GE Series 90-30 Series Service Manual

IC693MDL741

1. Description

The IC693MDL741 is a Series 90-30, 12/24 VDC Negative logic output module. This module is formerly produced by GE Fanuc, now acquired by Emerson Automation. It features Sixteen (16) discrete output channels in Two (2) groups of Eight (8) channels. Each channel delivers an output voltage range of 12-24 VDC with an output current of 0.5 Amperes per point and 2 Amperes per common.

2. Specifications

Specification	Value
Brand	**GE Fanuc**
Series	**Series 90-30**
Manufacturer	**GE Fanuc; Emerson Automation (Current)**
Part	**Number IC693MDL741**
Series	**Series 90-30**
Product	**type Digital I/O**
Part	**Number IC693MDL741**
Compatibility	**GE Fanuc 90-30 PLCs**
Product	**Description Discrete output module**
Output	**points 16**
No	**of Channels Sixteen (16)**
Peak	**module current draw 110 milliamps**
No.	**of output groups Two (2)**
Module	**voltage input 5 Volts DC**
Channels	**per group Eight (8)**
Rated	**voltage 12/ 24 Volts DC**
Isolation:	**1500 volts between field side and logic side; 500 Volts between groups**
Peak	**output voltage drop 0.5 Volts**
Output	**voltage range 12-24 VDC with (+ 20%, -15%)**
Operating	**temperature 0 to 60 degrees Celsius**
Nominal	**output voltage 12 / 24 VDC**
Product	**Lifecycle Status* Discontinued/Obsolete**
Output	**current 0.5 Amperes per point; 2 Amperes per common**
Current	**draw 110 mA (all outputs active)**
On	**response time, maximum 2 ms**
Off	**response time, maximum 2 ms**
Output	**Voltage Drop 0.5 volts, maximum**
Off-state	**Leakage 1 mA maximum**
The	**IC693M**

3. Product Information

The IC693MDL741 is a Series 90-30, 12/24 VDC Negative logic output module. This module is formerly produced by GE Fanuc, now acquired by Emerson Automation. It features Sixteen (16) discrete output channels in Two (2) groups of Eight (8) channels. Each channel delivers an output voltage range of 12-24 VDC with an output current of 0.5 Amperes per point and 2 Amperes per common.

Technical specifications for IC693MDL741

Brand GE Fanuc

Series Series 90-30

Manufacturer GE Fanuc; Emerson Automation (Current)

Part Number IC693MDL741

Series Series 90-30

Product type Digital I/O

Part Number IC693MDL741

Compatibility GE Fanuc 90-30 PLCs

Product Description Discrete output module

Output points 16

No of Channels Sixteen (16)

Peak module current draw 110 milliamps

No. of output groups Two (2)

Module voltage input 5 Volts DC

Channels per group Eight (8)

Rated voltage 12/ 24 Volts DC

Isolation: 1500 volts between field side and logic side; 500 Volts between groups

Peak output voltage drop 0.5 Volts

Output voltage range 12-24 VDC with (+ 20%, -15%)

Operating temperature 0 to 60 degrees Celsius

Nominal output voltage 12 / 24 VDC

Product Lifecycle Status* Discontinued/Obsolete

Output current 0.5 Amperes per point; 2 Amperes per common

Current draw 110 mA (all outputs active)

On response time, maximum 2 ms

Off response time, maximum 2 ms

Output Voltage Drop 0.5 volts, maximum

Off-state Leakage 1 mA maximum

The IC693MDL741 is part of Emerson Automation's Series 90-30 Programmable Logic Controller (PLC) platform, formerly from GE Fanuc. This module is a discrete output module, supporting negative logic wiring configuration. This module is provided with Sixteen (16) output LED indicators that depict the operational state of each channel of the module. The IC693MDL741 delivers an output voltage range of 12 to 24 volts DC, +20%, and –15%). It has an output current rating of 0.5 Amperes per point and 2.0 Amperes per common while output groupings are Eight (8) channels per group. This module does not come with individual channel isolation however, group isolation is provided. Group to group isolation is rated 500 Volts and 1500 Volts between field side and logic side or optical isolation. This module is also provided with a module insert where users can provide short, written descriptions of assigned outputs. The IC693MDL741 is installed to a Series 90-30 baseplate, occupying a single slot. It can act as a local output component, installed along with the CPU baseplate, or as a distributed I/O module component. The output characteristics of this module include voltage drop of 0.5 Volts, off-state leakage of 1 mA, Signal On and Off response time of 2 ms, maximum. The current draw of the IC693MDL741 is 110 mA when all outputs are energized, sourced from the 5VDC backplane. The IC693MDL741 is capable of energizing electrical loads such as motor starters, solenoids, indicating lamps, and annunciators. It may also be used with AC loads provided an interposing relay is installed in between.

The 16-point IC693MDL741 module is an I/O module for the GE Fanuc Series 90-30 PLCs. The module can be installed in any slot of a GE Series 90-30 PLC which has either a 5-slot or 10-slot baseplate. The baseplate forms the foundation of the PLC with all the other components mounted on it. When all the points on the IC693MDL741 module are on, the module current draw from the baseplate is 110 milliamps. The voltage input to the module is 5 Volts DC. The IC693MDL741 module does not contain any fuses. The IC693MDL741 module is a 12 to 24 Volts negative logic output module. The module provides 16 output points in 2 groups with each group having a common output power terminal. LEDs which indicate on the off status of the output points are available on the module. The IC693MDL741 module sinks the current from the loads to the negative power bus or to the user common and therefore it has negative logic characteristics. Solenoids and indicators are some of the devices which can be used with the IC693MDL741 module. The range of output voltages is 12 to 24 Volts DC. Up to 1500 Volts of isolation is available between the field and logic sides and 500 Volts of isolation is available between the groups. The peak output voltage drop is 0.5 Volts. The peak off state leakage is 1 milliamp. The working and storage temperature ranges for the module are 0 to 60 degrees Celsius and -40 to 85 degrees Celsius, respectively.