GE Series 90-30 Series Service Manual

IC693DSM314

1. Description

The IC693DSM314 motion control unit is a 4-axis component manufactured by GE Fanuc and it is part of Series 90-30. The unit supports operation in both digital and analog modes and it requires less than 5 milliseconds of time for block processing. This control module has a non-volatile storage capacity of 10 programs and 40 subroutines.

2. Specifications

Specification	Value
Brand	**GE Fanuc**
Series	**Series 90-30**
Part	**Number IC693DSM314**
Compatible	**components Programmable logic controllers**
Operation	**modes Digital, analog**
Block	**processing time Less than 5 milliseconds**
Number	**of axis 4**
Programming	**units resolution (position) -536,870,912 to 536,870,911 user units per second**
Programming	**units resolution (velocity) 1 to 8,388,607 user units per second**
Programming	**units resolution (acceleration) 1 to 1,073,741,823 user units per second**
Non-volatile	**storage 10 programs and 40 subroutines**
Backplane	**current consumption 450 milliAmps at 5 Volts DC (typical)**
Operating	**temperature 0 to 60 degrees Celsius (32 to 140 degrees Fahrenheit)**
Storage	**temperature -40 to 85 degrees Celsius (-40 to 185 degrees Fahrenheit)**
The	**IC693DSM314 motion controller is available through Series 90-30 by GE Fanuc. The controller has 4 available axes and it works in both analog and digital modes. This motion controller features a torque mode with a velocity loop of 0.5 milliseconds and it has an**

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Technical specifications for IC693DSM314

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Number of axis 4

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Non-volatile storage 10 programs and 40 subroutines

Backplane current consumption 450 milliAmps at 5 Volts DC (typical)

Operating temperature 0 to 60 degrees Celsius (32 to 140 degrees Fahrenheit)

Storage temperature -40 to 85 degrees Celsius (-40 to 185 degrees Fahrenheit)

The IC693DSM314 motion controller is available through Series 90-30 by GE Fanuc. The controller has 4 available axes and it works in both analog and digital modes. This motion controller features a torque mode with a velocity loop of 0.5 milliseconds and it has an improved tracking accuracy due to functions like the velocity feed forward function and the position error integrator function. The IC693DSM314 motion controller also includes local logic, an electronic CAM, simple programming, backplane motion control, and the option of scaling of the programming units by the users. The module is intended for use with programmable logic controllers and it provides support for the different software solutions offered for these components. The IC693DSM314 controller can be configured through either the VersaPro or CIMPLICITY ME software.

The IC693DSM314 motion controller need about 5 milliseconds of time for block processing and it allows for single-point programming. The programming units feature a position of -536,870,912 to 536,870,911 user units per second, a velocity of 1 to +8,388,607 user units per second, and acceleration of 1 to 1,073,741,823 user units per second. The controller unit has non-volatile storage that is enough to store up to 10 programs and 40 subroutines. The typical power consumption for the backplane of similar components from Series 90-30 is 450 milliAmps of current at 5 Volts DC. The IC693DSM314 controller features analog I/O for the connected PLC components and it has 2-position inputs for the capture strobe for every position. The controller must have an operating temperature above 0 Celsius (32 degrees Fahrenheit) and below 60 degrees Celsius (140 degrees Fahrenheit).