

DATA SHEET

MBA-UAI01

ABB Ability™ Symphony® Plus Hardware Selector



The MBA-UAI01 Mounting Base Adapter is used to mount an Al16e Universal Analog Input module to a 'Full-Size' _BS01-UAI base. The adapter enables the Al16e SDe Series Universal AI module to be used to replace Al06 SD Series Universal AI module and the Al03 RTD Analog Input Module.

Features and benefits

- The MBA-UAI01 Mounting Base Adapter enables the following use cases where SDe Series I/O modules replace SD Series Redundant I/O Modules:
- Al16e module replacing an Al06 module mounted in a _BS01-UAI base
- Al16e module replacing the Al03 module mounted in a _BS01-CJC base

General info		
Article number	7PAA008657R11	
Line redundancy	Redundant HN800 I/O Bus	
Channels	16	
Hot swap	No	
Supported IO modules	Al16e	
Singular or redundant	Singular	
Form factor	SD Series 'Full-size'	
Mounting	SD Series DIN-Rail Bases	
HN800 bus length	50 mm	
MTBF (per MIL-HDBK-217-FN2)	PR A: 9,121,503 hours @ 30 °C 7,937,322 hours @ 45 °C 5,385,604 hours @ 70 °C	
MTTR (Hours)	24 Hrs	

Detailed data		
Overvoltage category	Category 1 for power. Tested according to IEC/EN 61010-1	
Process signal connections	Up to 16 Analog Input Channels	
Field power connection	none	
Field power fusing	n/a	
Signal connection	Adapter	
Max current	.5 Apms	
Acceptable field signal wire sizes	n/a	
Galvanic isolation test voltage	1500 V for up to 1 minute	

Environment and certification		
Temperature, Operating	-40 to +70 °C Tested according to IEC/EN 60068-2-1, IEC/EN 60068-2-2	
Temperature, Storage	-40 to +85 °C Tested according to MIL-STD-810G	
Relative humidity	20% to 95% @ 40 °C non-condensing. Tested according to IEC/EN 60068-2-78, IEC/EN 61298-3	
Vibration (operational sinusoidal)	5 to 60 Hz 0.137 mm (0.0054 in.), 60 to 150 Hz 1.0 G. Tested according to IEC/EN 60068-2-6	
Vibration (transportation)	10 to 500 Hz. Tested according to MIL-STD-810G	
Shock (storage)	15 G, 11 msec. Tested according to IEC/EN 60068-2-27	
Drop	100 mm. Tested according to IEC/EN 60068-2-31	
Protection class	IP20 according to EN 60529	
Altitude (operational)	Sea level to 3,048 meters (10,000 ft.) Tested according to MIL-STD-810G	
Altitude (storage)	Sea level to 12,192 meters (40,000 ft.) Tested according to MIL-STD-810G	
Air quality	ISA S71.04 G3	
ESD immunity	Tested according to IEC/EN 61000-6-2, IEC/EN 61000-4-2, Severity level 3	
Surge immunity	Tested according to IEC/EN 61000-6-2, IEC/EN 61000-4-5, Severity level 3	
Electrical fast transient immunity	Tested according to IEC/EN 61000-6-2, IEC/EN 61000-4-4, Severity level 3	
Radiated RFI immunity	Tested according to IEC/EN 61000-6-2, IEC/EN 61000-4-3, Severity level 3	
Conducted Immunity	Tested according to IEC/EN 61000-6-2, IEC/EN 61000-4-6, Severity level 3	
Magnetic field immunity	Tested according to IEC/EN 61000-6-2, IEC/EN 61000-4-8, Severity level 4	
Radiated emission	Tested according to IEC/EN 61000-6-4, CISPR 11 + A1, CISPR 16-1-1, Group 1, Class A, ISM equipment	
Conducted emission	Tested according to IEC/EN 61000-6-4, CISPR 11 + A1, CISPR 16-1-1, Group 1, Class A, ISM equipment	
Voltage dips and interruption immunity	Tested according to IEC/EN 61000-6-2, IEC/EN 61000-4-11	
CSA non-hazardous locations	Certified for use as process control equipment in an ordinary (non-hazardous) location	
CSA hazardous, nonincendive locations	Class I, Division 2, Groups A, B, C, D	
CE Mark	CE Mark EMC directive 2004/108/EC & Low Voltage Directive 2006/95/EC	
RoHS compliance	RoHS Directive 2015/863	
WEEE compliance	DIRECTIVE/2012/19/EU	

Dimensions		
Width	26.76 mm	
Depth	54.9 mm	
Height	189.8 mm	
Weight	120 g	



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