DATA SHEET

# HDT-XIO-01

## ABB Ability™ Symphony® Plus Hardware Selector

The HDT-XIO-01 High-Density Termination module is used to terminate field wiring for up to 16 I/O Channels to the back side of an EMC-B0x Evolution Mounting Chassis. The HDT is installed on the back side of an EMC using an HDT-BRK-01 Bracket mounting assembly. The HDT-XIO-01 provides header connectors for four (4) pluggable 8-PT Terminal Blocks (which are sold separately). The HDT-XIO-01 also provides a 2-PT Terminal Block for the connection of Field I/O power.

The HDT-XIO-01 is capable of providing field I/O wiring termination for AD11e, AI12e, AO02es, DI06e, DO01e, DO05e, FI12e and PI01e SDe Series I/O modules. HDT-XIO-01 has a series of jumpers (J1 thru J21) that are used to configure specific I/O applications. Refer to 7PAA013189 S+ High-Density Terminations User Manual for detailed information regarding the proper installation and set-up of HDT-XIO-01.

## Features and benefits

- Connects to back side of an EMC-_B0x Evolution Mounting Chassis using an HDT-BRK-01 Mounting Bracket assembly
- Terminates 15 Channels when used with AI12e or FI12e Analog Input modules
- Terminates 14 Channels when used with AO02e Analog Output module
- Terminates 16 Channels when used with DI06e Digital Input module
- Terminates 16 Channels when used with DO01e Transistor Digital Output module
- Terminates 8 Channels when used with DO05e Electro-Mechanical Relay Digital Output module @ .5 Amp Max
- Terminates 13 Mixed I/O Channels when used with AD11e Analog Drive module

| **General info** | |
|---|---|
| Article number | 7PAA008675R11 |
| Life cycle status | Active |
| Line redundancy | No |
| Hot swap | No |
| Supported IO modules | AD11e, AI12e, AO02e, DI06e, DO01e, DO05e, FI12e and PI01e |
| Singular or redundant | Singular |
| Form factor | EMC-_B0_ Evolution Mounting Chassis |
| Mounting | EMC-DB01, EMC-DB02, EMC-SB01, EMC-SB02 |
| HN800 bus length | n/a |
| MTBF (per MIL-HDBK-217-FN2) | PR A: 167,809 Hours @ 30˚C 167,562 Hours @ 40˚C 166,666 Hours @ 70˚C |
| MTTR (Hours) | 8 Hrs |

| Detailed data | |
|---|---|
| Overvoltage category | Category 1 for power. Tested according to IEC/EN 61010-1 |
| Process signal connections | See Features and Benefits section in this datasheet or User manual |
| Field power connection | @ HDT-XIO |
| Field power fusing | @ HDT-XIO |
| Signal connection | Terminal Blocks |
| Max current | 2.5 A (Configuration dependent, please see user manual for more details) |
| Acceptable field signal wire sizes | 16AWG - 28AWG |
| 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 | Standard = 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 | 30.7 mm |
| Depth | 134.5 mm |
| Height | 130.5 mm |
| Weight | 250 g |

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