

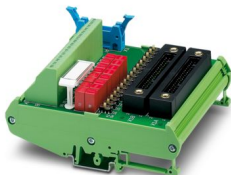
# UM-2KS40/AIO16/CS/Z/SO180 - Input module



2311344

<https://www.phoenixcontact.com/us/products/2311344>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



16-channel analog input/output module with spring-cage connection. Suitable for Yokogawa AAI141, AAI143 and AAI543 cards.  
Every channel can be switched between the output and the input. Connection option for HART multiplexers.

## Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 2311344                        |
| Packing unit                         | 1 pc                           |
| Minimum order quantity               | 1 pc                           |
| Note                                 | Made to order (non-returnable) |
| Sales key                            | C421                           |
| Product key                          | CK218N                         |
| GTIN                                 | 4046356317719                  |
| Weight per piece (including packing) | 284.4 g                        |
| Weight per piece (excluding packing) | 163.4 g                        |
| Customs tariff number                | 85369010                       |
| Country of origin                    | DE                             |

# UM-2KS40/AIO16/CS/Z/SO180 - Input module



2311344

<https://www.phoenixcontact.com/us/products/2311344>

## Technical data

### Product properties

|                 |                  |
|-----------------|------------------|
| Product type    | Interface module |
| No. of channels | 16               |

#### Data management status

|                  |    |
|------------------|----|
| Article revision | 07 |
|------------------|----|

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

|                      |                       |
|----------------------|-----------------------|
| Insulation           | Functional insulation |
| Overvoltage category | II                    |
| Pollution degree     | 2                     |

### Electrical properties

|                        |         |
|------------------------|---------|
| Operating voltage (DC) | 24 V DC |
| Current (per branch)   | ≤ 0.1 A |

#### Air clearances and creepage distances

|                          |                    |
|--------------------------|--------------------|
| Rated insulation voltage | 50 V               |
| Rated surge voltage      | 0.5 kV (1.2/50 µs) |

#### Supported controller YOKOGAWA CS3000 CentumVP

|                   |        |
|-------------------|--------|
| Suitable I/O card | AAI543 |
|                   | AAI141 |
|                   | AAI143 |

#### Supported controller YOKOGAWA STARDOM

|                   |         |
|-------------------|---------|
| Suitable I/O card | NFAI543 |
|                   | NFAI141 |
|                   | NFAI143 |

### Connection data

#### Connection 1 (control level)

|                       |                                                           |
|-----------------------|-----------------------------------------------------------|
| Connection method     | Yokogawa KS-compatible                                    |
| Number of connections | 2                                                         |
| Number of positions   | 40                                                        |
| Note                  | Usable system cables: Phoenix Contact YUC40, Yokogawa KS1 |
| Tightening torque     | 0.5 Nm                                                    |
| Pitch                 | 2.54 mm                                                   |

#### Connection 2 (field level)

|                               |                        |
|-------------------------------|------------------------|
| Connection method             | Spring-cage connection |
| Stripping length              | 7.5 mm                 |
| Number of positions           | 32                     |
| Conductor cross section rigid | 0.2 mm² ... 2.5 mm²    |

# UM-2KS40/AIO16/CS/Z/SO180 - Input module



2311344

<https://www.phoenixcontact.com/us/products/2311344>

|                                  |                                                       |
|----------------------------------|-------------------------------------------------------|
| Conductor cross section flexible | 0.2 mm² ... 1.5 mm²                                   |
|                                  | 0.25 mm² ... 1.5 mm² (Ferrule without plastic sleeve) |
|                                  | 0.25 mm² ... 1.5 mm² (Ferrule with plastic sleeve)    |
| Conductor cross section AWG      | 24 ... 14                                             |
| Pitch                            | 5.08 mm                                               |

## Connection 3 (HART connector)

|                       |                |
|-----------------------|----------------|
| Connection method     | HART connector |
| Number of connections | 1              |
| Number of positions   | 26             |
| Pitch                 | 1.27 mm        |

## Signaling

|                        |    |
|------------------------|----|
| Status display present | No |
|------------------------|----|

