GE RX3i PacSystem Series Service Manual

IC694MDL741

1. Description

The IC694MDL741 is a PACSystem RX3i, 12/24 VDC Negative logic output module. This module is formerly produced by GE Intelligent Platforms (GE IP), 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. It has a 110 mA current draw when all outputs are energized.

2. Specifications

Specification	Value
Brand	**GE Fanuc**
Series	**PACSystem RX3i**
Manufacturer	**GE Fanuc**
Manufacturer	**GE Intelligent Platforms; Emerson Automation (Current)**
Part	**Number IC694MDL741**
Product	**Description Discrete output module**
Series	**PACSYstem RX3i**
Type	**Output module**
No	**of Channels Sixteen (16)**
Part	**Number IC693MDL741**
Outputs	**per Module 16 (two groups of eight outputs each)**
No.	**of output groups Two (2)**
Product	**Description Discrete output module**
Rated	**Voltage 12/24 V DC**
No.	**of channels per group Eight (8)**
Channels	**per group Eight (8)**
Output	**Voltage Range 12 to 24 V DC (+20%, -15%)**
Wiring	**configuration Positive Logic**
Isolation:	**Field to Backplane (optical) and to Frame Ground 250 VAC continuous; 1500 VAC for 1 minute Group to Group 250 VAC continuous; 1500 VAC for 1 minute**
Isolation	**250 V AC continuous**
Output	**signal range 12 /24 VDC (-25%, +15%)**
Output	**voltage range 12-24 VDC with (+ 20%, -15%)**
Power	**Consumption 110mA (all outputs on) from 5Vdc bus on backplane**
Nominal	**output voltage 12 / 24 VDC**
Output	**current 0.5 Amper**

3. Product Information

The IC694MDL741 is a PACSystem RX3i, 12/24 VDC Negative logic output module. This module is formerly produced by GE Intelligent Platforms (GE IP), 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. It has a 110 mA current draw when all outputs are energized.

Technical specifications for IC694MDL741

Brand GE Fanuc

Series PACSystem RX3i

Manufacturer GE Fanuc

Manufacturer GE Intelligent Platforms; Emerson Automation (Current)

Part Number IC694MDL741

Product Description Discrete output module

Series PACSYstem RX3i

Type Output module

No of Channels Sixteen (16)

Part Number IC693MDL741

Outputs per Module 16 (two groups of eight outputs each)

No. of output groups Two (2)

Product Description Discrete output module

Rated Voltage 12/24 V DC

No. of channels per group Eight (8)

Channels per group Eight (8)

Output Voltage Range 12 to 24 V DC (+20%, -15%)

Wiring configuration Positive Logic

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

Isolation 250 V AC continuous

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

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

Power Consumption 110mA (all outputs on) from 5Vdc bus on backplane

Nominal output voltage 12 / 24 VDC

Output current 0.5 Amperes per point; 2 Amperes per common

LEDs Yes

Output current per channel 0.5 mA

On response time, maximum 2 ms

Otput Voltage Drop 0.5 volts maximum

Output current per module 2:00 AM

Off response time, maximum 2 ms

Offâ□□state Leakage 1mA maximum

Current draw 110 mA (all outputs active)

Output Voltage Drop 0.5 volts, maximum

Current 0.5 Amps

Response time, typical 2 ms

Off-state Leakage 1 mA maximum

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

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

Product Lifecycle Status Active

The IC694MDL741 is a discrete output module that belongs to PACSystem RX3i Programmable Automation Controller (PAC) product family that is formerly produced by GE Intelligent Platforms, now manufactured by Emerson Automation. This module features Sixteen (16) discrete output channels, supporting negative logic wiring configuration. The output channels are grouped into Two (2) with each group having Eight (8) output channels each. This output module can be used to energize output devices such as relay coils, solenoid-actuated devices, indicating lamps, motor starters, and similar devices. Each channel of this output module generates an output current of 0.5 Amperes while the total current per group is a maximum of 2 Amperes. The optical isolation which is field to the backplane, field to frame ground, and group to group isolation are similar, rated 250 VAC (continuous) and 1500 VAC for 1 minute. Output characteristics include maximum voltage drop of 0.5 Volts; off-state leakage current of 1 mA; On and Off response time of 2 ms. This module is installed to any available slot of the RX3i baseplate. Individually numbered LEDs are provided to the module's front panel that indicate the actuation state of each channel. It is also provided with a fault indicator marked as "F" for quick identification of the module's operating condition. This module supports installation to a local I/O rack where the CPU resides or as part of a distributed I/O architecture. Module insert is also provided with the module where a short description of each output channel can be written for quick identification of the outputs.

The IC694MDL741 output module is a negative logic output module that has been manufactured by GE Fanuc Automation. This output module operates with the RX3i series and it is meant to be connected to different devices that are required to complete machine control applications. These devices can be motors, solenoids, indicators, and even monitors. This module operates with negative logic, and this means that the module sinks current from a negative power bus. The IC694MDL741 has 16 outputs, and these are grouped in 2 separate groups of 8 outputs each. Each one of these outputs has a voltage range of 12 to 24 Volts DC. The IC694MDL741 comes with a voltage range of 12 to 24 Volts DC with a tolerance range between 20% and -15%. The isolation voltage provided by the module goes up to 250 Volts AC continuous both in the field to the backplane mode and in the group to

group mode. The IC694MDL741 has an output voltage drop of 0.5 Volts maximum and an off-state leakage of 1 milliamp maximum. The response time for switching on and switching Off of 2 milliseconds each. The module comes with one LED indicator for each output and one FAULT LED. This module is a low voltage module that can be installed in any slot of the RX3i system rack. All the equipment attached to this module will require an external power supply to operate properly and will need to be compatible with the features of the module.