GE RX3i PacSystem Series Service Manual

IC695MDL765

1. Description

The IC695MDL765 is a 24 / 125 VDC Smart discrete output module with diagnostics. It is part of the PACSystem RX3i platform, currently under Emerson Automation, formerly produced by GE Intelligent Platforms (GE IP). This module has Sixteen (16) digital output channels arranged in Two (2) isolated groups of Eight (8) channels each. Each output channels channel is rated 18-30 VDC / 105-132 VDC with group output current of 8 Amperes, maximum and 16 Amperes, maximum per module. Being a Smart Digital

3. Product Information

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Brand GE Intelligent Platforms/GE Fanuc

Series RX3i PacSystem

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

Part Number IC695MDL765Â

Series PACSystem RX3i

Part Number IC695MDL765

Product Line RX3i

Product Description Smart Discrete output module

Catalog IC695

No of Channels Sixteen (16)

Product Type Smart Digital Output Module

No. of groups Two (2), isolated

Rated Voltage 24/125 V DC

No. of channels per group Eight (8)

Number of Outputs 16 (2 isolated groups of 8)

Nominal output voltage 24 VDC / 125 VDC

Frequency NA

Output current 8 Amperes per group; 16 Amperes per module

Output Current 2 A per point

Peak Inrush Current 10A supplied for 10ms without ESCP trip

Output Voltage Range 18-30 VDC 105-132 VDC

Current draw 152 mA at 3.3 VDC; 540 mA at 5.1 VDC

Power Consumption at 5 V DC 540 mA

Response time, maximum (On and Off) 1 ms

Power Consumption at 3.3 V DC 152 mA

Output Protection Over temperature; Failed Switch Detection; Overload Detection; Shutdown; No-load Detection

Group to Group Isolation 250 V AC/1500 V AC

Output test capability Supported

The IC695MDL765 is a Smart Discrete Output Module. This module is primarily used to actuate field devices such as Pilot lamps, Solenoid actuated devices, Motor starters, Relay coils and other electrical loads to implement manual or automatic command initiated by the Central Processing Unit (CPU) or by the user. Being categorized as Smart module, it comes with output test capability which are normally installed with safety and counter modules as well as output hold to last state or default value in the event of CPU error or stoppage. It is also provided with a variety of internally installed electronic protection features such as Over temperature, Failed Switch Detection, Overload Detection and Shutdown and No-load Detection, available to every channel of the module. The IC695MDL765 comes with Sixteen (16) binary operating outputs, grouped into Two (2) isolated groups of Eight (8) channels each. Each output channel is able to deliver 0-30 VDC with 24 VDC nominal voltage and 105-130 VDC with 125 VDC nominal voltage and maximum current of 8 Amperes per group and 16 Amperes per module. Each of the module’s output has 1 ms response time for both signal transition specifically, On and Off transitions while the maximum switching frequency is 0.125HzfFor inductive loads greater than 2.2H otherwise, the overall switching frequency is 1 Hz when used with inductive or pilot duty output at 0.6 Ampere (132 VDC). Similarly, at 1.2 Amperes (30 VDC) the maximum switching frequency is 0.5 Hz at 0.08 H inductive load while the overall maximum switching frequency is 1 Hz.

The GE Fanuc IC695MDL765 module is a smart digital output module. GE Intelligent Platforms/GE Fanuc manufactures this module and it belongs to the GE Fanuc RX3i PacSystem product line with 16 output points with a rated voltage of 24 Volts DC or 125 Volts DC. This smart digital module has 16 discrete output points placed in 2 groups with 8 outputs each. The IC695MDL765 module has an output current rating of 2 Amps per point. Other specifications include an output voltage range of 105 to 132 Volts DC or 18 to 30 Volts DC and a current consumption rating of 540 milliamps at 5 Volts DC or 152 milliamps at 3.3 Volts DC. Each 8-output group is referenced to an isolated common to offer group to group isolation. The IC695MDL765 module has 2 types of outputs which include the sourcing-type outputs or positive logic and which are designed to switch the loads on the power supply current's positive side and also supply the current to the load. The GE Fanuc IC695MDL765 module can switch operator loads over a range of 105 to 132 Volts DC or 18 to 30 Volts DC, and it can also source an all-out current of 2 Amps for every point. This module requires user-supplied power to operate. It also comes with field status LED indicators labeled S1 and S2 to show whether the power supply (125 Volts DC/24 Volts DC) is available and if its is above the minimum possible level, whether the terminal block is in place, and whether there is a fault. The IC695MDL765 module is also designed to log messages about the loss of or the addition of a terminal block to the fault table of the inputs and outputs to show the status of the terminal block in the system.