# General Electric IS230SNTCH4A

INSTALLATION & COMMISSIONING GUIDE / EXACT-MODEL ENGINEERING FILE

General Electric IS230SNTCH4A is a simplex thermocouple input module for the GE Mark VIe control platform. The complete marking and installed hardware arrangement must be matched before replacement.

## 01 Job scope and safe-work boundary

| | |
|---|---|
| **Offered assembly** | General Electric IS230SNTCH4A |
| **Installed system** | GE Mark VIe control platform |
| **Work boundary** | Apply the site procedure before touching terminal-board wiring, I/O packs or DIN-rail hardware. |
| **As-found record** | Send the complete IS230SNTCH4A marking, installed-system context and required quantity. |

## Readiness controls

**Verify the complete catalog number**
Check every letter and number against the offered label and the approved Mark VIe hardware record.

**Isolate field and control power**
Apply the site procedure before touching terminal-board wiring, I/O packs or DIN-rail hardware.

**Record pack and board positions**
Photograph IONet ports, pack positions, terminal wiring, shields and connector orientation before removal.

**Preserve configuration evidence**
Archive the controller database, diagnostics and I/O mapping that identify the installed signal path.

## Related product references

- General Electric IS220PPROH1A
- General Electric DS200TBCAG1AAB
- General Electric 531X123PCHACG1
- General Electric 531X303MCPBCG1
- Bently Nevada 3300/47
- Bently Nevada 330101-00-28-10-02-CN
- Hirschmann M4-FAST-8-SFP
- General Electric IC695PNC001

## Engineering record prompts

| | |
|---|---|
| **Connector record** | Photograph every used connector, cable label, keying feature and shield termination. |
| **Host record** | Identify the carrier, rack, drive, chassis or operator station that owns the installed position. |
| **Configuration record** | Archive the applicable project, address, parameter, firmware or hardware-setting evidence. |

## 02 Replacement sequence

| | |
|---|---|
| **01 Record** | Send the complete IS230SNTCH4A marking, installed-system context and required quantity. |
| **02 Verify** | Compare every token in IS230SNTCH4A with the installed label and the applicable manufacturer document. |
| **03 Isolate** | Apply the site procedure before touching terminal-board wiring, I/O packs or DIN-rail hardware. |
| **04 Compare** | Check terminal-board connectors, I/O-pack seating, field terminals and Ethernet cabling before replacing the assembly. |
| **05 Reconnect** | Photograph IONet ports, pack positions, terminal wiring, shields and connector orientation before removal. |
| **06 Configure** | Archive the controller database, diagnostics and I/O mapping that identify the installed signal path. |
| **07 Prove** | Use an approved signal or protection test and retain as-left diagnostics with the maintenance record. |
| **08 Handover** | Retain the IS230SNTCH4A label, PTCC/IS200STTCH2A composition, connection photographs, diagnostics and controlled-test result. |

## Stop conditions

**Identity mismatch**
Stop if any complete-model token or revision marker differs.

**Interface mismatch**
Stop if keying, connector count or installed position does not match.

**Missing baseline**
Stop if the installed configuration or cable map cannot be recovered.

## Related product references

- General Electric DS200TBCAG1AAB
- General Electric 531X123PCHACG1
- General Electric 531X303MCPBCG1
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- General Electric IS220PPROH1A

## Engineering record prompts

| | |
|---|---|
| **Host record** | Identify the carrier, rack, drive, chassis or operator station that owns the installed position. |
| **Configuration record** | Archive the applicable project, address, parameter, firmware or hardware-setting evidence. |
| **Supply-scope record** | List terminal blocks, carriers, plugs, cables and accessories separately in the quotation. |
| **Baseline result** | Record initial indications, diagnostics and the controlled-system condition before work. |

## 03 Interface restoration and application fit

| | |
|---|---|
| **Complete identity** | Use IS230SNTCH4A as one complete reference in the quotation, service record and acceptance file. |
| **Installed position** | Record the exact host position and functional ownership within the GE Mark VIe control platform. |
| **Physical execution** | Compare artwork, connectors, keying, terminal hardware and orientation with the removed assembly. |
| **Configuration boundary** | Preserve the applicable project, address, firmware or hardware-setting record before removal. |
| **Acceptance evidence** | Retain initial and as-left diagnostics plus the controlled functional-test result. |
| **Unstated values** | Do not assign electrical or compatibility values that are not established by the exact-model evidence. |

## Application acceptance

**Mark VIe I/O replacement**
Replace the documented DIN-rail module only after matching the complete catalog number and terminal-board execution.

