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.

IDENTITY SNAPSHOT

H1 BICL interface between main control and bridge personality boards	**H2** Two isolated panel and system fault-string inputs
H3 Four-channel 10-bit RTD analog conversion	**H4** Isolated open-collector fan PWM output

System position

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

Document boundary

This dossier uses exact-model evidence and clearly identified family context. Unsupported values are intentionally left for nameplate, project-record or revision-manual verification.

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

Architecture and interface control

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.

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

Interface map

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

Engineering rule

Use the full GE IS200BICLH1AED identity in drawings, spares records and acceptance evidence. A similar family code is not proof of interchangeability.

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

03 / TECHNICAL DATA

Verified engineering data

Values below are limited to the reviewed exact-model or directly applicable manufacturer-family evidence.

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

CHANGE CONTROL

Record

Capture the complete nameplate, revision and installed position.

Compare

Check replacement hardware against project and service records.

Protect

Apply the documented power-isolation and ESD procedure.

Prove

Complete a model-specific functional test before release.

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

Service logic

Use evidence in sequence; do not skip directly from a fault symptom to part substitution.

1	Capture symptoms and existing status
2	Verify power, wiring, slot and surrounding system
3	Test IS200BICLH1AED against the exact service procedure
4	Replace only after the module is isolated as the cause
5	Commission and archive results

Model-specific 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.

Commissioning decision points

- 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.

Decisions and Apter Power support

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.

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.

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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.