

ABS2EC01EE

input interface module - 9.5 mm - solid state - 48 V
DC



Main

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|-------------------------------|---|
| 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 | 48 V |
| Control circuit type | DC |
| [In] rated current | <= 10.5 mA |
| Reverse polarity protection | Internal for control circuit Internal for output circuit |
| Short-circuit protection | 0.25 A external fuse fast blow (Ik <= 100 A DC) |
| Local signalling | 1 LED indicating control signal state |
| Sale per indivisible quantity | 5 |
| Width pitch dimension | 9.5 mm |

Complementary

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|----------------------------------|--|
| Control circuit voltage limits | 57.6 V |
| Voltage state 1 guaranteed | 36 V |
| Current state 1 guaranteed | 7.5 mA |
| Voltage state 0 guaranteed | 10.8 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 <= 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 300 V conforming to IEC 60947-1 |
| Connections - terminals | Screw clamp terminal |
| Flame retardance | V0 conforming to UL 94 |
| Cable cross section | 0.27...4 mm², 1 wire rigid 0.34...2.5 mm², 1 or 2 wires flexible with cable end 0.6...2.5 mm², 1 or 2 wires flexible without cable end |
| Operating position | Any position |
| Installation category | II conforming to IEC 60947-1 |
| Mounting support | Asymmetrical DIN rail Combination rail Symmetrical DIN rail |
| Product weight | 0.029 kg |

Environment

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|------------------------|--|
| dielectric strength | 2500 V between wired interface and earth for 1 minute 4000 V between I/O for 1 minute |
| standards | IEC 60947-5-1 |
| product certifications | BV CSA DNV |

The information provided in this documentation contains general descriptions and/or technical characteristics of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

LROS (Lloyds register of shipping)
UL

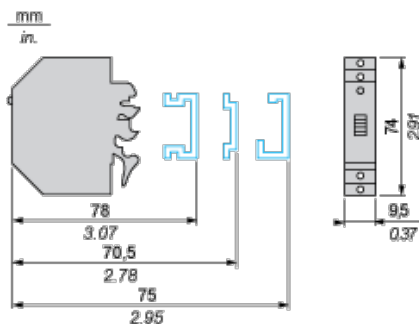
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|---------------------------------------|--|
| IP degree of protection | IP20 conforming to IEC 60529 |
| protective treatment | TC |
| fire resistance | 960 °C conforming to IEC 60695-2-1 |
| shock resistance | 30 gn for 11 ms conforming to IEC 60068-2-27 |
| vibration resistance | 5 gn (f = 10...150 Hz) conforming to IEC 68-2-6 |
| electromagnetic compatibility | 1.2/50 µs shock waves immunity test, 0.5 kV for U < 50 V conforming to IEC 60947-1 1.2/50 µs shock waves immunity test, 1.5 kV for U < 150 V conforming to IEC 60947-1 1.2/50 µs shock waves immunity test, 2.5 kV for U < 300 V conforming to IEC 60947-1 Electromagnetic field immunity test level 3, 10 V/m between 27...1000 MHz conforming to IEC 61000-4-3 Electrostatic discharge immunity test level 3, 8 kV conforming to IEC 61000-4-2 Fast transients immunity test level 3, on input/output 1 kV conforming to IEC 61000-4-4 Fast transients immunity test level 3, on power supply 2 kV conforming to IEC 61000-4-4 |
| ambient air temperature for operation | -25...70 °C at Us -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 |

Contractual warranty

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|-----------------|-----------|
| Warranty period | 18 months |
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Slim Solid-State Interface Module

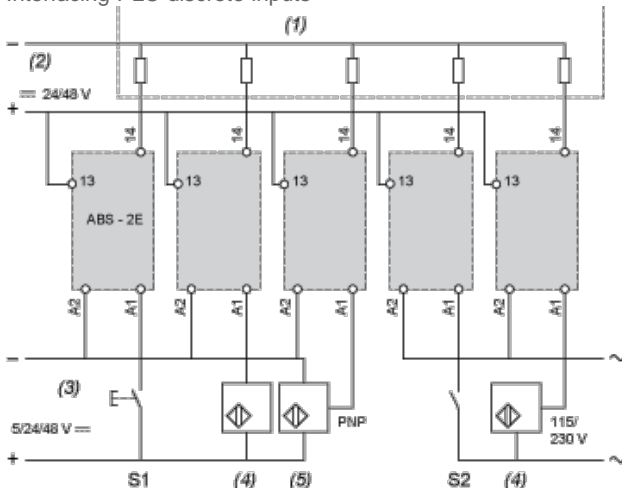
Dimensions



Slim Solid-State Interface Module

Example of Application with PLC

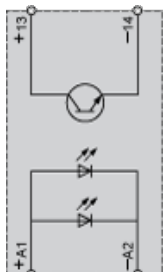
Interfacing PLC discrete inputs



- 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

