

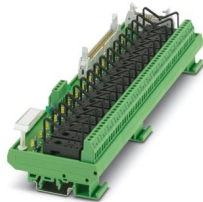
UMK-16 RELS/KSR-G24/21/PLC - Active module



2974901

<https://www.phoenixcontact.com/us/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)
Sales key	C421
Product key	CK2191
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

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Technical data

Product properties

Product type	Interface module
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

Data management status

Article revision	14
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Insulation characteristics

Overvoltage category	III
Pollution degree	2

Electrical properties

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

Supported controller ALLEN-BRADLEY ControlLogix

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

Suitable I/O card	1771 OBN
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Supported controller HONEYWELL Experion PKS C200

Suitable I/O card	TC-ODD 321
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Supported controller MITSUBISHI MELSEC Q

Suitable I/O card	QY81P
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Supported controller SCHNEIDER ELECTRIC Modicon TSX QUANTUM

Suitable I/O card	DDO 353
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Supported controller SIEMENS S7-300 / ET 200 M

Suitable I/O card	6ES7322-1BL00-0AA0
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Supported controller GE-FANUC RX3i

Suitable I/O card	IC694MDL754
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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 (LED display)
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
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Switching

Contact switching type	1 changeover contact
Maximum switching voltage	250 V AC/DC
Limiting continuous current	5 A

Connection data

Controller level

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

Field level

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Number of connections	48
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

Supply

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Number of connections	4
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

Connection for extension module

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

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Pitch	2.54 mm
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Signaling

Status display present	Yes
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Dimensions

Width	259 mm
Height	77 mm
Depth	59 mm

Material specifications

Color	green (RAL 6021)
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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 note	in rows with zero spacing
Mounting position	any

Notes

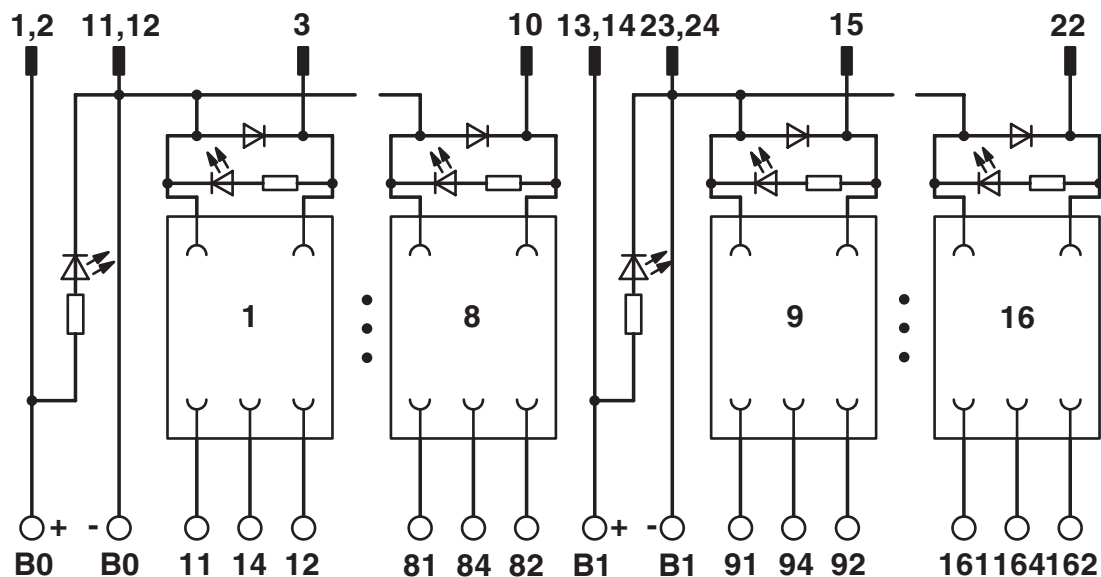
Notes on operation	Observe the maximum switching capacity of the relays used
Notes on operation	Do not connect adjacent channels to SELV/ PELV and voltages dangerous to the touch.
Notes on operation	The outputs are not suitable for switching different line conductors. The sum of the switching voltages 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).
Notes on operation	For proper use, the specifications of the installation directive (see Downloads) must be observed. For applications or use with third-party products, the specifications, and the safety and warning instructions of the respective third-party manufacturer must also be met.

Utilization restriction

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

Circuit diagram



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Approvals


To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2974901>



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



UL Listed
Approval ID: E238705



cUL Listed
Approval ID: E238705

cULus Listed

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Classifications

ECLASS

ECLASS-11.0	27141152
ECLASS-12.0	27141152
ECLASS-13.0	27141152

ETIM

ETIM 9.0	EC002780
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes
Exemption	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.)	Hexahydromethylphthalic anhydride(CAS: n/a)
	Lead(CAS: 7439-92-1)
SCIP	c839830a-b242-4325-b123-fdd32b032877

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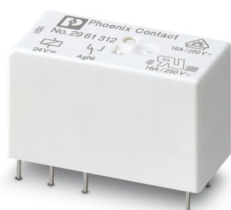
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Mandatory accessories

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

2961312

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



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

SIM-ERSN-HB-MR - Retaining bracket

2271471

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

Retainer, for miniature relay



Accessories

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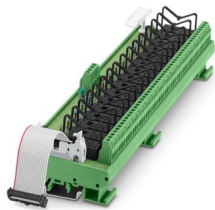
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UMK-16 RELS/KSR-G24/21/E/PLC - Active module

2974891

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

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