GE Versamax Series Service Manual

IC200MDL650

1. Description

The IC200MDL650 is a 32-Point discrete input module from the VersaMax I/O series formerly produced by GE Intelligent Platforms, now under Emerson Automation. This module has Thirty-Two (32) input channels that supports positive and Negative logic wiring configuration, in Four (4) groups of Eight (8) channels per group.

2. Specifications

Specification	Value
Brand	**GE Fanuc**
Series	**Versamax**
Manufacturer	**Emerson Automation / GE Fanuc (former)**
Manufacturer	**GE Intelligent Platforms (Former); Emerson Automation**
Part	**Number IC200MDL650**
Series	**VersaMax I/O**
No.	**of channels Thirty-Two (32)**
Product	**Description Discrete Input Module**
Product	**type Discrete Input Module**
No.	**of input groups Four (4)**
Module	**ID 80088008**
No	**of Channels Thirty-Two (32)**
No.	**of channel per group Eight (8)**
Number	**of Points 32 Inputs**
No.	**of groups Four (4)**
Input	**signal, nominal 24 VDC**
Number	**of groups 4**
No.	**of channels per group Eight (8)**
Input	**signal, range 0-30 VDC**
Input	**Voltage 0-30 Volts DC, 24 Volts DC nominal**
Output	**Voltage Range 18-30 VDC**
Current	**Draw 50 mA, maximum**
Input	**Impedance 10K ohms**
Output	**voltage, nominal 24 VDC**
Input	**response time 0.5 ms, maximum**
Group	**to Group Isolation 250 VAC continuous, 1500 VAC for 1 min.**
ON	**state Voltage 15-30 VDC**
Filter	**time 0 ms, 1.0 ms, 7.0ms**
Point	**to Point Isolation None**
OFF	**state voltage 0-5 VDC**
On-state	**voltage 15-30 VDC**
LED	**Indicator**

3. Product Information

The IC200MDL650 is a 32-Point discrete input module from the VersaMax I/O series formerly produced by GE Intelligent Platforms, now under Emerson Automation. This module has Thirty-Two (32) input channels that supports positive and Negative logic wiring configuration, in Four (4) groups of Eight (8) channels per group.

Technical specifications for IC200MDL650

Brand GE Fanuc

Series Versamax

Manufacturer Emerson Automation / GE Fanuc (former)

Manufacturer GE Intelligent Platforms (Former); Emerson Automation

Part Number IC200MDL650

Series VersaMax I/O

No. of channels Thirty-Two (32)

Product Description Discrete Input Module

Product type Discrete Input Module

No. of input groups Four (4)

Module ID 80088008

No of Channels Thirty-Two (32)

No. of channel per group Eight (8)

Number of Points 32 Inputs

No. of groups Four (4)

Input signal, nominal 24 VDC

Number of groups 4

No. of channels per group Eight (8)

Input signal, range 0-30 VDC

Input Voltage 0-30 Volts DC, 24 Volts DC nominal

Output Voltage Range 18-30 VDC

Current Draw 50 mA, maximum

Input Impedance 10K ohms

Output voltage, nominal 24 VDC

Input response time 0.5 ms, maximum

Group to Group Isolation 250 VAC continuous, 1500 VAC for 1 min.

ON state Voltage 15-30 VDC

Filter time 0 ms, 1.0 ms, 7.0ms

Point to Point Isolation None

OFF state voltage 0-5 VDC

On-state voltage 15-30 VDC

LED Indicators One LED per point, OK LED

ON state current 2.0 - 5.5 mA

Off-state voltage 0-5 VDC

Backplane Current Consumption 5 Volts, 50 milliamps

OFF state current 0-0.5 mA

On-state current 2.0 - 5.5 mA

External Power Supply None

Response time 0.5 ms

Off-state current 0 - 0.5 mA

Filter times 0 ms / 1.0 ms / 7 ms

The IC200MDL650 is a high-density discrete input module from the GE VersaMax I/O platform. This module features Thirty-Two (32) input channels that support positive and negative logic wiring configuration, arranged in Four (4) groups of Eight (8) input channels per group. This module comes with group-to-group isolation rated 250 VAC, continuous and 1500 VAC for 1 minute duration. This type of module is typically used in a wide variety of industrial application, primarily used to integrate input devices such as pushbutton, auxiliary contacts, limit switches, level switches, proximity sensors and similar binary or On/Off devices. The input channels of the IC200MDL650 are designed to accept an input voltage signal range of 0-30 VDC with 24 VDC as the nominal input. The module's On-state voltage is +15 to +30 VDC and Off state voltage of 0 to +5 VDC while the On state and Off state current ratings are w.0 to 5.5 mA and 0 to 0.5 mA, respectively. For both On to Off and Off to On channel state transitions, the response times are typical which is 0.5 ms, maximum. In addition, input channels are provided with configurable input filter times which may be used to eliminate debounce, false positive and false negative signals. Specifically, the available filter settings are 0 ms, 1.0 ms and 7.0 ms with 1.0 ms as the default setting. This module is installed to a standard DIN rail and support horizontal and vertical orientation. It is provided with individual channel status LED indicator to depict the actuation state of each input channel.

GE Fanuc Versamax IC200MDL650 Discrete Input Module is designed to function with DC input devices. The input characteristics of the module are compatible with a variety of input devices and configurable as either positive logic or negative logic inputs. The IC200MDL650 Discrete Input Module draws a maximum of 50 milliamps of current from the PLC backplane to power up. This 24 Volts DC input module does not have any derating at 24 Volts DC and its exact functioning depends on the external voltage, the orientation of the DIN rail that it is connected to, and the ambient temperature around it. Each input point has an LED indicator that provides the on/off status of the input channel. The inputs are compatible with user-supplied input devices such as sensors, limit switches, and pushbuttons. The IC200MDL650 Discrete Input Module is a distributed input module that expands PLC applications. Its CPU software configuration facilities allow the users to compensate in switch bounds and noise spike conditions with configurable filter times. It also provides 0.5

milliseconds of on and off response time with 1.5 milliseconds of total filter response time. The input voltage of the module is 24 Volts DC nominal and the operating voltage range is 0 to 30 Volts DC. This module allows for convenient and space-saving mounting facilities with its compact design. It can be mounted on a DIN rail either vertically or horizontally. A variety of I/O carriers are also available to make installation, backplane communication, and field wiring easy.