



### Main

|                               |                                                       |
|-------------------------------|-------------------------------------------------------|
| Range of product              | Interface for discrete signals                        |
| Product or component type     | Slim solid state input interface module               |
| Contacts type and composition | 1 NC                                                  |
| [Uc] control circuit voltage  | 24 V                                                  |
| Control circuit type          | DC                                                    |
| Maximum [In] rated current    | 12 mA                                                 |
| Reverse polarity protection   | Control circuit: internal<br>Output circuit: internal |
| Short-circuit protection      | 0.25 A external fuse fast blow (Ik ≤ 100 A DC)        |
| Local signalling              | 1 LED for control signal state                        |
| Sale per indivisible quantity | 5                                                     |
| Width pitch dimension         | 9.5 mm                                                |

### Complementary

|                                  |                                                                                                                                              |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Control circuit voltage limits   | 28.8 V                                                                                                                                       |
| Voltage state 1 guaranteed       | 16.9 V                                                                                                                                       |
| Current state 1 guaranteed       | 7.7 mA                                                                                                                                       |
| Voltage state 0 guaranteed       | 5.6 V                                                                                                                                        |
| Current state 0 guaranteed       | 2 mA                                                                                                                                         |
| [Ue] rated operational voltage   | 5...48 V                                                                                                                                     |
| Output circuit type              | DC                                                                                                                                           |
| Rated operational voltage limits | 2...60 V                                                                                                                                     |
| Maximum switching current        | 50 mA                                                                                                                                        |
| Minimum switching current        | 1 mA                                                                                                                                         |
| Residual current                 | 0.1 mA at state 0                                                                                                                            |
| Drop-out voltage                 | 1 V at state 1                                                                                                                               |
| Response time                    | ≤ 0.05 ms from state 0 to state 1 Ue ≤ 30 V and Ie ≥ 5 mA<br>≤ 0.4 ms from state 1 to state 0 Ue ≤ 30 V and Ie ≥ 5 mA                        |
| Switching frequency              | ≤ 1000 Hz 50 % Ue ≤ 30 V and Ie ≥ 5 mA                                                                                                       |
| [Ui] rated insulation voltage    | 250 V conforming to VDE 0110 group C<br>300 V conforming to IEC 60947-1                                                                      |
| Connections - terminals          | Screw clamp terminal                                                                                                                         |
| Flame retardance                 | V0 conforming to UL 94                                                                                                                       |
| Cable cross section              | 0.34...2.5 mm², 1 or 2 wires flexible with cable end<br>0.6...2.5 mm², 1 or 2 wires flexible without cable end<br>0.27...4 mm², 1 wire rigid |
| Operating position               | Any position                                                                                                                                 |
| Installation category            | II conforming to IEC 60947-1                                                                                                                 |
| Mounting support                 | Symmetrical DIN rail<br>Asymmetrical DIN rail<br>Combination rail                                                                            |
| Net weight                       | 0.029 kg                                                                                                                                     |

## Environment

|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dielectric strength                   | 2500 V between wired interface and earth for 1 minute<br>4000 V between I/O for 1 minute                                                                                                                                                                                                                                                                                                                                                        |
| Standards                             | IEC 60947-5-1                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Product certifications                | DNV<br>LROS (Lloyds register of shipping)<br>CSA<br>BV<br>UL                                                                                                                                                                                                                                                                                                                                                                                    |
| IP degree of protection               | IP20 conforming to IEC 60529                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Protective treatment                  | TC                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Fire resistance                       | 960 °C conforming to IEC 60695-2-1                                                                                                                                                                                                                                                                                                                                                                                                              |
| Shock resistance                      | 30 gn for 11 ms conforming to IEC 60068-2-27                                                                                                                                                                                                                                                                                                                                                                                                    |
| Vibration resistance                  | 5 gn conforming to IEC 68-2-6 (f = 10...150 Hz)                                                                                                                                                                                                                                                                                                                                                                                                 |
| Electromagnetic compatibility         | Electromagnetic field immunity test: level 3 10 V/m between 27...1000 MHz conforming to IEC 61000-4-3<br>Electrostatic discharge immunity test: level 3 8 kV conforming to IEC 61000-4-2<br>Fast transients immunity test: level 3 on input/output 1 kV conforming to IEC 61000-4-4<br>Fast transients immunity test: level 3 on power supply 2 kV conforming to IEC 61000-4-4<br>1.2/50 µs shock waves immunity test conforming to IEC 60947-1 |
| Ambient air temperature for operation | -25...70 °C at Us<br>-5...55 °C unrestricted operation                                                                                                                                                                                                                                                                                                                                                                                          |
| Ambient air temperature for storage   | -40...80 °C                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Operating altitude                    | <= 300 m                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Pollution degree                      | 2 conforming to IEC 60947-1                                                                                                                                                                                                                                                                                                                                                                                                                     |

