GE RX3i PacSystem Series Service Manual

IC694MDL753

1. Description

The IC694MDL753 is a 12 / 24 VDC, High-density Positive Logic discrete output module. It is part of the PACSystem RX3i platform, currently under Emerson Automation, formerly produced by GE Intelligent Platforms (GE IP). This module has Thirty-Two (32) digital output channels arranged in Four (4) groups of Eight (8) channels each. Each input channel is rated 12/24 volts DC, operating at output voltage range of 10.2 - 28.8 VDC and output current of 0.5 Amperes per channel.

2. Specifications

Specification	Value
Brand	**GE Fanuc**
Series	**PACSystem RX3i**
Manufacturer	**GE Intelligent Platforms (Former); Emerson Automation (Current)**
Part	**Number IC694MDL753**
Part	**Number IC694MDL753**
Product	**Description High Density Discrete output module**
No.	**of groups Four (4)**
Description	**Positive Logic Output Module**
No	**of Channels Thirty-Two (32)**
Output	**voltage range 10.2-28.8 VDC**
Application	**RX3i PacSystems**
No.	**of output groups Four (4)**
Output	**current 0.5 Amps per point; 4 Amps maximum per group; 3 Amps maximum per group common pin**
Operating	**Voltage 12/24 Volts DC**
No.	**of channels per group Eight (8)**
Response	**time, maximum (On and Off) 0.5 ms**
Switching	**Current 3.0 Amps per Group**
Wiring	**configuration Positive Logic**
On–state	**Voltage drop 0.3 VDC**
I/O	**Capacity 32 Discrete Outputs**
Output	**signal range 12 /24 VDC (-25%, +15%)**
Off–state	**Voltage leakage current 0.1 mA, maximum**
Point	**to Point Isolation Yes**
Nominal	**output voltage 12/24 VDC**
Compatible	**pre-wired cables IC694CBL327 / IC694CBL328**
Max	**Backplane Draw 260 Milliamps**
Output	

3. Product Information

The IC694MDL753 is a 12 / 24 VDC, High-density Positive Logic discrete output module. It is part of the PACSystem RX3i platform, currently under Emerson Automation, formerly produced by GE Intelligent Platforms (GE IP). This module has Thirty-Two (32) digital output channels arranged in Four (4) groups of Eight (8) channels each. Each input channel is rated 12/24 volts DC, operating at output voltage range of 10.2 - 28.8 VDC and output current of 0.5 Amperes per channel.

Technical specifications for IC694MDL753

Brand GE Fanuc

Series PACSystem RX3i

Manufacturer GE Intelligent Platforms (Former); Emerson Automation (Current)

Part Number IC694MDL753

Part Number IC694MDL753

Product Description High Density Discrete output module

No. of groups Four (4)

Description Positive Logic Output Module

No of Channels Thirty-Two (32)

Output voltage range 10.2-28.8 VDC

Application RX3i PacSystems

No. of output groups Four (4)

Output current 0.5 Amps per point; 4 Amps maximum per group; 3 Amps maximum per group common pin

Operating Voltage 12/24 Volts DC

No. of channels per group Eight (8)

Response time, maximum (On and Off) 0.5 ms

Switching Current 3.0 Amps per Group

Wiring configuration Positive Logic

On–state Voltage drop 0.3 VDC

I/O Capacity 32 Discrete Outputs

Output signal range 12 /24 VDC (-25%, +15%)

Off–state Voltage leakage current 0.1 mA, maximum

Point to Point Isolation Yes

Nominal output voltage 12/24 VDC

Compatible pre-wired cables IC694CBL327 / IC694CBL328

Max Backplane Draw 260 Milliamps

Output current per channel 0.5 mA

Wiring configuration Positive logic

Inrush Rating 5.4 Amps

Output current per module 3:00 AM

Max Response Time 0.5 Milliseconds

Current draw 260 mA (maximum) from 5 volt bus on backplane; (13mA + 3mA/point ON + 4.7mA/LED) 16.5mA (maximum) per group from user supply @ 24VDC and all eight outputs in group ON 9.6mA (maximum) per group from user supply @ 12VDC and all eight outputs in group ON

Number of Group 4

Response time, typical 0.5 ms

LED Indicators 32 Individual LEDs

Isolation, Field to Backplane (optical) and to Frame Ground 250 VAC continuous; 1500 VAC for 1 minute

Location RX3i PacSystem I/O Slot

Isolation, Group to Group 50 VAC continuous; 500 VAC for 1 minute

Product Lifecycle Status Active

The IC694MDL753 is a discrete input module that is part of the PACSystem RX3i Programmable Automation Controller (PAC) series that is formerly manufactured by GE Intelligent Platforms, recently acquired by Emerson Automation. This module is a high-density digital output module featuring Thirty-Two (32) output channels grouped in Four (4) with Eight (8) channels per group. Each channel of this module generates an output voltage range of 10.2-28.8 VDC with nominal values of 12 / 24 VDC. It supports positive logic wiring configuration only wherein, the positive wire from the output channels connects to the positive terminal of the connected load. Each channel generates an output current of 0.5 Amperes with maximum current of 4 Amperes per group and 3 Amperes per group common pin. Each channel generates an inrush current of 5.4 Amperes for 10ms, On-state voltage drop of 0.3 VDC and Off-state leakage current of 0.1 Ampere. Each channel exhibits response times of 0.5 ms This module is provided with 32 individual status LED indicating the energization state of each output channel. For establishing module connection, this module is provided with embedded pins compatible for two male 24–pin connectors (Fujitsu FCN–365P024–AU). User built cable may also be used for flexibility or by using pre-wired cable with catalog numbers IC694CBL327 and IC694CBL328. The IC694MDL753 occupies a single slot of the chassis and maybe installed to any available slot, whether in the local or remote I/O rack. All of the module’s outputs are energized when the CPU transitions to STOP mode.

The IC694MDL753 Positive Logic Output Module is a 12/24 Volts DC positive logic output module from the GE Fanuc RX3i PacSystem I/O module family. The IC694MDL753 Module provides 32 discrete output points that are divided into 4 groups of 8 outputs each. The IC694MDL753 Module’s outputs are either positive logic type outputs or sourcing outputs, and they can switch loads over a range of +12 to +24 Volts DC (+20% to -15%) with a source current of up to 0.5 Amps per point. Each output group common on the IC694MDL753 Module has a 2-pin I/O connector that is capable of handling up to 3.0 Amps of current load, and they can be used to drive different loads simultaneously, for example, 3 of the 4 groups can be used to drive 24 Volts DC loads while the fourth group can be reserved for 12 Volts DC loads. The IC694MDL753 Output Module has an operating voltage range of 12 to

24 Volts DC and an output range of 10.2 to 28.8 Volts DC. Its 32 discrete output points are forced off when the system’s CPU is stopped. Each output group has 500 Volts AC isolation for up to 60 seconds. The IC694MDL753 Output Module has a maximum backplane current draw of 260 milliamps at 5.0 Volts DC. It has a maximum inrush current rating of 5.4 Amps for 10 milliseconds and a maximum off-state leakage current of 0.1 milliamps. The IC694MDL753 Output Module has a maximum on-state voltage drop of 0.3 Volts DC and a maximum response time of 0.5 milliseconds (for both the off and on states). The IC694MDL753 Output Module can be installed on any I/O slot of the GE Fanuc Rx3i PacSystem PLC, and it comes with 32 LED indicators that show the individual on or off status of each output.