

2941439

<https://www.phoenixcontact.com/us/products/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	C460
Product key	CK61C2
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. 2×10^7 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



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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 ² ... 4 mm ²
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section AWG	24 ... 12

Contact side

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Connection method	Screw connection
Stripping length	8 mm
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Conductor cross section rigid	0.2 mm ² ... 4 mm ²
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
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

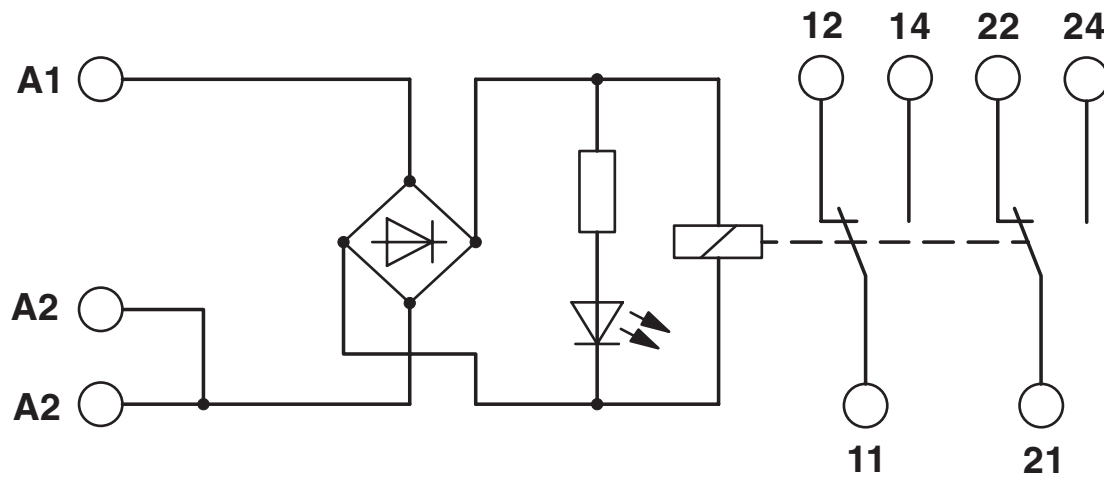
Standards/regulations	EN 61810-1
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Mounting

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

Drawings

Circuit diagram



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




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Approvals

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

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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

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	2167c78c-b889-4a19-b711-7a0a9136a928

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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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