## Dimensions

### Item dimensions

|        |          |
|--------|----------|
| Width  | 107.5 mm |
| Height | 125.4 mm |
| Depth  | 61.8 mm  |

## Environmental and real-life conditions

### Ambient conditions

|                                              |                  |
|----------------------------------------------|------------------|
| Degree of protection (Module)                | IP00             |
| Degree of protection (Installation location) | ≤ IP54           |
| Ambient temperature (operation)              | -20 °C ... 50 °C |
| Ambient temperature (storage/transport)      | -20 °C ... 70 °C |
| Altitude                                     | ≤ 2000 m         |

## Approvals

### UKCA

|             |                |
|-------------|----------------|
| Certificate | UKCA-compliant |
|-------------|----------------|

## Standards and regulations

### Air clearances and creepage distances

|                       |                |
|-----------------------|----------------|
| Standards/regulations | EN IEC 60664-1 |
|-----------------------|----------------|

## Mounting

|                   |                   |
|-------------------|-------------------|
| Mounting type     | DIN rail mounting |
| Mounting position | any               |

## Notes

|                    |                                                                                                                                        |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Notes on operation | For proper use, the specifications of the installation directive (see Downloads) must be observed. For applications or use with third- |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------|

# UM-2KS40/AIO16/CS/Z/SO180 - Input module



2311344

<https://www.phoenixcontact.com/us/products/2311344>

party products, the specifications, and the safety and warning instructions of the respective third-party manufacturer must also be met.

