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GE DS200TCDAH1BGD

Complete Product Information / Digital I/O Board

GE DS200TCDAH1BGD is a TCDA digital I/O board for the SPEEDTRONIC Mark V control platform. The TCDA function processes contact input and relay-output signals within the digital I/O architecture.

CAPABILITY ATLAS

01 / Functional feature

Conditions digital contact inputs from DTBA and DTBB.

02 / Functional feature

Routes contact-output signals to TCRA relay boards.

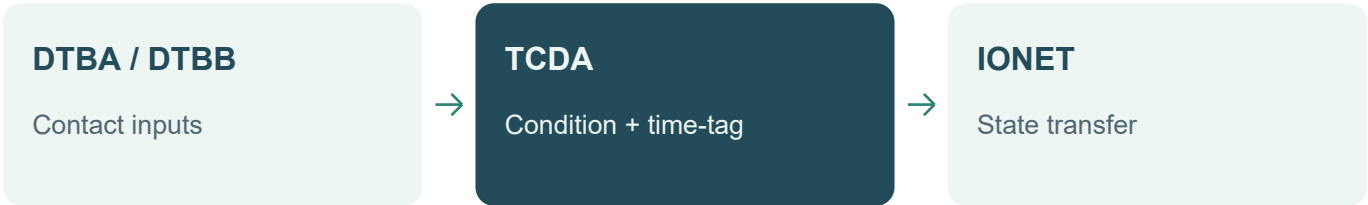
03 / Functional feature

Time-tags contact-state changes for IONET transfer.

04 / Functional feature

Uses application-specific IONET addressing and termination.

SYSTEM RELATIONSHIP



Functional signal relationship; terminal and core usage depends on the installed system.

Evidence boundary

TCDA functional-board information is documented. The complete H1BGD suffix is retained; suffix-specific ratings and interchangeability remain unverified.

PRODUCT SUPPORT

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Interfaces & system context

Complete Product Information / Technical dossier

VERIFIED TECHNICAL FIELDS

Field	Documented value
Functional acronym	TCDA
System platform	SPEEDTRONIC Mark V
Board function	Digital contact I/O
Input terminal boards	DTBA / DTBB
Relay output boards	TCRA
Communication network	IONET
Power interface	JP
Input connectors	JQ / JR
Output connectors	JO1 / JO2
IONET connectors	JX1 / JX2

Technical note

Match the TCDA board to its installed digital I/O core, terminal-board wiring and IONET address.
Preserve the application-specific jumper configuration when replacing the board.

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Integration & applications

Complete Product Information / Engineering use

Interface	Documented role
JQ / JR	DTBA / DTBB contact-input path
JO1 / JO2	TCRA contact-output signals; core-dependent use
JX1 / JX2	IONET, shielded twisted-pair connections
JP	TCPS board-power interface

APPLICATION ATLAS

Turbine contact monitoring

Acquires discrete contact states through DTBA and DTBB in the Mark V digital I/O architecture.

Relay signal routing

Carries contact-output signals to the configured TCRA relay-board positions.

Event-state tracking

Conditions and time-tags changing contacts before transferring the information through IONET.

Mark V I/O maintenance

Supports restoration of the installed digital I/O path with matching wiring, address and jumper records.

Use the installed unit drawings to establish the specific wiring and configuration. Application context does not establish replacement compatibility.

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Service precautions

Complete Product Information / Before returning to service

01 / Check

Isolate the installed control equipment before disconnecting TCDA wiring.

02 / Check

Record JQ and JR cabling to DTBA and DTBB before removal.

03 / Check

Identify JO1 and JO2 paths; output usage depends on the installed core.

04 / Check

Preserve JX1/JX2 IONET cabling and the shielded twisted-pair arrangement.

05 / Check

Match J4, J5 and J6 to the installed IONET ID record.

06 / Check

Keep J2 and J3 termination settings consistent with the network configuration.

07 / Check

Treat J1 and J8 as factory-test positions; do not alter them by assumption.

08 / Check

Check the J7 stall-timer setting and HMI contact-inversion constants against the application record.

Handover record

Retain the complete model, connection labels, configuration or isolation measurements, work performed and results of the site-approved functional checks.

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Questions & evidence

Complete Product Information / Model-specific decisions

Which terminal boards supply contact inputs to GE DS200TCDAH1BGD?

TCDA receives the contact input signals from DTBA and DTBB through JQ and JR.

How are relay-output signals routed from GE DS200TCDAH1BGD?

JO1 and JO2 carry the contact-output signals to TCRA relay boards; the installed core determines which output paths are used.

How does GE DS200TCDAH1BGD communicate within the digital I/O system?

The TCDA signal path uses IONET through JX1 or JX2. Match the installed network wiring and termination arrangement.

Where is contact inversion configured for GE DS200TCDAH1BGD?

Contact-input inversion is set by the application I/O configuration constants in the HMI configuration editor.

Which jumper settings affect the IONET identity of GE DS200TCDAH1BGD?

The TCDA configuration uses J4, J5 and J6 for the IONET ID; preserve the address required by the installed system.

What does GE DS200TCDAH1BGD do when a contact changes state?

TCDA conditions the input and time-tags the state change before transferring the information over IONET.

Which GE DS200TCDAH1BGD jumpers require special care during replacement?

J1 and J8 are factory-test positions, J2 and J3 relate to termination, and J7 enables the stall timer. Use the unit-specific jumper record rather than changing these positions by assumption.

Manufacturer source record

GEH-6153, SPEEDTRONIC Mark V LM Turbine Control Function Manual, WINSYS edition, Chapter 4, page 4-14.

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