



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

Complementary

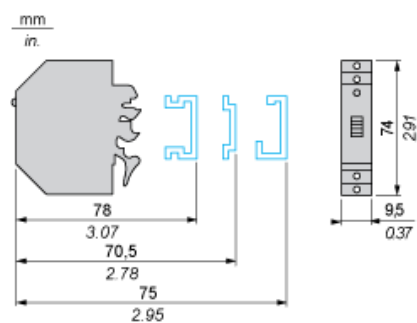
Control voltage limits	57.6 V
Voltage state 1 guaranteed	36 V
Current state 1 guaranteed	7.5 mA
Voltage state 0 guaranteed	10.8 V
Current state 0 guaranteed	2 mA
[Ue] rated operational voltage	5...48 V
Output circuit type	DC
Rated operational voltage limits	2...60 V
Maximum switching current	50 mA
Minimum switching current	1 mA
Residual current	0.1 mA at state 0
Drop-out voltage	≤ 1 V at state 1
Response time	≤ 0.4 ms from state 1 to state 0 $U_e \leq 30$ V and $I_e \geq 5$ mA ≤ 0.05 ms from state 0 to state 1 $U_e \leq 30$ V and $I_e \geq 5$ mA
Switching frequency	≤ 1000 Hz 50 % $U_e \leq 30$ V and $I_e \geq 5$ mA
[Ui] rated insulation voltage	300 V conforming to IEC 60947-1 250 V conforming to VDE 0110 group C
Connections - terminals	Screw clamp terminal
Flame retardance	V0 conforming to UL 94
Cable cross section	0.6...2.5 mm ² , 1 or 2 wires flexible without cable end 0.34...2.5 mm ² , 1 or 2 wires flexible with cable end 0.27...4 mm ² , 1 wire rigid
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

Dielectric strength	4000 V between I/O for 1 minute 2500 V between wired interface and earth for 1 minute
Standards	IEC 60947-5-1
Product certifications	BV CSA DNV LROS (Lloyds register of shipping) 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 (f = 10...150 Hz) conforming to IEC 68-2-6
Electromagnetic compatibility	Fast transients immunity test level 3, on power supply 2 kV conforming to IEC 61000-4-4 Fast transients immunity test level 3, on input/output 1 kV conforming to IEC 61000-4-4 Electrostatic discharge immunity test level 3, 8 kV conforming to IEC 61000-4-2 Electromagnetic field immunity test level 3, 10 V/m between 27...1000 MHz conforming to IEC 61000-4-3 1.2/50 µs shock waves immunity test, 2.5 kV for U < 300 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, 0.5 kV for U < 50 V conforming to IEC 60947-1
Ambient air temperature for operation	-5...55 °C unrestricted operation -25...70 °C at Us
Ambient air temperature for storage	-40...80 °C
Operating altitude	<= 300 m
Pollution degree	2 conforming to IEC 60947-1

Slim Solid-State Interface Module

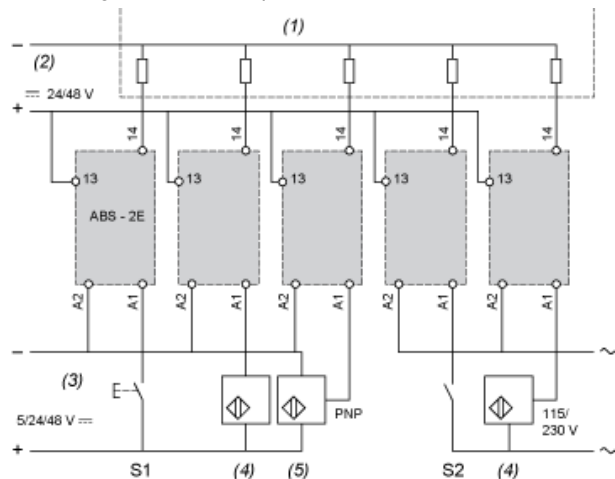
Dimensions



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

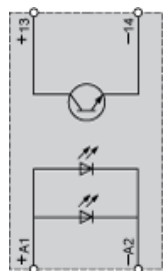
(3) Process power supply

(4) 2-wire sensors

(5) 3-wire sensors

Solid-State Input Module

Circuit Diagram



Wiring Diagram

