

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	1 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

Data management status

Date of last data management	02.05.2024
Article revision	05

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: E238705



UL Recognized
Approval ID: E238705



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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