

2941439

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Relay module, with soldered-in miniature switching relay, contact (AgNi+Au): small to large loads, 2 changeover contacts, 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	2941439
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	CK6146
Product key	CK6146
Catalog page	Page 135 (IF-2011)
GTIN	4017918080433
Weight per piece (including packing)	56.96 g
Weight per piece (excluding packing)	56.96 g
Customs tariff number	85364190
Country of origin	DE

## 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. $2 \times 10^7$ cycles

#### Insulation characteristics

Insulation	Basic insulation
	Safe isolation, reinforced insulation, and 6 kV between input circuit and output contact current paths

#### Insulation characteristics: Air clearances and creepage distances between the power circuits

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

#### Insulation characteristics: Air clearances and creepage distances between input and contact circuit (or output contact current path)

Insulation	Safe isolation, reinforced insulation
Overvoltage category	III
Pollution degree	2

### Electrical properties

Maximum power dissipation for nominal condition	0.43 W
Test voltage (Winding/contact)	4 kV AC (50 Hz, 1 min., winding/contact)
Test voltage (Contact/contact)	1 kV AC (50 Hz, 1 min., changeover contact/changeover contact)

#### Air clearances and creepage distances between the power circuits

Rated insulation voltage	260 V AC
Rated surge voltage	2.3 kV

#### Air clearances and creepage distances between input and contact circuit (or output contact current path)

Rated insulation voltage	260 V AC
Rated surge voltage	6 kV

### Input data

#### Coil side

# EMG 17-REL/KSR- 24/21-21-LC AU - Relay Module



2941439

<https://www.phoenixcontact.com/gb/products/2941439>

Nominal input voltage $U_N$	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 $U_N$	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

Contact switching type	2 changeover contacts
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	0.2 A
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	5 A
Maximum inrush current	6 A
Interrupting rating (ohmic load) max.	120 W (at 24 V DC) 95 W (at 48 V DC) 60 W (at 60 V DC) 40 W (at 110 V DC) 55 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

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Connection method	Screw connection
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Conductor cross section rigid	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
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Conductor cross section AWG	24 ... 12

## Dimensions

Width	17.5 mm
Height	75 mm
Depth	62.5 mm

## Material specifications

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

### Ambient conditions

Ambient temperature (operation)	-20 °C ... 40 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C

## Standards and regulations

### Air clearances and creepage distances between the power circuits

Standards/regulations	IEC 60664-1
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### Air clearances and creepage distances between input and contact circuit (or output contact current path)

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

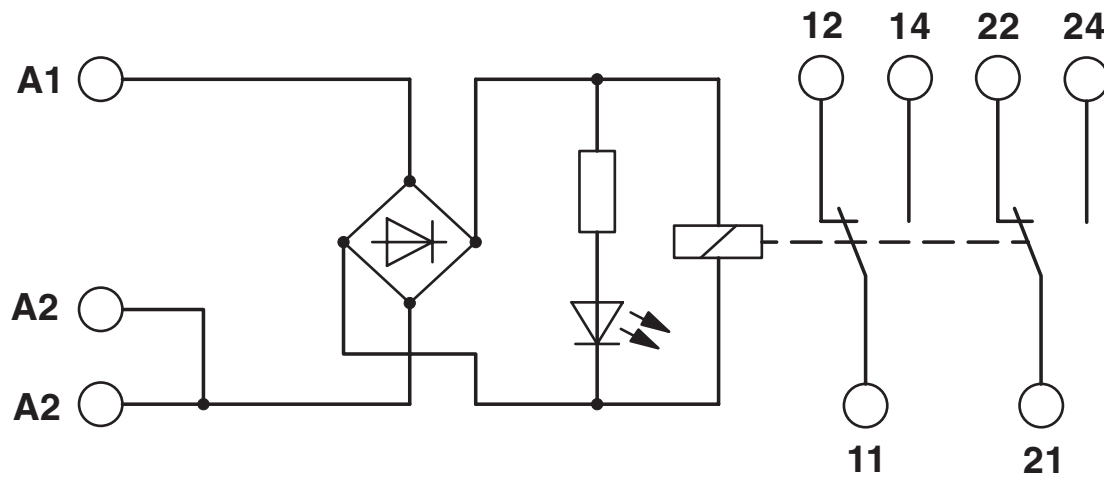
Standards/regulations	EN 61810-1
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## Mounting

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

## Drawings

Circuit diagram



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## Approvals


To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/2941439>




**cUL Recognized**  
Approval ID: FILE E 238705



**UL Recognized**  
Approval ID: FILE E 238705



**EAC**  
Approval ID: TR\_TS\_D\_00573\_c



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

**cULus Recognized**

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## Classifications

### ECLASS

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

### ETIM

ETIM 9.0	EC001437
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### UNSPSC

UNSPSC 21.0	39122300
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Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"



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## Accessories

### EMG-GKS 12 - Marking material

2947035

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Device marking label, width: 12 mm, area: 12 x 8 mm, e.g. for EML(10x7) R adhesive marking material

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