

# EMG 22-REL/KSR- 24/21AU - Relay module

2947721

<https://www.phoenixcontact.com/us/products/2947721>



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 documentation. Our general terms of use for downloads are valid.



Relay module, with soldered-in miniature switching relay, contact (AgNi+Au): small to large loads, 1 changeover contact, input voltage 24 V AC/DC

## Your advantages

- Safe isolation between coil and contact side
- Integrated input circuit and interference suppression circuit

## Commercial data

Item number	2947721
Packing unit	10 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	C460
Product key	CK61C2
Catalog page	Page 135 (IF-2011)
GTIN	4017918082840
Weight per piece (including packing)	62.56 g
Weight per piece (excluding packing)	62.36 g
Customs tariff number	85364190
Country of origin	DE

# EMG 22-REL/KSR- 24/21AU - Relay module

2947721

<https://www.phoenixcontact.com/us/products/2947721>



## Technical data

### Notes

#### Utilization restriction

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

### Product properties

Product type	Relay Module
Product family	EMG
Application	Universal
Operating mode	100% operating factor
Mechanical service life	approx. $3 \times 10^7$ cycles

#### Insulation characteristics

Insulation	Basic insulation Safe isolation, reinforced insulation, and 6 kV between input circuit and output contact current paths
Ovvoltage category	III
Pollution degree	2

#### Data management status

Date of last data management	02.05.2024
------------------------------	------------

### Electrical properties

Maximum power dissipation for nominal condition	0.43 W
Test voltage (Winding/contact)	5 kV <sub>rms</sub> (50 Hz, 1 min., winding/contact)
Test voltage (Contact/contact)	1 kV AC (50 Hz, 1 min., contact/contact)
Rated insulation voltage	260 V AC

### Input data

#### Coil side

Nominal input voltage U <sub>N</sub>	24 V AC/DC
Input voltage range	19.2 V AC/DC ... 26.4 V AC/DC (20 °C)
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at U <sub>N</sub>	18 mA
Typical response time	8 ms
Typical release time	10 ms
Protective circuit	Bridge rectifier; Bridge rectifier
Operating voltage display	Yellow LED

### Output data

#### Switching

# EMG 22-REL/KSR- 24/21AU - Relay module

2947721

<https://www.phoenixcontact.com/us/products/2947721>



Contact switching type	1 changeover contact
Type of switch contact	Single contact
Contact material	AgNi, hard gold-plated
Maximum switching voltage	30 V AC
	36 V DC
Limiting continuous current	50 mA
Maximum inrush current	50 mA
Interrupting rating (ohmic load) max.	1.2 W (at 24 V DC)

Switching: when the gold layer is destroyed

Note	the following values are applicable if a gold layer is destroyed
Maximum switching voltage	250 V AC/DC
Limiting continuous current	6 A
Maximum inrush current	8 A
Interrupting rating (ohmic load) max.	144 W (at 24 V DC) 58 W (at 48 V DC) 48 W (at 60 V DC) 50 W (at 110 V DC) 80 W (at 220 V DC) 1500 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

# EMG 22-REL/KSR- 24/21AU - Relay module

2947721

<https://www.phoenixcontact.com/us/products/2947721>



## Material specifications

Color	green (RAL 6021)
-------	------------------

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 50 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C

## Standards and regulations

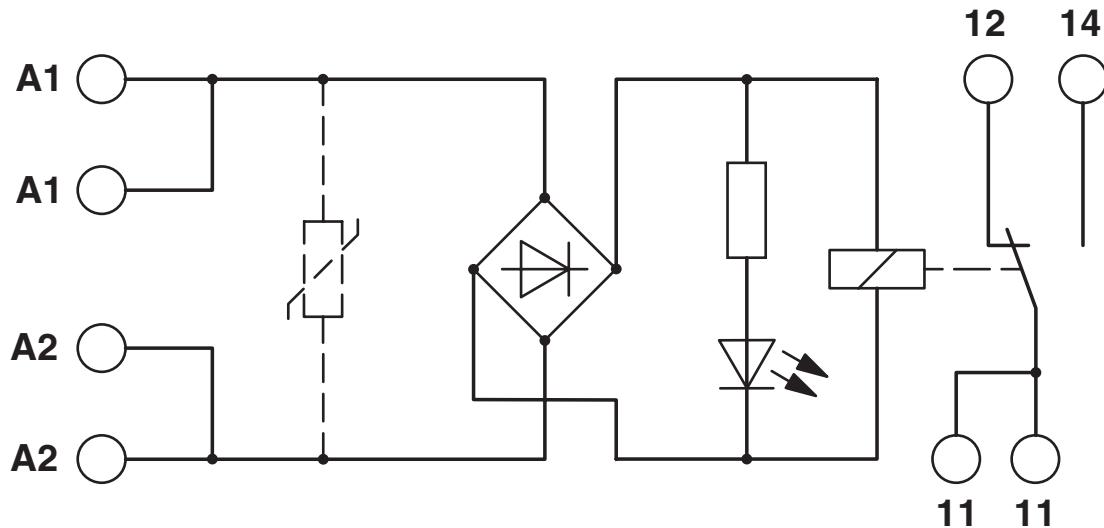
Standards/regulations	IEC 60664-1
-----------------------	-------------

## Mounting

Mounting type	DIN rail mounting
Assembly note	in rows with zero spacing
Mounting position	any

## Drawings

Circuit diagram



# EMG 22-REL/KSR- 24/21AU - Relay module

2947721

<https://www.phoenixcontact.com/us/products/2947721>



## Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2947721>



**EAC**

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

## Classifications

### ECLASS

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

### ETIM

ETIM 9.0	EC001437
----------	----------

### UNSPSC

UNSPSC 21.0	39122300
-------------	----------

# EMG 22-REL/KSR- 24/21AU - Relay module

2947721

<https://www.phoenixcontact.com/us/products/2947721>



## 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	11c97030-528a-49bd-9e25-04583242aae2

Phoenix Contact 2025 © - all rights reserved

<https://www.phoenixcontact.com>

### Phoenix Contact USA

586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)