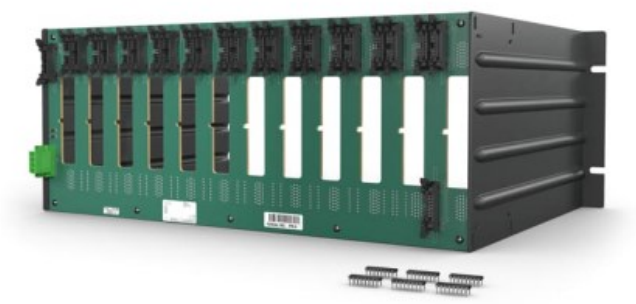
DATA SHEET

EMC-DB02

ABB Ability™ Symphony® Plus Hardware Selector



The EMC-DB02 Evolution Mounting Chassis, Divisible Bus, FRONT mounting rail provides mounting space for up to twelve (12) evolution modules within the same space as an MMU. The EMC chassis replaces MMU12 or MMU22 Module Mounting Units. The chassis has been designed so that I/O cables originally attached to the MMU can be attached in the exact same location once the EMC has replaced the MMU.

The chassis supports all of the functions of the SDe Series modules.This includes redundant HN800 I/O bus, optional I/O module redundancy and enhanced SOE capability.

The EMC-DB01 chassis allows the HN800 I/O bus to be divided between any slot of the chassis. The EMC-DB01 chassis can support up to four (4) SDe Controllers & I/O modules. DBJ01 Divisible Bus Jumpers must be installed between slots to connect the HN800 I/O bus.

Features and benefits

- Mounts up to twelve (12) EMB01S-xxx Evolution Module Bases
- Use EMB01S-XIO to mount AI12e, AO02e, DI06e, or DO01e I/O modules
- Use EMB01S-UAI to mount AI16e Universal AI modules s
- Use EMB01S-EMR to mount DO05e EMR DO modules
- Use EMB01S-CIO to mount AD115e CIO modules
- Use EMB01S-PIO to mount PI01e Pulse Input modules
- Use EMB01S-SOE to mount DI06e when replacing SOE Input modules

General info	
Article number	7PAA005102R11
Life cycle status	Active
Line redundancy	Yes
Hot swap	No
Supported IO modules	EMB01S-CIO, EMB01S-EMR, EMB01S-PIO, EMB01S-SOE, EMB01S-UAI, EMB01S-XIO
Singular or redundant	Singular
Form factor	19-Inch Rack
Mounting	FRONT Mounting Rail
HN800 bus length	610 mm
MTBF (per MIL-HDBK-217-FN2)	PR C: 569,872 Hours @ 30˚C, 483,065 Hours @ 40˚C, 310,534 Hours @ 70˚C
MTTR (Hours)	16 Hrs

Detailed data	
Overvoltage category	Category 1 for power. Tested according to IEC/EN 61010-1
Field power connection	n/a
Field power fusing	n/a
Signal connection	n/a
Max current	n/a
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 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 61000-4-6, 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	483.1 mm
Depth	99.04 mm
Height	177.80 mm
Weight	3.175 kg

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