DATA SHEET

HDT-UAI-01

ABB Ability™ Symphony® Plus Hardware Selector

The HDT-UAI-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 mounting bracket assembly. The HDT-UAI-01 provides header connectors for four (4) pluggable 12-PT Terminal Blocks (which are sold separately). The HDT-UAI-01 also provides a 2-PT Terminal Block for the connection of Field I/O power.

The HDT-UAI-01 is capable of providing field I/O wiring termination for AI16e Universal Analog Input modules, which support high-level analog input signals, RTDs, TCs, and mV inputs. HDT-UAI-01 has a series of jumpers (J1 thru J16) 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-UAI-01.

Features and benefits

- Connects to back side of an EMC-_B0x Evolution Mounting Chassis using an HDT-BRK-01 Mounting Bracket assembly
- Terminates 16 Channels when used with AI16e Universal Analog Input modules

General info	
Article number	7PAA008674R11
Life cycle status	Active
Line redundancy	Yes
Hot swap	No
Supported IO modules	AI16e
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: 186,677 Hours @ 30˚C 186,657 Hours @ 40˚C 186,589 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	Sixteen (16) Analog inputs
Field power connection	@ HDT-UAI
Field power fusing	@ HDT-UAI
Signal connection	Terminal Blocks
Max current	2.6 A
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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