GE IS200BICLH1AED

Bridge Interface Board

GE IS200BICLH1AED is a conformally coated BICL VME board that interfaces an Innovation Series drive main controller with BPIA, BPIB or SCNV bridge personality hardware while supervising fault strings, contactors, bridge temperature and fan control.

01	02	03	04
BICL interface between main control and bridge personality boards	Two isolated panel and system fault-string inputs	Four-channel 10-bit RTD analog conversion	Isolated open-collector fan PWM output

System position

Innovation Series main control board	IS200BICLH1AED in VME slot 5	BPIA / BPIB or SCNV bridge interface	IGBT or SCR bridge, contactors and cooling fan

Evidence boundary

Only verified exact-model facts and explicitly identified family context are included. Similar codes are not treated as substitutes.

Model-specific release focus

- BICL interface between main control and bridge personality boards
- Two isolated panel and system fault-string inputs
- Four-channel 10-bit RTD analog conversion
- Isolated open-collector fan PWM output

02 / CAPABILITY MAP

Engineering domains and architecture

Board family	IS200BICLH_A_ _
Mounting	VME rack, designated slot 5
Main connectors	P1 bridge-control interface and P2 control/backplane interface
RTD inputs	4 channels, 10-bit conversion, 0-5 V transfer range

Fault-string inputs	24 or 115 V ac/dc, 20 mA maximum loading
MA sense input	24-115 V ac/dc, 4-10 mA peak loading
Fan PWM output	Isolated open collector, 60 V dc, 10 mA
Logic supplies	+5 V dc, +15 V dc, -15 V dc and isolated +24 V dc

Interface architecture

P1

Bridge control, contactor pilots, fault strings, RTD and feedback signals

P2

Main-controller bus, address/data, logic power and serial board identification

BPIA / BPIB mode

BICLEPLD logic for three-phase IGBT driver control and protection

SCNV mode

SCNVEPLD logic for SCR firing, dynamic braking and VCO feedback

Interface evidence for acceptance

- P1: Bridge control, contactor pilots, fault strings, RTD and feedback signals
- P2: Main-controller bus, address/data, logic power and serial board identification
- BPIA / BPIB mode: BICLEPLD logic for three-phase IGBT driver control and protection
- SCNV mode: SCNVEPLD logic for SCR firing, dynamic braking and VCO feedback

Use cases with controlled scope

IGBT bridge control

Generates timing and enable logic when the installed drive uses BPIA or BPIB personality hardware.

SCR / dynamic braking control

Supports SCNV applications with gate-pattern and braking-device supervision.

Drive interlocking

Monitors panel and system fault strings before allowing contactor and bridge operation.

Thermal management

Reads four RTD channels and issues an isolated PWM command for fan speed control.

INTEGRATION CHECKPOINTS

Identity

GE IS200BICLH1AED is preserved in full.

Host system

Rack, slot and surrounding hardware are verified.

Configuration

Project, firmware and settings are recorded.

Acceptance

Functional evidence is captured before release.

System relationship

Innovation Series main control board	IS200BICLH1AED in VME slot 5	BPIA / BPIB or SCNV bridge interface	IGBT or SCR bridge, contactors and cooling fan

Configuration-control record

- Fault-string inputs: 24 or 115 V ac/dc, 20 mA maximum loading
- MA sense input: 24-115 V ac/dc, 4-10 mA peak loading
- Fan PWM output: Isolated open collector, 60 V dc, 10 mA
- Logic supplies: +5 V dc, +15 V dc, -15 V dc and isolated +24 V dc

Decision matrix

Question	Answer
What does GE IS200BICLH1AED connect in the drive?	It links the Innovation Series main control board to BPIA, BPIB or SCNV bridge personality hardware through the VME P1 and P2 interfaces.
Which rack position is specified for GE IS200BICLH1AED?	The BICL faceplate identifies slot 5; verify the keyed rack and installed drive drawing before insertion.
How many RTD channels does GE IS200BICLH1AED process?	The BICL design has four 10-bit RTD analog channels with a 0-5 V conversion range.
What levels can the GE IS200BICLH1AED fault strings accept?	The isolated panel and system fault-string inputs are specified for 24 or 115 V ac/dc with 20 mA maximum loading.

Eight release precautions

1

Install IS200BICLH1AED only in the keyed BICL slot identified for the drive; the GE faceplate specifies slot 5.

2

De-energize and prove absence of hazardous voltage before removing the VME board or touching P1/P2 circuits.

3

Use grounded ESD handling and keep the board in antistatic packaging outside the rack.

4

Confirm whether the application uses BPIA/BPIB or SCNV logic before comparing pin functions.

5

Verify both panel and system fault strings at the correct 24 V or 115 V level before enabling contactors.

6

Inspect the MA/MB pilot and sense wiring so bridge firing cannot remain enabled through an open interlock.

7

Do not force the keyed board into another VME position or adjust hardware while control power is present.

8

After replacement, test watchdog shutdown, contactor sequencing, RTD values and fan PWM response before loading the drive.

- Verify both panel and system fault strings at the correct 24 V or 115 V level before enabling contactors.
- Inspect the MA/MB pilot and sense wiring so bridge firing cannot remain enabled through an open interlock.
- Do not force the keyed board into another VME position or adjust hardware while control power is present.
- After replacement, test watchdog shutdown, contactor sequencing, RTD values and fan PWM response before loading the drive.

Product verification and support

Apter Power verification record

Model identity	Keep the complete GE model code and every suffix in purchasing, installation and acceptance records.
Verification boundary	Confirm the physical nameplate, installed position and revision-controlled project documents before field work.
Apter Power support	Use the contact details and Apter Power website links in this document for product and sourcing support.

Related Apter Power references	Scope note
GE 151X1202YE03SA04 IS200STAIH2ADC	Portfolio reference only; verify compatibility independently.
GE IS200TREAH1A	Portfolio reference only; verify compatibility independently.
GE IS200TRTDH1CCC	Portfolio reference only; verify compatibility independently.

	Apter Power technical and sourcing support sales13@apterpower.com +86 180 3023 5313 www.apterpower.com Scan for the Apter Power contact page.	Model record GE IS200BICLH1AED Bridge Interface Board Verify the complete nameplate before installation.

Handover evidence to retain

- Exact identity retained: GE IS200BICLH1AED
- IS200BICLH1AED in VME slot 5
- BPIA / BPIB or SCNV bridge interface
- Archive as-left checks and measured results before release.