GE Series 90-30 Series Service Manual

IC693MDL655

1. Description

The IC693MDL655 is a Series 90-30 Discrete Input module formerly manufactured by GE Fanuc, now under Emerson Automation. This module features Thirty-Two (32) 24VDC input channels supporting Positive / Negative logic wiring configuration. It accepts 0-30 VDC input voltage range and input current of 7 mA. This module has backplane current draw of 195 mA @ 5VDC and 224 mA @ 24VDC.

2. Specifications

Specification	Value
Brand	GE Fanuc
Series	Series 90-30
Manufacturer	GE Fanuc
Part	Number IC693MDL655
Product	Description Discrete input module
Module	Type Discrete I/O
No	of Channels Thirty-Two (32)
Power	Type DC
No.	of groups Four (4)
Input	Voltage range 0-30 VDC
No.	of channels per group Eight (8)
Input	Current (mA) 7
Wiring	configuration Positive / Negative logic
Response	Time (ms) 2 on/2 off
Input	signal range 0-30 VDC
number	of points 32
Nominal	Input voltage 24 VDC
Trigger	Voltage 11.5-30 Volts
Input	current 7 mA per channel
Product	Lifecycle Status* Discontinued/Obsolete
Current	draw 195 mA @ 5VDC; 224 mA @ 24 VDC
On	State Voltage 11.5 - 30.0 VDC
Off	state voltage 0-5 VDC
On	state current 3.2 mA
Off	state current 1.1 mA
On	response time, typical 2 ms
On	response time, maximum 2 ms
Product	Lifecycle Status Discontinued/Obsolete
The	IC693MDL655 is a High-density, digital input module that is part of Emerson Automation's Series 90-30 Programmable Logic Controller (PLC) platform. This input module is d

3. Product Information

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Technical specifications for IC693MDL655

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Series Series 90-30

Manufacturer GE Fanuc

Part Number IC693MDL655

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Power Type DC

No. of groups Four (4)

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No. of channels per group Eight (8)

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Nominal Input voltage 24 VDC

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On State Voltage 11.5 - 30.0 VDC

Off state voltage 0-5 VDC

On state current 3.2 mA

Off state current 1.1 mA

On response time, typical 2 ms

On response time, maximum 2 ms

Product Lifecycle Status Discontinued/Obsolete

The IC693MDL655 is a High-density, digital input module that is part of Emerson Automation’s Series 90-30 Programmable Logic Controller (PLC) platform. This input module is designed to be installed to any Series 90-30 baseplate whether CPU baseplate, I/O Expansion baseplate or Remote I/O baseplate. It is directly mounted to any available I/O slot of a 5-slot or 10-slot baseplate and occupies single sot only. Additionally, this module is compatible for use with embedded 90-30 CPUs and modular 90-30 CPUs. Being a high-density input module, it features Thirty-Two (32) input points, grouped in Four (4) with Eight (8) inputs per group. Each channel is compatible to be wired with On/Off type of devices that operate at voltage signal range of 0-30 VDC and nominal voltage of 24 VDC. Typical On/Off devices used with this module are limit switches, level switches, proximity switches, auxiliary contacts, pushbutton devices and other devices that are operating similarly. Unlike other digital input modules, the IC693MDL655 uses Two (2) male 24-pin type connectors with ordering number Fujitsu FCN-365P024-AU. This is pre-mounted on the front panel of the module that interfaces to input groups A, B, C and D. This requires use of pre-wired cables which are separately purchased. Compatible pre-wired cables are IC693CBL327 and IC693CBL328. Additionally, this cable can be custom built. The IC693MDL655 is also provided with LED status indicators that with group identifiers as well. LED indicators are labelled as A1-A8 (Group 1); B1-B8 (Group 2); C1-C8 (Group 3) and D1 - D8 (Group 4).

The IC693MDL655 module is a 24 Volts DC input module. This module features positive or negative logic and it comes with 32 input points which are divided into 4 groups of 8 inputs each. The IC693MDL655 module features an input voltage range of 0 to 30 Volts DC. The isolation is rated as 1500 Volts between the field side and the logic side. The input current rate is 7.0 milliamps of typical ON current at 24 Volts DC. The on-state voltage is 11.5 to 30 Volts DC while the off-state voltage is 0 to 5 Volts DC. The on/off response time is indicated as 2 milliseconds maximum. The IC693MDL655 module’s backplane isolation between the field side and the logic side is provided by the OptoCouplers on the module. Connections to the IC693MDL655 module’s input circuits is made from the user’s input devices to 2 male 24-pin connectors, which are mounted on the front of the module. The external input devices include the proximity sensors, the pushbuttons, and the BCD thumbwheels.