

EMB01S-RBX

ABB Ability™ Symphony® Plus Hardware Selector



The **EMB01S-RBX** Evolution Module Base for Remote Bus eXtender is used to mount an RBX01e Enhanced Remote Bus eXtender fiber optic repeater module to an EMC Evolution Mounting chassis of Symphony Plus.

The EMB01S-RBX Evolution Module Base for Remote Bus eXtender occupies one (1) slot within an EMC Evolution Mounting Chassis. The EMB01S-RBX can be configured to talk on HN800A or HN800B via the JP1 jumper.

Features and benefits

- Within an EMC-_B0_ Evolution Mounting Chassis, the EMB01S-RBX mounting base connects the RBX01e fiber optic repeater module to the electrical HN800 I/O of the Evolution Mounting Chassis.
- Using RBX01e enhanced fiber optic repeater modules, HN800 remote I/O links support:
- SD & SDe Series I/O modules.
- PDP800 PROFIBUS DP Master modules.
- SCI200 Multi-Protocol Ethernet Interface modules.
- CI850 Electrical Integration Interface modules.

General info	
Article number	7PAA008654R11
Life cycle status	Active
Line redundancy	Redundant HN800 I/O Bus
Hot swap	No
Supported IO modules	RBX01e
Singular or redundant	Singular
Form factor	EMC-_B0_ Evolution Mounting Chassis
Mounting	EMC-DB01, EMC-DB02, EMC-SB01, EMC-SB02
HN800 bus length	190 mm
MTBF (per MIL-HDBK-217-FN2)	EMB01S-RBX PR A: 401,469 hours @ 30°C 396,607 hours @ 45°C 372,349 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	HN800
Field power connection	n/a
Field power fusing	n/a
Signal connection	Category 1 for power. Tested according to IEC/EN 61010-1
Acceptable field signal wire sizes	OM1 (62.5/125 µm) or OM4 (50/125 µm) Multi-Mode fiber optic cable
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 compliant
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 61000-6-2, IEC/EN 61000-4-3, Severity level 3
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	35.5 mm
Depth	173.5 mm
Height	177 mm
Weight	170 g

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