GE RX3i PacSystem Series Service Manual

IC694MDL930

1. Description

The IC694MDL930 is a relay output module that is part of the PACSystem RX3i platform, currently under Emerson Automation, formerly produced by GE Intelligent Platforms (GE IP). This module has Eight (8) individually isolated Form A or Normally Open (N.O.) outputs. Each relay output is rated 5-30 VDC (24 nominal) and 5-250VAC (120/240VAC nominal) voltages with maximum current capacity of 4 Amperes.

2. Specifications

Specification	Value
Brand	**GE Fanuc**
Series	**PACSystem RX3i**
Manufacturer	**GE Intelligent Platforms (Former); Emerson Automation (Current)**
Part	**Number IC694MDL930**
Part	**Number IC694MDL930**
Product	**Description Relay Output module**
No	**of Channels Sixteen (16), individually isolated**
Description	**AC/DC Voltage Output Module**
No.	**of channels Eight (8), individually isolated**
Output	**contact form Form A (Normally Open, N.O.)**
Operating	**Voltage 5 to 30 Volts DC or 5 to 250 Volts AC**
Contact	**form Normally Open (N.O.) Form A contacts**
Output	**voltage range 5-250VAC / 5-30 VDC**
Switching	**current 4.0 Amps per Point**
Output	**voltage, range 5 - 30 VDC; 5 - 250VAC (50/60 Hz);**
Nominal	**output voltage 120-240 VAC; 24 VDC**
I/O	**Capacity 8 Individually-isolated Normally-Open Relay Type Outputs**
Output	**voltage, nominal 24 VDC; 120/240 VAC**
Minimum	**Output current 10 mA per point**
Point	**to Point Isolation Yes**
Maximum	**load 4 Amps resistive maximum per output; 2 Amps pilot duty per output; 20 Amps maximum per module for UL installations**
Maximum	**output**

3. Product Information

The IC694MDL930 is a relay output module that is part of the PACSystem RX3i platform, currently under Emerson Automation, formerly produced by GE Intelligent Platforms (GE IP). This module has Eight (8) individually isolated Form A or Normally Open (N.O.) outputs. Each relay output is rated 5-30 VDC (24 nominal) and 5-250VAC (120/240VAC nominal) voltages with maximum current capacity of 4 Amperes.

Technical specifications for IC694MDL930

Brand GE Fanuc

Series PACSystem RX3i

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

Part Number IC694MDL930

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Product Description Relay Output module

No of Channels Sixteen (16), individually isolated

Description AC/DC Voltage Output Module

No. of channels Eight (8), individually isolated

Output contact form Form A (Normally Open, N.O.)

Operating Voltage 5 to 30 Volts DC or 5 to 250 Volts AC

Contact form Normally Open (N.O.) Form A contacts

Output voltage range 5-250VAC / 5-30 VDC

Switching current 4.0 Amps per Point

Output voltage, range 5 - 30 VDC; 5 - 250VAC (50/60 Hz);

Nominal output voltage 120-240 VAC; 24 VDC

I/O Capacity 8 Individually-isolated Normally-Open Relay Type Outputs

Output voltage, nominal 24 VDC; 120/240 VAC

Minimum Output current 10 mA per point

Point to Point Isolation Yes

Maximum load 4 Amps resistive maximum per output; 2 Amps pilot duty per output; 20 Amps maximum per module for UL installations

Maximum output current 2A pilot duty per output (5 to 30VDC, 5 to 250VAC); 4A for 5-30VDC maximum (resistive);

Max. Backplane Draw 6.0 Milliamps

Minimum load 10 mA

Current draw 6 mA at 5VDC from backplane maximum (all outputs ON) 70 mA at 24VDC from backplane relay power (all outputs ON)

Inrush Rating 5.0 Amps

Maximum inrush 5:00 AM

Relay contact life 150,000 -1,000,000 operations

Max. Response Time 10.0 Milliseconds

Current draw 6mA (all outputs on) from 5 volt bus on backplane; 70mA (all outputs on) from relay 24V bus on backplane

External supply voltage 5-250VAC / 0-30 VDC

Installation RX3i PLC I/O Slots

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

Compatible CPU PACSystems RX3i; Series 90-30

LED Indicators 32 Individually-Numbered LEDS

Relay Contact Life 50,000 - 1,000,000 operations, depending on voltage and load type

LED Indicators Eight (8) channel indicators

Response time 15 ms

Product Lifecycle Status Active

The IC694MDL930 is part of the PACSystem RX3i mid-rangeProgrammable Automation Controller (PAC) platform. This module is specifically a relay output module featuring Eight (8) individually isolated Normally Open (N.O.) or Form A contact outputs. Each output contact comes with a separate common and dry-contact in nature, allowing different voltage types and levels to be wired to this module specifically, 5-30 VDC (24 nominal) and 5-250VAC (120/240VAC nominal). Each output channel has current capacity of 4 Amperes per output when used with resistive loads and 2 Amperes with pilot duty devices. The maximum load current that the module can withstand is 30 Amperes for UL installations and varies according to ambient temperature. Conversely, the minimum load that the module can accommodate is 10 mA. The output channels of the module have typical response time of 15 ms for both On and Off switching while the module has maximum backplane current draw of 6mA with all outputs on from the 5 VDC bus on backplane and 70mA with all outputs energized from relay 24VDC bus on backplane. This module also supports installation to a Series 90-30 baseplate. It can function as a local output module, mounted along the Central Processing Unit (CPU) rack or to an expansion, remote ofr distributed I/O station along with the appropriate communication adapter. It is classified as a high-voltage module and comes with Eight (8) Status LED indicators for depicting the energization state of each output channel. This module does not come with channel protection such as fuse or RC snubber circuit.

The IC694MDL930 RX3i is an 8-channel relay output module from the GE Fanuc RX3i PACSystems discrete I/O PLC family. Like every discrete output module in this family, the IC694MDL930 Output Module provides an interface between the RX3i PLCs and external output devices such as indicators, motor starters, and solenoids. The IC694MDL930 Output Module has 8 individually-isolated normally-open relay output points, each of which are capable of switching loads of up to 4.0 Amps, and each output point has its own common output terminal. The IC694MDL930 Output Module requires an external power supply for operation and the users can order an AC or DC power module rated at 120 to 240 Volts AC or 24 Volts DC to operate all the connected field devices. The IC694MDL930 Output Module has an operating voltage range of 5 to 30 Volts DC or 5 to 250 Volts AC at 50 to 60 Hertz and an output point to point isolation rating of 250 Volts AC continuous or 1500 Volts AC for 60 seconds. The IC694MDL930 Output Module has 8 individually-isolated normally-open relay

type outputs with 4.0 Amps of maximum output current load per point and 20.0 Amps of maximum output current load per module. The IC694MDL930 Output Module has a maximum backplane current draw of 6.0 milliamps at 5.0 Volts DC and a minimum output load of 10.0 milliamps per point. The IC694MDL930 Output Module has an inrush current rating of 5.0 Amps maximum and a maximum response time 10 milliseconds (on or off). The IC694MDL930 Output Module comes with 32 individually-numbered LED indicators that show the individual operation status of each output point, and the entire module can be installed in the I/O slot of the RX3i PLC backplane.