

MBA-SM01

ABB Ability™ Symphony® Plus Hardware Selector



The MBA-SM01 Mounting Base Adapter is used to mount an SDe Series I/O Module to 'Full-Size' SD Series Singular Module bases. The adapter enables SDe Series I/O modules to be used to replace Singular, 'Full-Size' SD Series I/O modules .

Features and benefits

- The MBA-SM01 Mounting Base Adapter enables the following use cases where SDe Series I/O modules replace SD Series Singular I/O Modules:
- AD11e module replacing an AD01, AD02, or AD11 module mounted in a _BS01-EPD base
- AI12e/FI12e module replacing an AI01 or AI02 module mounted in a _BS01-EPD or _BS0-FPH base
- AO02e module replacing an AO01 or AO02 module mounted in a _BS01-EPD base
- AX05e module replacing an AI05 or AO05 module mounted in a _BS01-EPD base
- DI06e module replacing a DI01, DI02, DI03 or DI04 module mounted in a _BS01-EPD, _BS01-FPH, or _BS01-FPN base
- DO01e module replacing a DO01 module mounted in a _BS01-EPD, _BS01-FPH, or _BS01-FPN base
- DO02e module replacing a DO02 module mounted in a _BS01-EPD, _BS01-FPH, or _BS01-FPN base
- DO05e module replacing a DO05 module mounted in _BS02-EPD base @ .5 Amp Max
- PI01e module replacing a PI01 module mounted in a _BS01-EPD, _BS01-FPH, or _BS01-FPN base

General info	
Article number	7PAA008655R11
Line redundancy	Redundant HN800 I/O Bus
Channels	16
Hot swap	No
Supported IO modules	AD11e, AI12e, AO02e, DI06e, DO01e, DO05e, FI12e, PI01e
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 or Digital I/O Channels, Dependent on I/O Module Type
Field power connection	none
Field power fusing	n/a
Signal connection	Adapter
Max current	.5 Amps
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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