GE Versamax Series Service Manual

IC200ALG321

1. Description

The IC200ALG321 is a 4-Point Analog Current Output Module from VersaMax I/O series of formerly by GE Intelligent Platforms, now under Emerson Automation. This module has Four (4) single-ended output channels that generates 0-10 VDC output signal with resolution of 2.5 mV and maximum update rate of 0.3 ms. It requires an external power supply ranging 18-30VDC or 9.6 to 15 VDC.

2. Specifications

Specification	Value
Brand	**GE Fanuc**
Series	**Versamax**
Manufacturer	**GE Intelligent Platforms (Former); Emerson Automation (Current)**
Part	**Number IC200ALG321**
Series	**VersaMax**
Type	**Output module**
Part	**Number IC200ALG321**
Outputs	**4 analog current-sourcing outputs**
Product	**Description 4-Point Analog Voltage Output Module**
Voltage	**18 to 30 VDC**
Wiring	**configuration Single-ended**
Current	**Consumption 210 mA max.**
Output	**signal, nominal 0-10 VDC**
Output	**Current 0 to 10.24V DC**
Analog	**resolution 12 bits**
Accuracy	**(Full Scale) 0.3% typical and +/- 1% maximum**
External	**Power supply 18-30VDC; 9.6 to 15 VDC**
Resolution	**8 Counts**
Nominal	**Supply voltage 12 / 24 VDC**
Update	**Rate 0.3 ms, maximum**
Current	**Draw 50 mA, maximum**
LEDs	**2**
Output	**grouping Single group**
Diagnostic	**Tools Yes**
Output	**wiring Single-ended**
Diagnostics	**Loss of user side power**
Output	**default Hold last state; 0 VDC**
The	**IC200ALG321 is a Voltage output module from the VersaMax product family. This module is a 12-bit resolution module that generates 0-10 VDC voltage signals, mainly**

3. Product Information

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Technical specifications for IC200ALG321

Brand GE Fanuc

Series Versamax

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

Part Number IC200ALG321

Series VersaMax

Type Output module

Part Number IC200ALG321

Outputs 4 analog current-sourcing outputs

Product Description 4-Point Analog Voltage Output Module

Voltage 18 to 30 VDC

Wiring configuration Single-ended

Current Consumption 210 mA max.

Output signal, nominal 0-10 VDC

Output Current 0 to 10.24V DC

Analog resolution 12 bits

Accuracy (Full Scale) 0.3% typical and +/- 1% maximum

External Power supply 18-30VDC; 9.6 to 15 VDC

Resolution 8 Counts

Nominal Supply voltage 12 / 24 VDC

Update Rate 0.3 ms, maximum

Current Draw 50 mA, maximum

LEDs 2

Output grouping Single group

Diagnostic Tools Yes

Output wiring Single-ended

Diagnostics Loss of user side power

Output default Hold last state; 0 VDC

The IC200ALG321 is a Voltage output module from the VersaMax product family. This module is a 12-bit resolution module that generates 0-10 VDC voltage signals, mainly used to modulate control devices such as valves, Variable Frequency Drives (VFD), louvers, dampers, positioners as well as re-transmission of signals for processing of local panel meters, recorders or data loggers, signal splitters and isolators and similar electrical devices. The IC200ALG321 generates 0-10 VDC output voltage with resolution of 12-bits or digital resolution of 2.5 mV and maximum channel update rate of 0.3 ms. This module supports single-ended wiring and comes in a single group of output channels with group isolation rating of 250 VAC, continuous and 1500 VAC for 1 minute duration. The built-in status indicators available to this module are FLD POWER LED and an OK LED that indicates active field power and backplane power both present and received by the module, respectively. This module has maximum backplane current consumption of 50 mA. The IC200ALG321 requires an external power supply to operate. Applicable supply voltage ranges are 18-30VDC or 9.6 to 15 VDC, with nominal supply voltage of 12 / 24 VDC. This module has an output voltage range of 0-10.24 VDC with load characteristics of 5000 Ohms, minimum for resistive loads and 1 µF, maximum for capacitive loads. This module is capable of detecting and reposting to the host CPU the presence of field side power and output reaction to CPU Stop and module fault such as holding of last state and 0 VDC.

The GE Fanuc IC200ALG321 module is a 12-bit analog output module that comes with 4 channels and it is intended to provide a connection between different output devices and the main processor. This specific module has been included in the Versamax product line by GE Fanuc Automation. This module provides 4 analog voltage outputs that operate with a rating between 0 and 10 Volts DC each. This module provides a 12-bit resolution and digital resolution of 2.5 millivolts. The resolution level is highly affected by the radiofrequency interference produced by nearby equipment. If there is radiofrequency interference in the environment, the resolution of the module might need to be degraded by at least +/-1 percent. The GE Fanuc Automation IC200ALG321 12-bit analog output module comes with 2 LED indicators used to indicate backplane current is connected and presence of the user-side power to feed the analog-field circuits. The IC200ALG321 has an isolation level that provides isolation between the user input and the logic ground and frame ground. This isolation voltage rating is 250 Volts AC continuous and it is 1500 Volts AC maximum for 1 minute. It does not require degrading for the temperature conditions and it operates with a voltage range of 18 to 30 Volts DC. This module has a voltage rating of 12 Volts DC nominal and a current consumption rating of 210 milliamps. The accuracy of the module goes up to 0.3 percent typical and it is 1 percent maximum. The recommended temperature range is 0 to 60 degrees Celsius.