GE IC697MDL750

01 Function and selected configuration

Product function

GE IC697MDL750 combines grouped DC load switching with short-duration inrush capability, allowing the engineer to balance individual load demand, group heating and the configured response to PLC operating conditions.

Selected configuration

32-point 24/48 VDC output module, four isolated eight-point groups. Each output can conduct up to 10 A for 20 ms as a transient inrush condition. Repetitive switching must also satisfy the load duty-cycle guidance and the 2 A group thermal limit. The output voltage drop is 1 V maximum, and off-state leakage is 1 mA maximum, both of which matter when matching the connected load.

Functional path

PLC output reference	Isolated output driver	External DC group supply	Rated DC load

Output supply range	20 to 60 VDC; 24/48 VDC nominal
Load limits	0.5 A per point and 2 A per eight-point group
Switching	1 ms maximum on and off response

The module has no internal fuses; external point protection is required where the circuit design calls for it. Software configuration selects output references and the applicable hold-last-state or turn-off fault response. Point LEDs indicate logic-side state, so commissioning must also verify the actual load and the configured response to a controlled fault.

IC697MDL750 / Technical operating envelope

02 Technical operating envelope

Nominal load voltage	24 or 48 VDC
Output voltage range	20 to 60 VDC
Output count	32, four groups of eight
Maximum point current	0.5 A continuous
Maximum group current	2 A continuous
Inrush current	10 A maximum for 20 ms
Maximum on-state drop	1 V
Maximum off-state leakage	1 mA
On response time	1 ms maximum
Off response time	1 ms maximum
5 V backplane current	0.25 A
Internal fuses	None

The 0.5 A per-point and 2 A per-group continuous limits apply together. The 10 A / 20 ms inrush capability is not a continuous rating. Review repetitive load duty and external fuse coordination; the module has no built-in fuses.

IC697MDL750 / System integration and applications

03 System integration and applications

Solenoid control

Switch compatible DC solenoids after checking steady current, inrush and required off-state release.

Motor-starter commands

Drive suitable DC starter interfaces within the output and group limits; this is not direct motor-power switching.

Indicator circuits

Operate DC indicators while assessing cold-start inrush and the permitted repetitive duty.

Defined output fallback

Implement the application-selected hold or turn-off behavior and verify its effect on connected equipment.

System and supply context

The PLC backplane supplies module logic while external DC sources energize the output groups and their loads. Field wiring, external fuses and load devices are separate parts of the installation.

Application boundary

The following load uses are subject to point current, group current, inrush duration and leakage limits. Evaluate the complete circuit before selecting protection and fault behavior.

Does IC697MDL750 include replaceable internal group fuses?

No. The module has no internal fuses. Where required, provide suitable external point protection coordinated with the load and the manufacturer guidance.

IC697MDL750 / Engineering selection decisions

04 Engineering selection decisions

Can all eight IC697MDL750 outputs in one group carry 0.5 A together?

No. Each point is limited to 0.5 A, but the combined continuous current of an eight-point group must remain at or below 2 A.

How long can IC697MDL750 carry a 10 A surge?

The maximum inrush specification is 10 A for 20 ms. Repetition depends on the load and duty cycle; it must not be treated as a sustained output rating.

Why can a sensitive load still see current when IC697MDL750 is off?

Off-state leakage can be as high as 1 mA. Check whether the load reliably releases at that leakage level rather than relying only on the PLC command state.

Are IC697MDL750 group supply terminals internally linked?

No. The four output groups are isolated from one another, and each group requires its own field supply connection. Preserve the approved grouping and polarity.

Separate DC groups	Restore correct supply polarity and the intended group boundaries.
Verify off-state release	Check the connected load with the maximum leakage characteristic in mind.

IC697MDL750 / Configuration boundary and references

05 Configuration boundary and references

Lifecycle and support

The current manufacturing and OEM support stages for IC697MDL750 require confirmation from GE. Apter Power availability is confirmed separately.

Replacement assessment

Match DC polarity, per-point loading, group supply circuits and configured fault behavior. Verify external protection rather than assuming the module contains group fuses.

Document roles

Use the original manufacturer excerpt for its preserved technical tables and drawings. This product brief explains configuration and selection boundaries. The independent installation guide organizes preparation, connection, testing and handover. It does not replace the applicable manufacturer installation instructions.

Technical basis

GE Fanuc 24/48 VDC Output Module, GFK-0085G, in GFK-0600F.

Related product navigation

- GE IC693CPU351
- GE IC693MDL740
- GE IC693PWR321

These are related references, not confirmed substitutes or an automatically approved assembly.

Product enquiries