

IC693DSM302

Series 90-30 Two-Axis Motion Controller

GE IC693DSM302 is a two-axis motion controller for the Series 90-30. It integrates DSP servo control, motion programs, follower operation and documented field interfaces with the PLC application.

BRAND	GE	MODEL	IC693DSM302
PRODUCT	Series 90-30 Two-Axis Motion Controller	FAMILY	Series 90-30
OFFICIAL SOURCE	GE Fanuc DSM302 Motion Mate Module Data Sheet	RECORD	GFK-1465C and GFK-1464A, DSM302 operation and interface sections

DOCUMENT SCOPE

Official technical evidence, controlled engineering checks, model-specific FAQ and related product navigation.

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Product Overview and Applications

SYSTEM FUNCTION

GE IC693DSM302 is a two-axis motion controller for the Series 90-30. It integrates DSP servo control, motion programs, follower operation and documented field interfaces with the PLC application.

FUNCTION 1

Controls two servo axes in Standard or Follower mode

FUNCTION 2

Updates torque, velocity and position loops through the onboard DSP

FUNCTION 3

Stores ten motion programs and forty subroutines in flash memory

FUNCTION 4

Provides home, overtravel, capture, follower and auxiliary analog interfaces

APPLICATION	ENGINEERING CONTEXT
Two-axis positioning	Runs coordinated documented motion profiles under Series 90-30 logic.
Follower control	Uses the quadrature follower input in the approved follower configuration.
Servo retrofit	Preserves axis wiring, motor feedback, scaling and program records during replacement.
Motion commissioning	Validates home, limits, feedback direction and a reduced-speed test profile.

Technical Data and Acceptance

PARAMETER	VERIFIED VALUE
Product family	Series 90-30
Controlled axes	Two
Operating modes	Standard and Follower modes
Servo control	DSP vector control for documented GE Fanuc AC servo systems
Torque-loop update	250 microseconds
Velocity-loop update	1 ms
Position-loop update	2 ms
Block processing	Less than 5 ms
Position command range	-8,388,608 to +8,388,607 user units
Velocity command range	1 to 8,388,607 user units per second
Acceleration command range	1 to 134,217,727 user units per second squared
Program storage	10 motion programs and 40 subroutines in flash memory
Firmware 1.30 CPU requirement	Series 90-30 CPU firmware 6.50 or later
Interfaces	Home and overtravel inputs, two capture strobes, 5 V, 24 V and analog I/O, quadrature follower input and 13-bit auxiliary analog output

Acceptance Path

1 IDENTITY

The complete IC693DSM302 marking and revision agree with the engineering record.

2 COMPATIBILITY

System position, companion hardware and interfaces match the manufacturer documentation.

3 CONFIGURATION

Saved values, channel mappings and protection limits are restored without unexplained change.

4 FUNCTIONAL PROOF

Diagnostics and the model-specific controlled test pass without unexplained fault.

Precautions and Model-Specific FAQ

NO.	PRECAUTION	QUESTION	ANSWER
1	Verify the complete GE IC693DSM302 marking and installed revision.	How many axes does GE IC693DSM302 control?	It controls two documented servo axes.
2	Confirm the documented Series 90-30 rack position and compatible companion hardware.	Which modes does GE IC693DSM302 provide?	It supports Standard and Follower operating modes.
3	Back up the approved controller, network or channel configuration before removal.	What are the GE IC693DSM302 loop update times?	The documented updates are 250 microseconds for torque, 1 ms for velocity and 2 ms for position.
4	De-energize the system and follow the current manufacturer service procedure before handling hardware.	How many motion programs can GE IC693DSM302 store?	Its flash memory stores ten motion programs and forty subroutines.
5	Label every field, communication, common, shield and protective-ground connection.		
6	Do not substitute a neighbouring catalog number without documented engineering approval.		
7	Restore the exact configuration and verify normal module and system diagnostics.		
8	Complete a controlled model-specific functional test before production release.		

Related Products on Apter Power

MODEL	APTER POWER PAGE
Woodward 8200-226	View Woodward 8200-226
Woodward 8280-192	View Woodward 8280-192
Woodward 8280-4001	View Woodward 8280-4001
Woodward 8406-113	View Woodward 8406-113
Woodward 8440-1934	View Woodward 8440-1934
Woodward 8440-1917	View Woodward 8440-1917

FAQ, Related Products and Sources

QUESTION	ANSWER
Which CPU firmware is required for GE IC693DSM302 firmware 1.30?	The data sheet requires Series 90-30 CPU firmware 6.50 or later.
What must be recorded before replacing GE IC693DSM302?	Record the complete GE IC693DSM302 marking, installed revision, system position, connections and approved configuration before removal.
What confirms successful commissioning of GE IC693DSM302?	The exact GE IC693DSM302 identity, restored configuration, normal diagnostics and a controlled model-specific functional test must all agree with the approved record.

MANUFACTURER SOURCE RECORDS

GE Fanuc DSM302 Motion Mate Module Data Sheet - GFK-1465C and GFK-1464A, DSM302 operation and interface sections
GE Fanuc DSM302 Motion Mate Module Data Sheet - GFK-1465C and GFK-1464A, DSM302 operation and interface sections

Related Products on Apter Power

MODEL	APTER POWER PAGE
Woodward 8440-2028	View Woodward 8440-2028
Woodward 8440-2050	View Woodward 8440-2050
Woodward 8440-2082	View Woodward 8440-2082
Woodward 9905-003	View Woodward 9905-003
Woodward 9905-021	View Woodward 9905-021
Woodward 9905-096	View Woodward 9905-096
Woodward 9905-969	View Woodward 9905-969
Siemens 16267-1-2	View Siemens 16267-1-2

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