GE IC200ALG620 Manual

Brand	GE
Product Series	Versamax
Product Type	3-wire and 4-wire RTDs

Description

The IC200ALG620 is a 4-channel Resistance Temperature Detector (RTD) input module from VersaMax I/O series formerly produced by GE Intelligent Platforms, now under Emerson Automation. This module has Four (4) RTD inputs, compatible with 3-wire or 4-wire RTD devices, supporting different types of RTD sensors such as Platinum 25, 100, and 1000 ohm;
Technical specifications for IC200ALG620
Brand GE Fanuc
Series VersaMax
Manufacturer GE Intelligent Platforms (Former); Emerson Automation (Current)
Part Number IC200ALG620
Part Number IC200ALG620
Description Analog input module
Product Description 4-point RTD / Resistance input module
Resolution 16 bits
Compatible RTD sensors Platinum 25, 100, and 1000 ohm; Copper 10, 50, and 100 ohm; Nickel 100 and 120 ohm; Nickel / Iron 604 ohms
Update Rate 210 milliseconds
Compatible RTD Wiring type 3-wire and 4-wire RTDs
Bus Voltage 5 Volts DC
Resistance input range 0-500 Ohms; 0-3000 Ohms
Isolation (Input to Frame) 1500 Volts AC
Digital Resolution 15 bits plus sign
Isolation (Input to Logic) 250 Volts AC
Accuracy, at 25° C +/–0.15% on resistance measurement; +/-0.15% on RTD (temperature) measurement
Frequency 50-60 Hertz
Temperature sensitivity (0° to 60°C) +/–0.004% of reading; +/–1.5µV per °C referred to input
Temperature 0-60 degrees Celsius
Channel update rate approximately 210 ms per channel @ 60 Hz; approximately 230 ms per channel @ 50 Hz
Backplane current consumption 5V output: 125mA maximum; 3.3V output: 125mA
Channel diagnostics Diagnostics Open RTD, input short, underrange, overrange, non-volatile memory storage fault, wiring fault and high/low alarm
Operating temperature range 0 to 60 Degrees C, ambient
Maximum lead resistance 5 ohms per lead
The IC200ALG620 is a VersaMax analog input module that is manufactured by Emerson Automation. This module is specifically a Resistance Temperature Detector (RTD) module that is used for temperature measurement and integration of transducers. This module is a 4-channel RTD / Resistance analog input module that can be used with a variety of RTD sensors including Platinum 25, 100, and 1000 ohm; Copper 10, 50, and 100 ohm; Nickel 100 and 120 ohm; and Nickel / Iron 604 ohms and direct input of resistance value ranges such as 0-500 Ohms and 0-3000 Ohms. The IC200ALG620 supports 3-wire and 4-wire RTD sensors. Each channel has a dedicated Analog to Digital (ADC) converter circuit with conversion resolution of 16 bits. This module has measurement accuracy (at 25 Degree Celsius) of +/–0.15% when used for resistance measurement and +/-0.15% on RTD (temperature) measurement mode. Each input channel is capable of detecting Open RTD, input short, underrange, overrange, non-volatile memory storage fault, wiring

fault and high/low alarm. These fault and alarm conditions are reported to the host Programmable Logic Controller (PLC) for integration. This module has an update rate of 210 ms per channel at 60 Hz and 230 ms per channel at 50 Hz. It is also installed with an OK LED which signals backplane power active supplied to the module when lit Green and module fault when lit Amber. This module has backplane current draw of 125 mA at 5.0 VDC bus output and 125 mA at 3.3 VDC bus output.

The IC200ALG620 module is a 16-bit module manufactured by GE Fanuc. It is an analog input module designed with 4 channels. It offers a resolution of 16 bits. It operates with a voltage of 5 Volts and it has an update rate of 210 milliseconds. It is equipped with LED indicators that help the users to understand different states of the module. It has the FLD PWR LED and the OK LED. The FLD PWRLED shows that the backplane power and field power are present in the circuit. The OK LED shows the normal operation of the module. It illuminates in amber when a diagnostics error is present in the module. The LED flashes green when the module is updating or in the boot mode. It consumes a total of 125 milliamps of current from the 5 Volts bus. The IC200ALG620 module has 250 Volts AC isolation for user input to logic and 1500 Volts AC isolation for 60 seconds for user input to frame. It consumes a total of 125 milliamps of current. It can update at a frequency between 50 and 60 Hertz, depending upon the channel. The common mode rejection ratio of the module is 120 dB with a frequency of 50 to 60 Hertz with of 100% span. The normal mode rejection stands at 60 dB at a similar frequency. The operation temperature of the IC200ALG620 module should not exceed 60 degrees Celsius in a clean environment. The IC200ALG620 module is easy to configure and install. During the installation process, the module should be properly grounded to avoid electrical damage.

Technical Specifications

Brand GE Fanuc
Series VersaMax
Manufacturer GE Intelligent Platforms (Former); Emerson Automation (Current)
Part Number IC200ALG620
Part Number IC200ALG620
Description Analog input module
Product Description 4-point RTD / Resistance input module
Resolution 16 bits
Compatible RTD sensors Platinum 25, 100, and 1000 ohm; Copper 10, 50, and 100 ohm; Nickel 100 and 120 ohm; Nickel / Iron 604 ohms
Update Rate 210 milliseconds
Compatible RTD Wiring type 3-wire and 4-wire RTDs
Bus Voltage 5 Volts DC
Resistance input range 0-500 Ohms; 0-3000 Ohms
Isolation (Input to Frame) 1500 Volts AC
Digital Resolution 15 bits plus sign
Isolation (Input to Logic) 250 Volts AC
Accuracy, at 25° C +/–0.15% on resistance measurement; +/-0.15% on RTD (temperature) measurement
Frequency 50-60 Hertz
Temperature sensitivity (0° to 60°C) +/–0.004% of reading; +/–1.5µV per °C referred to input
Temperature 0-60 degrees Celsius
Channel update rate approximately 210 ms per channel @ 60 Hz; approximately 230 ms per channe