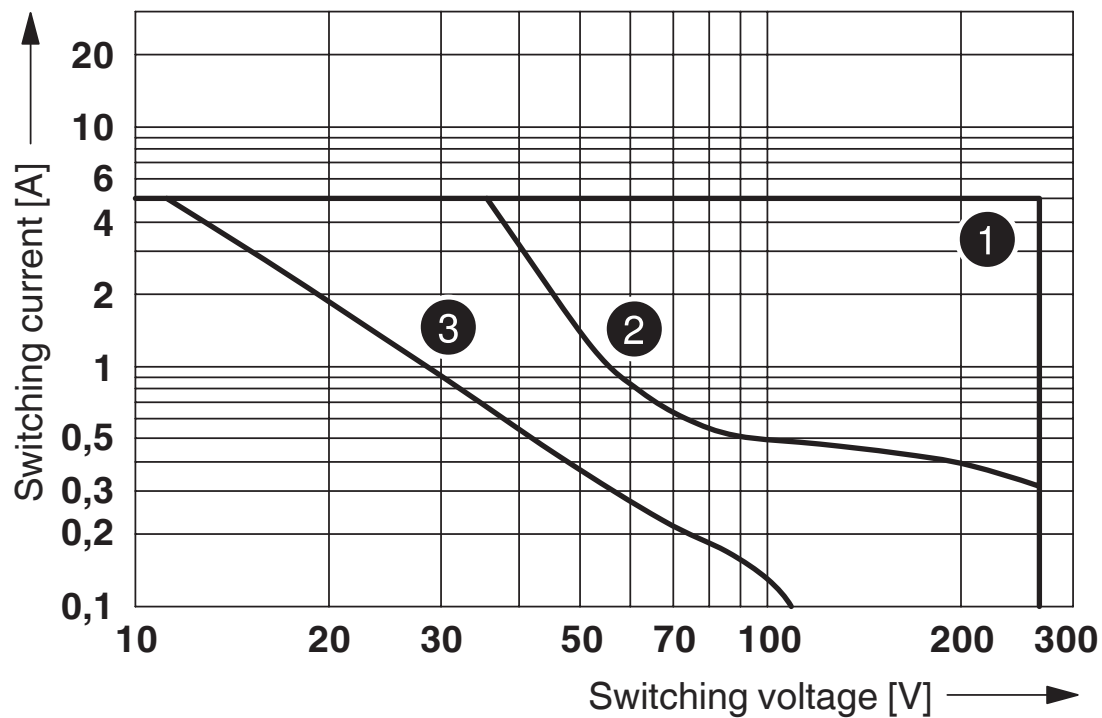
Standards/regulations	IEC 60664
	IEC 60664-1

## Mounting

Mounting type	DIN rail mounting
Mounting position	any

## Drawings

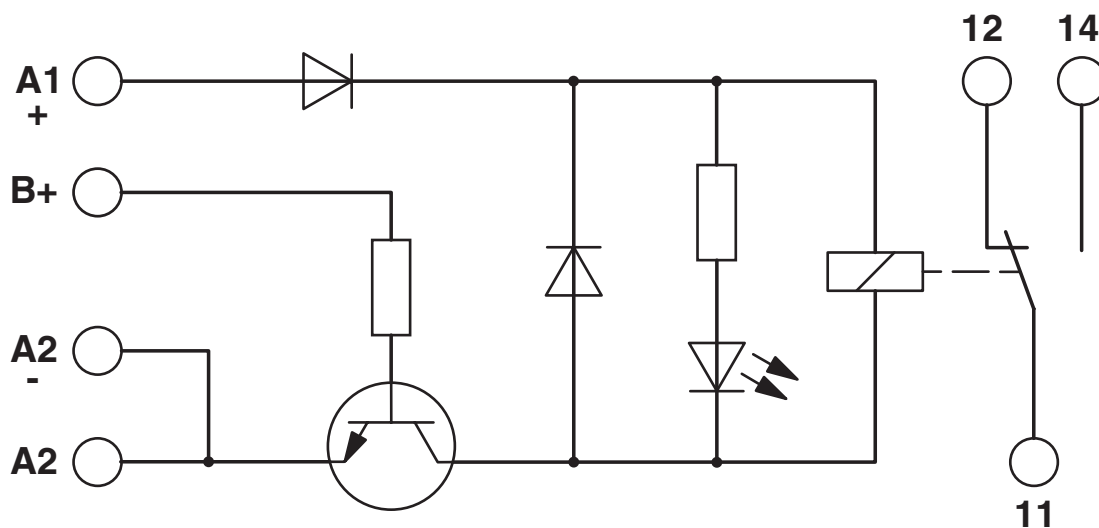
Diagram



- ① AC, ohmic load
- ② DC, ohmic load
- ③ DC, L/R = 40 ms

## Interrupting rating

Circuit diagram



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## Approvals

🔗 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2949787>



**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
Exemption	6(c), 7(a)

### China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	81934925-6378-4b1d-aa51-ebfa485b94f0

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