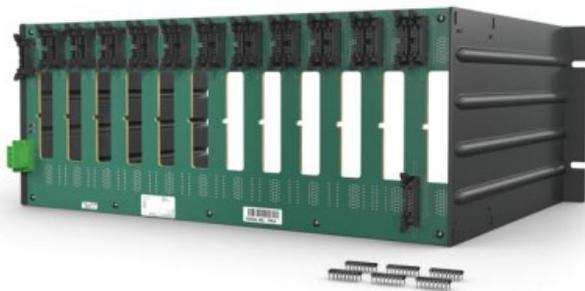


EMC-DB02

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
- 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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