

Installation Identity and Scope

Honeywell 8C-TAIDB1 is the coated redundant IOTA for the 16-channel 8C-PAIH54 differential analog input module. It supports current or voltage transmitters and single-ended or differential channel configuration within Series 8 I/O.

INSTALLATION IDENTITY	REQUIRED VALUE
Complete model	8C-TAIDB1
Manufacturer	Honeywell
Hardware type	Redundant AI IOTA
System family	Series 8 I/O
Official source	S803-150-530, Version 1.0, May 2024, sections 4.3.2 and 4.4.1

CONTROLLED ENGINEERING COPY

Use 8C-TAIDB1 only with the documented 8C-PAIH54 analog input module and the approved channel wiring. Record every current or voltage selection, IOTA jumper state, HART assignment and redundancy path before controlled commissioning.

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8C-TAIDB1

Pre-Installation Plan

NO.	REQUIRED ACTION
1	Verify the complete 8C-TAIDB1 and 51307133-175 marking before work.
2	Confirm the companion module is the documented Honeywell 8C-PAIH54.
3	Place both redundant paths and the associated process loops in the approved maintenance state.
4	Record whether every channel is single-ended or differential before disturbing wiring.
5	Record every current or voltage range and the corresponding 250-ohm IOTA jumper state.

Matched Hardware

CONTROL ITEM	REQUIRED RECORD
Identity	8C-TAIDB1
Physical interface	Documented Series 8 IOTA position and keyed IOM interface
Companion check	Approved 8C-PAIH54 companion module and field termination
Configuration	Saved channel map, signal configuration, diagnostics and maintenance record
Functional proof	Every enabled channel, module diagnostic and controlled system response

Related Honeywell Products

MODEL	AFTER POWER PAGE
Honeywell 8C-PCNT03	View Honeywell 8C-PCNT03
Honeywell 8C-PDIL51-51454359-175	View Honeywell 8C-PDIL51-51454359-175
Honeywell 8C-PDILA1	View Honeywell 8C-PDILA1
Honeywell 8C-PDOD51	View Honeywell 8C-PDOD51
Honeywell 8C-PDOD51-51454361-175	View Honeywell 8C-PDOD51-51454361-175

Wiring and Interface Checks

CHECK	MODEL-SPECIFIC REQUIREMENT
Identity	Record Honeywell 8C-TAIDB1 and item 51307133-175 exactly.
Companion module	Confirm the documented 8C-PAIH54 analog input module.
Channel mode	Record single-ended or differential selection for all sixteen channels.
Signal range	Match each voltage or current range to the approved channel record.
IOTA jumpers	Verify every 250-ohm load-resistor jumper state before energization.
Redundancy and HART	Verify both I/O paths, diagnostics and configured HART devices.

CONFIGURATION BOUNDARY

Use 8C-TAIDB1 only with the documented 8C-PAIH54 analog input module and the approved channel wiring. Record every current or voltage selection, IOTA jumper state, HART assignment and redundancy path before controlled commissioning.

Expected Technical Values

PARAMETER	VALUE
Complete model	8C-TAIDB1
Honeywell item number	51307133-175
IOTA role	Redundant differential analog input termination assembly
Compatible I/O module	8C-PAIH54

Related Honeywell Products

MODEL	APTER POWER PAGE
Honeywell 8C-PDODA1-51454472-175	View Honeywell 8C-PDODA1-51454472-175
Honeywell 8C-TAIXA1-51307127-175	View Honeywell 8C-TAIXA1-51307127-175

Commissioning and Acceptance

TEST	ACCEPTANCE CONDITION
Identity	Exact IOTA, item number and 8C-PAIH54 pairing match the engineering record.
Configuration	All channel modes, ranges, jumpers and HART assignments are restored.
Electrical check	Field signals, commons and shields match the approved topology.
Redundancy proof	All channels and a controlled path transfer pass without unexplained fault.

Model-Specific Questions

QUESTION	ENGINEERING ANSWER
Which I/O module is specified for Honeywell 8C-TAIDB1?	Honeywell specifies 8C-TAIDB1 as the redundant coated IOTA for the 8C-PAIH54 analog input module.
How many channels does Honeywell 8C-TAIDB1 support?	The documented 8C-PAIH54 and 8C-TAIDB1 arrangement supports sixteen channels configured as single-ended or differential inputs.
Which signal types can Honeywell 8C-TAIDB1 terminate?	The documented arrangement accepts voltage or current inputs from 2-wire or self-powered transmitters.
Which ranges are documented for Honeywell 8C-TAIDB1?	The official specification lists 0-5 V, 1-5 V, 0.4-2 V and 4-20 mA through 250 ohms.

Related Honeywell Products

MODEL	APTER POWER PAGE
Honeywell 8C-TAOXB1-51307137-175	View Honeywell 8C-TAOXB1-51307137-175
Honeywell 8C-TCNTA1	View Honeywell 8C-TCNTA1
Honeywell 8C-TDIL01	View Honeywell 8C-TDIL01
Honeywell 8C-TDIL11	View Honeywell 8C-TDIL11
Honeywell 8C-TDOD51	View Honeywell 8C-TDOD51

FAQ, Source and Controlled Release

QUESTION	ENGINEERING ANSWER
What resolution and scan rate apply to Honeywell 8C-TAIDB1?	The compatible analog input module uses 16-bit conversion and a 50 ms input scan rate.
Why must Honeywell 8C-TAIDB1 jumper positions be recorded?	Each voltage channel requires its 250-ohm load resistor connection to be handled according to the IOTA jumper instruction, so the physical state must match the configured range.
Can Honeywell 8C-TAIDB1 be inserted or removed under power?	The official specification states that module removal and insertion under power is supported, subject to the site's approved maintenance procedure.
What proves Honeywell 8C-TAIDB1 commissioning is complete?	All sixteen ranges, wiring assignments, diagnostics and HART devices must agree with the approved record, and the redundant path transfer must pass its controlled test.

MANUFACTURER SOURCE RECORDS

Series 8 Controller and I/O Specification - S803-150-530, Version 1.0, May 2024, sections 4.3.2 and 4.4.1
Honeywell Series 8 I/O Product Page - Honeywell Process Solutions Series 8 controller and I/O overview

Controlled Release Summary

RELEASE ITEM	REQUIRED EVIDENCE
Identity	8C-TAIDB1 recorded
Interface	Connections and companion hardware verified
Configuration	Installed values agree with approved record
Functional proof	Controlled test completed without unexplained fault

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