**Planned outage maintenance**
Capture the installed I/O mapping, pack positions and field wiring before disturbing the assembly.

**Controlled commissioning**
Restore the approved Mark VIe configuration and prove the exact input, output or protection path.

**Spare qualification**
Retain catalog number, redundancy, included terminal board and I/O-pack quantity with the spare record.

## Applicable technical data

| | |
|---|---|
| **Catalog number** | IS230SNTCH4A |
| **Product type** | Simplex Thermocouple Input Module |
| **Control platform** | GE Mark VIe |
| **GE notice mapping** | No-price-impact catalog number corresponding to IS230STTCH4A |
| **I/O pack redundancy** | Simplex |
| **I/O pack family** | PTCC |

## Related product references

- General Electric 531X303MCPBCG1
- Bently Nevada 3300/47
- Bently Nevada 330101-00-28-10-02-CN
- Hirschmann M4-FAST-8-SFP
- General Electric IC695PNC001
- General Electric IS220PPROH1A

## 04 Commissioning and fault isolation

| | |
|---|---|
| **Identity** | Confirm the complete marking, artwork and installed position. |
| **Interface map** | Restore connectors and cables only from the approved as-found record. |
| **Controlled power-up** | Observe host and unit indications before enabling the process function. |
| **Functional proof** | Test the intended simplex thermocouple input module role and retain diagnostics with the handover. |

## Diagnostic questions

| | |
|---|---|
| **How should the field wiring for IS230SNTCH4A be verified?** | Trace every used terminal on IS200STTCH2A to the approved field drawing before reconnecting IS230SNTCH4A. |
| **What should be checked before energizing IS230SNTCH4A?** | Confirm pack seating, terminal torque, shield handling, IONet connection and the approved simplex architecture for IS230SNTCH4A. |
| **How can a suspected IS230SNTCH4A fault be separated from an external fault?** | Check terminal-board wiring, pack power, IONet status and controller diagnostics before controlled substitution of IS230SNTCH4A. |
| **What proves that IS230SNTCH4A is operating correctly after installation?** | A controlled thermocouple input test must produce the expected field response and clean Mark VIe diagnostics for IS230SNTCH4A. |

## Result record matrix

| | |
|---|---|
| **Baseline** | Record the pre-test state and host position. |
| **Stimulus** | Apply only the approved command, signal or diagnostic action. |
| **Observation** | Capture unit indication, host diagnostic and field response together. |
| **Disposition** | Accept, correct and retest, or record the exception with its owner. |

## Related product references

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## Engineering record prompts

| | |
|---|---|
| **Nameplate record** | Capture the complete marking, visible revision and installed position before removal. |
| **Connector record** | Photograph every used connector, cable label, keying feature and shield termination. |

## 05 Handover and service record

**Identity evidence**
Offered and removed markings plus installed position.

**Configuration evidence**
As-found and as-left project, address or setting record.

**Test evidence**
Diagnostics, controlled functional result and open exceptions.

**Supply evidence**
Included items and separately supplied accessories confirmed in the quotation.

## Close-out checks

| | |
|---|---|
| **Identity closed** | The as-left record names IS230SNTCH4A without a shortened family reference. |
| **Interfaces closed** | Every restored connection is traceable to the pre-work record. |
| **Function closed** | The intended simplex thermocouple input module role has a recorded controlled-test result. |
| **Exceptions closed** | Outstanding issues have an owner and documented action. |

## Ordering checks

| | |
|---|---|
| **Match the complete marking** | Compare every token in IS230SNTCH4A with the installed label and the applicable manufacturer document. |
| **Verify the assembly boundary** | Confirm the terminal board, I/O pack, connector, carrier or matched-system components that belong with IS230SNTCH4A. |

## Related product references

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- General Electric 531X123PCHACG1
- General Electric 531X303MCPBCG1

## Engineering record prompts

| | |
|---|---|
| **Baseline result** | Record initial indications, diagnostics and the controlled-system condition before work. |
| **Identity decision** | Approve only the complete order code and observed execution; do not shorten the family name. |
| **Interface decision** | Confirm connector count, orientation, pin ownership and field wiring against the as-found map. |

**Discuss the complete IS230SNTCH4A marking with Apter Power.**

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Scan the WhatsApp QR to share nameplate and installed-system evidence.