GE RX3i PacSystem Series Service Manual

IC694MDL754

1. Description

The IC694MDL754 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 Two (2) isolated groups of Sixteen (16) channels each. Each input channel is rated 12/24 volts DC, operating at output voltage range of 10.2 - 30.0 VDC and output current of 0.75 Amperes per channel. It comes wit

2. Specifications

Specification	Value
Brand	GE Fanuc
Series	PACSystem RX3i
Manufacturer	GE Intelligent Platforms (Former); Emerson Automation (Current)
Part	Number IC694MDL754
Part	Number IC694MDL754
Product	Description High Density Discrete output module
No.	of groups Two (2)
Description	32-Point Output Module
No	of Channels Thirty-Two (32)
Output	voltage range 10.2-30.0 VDC
Operating	Voltage 12/24 Volts DC
No.	of output groups Two (2)
Output	current 0.75 Amps per point
Switching	Current 0.75 Amps per Point
No.	of channels per group Sixteen (16), isolated
Response	time, maximum (On and Off) 0.5 ms
I/O	Capacity 32 Discrete Outputs
Wiring	configuration Positive Logic
On–state	Voltage drop 0.3 VDC
Point	to Point Isolation Yes
Output	signal range 10.2 - 30.0 VDC
Off–state	Voltage leakage current 0.1 mA, maximum
Max.	Backplane Draw 300 mill-Amps
Nominal	output voltage 12/24 VDC
Built-in	Protection Short-circuit, overcurrent and overtemperature protection
Inrush	Rating 3.0 Amps
Output	current per channel 0.75 mA
Wiring	configur

3. Product Information

The IC694MDL754 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 Two (2) isolated groups of Sixteen (16) channels each. Each input channel is rated 12/24 volts DC, operating at output voltage range of 10.2 - 30.0 VDC and output current of 0.75 Amperes per channel. It comes with integrated Short-circuit, overcurrent and overtemperature protection with auto-recovery capability

Technical specifications for IC694MDL754

Brand GE Fanuc

Series PACSystem RX3i

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

Part Number IC694MDL754

Part Number IC694MDL754

Product Description High Density Discrete output module

No. of groups Two (2)

Description 32-Point Output Module

No of Channels Thirty-Two (32)

Output voltage range 10.2-30.0 VDC

Operating Voltage 12/24 Volts DC

No. of output groups Two (2)

Output current 0.75 Amps per point

Switching Current 0.75 Amps per Point

No. of channels per group Sixteen (16), isolated

Response time, maximum (On and Off) 0.5 ms

I/O Capacity 32 Discrete Outputs

Wiring configuration Positive Logic

On–state Voltage drop 0.3 VDC

Point to Point Isolation Yes

Output signal range 10.2 - 30.0 VDC

Off–state Voltage leakage current 0.1 mA, maximum

Max. Backplane Draw 300 mill-Amps

Nominal output voltage 12/24 VDC

Built-in Protection Short-circuit, overcurrent and overtemperature protection

Inrush Rating 3.0 Amps

Output current per channel 0.75 mA

Wiring configuration Positive logic

Max. Response Time 0.5 Milliseconds

Current draw 300 mA (maximum) from 5 volt bus on backplane

Compatible Terminal blocks Box-style (IC694TBB032) / Spring-style (IC694TBS032)

Number of Output Groups 2

Response time, typical 0.5 ms

Location RX3i PacSystems I/O slot

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

LED Indicators 32 LEDs (1 per Output)

Isolation, Group to Group 250 VAC continuous; 1500 VAC for 1 minute

Protection Short-circuit protection, overcurrent protection, overtemperature protection, all with auto recovery

Product Lifecycle Status Active

The IC694MDL754 is a PACSystem RX3i component. This module is specifically a Thirty-Two (32) point discrete output module with Two (2) isolated groups of Sixteen (16) output channels each and support positive logic wiring configuration. Each channel is designed to provide an output voltage range of 10.2 - 20.0 VDC with nominal voltage output of 12 / 24 VDC and output current per channel of 0.75 Ampere. This module comes with a variety of electronic protection ratings such as Short-circuit, overcurrent and overtemperature protection. Each protection features supports auto-recovery capability. The IC694MDL754 is formerly manufactured by GE Intelligent Platforms but recently acquired by Emerson Automation. This module occupies a single slot and can be installed to any vacant slot of the local CPU rack of to any remote I/O station. It is specifically compatible for installation with an RX3i CPU release 2.90 or greater. It is desiged to be used with either a Box-style (IC694TBB032) or Spring-style (IC694TBS032) front Terminal Block. This module is classified as a low voltage module with individual LED status indicator. The IC694MDL754 has backplane current draw of 300 mA (maximum) from 5 volt bus on backplane and requires an external power supply that provides +12 VDC to +30 VDC supply voltage range with nominal supply of 12/24 VDC nominal. Each channel has maximum 0.5 ms response time, maximum output leakage current of 0.1 mA, typical steady-state overcurrent trip of 5 Amperes per point. This module ahs inrush current rating of 3 Amperes for 10 ms without ESCP trip.

The GE Fanuc IC694MDL754 Output Module is a 12/24 Volts DC rated positive logic output module for the RX3i PACSystems PLCs. The IC694MDL754 Output Module belongs to the RX3i PACSystems mid-range controller family. Like most discrete output modules in its class, the IC694MDL754 Output Module provides interfaces between the RX3i controllers and external output devices via its 32 discrete output points. The outputs are grouped in 2 isolated output group commons that each have 16 output points. Each output point has built-in electronic short-circuit and over-current protection which generates and sends fault reports to the RX3i controller whenever there is a short-circuit or over-current condition. The IC694MDL754 Output Module outputs can be either a positive logic or sourcing type outputs, and they can switch loads to the positive end of a power supply and at the same time

supply current to the load. As a standard feature, the IC694MDL754 Output Module's outputs can switch loads over a 12 to 24 Volts DC (+20% to -15%) range and each output point can source up to 0.75 Amps of maximum current. The GE Fanuc RX3i IC694MDL754 Output Module has a voltage rating of 12/24 Volts DC and an operating voltage range of 10.2 to 30.0 Volts DC. The IC694MDL754 Output Module draws 300 milliamps of backplane current at 5.0 Volts DC, and it has an output current rating of 0.75 Amps per point. The IC694MDL754 Output Module has an inrush current rating of 3.0 Amps (for 10 milliseconds) and a maximum response time of 0.5 milliseconds. The IC694MDL754 Output Module has a DIP switch at the back end for selecting output modes and it also has 32 LEDs that show the status of individual output points. The IC694MDL754 Output Module is installed on any I/O slot in an RX3i PLC system, and it is compatible with only RX3i series CPUs with firmware version 2.90 or later.