# 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.

## Job objective

Replace, install or verify the exact module without changing unrelated wiring, configuration, dimensions, weight or other stored product data.

## Safe-work boundary

| | |
|---|---|
| **Identify**<br>Match the complete model and every suffix or secondary code. | **Isolate**<br>Apply the plant-approved electrical and process isolation procedure. |
| **Preserve**<br>Back up configuration and photograph all connections. | **Control**<br>Use ESD protection and revision-controlled documentation. |

## Required evidence before work

Nameplate photo; slot/rack record; connector map; project backup where applicable; fault history; approved acceptance procedure.

### 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

# Readiness checklist

| | |
|---|---|
| Exact identity | GE IS200BICLH1AED matches the work order and physical unit |
| System position | Rack, slot and functional assignment are recorded |
| Configuration | Parameters, firmware or project data are backed up when applicable |
| Connections | Every cable, terminal, jumper and shield is labeled |
| Condition | Connector, board and packaging condition are inspected |
| Test plan | Expected states and acceptance evidence are agreed |

## Interface preparation

| | |
|---|---|
| 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

03 / INSTALLATION SEQUENCE

# Controlled replacement workflow

| | |
|---|---|
| 1 | Confirm isolation and absence of hazardous energy |
| 2 | Compare old and replacement identities and revisions |
| 3 | Photograph and label all connections |
| 4 | Remove the existing module using ESD-safe handling |
| 5 | Inspect slot, connector, grounding and cooling path |
| 6 | Install the exact replacement without forcing connectors |
| 7 | Restore cables, jumpers and settings from the controlled record |
| 8 | Perform a final visual and continuity check before energization |

**STOP POINT**

Do not energize if the model, slot, connector orientation, grounding, jumper state or documented system assignment is unresolved.

**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

# Staged return to service

| Stage | Action | Acceptance |
|---|---|---|
| Stage 1 | Visual inspection and isolation release | Expected controlled result |
| Stage 2 | Apply control power under observation | Expected controlled result |
| Stage 3 | Confirm module recognition or status | Expected controlled result |
| Stage 4 | Verify communication and affected signal paths | Expected controlled result |
| Stage 5 | Exercise the documented function | Expected controlled result |
| Stage 6 | Archive measured results and as-left configuration | Expected controlled result |

## Product-specific acceptance focus

**1**

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

**2**

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

**3**

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

**4**

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

### 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.

# Fault isolation and final record

| | |
|---|---|
| 1 | Unexpected state: stop and capture evidence |
| 2 | Recheck identity, power, slot and connectors |
| 3 | Compare configuration and revision records |
| 4 | Test surrounding system before condemning the module |
| 5 | Restore a safe state and document the outcome |

## Apter Power handover 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. |

Commissioning support sales13@apterpower.com +86 180 3023 5313 www.apterpower.com

**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.