GE Field Control Series Service Manual

IC200ALG262

1. Description

Product Description

2. Specifications

Specification	Value
No.	of channels: 8 differential, one group
Voltage	Range: -10 to +10 volts DC
Current	Range: 4 - 20 mA, 0 - 20 mA
Update	Rate: 7.5 ms
Input	Filter Response: N/A
Power	Consumption: 200 mA from +5V bus The IC200ALG262 is an 8-Point Analog Current input module from VersaMax I/O series formerly produced by GE Intelligent Platforms, now under Emerson Automation. This module has Eight (8) single-ended input channels that accepts 0-20 mA / 4-20 mA input signal with resolution of 15-bits and maximum update rate of 7.5 ms.
Manufacturer	GE Fanuc
Series	Field Control
Manufacturer	GE Intelligent Platforms (Former); Emerson Automation (Current)
Part	Number IC200ALG262
Series	VersaMax
Product	Type Input Module
Part	Number IC200ALG262
Number	of Inputs 8
Product	Description 4-Point Analog current input module
Module	Type Analog
Wiring	configuration Differential
Converter	Resolution 15 Bits
Input	signal, nominal 0-20 mA; 4-20 mA
Input	Type Single-Ended
Analog	resolution 15 bits
Update	Rate 7.5 mi

3. Product Information

Product Description

IC200ALG262 is a 15 Bit Differential Current Module with eight channels from GE Versamax. This analog input module offers an interface to eight analog current inputs that receive power from the backplane power supply. This means no external power source is necessary for module operation. However, power for the user's transceivers is required from an external source.

The IC200ALG262 has a single group of eight differential input channels with 15-bit converter resolution. The CPU or NIU performs the intelligent processing for this unit as the module provides eight words of analog input data. This unit reports a loss of power fault for field side circuits and open wire faults for every channel but only in 4-20mA mode. A jumper on the carrier terminal can be used to configure this range or the 0-20mA input range as needed, or the lack of a jumper cable will allow the module to use the 4-20mA range. Additionally, LED lights indicate power and proper functioning.

When first installing the IC200ALG262 module, carefully inspect all parts for damage. Do not use damaged parts as this may affect overall functioning. Analog channel connections should be created with shielded twisted pair cable with the cable grounded at the source device. However, if unable to ground at the source, then grounding at the I/O module is appropriate and can be done using the auxiliary I/O terminal. If this option is used, shield connections can be made on an auxiliary I/O terminal connected to the I/O carrier. If additional connections are required, an auxiliary I/O terminal strip can be utilized.

Technical Specifications

No. of channels: 8 differential, one group

Voltage Range: -10 to +10 volts DC

Current Range: 4 - 20 mA, 0 - 20 mA

Update Rate: 7.5 ms

Input Filter Response: N/A

Power Consumption: 200 mA from +5V bus The IC200ALG262 is an 8-Point Analog Current input module from VersaMax I/O series formerly produced by GE Intelligent Platforms, now under Emerson Automation. This module has Eight (8) single-ended input channels that accepts 0-20 mA / 4-20 mA input signal with resolution of 15-bits and maximum update rate of 7.5 ms.

Technical specifications for IC200ALG262

Manufacturer GE Fanuc

Series Field Control

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

Part Number IC200ALG262

Series VersaMax

Product Type Input Module

Part Number IC200ALG262

Number of Inputs 8

Product Description 4-Point Analog current input module

Module Type Analog

Wiring configuration Differential

Converter Resolution 15 Bits

Input signal, nominal 0-20 mA; 4-20 mA

Input Type Single-Ended

Analog resolution 15 bits

Update Rate 7.5 milliseconds

Digital resolution 0.5 µA for 4-20 mA; 0.625 µA for 0-20 mA

Current Range 0 to 20 mA or 4 to 20 mA

Common mode range -10 V to +10 V

Common mode rejection 70 db

Input impedance 100 Ohms

Update rate 7.5 ms, maximum

Input signal selection No terminal jumper installed: 4-20 mA With Jumper installed: 0-20 mA

Current Draw 200 mA, maximum

Input grouping Single group

Diagnostics Loss of user side power; Open wire detection for 4-20 mA Description

The IC200ALG262 is a component module that is part of the VersaMax I/O platform. This module is specifically an analog input module that supports differential current wiring. It comes with Eight (8) analog input channels that are designed to receive standard current input signals such as 0-20 mA and 4-20 mA input signal. The IC200ALG262 is currently manufactured by Emerson Automation. It is ideally used to interface analog signal generating instruments such as field transmitters for measuring pressure, level, flow, temperature, turbidity, viscosity, speed and other types of transmitters; for integration of locally mounted panel meters to implement remote display; for monitoring the speed output of a Variable Frequency Drive (VFD); for monitoring position of rotary and linear devices and other applications. The IC200ALG262 has a built-in Analog to Digital Converter (ADC) circuit with conversion resolution of 15 bits. The input channels are arranged in a single group and capable of detecting loss of module's internal power and open wire detection when configured to receive 4-20 mA. Each channel has an uprate rate of 7.5 ms with digital resolution of 0.5 µA for 4-20 mA signal range and 0.625 µA for 0-20 mA signal range. This module has maximum backplane current draw of 200 mA from the 5 VDC bus voltage. Compatible configuration software and hardware firmware versions that can be used with this module include VersaPro software Version 2.0 or higher; VersaMax PLC CPU Firmware 2.10or higher; VersaMax Ethernet Network Interface Unit (NIU) firmwareversion 1.10 of higher; It is also compatible with VersaMax DeviceNet, Profibus or Genius NIU modules.

The IC200ALG262 input module from GE Fanuc is an analog input module in the VersaMax product series. It can be an interface for 8 analog inputs that are current inputs. The

IC200ALG262 input module does not need an external power supply as it receives power from the backplane power supply. This module has resolution of 15 bits. The IC200ALG262 analog input module is software-configurable. It supports intelligent processing from a CPU or an NIU. All 8 of its input channels are single-ended and that are arranged in 1 group. The update rate for this module is 7.5 milliseconds. The GE Fanuc IC200ALG262 can diagnose problems like the loss of internal power and open wires at signal levels of 4 to 20 milliamps. The LED on the IC200ALG262 input module is the OK LED which shows that the backplane power supply is properly connected and functioning. The inputs channels can operate at current levels between 0 and 20 milliamps or between 4 and 20 milliamps and these current ranges can be configured with a jumper. If there is no jumper on the IC200ALG262 module, the input current range will always be 4 to 20 milliamps. The manufacturer recommends using shielded twisted pair cables for making the analog channel connections on this module, and the manufacturer also recommends be grounded at the source device or at the I/O module if grounding it at the source device is not possible.