GE RX3i PacSystem Series Service Manual

IC694MDL645

1. Description

The IC694MDL645 is a PACSystem RX3i Discrete Input module formerly manufactured by GE Fanuc, now under Emerson Automation. This module features Sixteen (16) 24VDC input channels that support Positive or Negative logic wiring configuration with One (1) group of input channels. It accepts 0-30 VDC input voltage range with nominal voltage of 24 VDC and input current of 7 mA at rated voltage. This module has backplane current draw of 80 mA @ 5VDC and 125 mA from isolated 24 VDC backplane or external

2. Specifications

Specification	Value
Brand	**GE Fanuc**
Series	**PACSystem RX3i**
Manufacturer	**GE Fanuc**
Part	**Number IC694MDL645**
Product	**Description Discrete input module**
Rated	**Voltage 24 Volts DC (positive or negative logic)**
No	**of Channels Sixteen (16)**
Input	**points 16 (1 group)**
Wiring	**configuration Positive / Negative Logic**
Input	**Current 7 Milliamperes**
Input	**signal range 0-30 VDC**
Input	**Voltage Range 0 to 30 Volts DC**
Nominal	**Input voltage 24 VDC**
Power	**Consumption 80 Milliamps from 5 Volts bus, 125 Milliamps from 24 Volts supply**
Input	**current 7 mA per channel**
Operating	**Temperature 32 to 140 degrees Fahrenheit**
Current	**draw 80 mA @ 5VDC; 125 mA @ 24 VDC**
Storage	**Temperature -40 to 185 degrees Fahrenheit**
On	**State Voltage 11.5 - 30 VDC**
Humidity	**5% to 95%, non-condensing**
Off	**state voltage 0 - +5 VDC**
On	**state current 3.2 mA**
Off	**state current 1.1 mA**
On	**response time, typical 7 ms**
On	**response time, maximum 7 ms**
Product	**Lifecycle Status Active**
The	**IC694MDL645 is a digital input module from the PACsystem RX3i series of Emerson Automation, for**

3. Product Information

The IC694MDL645 is a PACSystem RX3i Discrete Input module formerly manufactured by GE Fanuc, now under Emerson Automation. This module features Sixteen (16) 24VDC input channels that support Positive or Negative logic wiring configuration with One (1) group of input channels. It accepts 0-30 VDC input voltage range with nominal voltage of 24 VDC and input current of 7 mA at rated voltage. This module has backplane current draw of 80 mA @ 5VDC and 125 mA from isolated 24 VDC backplane or externally installed power supply.

Technical specifications for IC694MDL645

Brand GE Fanuc

Series PACSystem RX3i

Manufacturer GE Fanuc

Part Number IC694MDL645

Product Description Discrete input module

Rated Voltage 24 Volts DC (positive or negative logic)

No of Channels Sixteen (16)

Input points 16 (1 group)

Wiring configuration Positive / Negative Logic

Input Current 7 Milliamperes

Input signal range 0-30 VDC

Input Voltage Range 0 to 30 Volts DC

Nominal Input voltage 24 VDC

Power Consumption 80 Milliamps from 5 Volts bus, 125 Milliamps from 24 Volts supply

Input current 7 mA per channel

Operating Temperature 32 to 140 degrees Fahrenheit

Current draw 80 mA @ 5VDC; 125 mA @ 24 VDC

Storage Temperature -40 to 185 degrees Fahrenheit

On State Voltage 11.5 - 30 VDC

Humidity 5% to 95%, non-condensing

Off state voltage 0 - +5 VDC

On state current 3.2 mA

Off state current 1.1 mA

On response time, typical 7 ms

On response time, maximum 7 ms

Product Lifecycle Status Active

The IC694MDL645 is a digital input module from the PACsystem RX3i series of Emerson Automation, formerly GE Intelligent Platforms (GE IP). This input module is designed with Sixteen (16) input channels that are compatible for Positive or Negative logic wiring. This module has a single group of inputs and a single common terminal. Each input channels is designed to receive an input voltage range of 0-30 VDC input range and rated voltage of 24 VDC. Each input channel has ON state voltage of 11.5 - 30 VDC and Off-state voltage of 0-5VDC while the minimum input current is 3.2 mA and maximum input current of 1.1 mA. The module has typical response time of 7 ms per channel with power consumption of 80 mA @ 5VDC and 125 mA @ 24VDC backplane bus or externally supplied voltage. This module also comes with continuous isolation rating of 250 VAC and 1500 VAC for 1 minute. This isolation is from Filed to backplane, also known as optical isolation and frame to ground isolation. The IC694MDL645 can be installed as local output module component of an RX3i system as well as distributed I/O component of the same system. Additionally, it supports RX7i systems, functions as distributed I/O only. Sixteen (16) output LEDs are also available to this module which represents each input channel. An active input channels will have it corresponding LED energized otherwise, the LED remains de-energized. This module is especially compatible for use with On/Off devices such as switches, pushbutton devices, proximity sensors and auxiliary contacts.

The GE Fanuc IC694MDL645 Input Module from the RX3i PacSystem series has a rated voltage of 24 Volts DC (with positive or negative logic), an input current of 7 milliamps, an input voltage range between 0 and 30 Volts DC, and a power consumption rating of 80 milliamps from the 5 Volts bus source and one of 125 milliamps from a 24 Volts supply. It is available with 16 input points, all of which are arranged in a single group with a shared power input terminal. It is wired for either negative or positive logic. The GE Fanuc IC694MDL645 Input Module has various input characteristics such as an on-state voltage between 11.5 and 30 Volts DC, an off-state voltage from 0 to 5 Volts DC, an on-state current of 3.2 milliamps minimum, an off-state current of 1.1 milliamps maximum, an on-state response time of 7 milliseconds on average, and an off-state response time of 7 milliseconds on average. These characteristics make the GE Fanuc IC694MDL645 Input Module compatible with limit switches, electronic proximity switches, and pushbuttons. The field input devices are powered from the 24 Volts OUT and the 0 Volts OUT module terminals. In addition, the field devices can also be powered from an external source. The GE Fanuc IC694MDL645 Input Module has 16 green LEDs that display the on and off status of the module’s 16 input points. This module is a low-voltage module and this is signified by 2 blue bands at the top and bottom of the module label. The IC694MDL645 Input Module has an operating temperature between 32 and 140 degrees Fahrenheit and a storage temperature range between -40 and 185 degrees Fahrenheit. It has a non-condensing tolerable humidity range of 5% to 95%.