WESTINGHOUSE 5X00594G01

Thermocouple Input Module

WESTINGHOUSE 5X00594G01 is an Ovation sixteen-channel thermocouple input module for low-level millivolt temperature signals.

Job objective

Replace, install or verify the exact unit while preserving unrelated wiring, configuration, dimensions, weight and stored product data.

Safe-work boundary

Identify Match the complete model and every suffix to the physical unit.	**Isolate** Apply the plant-approved electrical, process and stored-energy isolation.
Preserve Back up configuration and photograph all connections and settings.	**Control** Use ESD protection and revision-controlled documentation.

Product-specific hazards and controls

1 Isolate affected thermocouple circuits before handling WESTINGHOUSE 5X00594G01.	**2** Confirm the G01 identity and the installed 1C31116G05 field-interface module.
3 Record sensor type, polarity, range, engineering units and cold-junction arrangement for all channels.	**4** Use matching thermocouple extension wire and preserve the original polarity end to end.

Required evidence before work

Nameplate photo, installed-position record, connection map, configuration or jumper record, fault history and approved acceptance plan.

Readiness and interface checklist

Exact identity	WESTINGHOUSE 5X00594G01 matches the work order and physical unit
Installed position	Rack, slot, panel and functional assignment recorded
Configuration	Project data, jumpers, settings or calibration state captured
Connections	Every cable, terminal, shield and polarity labeled
Condition	Board, housing, connectors and packaging inspected
Test plan	Expected states, safe response and acceptance evidence agreed

Interface preparation

Sensor boundary	Sixteen thermocouple or low-level millivolt circuits
Field interface	1C31116G05 signal routing and termination
Conversion boundary	5X00594G01 low-level acquisition
Controller boundary	Temperature or millivolt values delivered to Ovation

Pre-job evidence review

H1 Sixteen thermocouple channels	**H2** Low-level millivolt acquisition
H3 ±20, ±50 and ±100 mV families	**H4** 1C31116G05 interface pairing

03 / INSTALLATION SEQUENCE

Controlled replacement workflow

1	Confirm isolation and absence of hazardous energy
2	Compare removed and replacement identities and revisions
3	Photograph, label and verify all connections and settings
4	Remove the existing assembly using ESD-safe handling
5	Inspect mounting, connectors, grounding, ventilation and surrounding hardware
6	Install the exact replacement without forcing connections
7	Restore cables, jumpers and settings from the controlled record
8	Complete final visual, continuity and polarity checks before energization

STOP CONDITIONS

Identity

Stop if the complete model or revision does not match.

Connection

Stop if connector orientation, polarity or terminal mapping is unresolved.

Configuration

Stop if the as-found jumper, project or adjustment record is missing.

System

Stop if grounding, cooling or the safe-state assignment is uncertain.

Staged return to service

Stage 1	Visual inspection, isolation release and controlled power-ready state
Stage 2	Apply power under observation and stop on abnormal indicators, heat or sound
Stage 3	Confirm module recognition, status indications and surrounding-system health
Stage 4	Verify every affected connection, signal or relay path
Stage 5	Exercise the documented function and configured safe response
Stage 6	Archive measurements, settings, results and as-left configuration

Product-specific acceptance focus

5

Keep low-level wiring segregated from power and switching conductors.

6

Do not inject voltage outside the configured millivolt family.

7

Commission with a traceable thermocouple or millivolt source at representative points.

8

Release the module only after every used channel and its configured alarm behavior agree with the site test.

Acceptance evidence

Identity

Photo and record show the exact installed model.

Connections

Terminal, cable and connector checks are complete.

Function

The affected command, indication or supply path has been exercised.

Safe state

Loss-of-power or loss-of-command behavior matches the approved design.

Fault isolation and final record

1	Unexpected state: stop and capture evidence
2	Recheck identity, power boundary, position and connections
3	Compare configuration and revision-controlled records
4	Test the surrounding system before condemning the unit
5	Restore a safe state and document the verified outcome

Apter Power handover record

Model identity	Keep the complete WESTINGHOUSE 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

Related Apter Power references	Scope note
WESTINGHOUSE 1C31192G01	Portfolio reference only; verify compatibility independently.
WESTINGHOUSE 1C31223G01	Portfolio reference only; verify compatibility independently.
WESTINGHOUSE 1C31238H01	Portfolio reference only; verify compatibility independently.

	Apter Power technical support sales13@apterpower.com +86 180 3023 5313 www.apterpower.com	Model record WESTINGHOUSE 5X00594G01 Thermocouple Input Module Verify the complete nameplate before installation.