## Packing Units

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Weight             | 36 g    |
| Package 1 Height             | 7 cm    |
| Package 1 width              | 9 cm    |
| Package 1 Length             | 11.1 cm |
| Unit Type of Package 2       | BB1     |
| Number of Units in Package 2 | 5       |
| Package 2 Weight             | 184 g   |
| Package 2 Height             | 7 cm    |
| Package 2 width              | 9 cm    |
| Package 2 Length             | 11.1 cm |
| Unit Type of Package 3       | S01     |
| Number of Units in Package 3 | 25      |
| Package 3 Weight             | 1.1 kg  |
| Package 3 Height             | 15 cm   |
| Package 3 width              | 15 cm   |
| Package 3 Length             | 40 cm   |

## Offer Sustainability

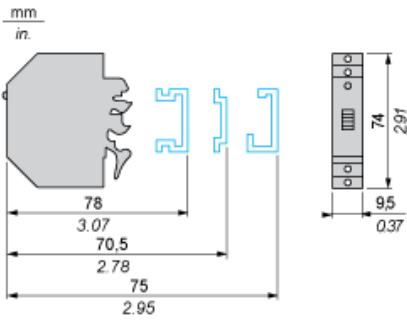
|                            |                                                                                                                                                                                      |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| REACH Regulation           |  <a href="#">REACH Declaration</a>                                                                |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)  <a href="#">EU RoHS Declaration</a> |
| Mercury free               | Yes                                                                                                                                                                                  |
| RoHS exemption information |  <a href="#">Yes</a>                                                                              |
| China RoHS Regulation      |  <a href="#">China RoHS Declaration</a>                                                           |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins                                                          |

Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Slim Solid-State Interface Module

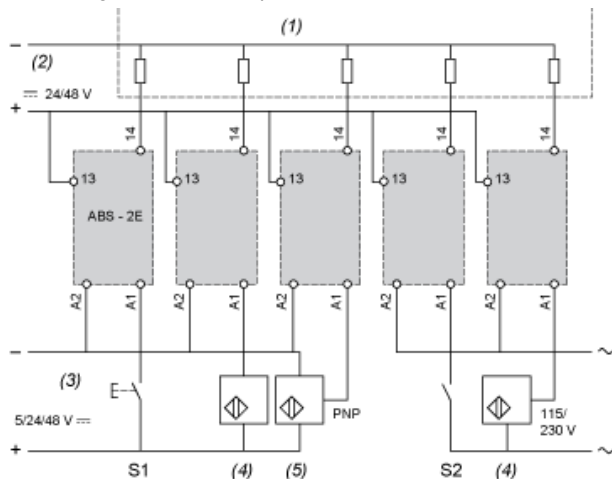
Dimensions



## Slim Solid-State Interface Module

### Example of Application with PLC

Interfacing PLC discrete inputs



S1, Pushbuttons series contacts

S2

(1) PLC positive logic discrete inputs

(2) Processing power supply

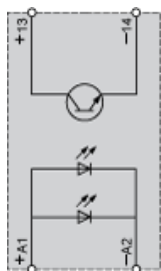
(3) Process power supply

(4) 2-wire sensors

(5) 3-wire sensors

## Solid-State Input Module

### Circuit Diagram



### Wiring Diagram

