

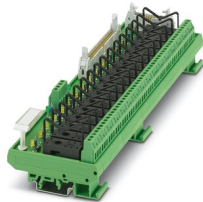
Active module - UMK-16 RELS/KSR-G24/21/PLC



2974901

<https://www.phoenixcontact.com/pc/products/2974901>

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VARIOFACE output module, with plug-in bases for 16 miniature relays, 1 changeover contact each, for 24 V DC (basic module, without relays)

Your advantages

- LED status indicator per signal path and supply voltage
- Freewheeling and polarity protection diode for each signal path
- Plug-in miniature relays, each with a changeover contact

Commercial Data

Item number	2974901
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Product Key	CK2171
Catalog Page	Page 539 (C-5-2017)
GTIN	4017918089009
Weight per Piece (including packing)	462.4 g
Weight per Piece (excluding packing)	380.9 g
Customs tariff number	85364190
Country of origin	DE

Technical Data

Notes

Notes on operation	Observe the maximum switching capacity of the relays used
Notes on operation	Do not connect adjacent channels to SELV/ PELV and voltages dangerous to the touch.
Notes on operation	The outputs are not suitable for switching different line conductors. The sum of the switching voltages used for adjacent outputs must not exceed the rated insulation voltage value
Notes on operation	The necessary requirements for insulation (basic insulation or reinforced insulation) from adjacent modules (in DIN-rail direction) must be realized by applying suitable measures (e. g., partition plates).

Utilization restriction

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

Product type	Controller board
No. of channels	16 32
Operating mode	100% operating factor
Mechanical service life	3x 10 ⁷ cycles
Compatible components	Miniature relay, REL-MR- 24DC/21HC
With components	no

Insulation characteristics

Overvoltage category	III
Pollution degree	2

Electrical properties

No. of channels	1632 32 (with connected extension module UMK-16 RELS/KSR-G24/21/E/PLC (2974891))
Rated insulation voltage	300 V AC
Rated surge voltage	4 kV (Basic insulation between output contact current paths) 6 kV (Safe isolation and reinforced insulation between input circuit and output contact paths)

Supported controller SIEMENS S7-400

Suitable I/O card	6ES7422-1BL00-0AA0 6ES7422-7BL00-0AB0
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Supported controller ALLEN-BRADLEY ControlLogix

Suitable I/O card	1756-OB32
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Supported controller ALLEN-BRADLEY PLC 5

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Suitable I/O card	1771 OBN
Supported controller HONEYWELL Experion PKS C200	
Suitable I/O card	TC-ODD 321
Supported controller MITSUBISHI MELSEC Q	
Suitable I/O card	QY81P
Supported controller SCHNEIDER ELECTRIC Modicon TSX QUANTUM	
Suitable I/O card	DDO 353
Supported controller SIEMENS S7-300 / ET 200 M	
Suitable I/O card	6ES7322-1BL00-0AA0
Supported controller GE-FANUC RX3i	
Suitable I/O card	IC694MDL754

Input data

Nominal input voltage U_N	24 V DC
Input voltage range in reference to U_N	0.8 ... 1.1
Typical input current at U_N	2 mA (Light indicator)
Protective circuit	Freewheeling diode; Freewheeling diode
Operating voltage display	Green LED
Status display/channel	Yellow LED

Output data

Compatible components	Miniature relay, REL-MR- 24DC/21HC
Switching	
Contact type	1 changeover contact
Maximum switching voltage	250 V AC/DC
Limiting continuous current	5 A

Connection data

Coil side

Connection method	IDC/FLK pin strip
Number of connections	1
Number of positions	50
Pitch	2.54 mm

Contact side

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Number of connections	48
Conductor cross section solid	0.2 mm ² ... 4 mm ²
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²

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Conductor cross section AWG	24 ... 12
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Supply

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Number of connections	4
Conductor cross section solid	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

Connection for extension module

Connection method	IDC/FLK pin strip
Number of connections	1
Number of positions	20
Pitch	2.54 mm

LED signaling

Status display present	yes
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Dimensions

Width	259 mm
Height	77 mm
Depth	59 mm

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP00
Ambient temperature (operation)	-20 °C ... 50 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C

Standards and regulations

Standards/regulations	EN 61010-2-201
	IEC 60664

Mounting

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

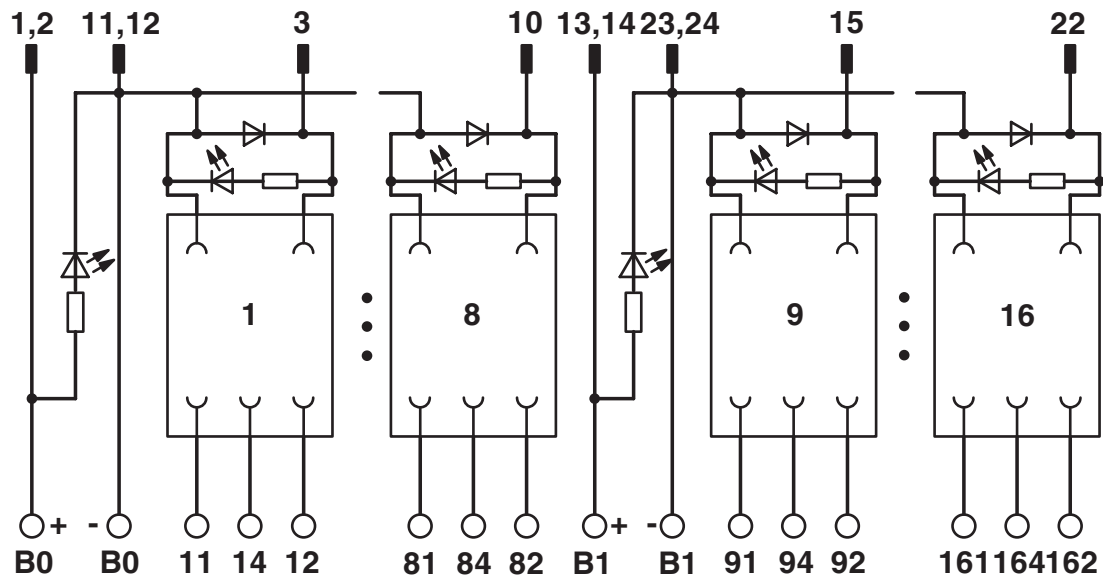
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Drawings

Circuit diagram



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Approvals



EAC

Approval ID: RU*DE*08.B.01841/19



UL Listed

Approval ID: FILE E 238705



cUL Listed

Approval ID: FILE E 238705

cULus Listed

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Classifications

ECLASS

ECLASS-9.0	27141152
ECLASS-10.0.1	27141152
ECLASS-11.0	27141152

ETIM

ETIM 8.0	EC002780
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UNSPSC

UNSPSC 21.0	39121400
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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
	Hexahydromethylphthalic anhydride
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

Single relay

Single relay - REL-MR- 24DC/21HC - 2961312

<https://www.phoenixcontact.com/pc/products/2961312>



Plug-in miniature power relay, with power contact for high continuous currents, 1 changeover contact, input voltage 24 V DC

Retaining bracket

Retaining bracket - SIM-ERSN-HB-MR - 2271471

<https://www.phoenixcontact.com/pc/products/2271471>

Retainer, for miniature relay



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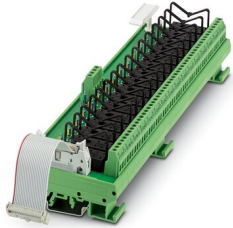
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