MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

GE

IC200ALG263

FIFTEEN-CHANNEL ANALOG VOLTAGE INPUT MODULE

Used with the applicable GE VersaMax configuration.

REFERENCE PACKAGE

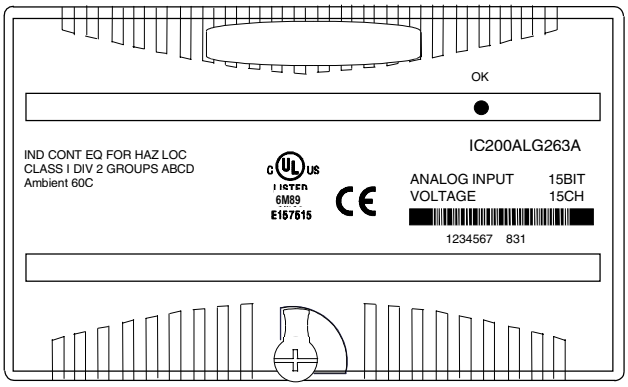
OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: GE Fanuc VersaMax Modules, Power Supplies, and Carriers User Manual, GFK-1504K

IC200ALG263
Analog Input Module, 15 Bit Voltage 15 Channels

Analog input module IC200ALG263 provides an interface to 15 voltage inputs. The inputs are single-ended, with all inputs sharing a common return.



The module receives power from the backplane power supply. No external power source is required for module operation. Power for the user's transceivers must be supplied from an external source.

Intelligent processing for this module is performed by the CPU or NIU. The module provides 15 words of analog input data.

LED Indicators

The green OK LED is on when backplane power is present, internally generated field power is functioning properly, the module has been configured, the module has been recognized on the backplane, and all diagnostic tests are executing as expected.

Diagnostics

The module reports a Loss of Internal Power fault for field-side circuits.

The module reports an Internal Hardware fault upon detection of an A/D conversion malfunction. The module detects this malfunction by applying a known stimulus to the A/D conversion path and verifying the expected result. If an unexpected result occurs three times consecutively, the module stops scanning, turns off the OK LED, and reports an Internal Hardware fault. The module must be power cycled or replaced to clear this fault.

Configuration Parameters

The analog inputs are software-configurable to either default or hold last state upon loss of module.

IC200ALG263
Analog Input Module, 15 Bit Voltage 15 Channels

Module Specifications

Module Characteristics	
Channels	15 single ended, one group
Module ID	FFFFB00F
Isolation: User input to logic (optical) and to frame ground Group to group Channel to channel	 250VAC continuous; 1500VAC for 1 minute Not applicable None
LED indicators	OK LED. See "LED Indicators" for description.
Backplane current consumption	5V output: 150mA maximum
External power supply	None
Thermal derating	None
Configuration parameters	None
Diagnostics	Loss of Internal Power A/D conversion malfunction greater than 6% of full scale
Input Characteristics	
Input voltage	-10V to +10V
Input Impedance	100K Ohms minimum
Accuracy at: 25 degrees C* 0 to 60 degrees C	 +/-0.3% typical of full scale, +/-0.5% maximum of full scale +/-1% maximum of full scale
Resolution	+/- 15 bits 0.3125mV = 1 count
Filter response (3dB Corner Freq)	32 Hz +/-20%
Update rate per module	7.5ms
Compatibility	
VersaPro Software	Version 2.0 or higher
VersaMax PLC CPU Firmware	Version 2.10 or higher
VersaMax Ethernet NIU Firmware	Version 1.10 or higher
VersaMax DeviceNet, Profibus, or Genius NIU Firmware	Planned for future release

* In the presence of severe RF interference, (IEC 1000-4-3, 10V/m), accuracy may be degraded to +/-2%.

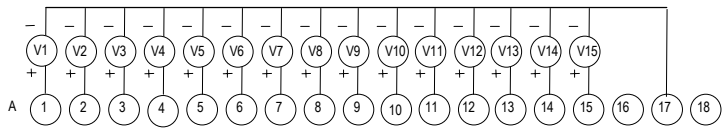
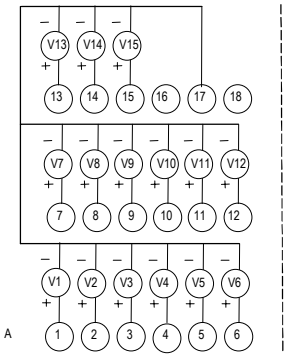
IC200ALG263
Analog Input Module, 15 Bit Voltage 15 Channels

Field Wiring

Terminal assignments for the module are shown below.

