ABS2SA02MB

output interface module - 17.5 mm - solid state - 24..230 V AC - 3 A



Main

Range of Product	Interface for discrete signals
Product or Component Type	Slim solid state output interface module
Contacts type and composition	1 NC
[Uc] control circuit voltage	24 V
Control circuit type	DC
Maximum [In] rated current	13.6 mA
Reverse polarity protection	Control circuit internal Output circuit internal
Short-circuit protection	3.15 A external fuse fast blow lk <= 1 kA AC and lk <= 100 A DC)
[Ith] conventional free air thermal current	3 A 104 °F (40 °C)
Local signalling	Green mechanical indicator for position of contacts 1 green LED control signal state
Sale per indivisible quantity	1
Width pitch dimension	0.69 in (17.5 mm)

Complementary

Complementary	
Control circuit voltage limits	28.8 V
Voltage state 1 guaranteed	16.9 V
Current state 1 guaranteed	8.3 mA
Voltage state 0 guaranteed	5.3 V
Current state 0 guaranteed	2 mA
[Ue] rated operational voltage	24240 V
Output circuit type	AC
Rated operational voltage limits	<= 264 V
[le] rated operational current	1 A AC-15 vertical position, single product IEC 60947-5-1 1 A AC-15 vertical position, touching product IEC 60947-5-1 1.6 A AC-13 vertical position, single product IEC 60947-5-1 1.6 A AC-14 vertical position, single product IEC 60947-5-1 2.1 A AC-12 vertical position, single product IEC 60947-5-1 1.5 A AC-12 vertical position, touching product IEC 60947-5-1 1.5 A AC-13 vertical position, touching product IEC 60947-5-1 1.5 A AC-14 vertical position, touching product IEC 60947-5-1
Minimum switching current	10 mA
Maximum residual current	2.5 mA
Drop-out voltage	3 V 1.5 V
DV/dt	500 V/µs
0 crossing voltage	50 V peak
Response time	<= 10 ms from state 0 to state 1 50 Hz <= 10 ms from state 1 to state 0 50 Hz <= 8 ms from state 0 to state 1 60 Hz <= 8 ms from state 1 to state 0 60 Hz
Switching frequency	<= 0.7 Hz AC-13 module alone 40 % <= 0.7 Hz AC-14 module alone 40 % <= 0.7 Hz AC-15 module alone 40 % <= 50 Hz on resistive load 50 %

[Ui] rated insulation voltage	250 V VDE 0110 group C 300 V IEC 60947-1
Flame retardance	V0 conforming to UL 94
Cable cross section	0.000.00 ln² (0.62.5 mm²), 1 or 2 wires flexible without cable end screw clamp terminal 0.000.01 ln² (0.274 mm²), 1 wire rigid 0.000.00 in² (0.342.5 mm²), 1 or 2 wires flexible with cable end
Operating position	Any position
Installation category	II IEC 60947-1
Mounting Support	Asymmetrical DIN rail Combination rail Symmetrical DIN rail
Net Weight	0.97 lb(US) (0.44 kg)

Environment

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	CSA UL DNV BV LROS (Lloyds register of shipping)
IP degree of protection	IP20 conforming to IEC 60529
Protective treatment	TC
Fire resistance	1760 °F (960 °C) IEC 60695-2-1
Shock resistance	30 gn 11 ms IEC 60068-2-27
Vibration resistance	5 gn 10150 Hz)IEC 60068-2-6
Electromagnetic compatibility	Electromagnetic field immunity test level 3 10 V/m between 271000 MHz IEC 61000-4-3 Electrostatic discharge immunity test level 3 8 kV IEC 61000-4-2 Fast transients immunity test level 3 on input/output 1 kV IEC 61000-4-4 Fast transients immunity test level 3 on power supply 2 kV IEC 61000-4-4 1.2/50 µs shock waves immunity test IEC 60947-1
Ambient Air Temperature for Operation	-13158 °F (-2570 °C) at Us 23131 °F (-555 °C) unrestricted operation
Ambient Air Temperature for Storage	-40176 °F (-4080 °C)
Operating altitude	<= 9842.52 ft (3000 m)
Pollution degree	2 IEC 60947-1

Ordering and shipping details

22375 - INTERFACE MODULE(ABA,R,S)
CP2
3389110602548
1
1.66 oz (47 g)
No
FR

Packing Units

. doming office		
Unit Type of Package 1	PCE	
Package 1 Height	2.83 in (7.2 cm)	
Package 1 width	3.54 in (9 cm)	
Package 1 Length	4.25 in (10.8 cm)	
Unit Type of Package 2	BB1	
Number of Units in Package 2	5	
Package 2 Weight	8.36 oz (237 g)	
Package 2 Height	2.83 in (7.2 cm)	
Package 2 width	3.54 in (9 cm)	
Package 2 Length	4.25 in (10.8 cm)	

Unit Type of Package 3	S01
Number of Units in Package 3	25
Package 3 Weight	3.03 lb(US) (1.375 kg)
Package 3 Height	5.91 in (15 cm)
Package 3 width	5.91 in (15 cm)
Package 3 Length	15.75 in (40 cm)
Offer Sustainability	
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACh Regulation	☑REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
RoHS exemption information	₫Yes
China RoHS Regulation	Ğ China RoHS Declaration

Contractual warranty

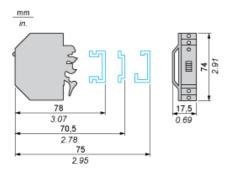
Warranty 18 months

Product data sheet Dimensions Drawings

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Slim Solid-State Interface Module

Dimensions

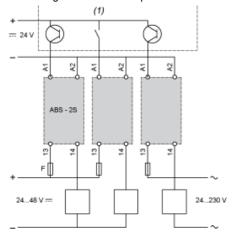


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Slim Solid-State Interface Module

Example of Application with PLC

Interfacing PLC discrete outputs



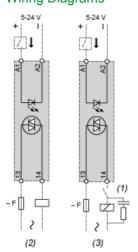
(1) PLC positive logic transistor (or relay) outputs

Solid-State Output Module

Circuit Diagram



Wiring Diagrams



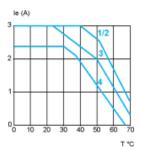
- F fuse DF1 SS133.2
- (1) or peak limiter
- (2) Resistive load
- (3) Inductive load

Product data sheet Performance Curves

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Temperature Derating Curves - Uc = Us = 24 V

AC Loads



- (1) Vertical module alone or adjacent to modules with low heat dissipation
- (2) Horizontal module alone or adjacent to modules with low heat dissipation
- (3) Vertical module mounted with 2 modules with identical heat dissipation on both sides
- (4) Horizontal module mounted with 2 modules with identical heat dissipation on both sides

NOTE: T°C is the ambient temperature.

Mouser Electronics

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