# UM-2KS40/AIO16/CS/Z/SO180 - Input module

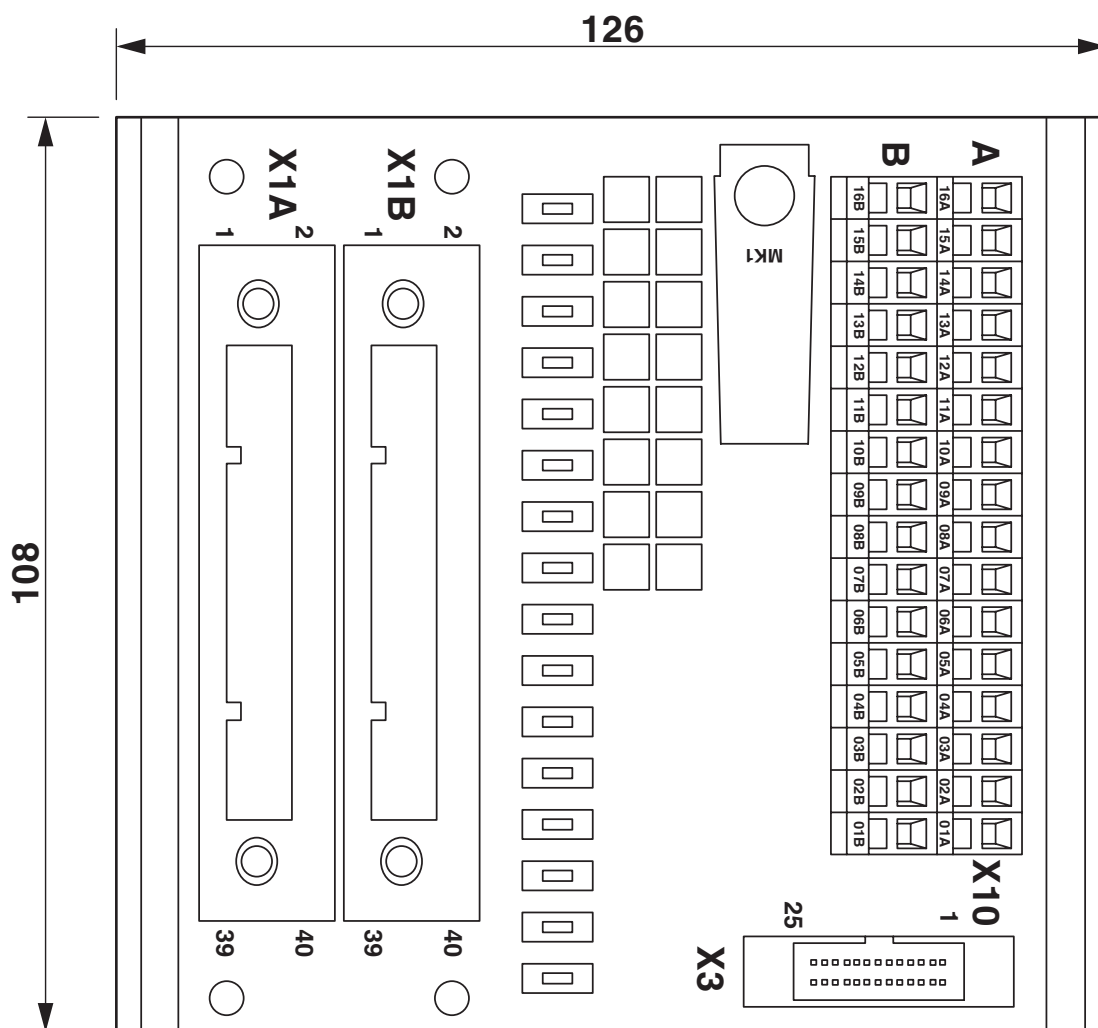
2311344

<https://www.phoenixcontact.com/us/products/2311344>



## Drawings

## Dimensional drawing



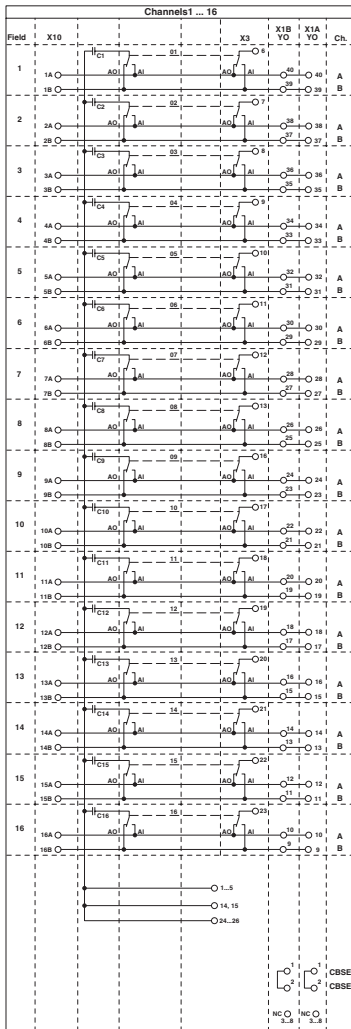
# UM-2KS40/AIO16/CS/Z/SO180 - Input module

2311344

<https://www.phoenixcontact.com/us/products/2311344>



### Circuit diagram



# UM-2KS40/AIO16/CS/Z/SO180 - Input module



2311344

<https://www.phoenixcontact.com/us/products/2311344>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2311344>



**EAC**  
Approval ID: RU\*-DE.\*08.B.01829\*

|                                                                                   |                                     |                       |                   |                             |
|-----------------------------------------------------------------------------------|-------------------------------------|-----------------------|-------------------|-----------------------------|
|  | <b>CSA</b><br>Approval ID: LR 13631 |                       |                   |                             |
|                                                                                   | Nominal voltage $U_N$               | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|                                                                                   | 24 V                                | 0.1 A                 | -                 | -                           |

# UM-2KS40/AIO16/CS/Z/SO180 - Input module



2311344

<https://www.phoenixcontact.com/us/products/2311344>

## Classifications

### ECLASS

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

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC002780 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39121400 |
|-------------|----------|

Environmental product compliance

|                                         |                                                                                                                                                                                                                                   |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EU RoHS                                 |                                                                                                                                                                                                                                   |
| Fulfills EU RoHS substance requirements | Yes                                                                                                                                                                                                                               |
| Exemption                               | 6(c)                                                                                                                                                                                                                              |
| 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                                    | e3facb1b-d325-49b5-bd1e-17005ffe53d6                                                                                                                                                                                              |