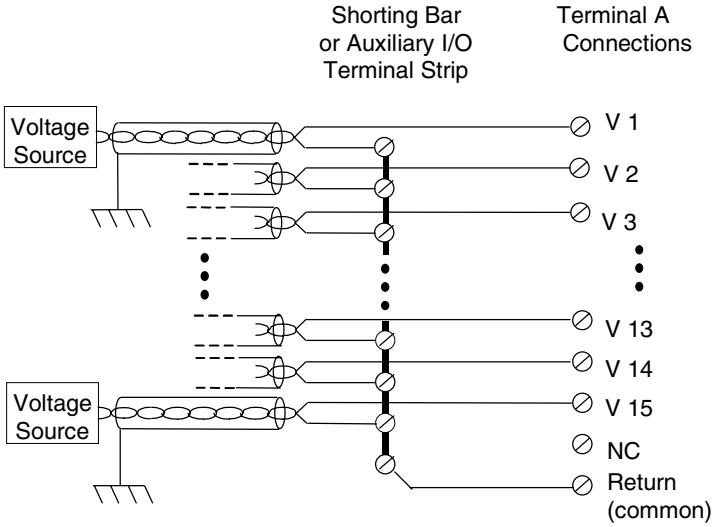
Number	Connection	Number	Connection
A1	V1	B1	No connection
A2	V2	B2	No connection
A3	V3	B3	No connection
A4	V4	B4	No connection
A5	V5	B5	No connection
A6	V6	B6	No connection
A7	V7	B7	No connection
A8	V8	B8	No connection
A9	V9	B9	No connection
A10	V10	B10	No connection
A11	V11	B11	No connection
A12	V12	B12	No connection
A13	V13	B13	No connection
A14	V14	B14	No connection
A15	V15	B15	No connection
A16	NC	B16	No connection
A17	Return (common)	B17	No connection
A18	NC	B18	No connection

Note: All inputs are single-ended, and share a common return.

Wiring Connections for Carriers with Two Rows of Terminals *IC200CHS002, 005* *IC200CHS012, 015*	
Wiring Connections for Carriers with Three Rows of Terminals *IC200CHS001, 022, 025* *IC200CHS011*	

IC200ALG263
Analog Input Module, 15 Bit Voltage 15 Channels

Wiring Examples



An optional Shorting Bar or Auxiliary I/O Terminal Strip can be used for wiring convenience when multiple Return paths need to be wired together.

An external source must be provided to power input transceivers.

IC200ALG263
Analog Input Module, 15 Bit Voltage 15 Channels

Cable Shield Connections

If possible, the cable should be grounded at the source device. If that is not possible, the cable shield must be grounded at the source device. If that is not possible, the cable shield must be grounded at the I/O module. This can be done using an Auxiliary I/O Terminal (IC200TBM001, 002, or 005).

If the module is installed on a Terminal-style I/O Carrier (IC200CHS001, 002, or 005), shield connections can be made on an Auxiliary I/O Terminal that is attached to the I/O carrier.

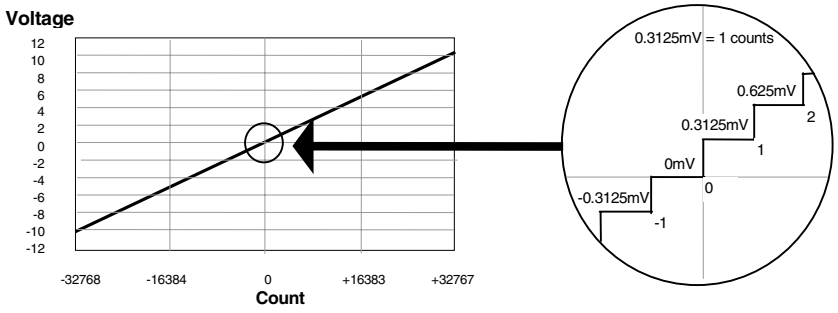
If the module is installed on a Compact Terminal-style I/O Carrier (IC200CHS022, 025), shield connections can be made on an Auxiliary I/O Terminal that is mounted near the I/O carrier. Be sure to ground the Auxiliary I/O Terminal Strip if you plan to use it for this purpose.

If the module is installed on a Connector-style I/O Carrier (IC200CHS003), the cable shield can be connected directly to an Interposing Terminal (IC200CHS011, 012, 015). Be sure to ground the Interposing Terminal. It is recommended to use a shielded interposing cable as well between the Interposing Terminal and the Connector Base. A custom shielded cable can be made using the Connector kit (IC200ACC302). In addition, a custom shield braid can be wrapped around standard Interposing Cables (IC200CBL105, 110, 120, 230). If this approach is used be sure to ground the braid.

Scaling

The graphs below show the relationship between the input voltage measured at the field terminals and the data that is output by the module.

Count and Input Voltage



The following equation can be used to calculate count values:

Counts = (Input Voltage) x (32000 / 10V)