GE IC697HSC700

High-Speed Counter

GE IC697HSC700 processes rapid pulse inputs independently of the PLC scan and controls four isolated positive-logic outputs for Series 90-70 applications.

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 Match the complete model and every suffix or secondary code.	**Isolate** Apply the plant-approved electrical and process isolation procedure.
Preserve Back up configuration and photograph all connections.	**Control** 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

- 200 kHz counting for Types A–D
- 800 kHz Type E A-quad-B operation
- 12 single-ended or differential inputs
- Four optically isolated positive-logic outputs

Readiness checklist

Exact identity	GE IC697HSC700 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

Inputs 1–12	Single-ended or differential pulse and control signals
Inputs 1–4	Also support magnetic-pickup thresholds
OSC / 5VP	External oscillator and built-in 5 V encoder supply connections
OUT1–OUT4	Optically isolated source outputs with shared fuse protection

Interface evidence for acceptance

- Inputs 1–12: Single-ended or differential pulse and control signals
- Inputs 1–4: Also support magnetic-pickup thresholds
- OSC / 5VP: External oscillator and built-in 5 V encoder supply connections
- OUT1–OUT4: Optically isolated source outputs with shared fuse protection

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

- Input thresholds: TTL, 10–30 V non-TTL, 400 mV magnetic pickup
- Output count: 4 positive-logic outputs
- Output supply: 5 VDC or 10–30 VDC user supply
- Terminal connector: 40-position removable strip

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

Include encoder current and energized-output current in the backplane-load calculation.

2

Protect the output supply and replace the common 5 A fuse only with the specified type.

3

Do not exceed 30 VDC or 1 A per output when using the 10–30 VDC output supply.

4

After configuration, verify count direction, scaling, reset/gate inputs, preset actions and all four output states.

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 IC697ACC724	Portfolio reference only; verify compatibility independently.
GE IC697CPM790	Portfolio reference only; verify compatibility independently.
GE IC697ALG321	Portfolio reference only; verify compatibility independently.



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