IC693PTM101A

01 / Installed system and risk controls

GE IC693PTM101A is a Series 90-30 power transducer system. The documented IC693PTM101 configuration combines a rack processing module, its matched interface board and a 39-inch interface cable for electrical measurement or generator synchronization monitoring.

Rack and field boundary

The PLC module, paired interface board, CT/PT input circuits and shielded cable form one measured system; the PTM does not replace switchgear protection.

Before returning the system to service

Isolate hazardous circuits

Disconnect all connected power-distribution circuits before servicing the interface board or sensing transformers.

Secure CT secondaries

The interface board has no built-in CT shorting bars. Provide the specified external shorting arrangement and follow the site CT isolation procedure.

Ground before wiring

Install the interface-board frame ground first, before any other connection, as required by GE.

Respect input limits

Compare transformer secondary values with the voltage, current, frequency and terminal ratings before energizing.

Record the installed configuration

Baseline

Record both board markings, cable length, CT/PT ratios, frame-ground point and PLC slot before removal.

Isolation plan

Isolate the distribution circuits and secure CT secondaries using the site procedure before disconnecting the interface board.

Wiring review

Compare phase polarity, DB-25 lead, transformer secondary values and grounding with the installed drawing.

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02 / Commission and hand over

Why must IC693PTM101A be checked as a matched hardware set?

GE describes the IC693PTM101 base configuration as a rack processing module paired with a specific interface board and cable. The boards are treated as one set, so confirm both labels, the DB-25 lead and the installed revision before replacement.

How does IC693PTM101A distinguish power monitoring from synchronization monitoring?

The Series 90-30 program selects the operating mode through the PTM command bits. Power-monitor mode calculates electrical quantities; synchronism mode compares generator and grid voltage, frequency and phase. Confirm the application logic and transformer wiring for the intended mode.

Why are external CT shorting provisions needed with IC693PTM101A?

The GE interface board does not include CT shorting bars. Use a suitable external arrangement and the plant isolation procedure before opening any CT secondary circuit.

What should be verified before IC693PTM101A is connected to a three-phase circuit?

Confirm wye or delta configuration, transformer secondary ratings and ratios, polarity, grounding and terminal assignments. Then compare live phase measurements and PLC data words with an independent meter or site baseline.

Can IC693PTM101A serve as the plant protective relay?

The GE PTM manual describes measurement and monitoring functions and explicitly excludes protective-relay use. Keep independent protection and switchgear interlocks as designed for the installation.

How is the Series 90-30 I/O image allocated for IC693PTM101A?

The documented PTM uses 16 %I and 16 %Q bits plus 25 %AI and 2 %AQ words. Check the actual baseplate address, available memory and project configuration before downloading the PLC program.

Close-out evidence

Record the installed wiring, configuration and as-left functional checks under the site change record.

Technical basis: GE Fanuc Power Transducer for the Series 90-30 PLC User’s Manual, GFK-1734A, January 2000.

Technical enquiry

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