GE Series 90-30 Series Service Manual

IC693MDL646

1. Description

The IC693MDL646 is a Series 90-30 Discrete Input module formerly manufactured by GE Fanuc, now under Emerson Automation. This module features Sixteen (16) 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 80 mA @ 5VDC and 125 mA @ 24VDC.

2. Specifications

Specification	Value
Brand	**GE Fanuc**
Series	**Series 90-30**
Manufacturer	**GE Fanuc**
Part	**Number IC693MDL646**
Product	**Description Discrete input module**
Rated	**Voltage 24 Volts DC**
No	**of Channels Sixteen (16)**
Input	**Voltage Range 0 to +30 Volts DC**
Wiring	**configuration Positive / Negative logic**
Inputs	**per Module 16 (one group with a single common)**
Input	**signal range 0-30 VDC**
Isolation	**1500 Volts between field side and logic side**
Nominal	**Input voltage 24 VDC**
Input	**Current 7 mA per channel**
Current	**draw 80 mA @ 5VDC; 125 mA @ 24 VDC**
On-state	**Voltage 11.5 to 30 Volts DC**
On	**State Voltage 11.5 - 30.0 VDC**
Off-state	**Voltage 0 to +5 Volts DC**
Off	**state voltage 0-5 VDC**
On-state	**Current 3.2 mA minimum**
On	**state current 3.2 mA**
Off-state	**Current 1.1 mA maximum**
Off	**state current 1.1 mA**
On	**response time, typical 1 ms**
Off	**response time, maximum 1 ms**
Product	**Lifecycle Status Discontinued/Obsolete**
The	**IC693MDL646 is a component module of the Series 90-30 Programmable Logic Controller (PLC) platform that is manufactured by formerly by GE F**

3. Product Information

The IC693MDL646 is a Series 90-30 Discrete Input module formerly manufactured by GE Fanuc, now under Emerson Automation. This module features Sixteen (16) 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 80 mA @ 5VDC and 125 mA @ 24VDC.

Technical specifications for IC693MDL646

Brand GE Fanuc

Series Series 90-30

Manufacturer GE Fanuc

Part Number IC693MDL646

Product Description Discrete input module

Rated Voltage 24 Volts DC

No of Channels Sixteen (16)

Input Voltage Range 0 to +30 Volts DC

Wiring configuration Positive / Negative logic

Inputs per Module 16 (one group with a single common)

Input signal range 0-30 VDC

Isolation 1500 Volts between field side and logic side

Nominal Input voltage 24 VDC

Input Current 7 mA per channel

Current draw 80 mA @ 5VDC; 125 mA @ 24 VDC

On-state Voltage 11.5 to 30 Volts DC

On State Voltage 11.5 - 30.0 VDC

Off-state Voltage 0 to +5 Volts DC

Off state voltage 0-5 VDC

On-state Current 3.2 mA minimum

On state current 3.2 mA

Off-state Current 1.1 mA maximum

Off state current 1.1 mA

On response time, typical 1 ms

Off response time, maximum 1 ms

Product Lifecycle Status Discontinued/Obsolete

The IC693MDL646 is a component module of the Series 90-30 Programmable Logic Controller (PLC) platform that is manufactured by formerly by GE Fanuc, now by Emerson Automation. This module is designed to accept 24 VDC input signals and supports Positive and Negative logic wiring configuration. The IC693MDL646 has a single group of Sixteen (16) input channels. It comes with a common power input terminal with 1 ms On and Off typical response time. This module is designed to accommodate a wide variety of Binary or On/Off field devices such as push button devices, switches, proximity switches and auxiliary contacts. This module accepts an input voltage range of 0-30 VDC with nominal value of 24 VDC and input current of 7 mA at rated voltage. Input characteristics of this module includes an On state voltage of 11.5 VDC - 30 VDC; Off state voltage of 0 VDC - 5 VDC; On state current of 3.2 mA (minimum); Off state current of 1.1 mA (maximum) and Power consumption of 80 mA @ 5VDC for 5VDC bus voltage and 125 mA @ 24VDC bus voltage or user provided power supply. The IC693MDL646 comes with Twenty (20) connection terminals. These terminals are covered by a swing door with the swing door also providing the wiring insert as reference on how to establish connection to devices and power sources. This module follows a color-code indicating that the IC693MDL646 is a low-voltage module. Individual channel status LEDs are also installed as well as Module OK LED.