GE Versamax Series Service Manual

IC200MDL331

1. Description

The IC200MDL331 is an 8-Point discrete output module from the VersaMax I/O series formerly produced by GE Intelligent Platforms, now under Emerson Automation. This module has Eight (8) isolated output channels that delivers output signal voltage of 120 VAC at signal range of 85-132 VAC, 47-63 Hz and output current of 2.0 Ampere per point.

2. Specifications

Specification	Value
Manufacturer	**GE Intelligent Platforms (Former); Emerson Automation (Current)**
Series	**VersaMax**
Series	**VersaMAx**
Part	**Number IC200MDL331**
Part	**Number IC200MDL331**
Product	**type Discrete Output Module**
Product	**Description Discrete Output Module**
Product	**Type Output Module**
No	**of Channels Eight (8)**
No.	**of channels Eight (8)**
Number	**of Outputs 8**
Output	**Voltage Range 85-132 VAC**
Output	**signal, nominal 120 VAC**
Voltage	**Type AC**
Output	**voltage, nominal 120 VAC**
Output	**signal, range 0-132 VAC**
Nominal	**Voltage 120 Volts AC**
Output	**current per channel, min. 0.5 Amperes**
Output	**current 2.0 A per point**
Operating	**Voltage 85 to 132 Volts AC**
Output	**current per channel, max 2 Amperes**
Current	**Drawn from BIU power supply 85 mA, maximum**
Operating	**Frequency 47 to 63 Hertz**
Inrush	**current, max 20 Amperes**
Output	**grouping Individually isolated**
Maximum	**Inrush Current 20 Amps**
Response	**time 1/2 cycle**
Output	**response time ½ cycle**
LED	**indicators Eight (8) channel LED: OK LED;**
Protection	**Snubber; MOV for each output**
Built-in	**protec**

3. Product Information

The IC200MDL331 is an 8-Point discrete output module from the VersaMax I/O series formerly produced by GE Intelligent Platforms, now under Emerson Automation. This module has Eight (8) isolated output channels that delivers output signal voltage of 120 VAC at signal range of 85-132 VAC, 47-63 Hz and output current of 2.0 Ampere per point.

Technical specifications for IC200MDL331

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

Series VersaMax

Series VersaMAx

Part Number IC200MDL331

Part Number IC200MDL331

Product type Discrete Output Module

Product Description Discrete Output Module

Product Type Output Module

No of Channels Eight (8)

No. of channels Eight (8)

Number of Outputs 8

Output Voltage Range 85-132 VAC

Output signal, nominal 120 VAC

Voltage Type AC

Output voltage, nominal 120 VAC

Output signal, range 0-132 VAC

Nominal Voltage 120 Volts AC

Output current per channel, min. 0.5 Amperes

Output current 2.0 A per point

Operating Voltage 85 to 132 Volts AC

Output current per channel, max 2 Amperes

Current Drawn from BIU power supply 85 mA, maximum

Operating Frequency 47 to 63 Hertz

Inrush current, max 20 Amperes

Output grouping Individually isolated

Maximum Inrush Current 20 Amps

Response time 1/2 cycle

Output response time ½ cycle

LED indicators Eight (8) channel LED: OK LED;

Protection Snubber; MOV for each output

Built-in protection: Snubber / MOV circuit

Output Voltage Drop 2.0 volts maximum

External Power supply 85-132 VAC, 120 VAC (nominal)

Output Leakage Current less than 2 mA maximum at 132 VAC

Isolation User input to logic (optical) and frame ground: 250VAC continuous; 1500VAC for 1 minute Group to group: 250VAC continuous; 1500VAC for 1 minute

The IC200MDL331 is a discrete output module from VersaMax I/O platform. This is an 8-channel, individually isolated output module that is able to deliver a nominal output voltage of 120 VAC at an output voltage range of 0-132 VAC at frequency range of 47-63 Hz. It also provides a relatively higher output current compared to other discrete output modules as the IC200MDL331 deliver a maximum output current of 2.0 Amperes with minimum of 10 mA. This enables the module compatible for use with electrical devices with higher current actuaton ratigns. In general, this module may be used to energize Relay coils, Pilot Lamps, solenoid actuated devices and other similar loads that operate in binary or On/Off states.

The IC200MDL331 is formerly manufactured by GE Intelligent Platforms, now under Emerson Automation due to the recent acquisition of the former. This I/O series is ideally used to implement distributed I/O architecture, eliminating long signal cable runs, significantly reducing cable cost, installation and maintenance costs. This module receives control commands and sends status data from and to a central Processing Unit (CPU) over an industrial protocol facilitated by the local bus interface module. The module's channel-to-channel isolation is rated 250 VAC for continuous and 1500 VAC for 1 minute while the optical isolation and frame to ground isolation are also 250 VAC, continuous and 1500 for 1 minute. This module draws current from the local backplane in the amount of 85 mA, maximum. This backplane power energizes the module circuitry to enable functionality. An external 85-132 VAC, 47-63 Hz must be wired to the module which is used by the IC200MDL331 to generate the rated output voltage and current.

The GE Fanuc IC200MDL331 output module is an isolated output module from the GE Versamax series. It is designed to operate at a voltage of 120 Volts AC, and this AC voltage must come from an external power supply so that power can be switched to the loads on the module. The IC200MDL331 output module has 8 output points, and because it is an isolated module, all 8 of the output points are isolated from each other. The isolation rating from the user input to the optical logic and the frame ground is 250 Volts AC for continuous isolation and it is 1500 Volts AC for 1 minute. There is no group to group isolation on the IC200MDL331 output module because the inputs are not arranged into separate groups. The GE Fanuc IC200MDL331 isolated 8-point output module supports an output voltage range of 85 to 132 Volts AC at a frequency of 47 to 63 Hertz, in addition to its nominal voltage rating of 120 Volts AC. The maximum output voltage drop is 2 Volts, and the module's load current ratings are 10 milliamps of minimum current per point, 2 Amps of maximum current per point, and 20 Amps for 1 cycle of maximum inrush current. The LEDs on the IC200MDL331 output module are an OK LED that indicates if the backplane power to the module is present and the individual LEDs to show which outputs are on or off. The output LEDs are powered by the system logic which acts independently of the load condition that the module is experiencing.