

# UM-2KS40/16AI-J/SI/RS/SO225 - Input module



2905003

<https://www.phoenixcontact.com/us/products/2905003>

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16-channel analog input module with screw connection, redundant voltage supply, and additional jumpers for each channel. Suitable for Yokogawa SAI 143 card.

## Product description

These modules have been specifically developed to connect analog I/O cards to the field level using preassembled system cables. The modules offer the following features:

- Transmission of up to 16 channels
- Two parallel system connections for redundant applications
- Fuse and LED per channel
- 2- or 3-conductor connection for each channel depending on the jumper position
- Screw connection

The following input cards can be connected:  
SAI 143

## Commercial data

Item number	2905003
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	C421
Product key	CK21A4
GTIN	4046356906937
Weight per piece (including packing)	848.4 g
Weight per piece (excluding packing)	818.2 g
Customs tariff number	85369010
Country of origin	DE

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## Technical data

### Product properties

Product type	Interface module
No. of channels	16
Operating mode	100% operating factor

### Insulation characteristics

Insulation	Functional insulation
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### Insulation characteristics: Air clearances and creepage distances

Insulation	Functional insulation
Overvoltage category	II
Pollution degree	2

### Electrical properties

Max. permissible current	0.9 A (per path, protected by slow-blow fuse 1 A, 5x20 (short-circuit protection only))
Max. permissible total current	10 A (protected by slow-blow fuse 10 A, 5x20 (short-circuit protection only))
Nominal voltage $U_N$	24 V DC 19.2 V DC ... 30 V DC

### Air clearances and creepage distances

Rated insulation voltage	50 V
Rated surge voltage	0.5 kV

### Supported controller YOKOGAWA ProSafe-RS

Suitable I/O card	SAI143
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### Output data

#### Alarm contact

Contact switching type	1 N/O contact
Type of switch contact	Double contact
Contact material	AgNi, 5 µm hard gold-plated
Maximum switching voltage	25 V AC 48 V DC
Limiting continuous current	1 A
Min. switching current	1 mA
Interrupting rating (ohmic load) max.	24 W (24 V DC) 48 W (48 V DC) 25 VA (25 V AC)

### Connection data

Field level

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Connection method	Screw connection
Number of connections	1
Number of positions	66
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

## Controller level

Connection method	Yokogawa KS-compatible
Number of connections	2
Number of positions	40
Tightening torque	0.5 Nm

## Supply

Connection method	Screw connection
Number of connections	1
Number of positions	6
Conductor cross section rigid	0.34 mm <sup>2</sup> ... 2.5 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

## Signaling

Status display	LED red
Status display present	Yes, if the fuse fails
Operating voltage display	Green LED

## Dimensions

### Item dimensions

Width	181.4 mm
Height	127.5 mm
Depth	94.7 mm

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP00
Degree of protection (Installation location)	≥ IP54 (Installation location)
Ambient temperature (operation)	-20 °C ... 55 °C
Altitude	≤ 2000 m

## Standards and regulations

### Air clearances and creepage distances

Standards/regulations	DIN EN 50178
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## Mounting

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

## Notes

General	No additional touch protection is required when using a SELV/PELV voltage ( $\leq 25$ V AC or 60 V DC).
General	At least one functional insulation against adjacent modules is complied with (in the support rail direction). If the application has stricter requirements for the insulation (basic insulation or reinforced insulation), they must be realized by applying suitable measures (e. g. partition plates).
General	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.

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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

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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