GE IC697CPX772

01 Preserve the application before CPU replacement

1 Save the complete project

Create a verified copy of the program, hardware configuration and required register data. Record the actual CPU firmware and programming-software revision. The 512 Kbyte RAM and optional 256 Kbyte user flash have different roles; do not assume a flash image contains the latest running values or a complete current project.

2 Record operating permissions

Photograph the RUN/STOP selector and memory-protect keyswitch positions, and document the authorized programming path. Memory protection does not block every possible access path, since parallel programming is treated differently. Establish who may restore the project and who approves the transition to outputs enabled.

3 Check the rack and power budget

Confirm rack 0 slot 1 and identify the installed I/O and communications modules. Allow 3.1 A nominal on the 5 V bus and assess the complete supply load. If the cabinet operates continuously above 50 °C, evaluate the specified supply derating and cooling arrangement before proceeding.

Recovery set	Program, configuration, registers and firmware identity
Installation	Rack 0, slot 1
Power assessment	5 V budget and supply thermal derating

IC697CPX772 / Install without losing retained information

02 Install without losing retained information

1 Use a controlled shutdown

Place the machine or process in the approved maintenance state and establish the required output condition before removing rack power. Set the CPU selector to STOP. Label serial and option-module connections so they can be restored without changing the project assumptions or swapping the two RS-485 interfaces.

2 Inspect and maintain the battery

The lithium battery retains RAM and the calendar clock during loss of rack power. Follow the manufacturer replacement sequence, connecting a new battery before removing the old one when retaining memory. Keep the verified project copy available regardless of battery condition and investigate any low-battery indication.

3 Seat the CPU in its assigned slot

With rack power removed, inspect the CPU contacts and rack guides, then install it in slot 1 of rack 0. Engage the mechanical retention without forcing the board. Preserve the memory-protection setting appropriate to the authorized restore operation rather than enabling unrestricted changes by default.

Selector	STOP during installation
Memory retention	Battery connected and recovery copy available
Physical fit	Correct slot, intact guides and engaged clips

IC697CPX772 / Restore serial and network programming paths

03 Restore serial and network programming paths

1 Distinguish the three interfaces

Port 1 is the six-pin RS-232 connection. Port 2 is a 15-pin optocoupler-isolated RS-485 interface, while port 3 is a nonisolated 15-pin RS-485 interface. Trace the cable function and grounding before reconnecting it; similar connector shapes do not make the two RS-485 ports electrically equivalent.

2 Check firmware-dependent services

Confirm the firmware before using port 1 or 2 for program load/store and datagrams. Those capabilities were added with release 8.00, together with Break-Free SNP as their default protocol. Preserve the actual host settings and do not assume that a replacement with a different firmware release behaves identically.

3 Restore Ethernet access through its module

When the project is programmed over Ethernet, verify the separate interface module and its IP configuration. The CPU itself has no integrated Ethernet socket. Keep the communications-module settings with the project and prove the selected programming path before authorizing a program download.

Port 1	RS-232, six-pin RJ11
Port 2	RS-485 compatible, isolated
Port 3	RS-485 compatible, nonisolated

IC697CPX772 / Validate configuration before enabling outputs

04 Validate configuration before enabling outputs

1 Observe the startup diagnostics

After controlled power-up, expect the OK indicator to blink during diagnostics and then remain on after successful completion. With the selector in STOP, verify that RUN and EN reflect the intended disabled state. Investigate startup or configuration faults before changing the operating mode.

2 Compare programmed and installed hardware

Restore the approved configuration and verify every relevant rack position. The CPU checks actual hardware against its configured arrangement; a mismatch can create a fault response. Confirm I/O references and communication settings rather than treating a successful program transfer as a completed commissioning test.

3 Exercise the application in stages

Where the site procedure permits, verify program execution with outputs disabled before authorizing outputs enabled. Check representative discrete, analog and serial functions and the required fault responses. Evaluate real scan behavior under the configured workload; the Boolean execution specification does not establish total process response.

Startup	OK, RUN, EN and MEM PROTECT indications recorded
Configuration	Hardware comparison and fault review complete
Release	Output enable authorized after functional checks

IC697CPX772 / Document the restored controller

05 Document the restored controller

1 Keep the final recoverable state

Archive the final accepted project and identify the CPU firmware, memory allocation and user-flash use. Retain serial settings, the Ethernet-interface configuration where present, and the current clock setting. Record the battery status and the date of the recovery copy so the next replacement does not rely on an unverified old image.

2 Close the maintenance window

Return the selector and protection key to their approved operating positions after the program and output tests are accepted. Remove temporary forces or overrides through the site procedure and confirm normal communications. Keep the result of the staged output test with the maintenance record.

Technical basis: GE Fanuc 96 MHz CPU, GFK-1429F, in GFK-0600F.

Related product navigation

- GE IC697MEM717
- GE IC697CPM790
- GE IC697CPX782

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