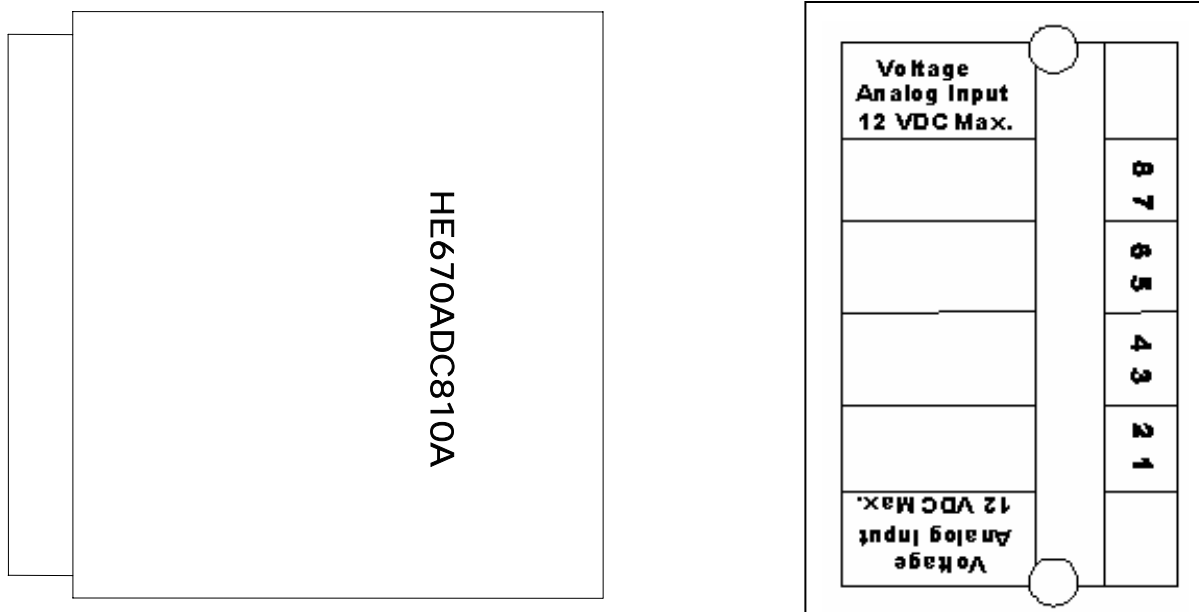# 1   DESCRIPTION

The +/-10VDC Isolated Analog Input Module (HE670ADC810) is compatible with the GE Fanuc Field Control Processors. They provide eight analog input channels, with 12-bits of resolution. This module is bus isolated up to 1000 V continuous. This module converts the voltage input signals into digital values (-10,000 to +10,000 normally), which are placed directly into the global output data of the module. These values can be accessed by any device which can monitor global data on the Genius LAN.
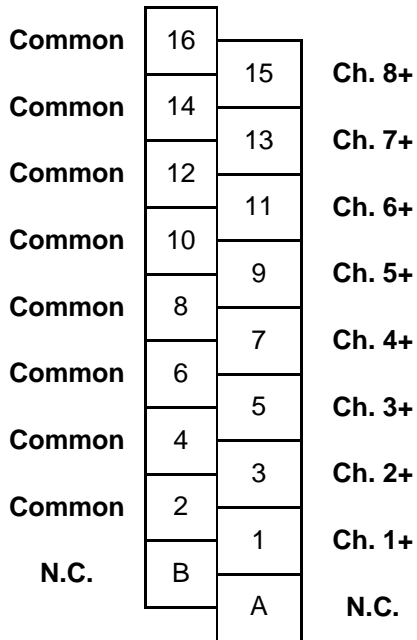
NOTE: For HE670ADC810, revision D and higher, hot swap capability is supported.
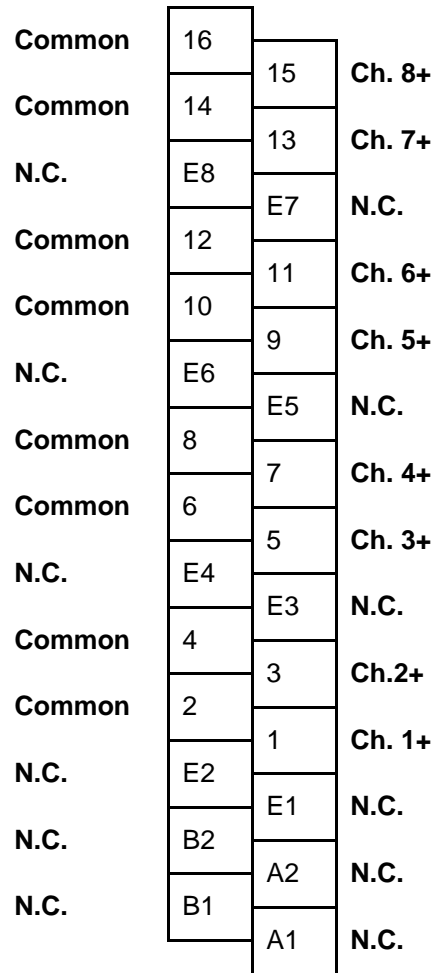

2   SPECIFICATIONS

Table 2.1 - HE670ADC810 Specifications			
Power Consumption	130mA from backplane	**Resolution** (0 to +10) (-10 to +10)	12-bits 11-bits + sign
Number of channels	8, single ended, common low side	**Output Format**	Set by BIU, Normally 10V = 10000 Counts
Range	0 to +10VDC -10 to +10VDC Selectable by the BIU	**Conversion Time**	60 uS / Channel Typical
Isolation from bus, Input/Common	3KV Peak Transient, 1KV Continuous	**Maximum Error at 25°C**	+/- 0.1% Full Scale
Max Isolation Leakage at 240VAC	7uA	**Nonlinearity**	+/- 0.025% of Scale
Input Impedance	501K ohms, +/-2%	**Temperature Coefficient**	0.005% per °C
Maximum Input Voltage to Common	+/- 12VDC	**Operating Temperature**	0 to 75°C
Input Noise Filter	1.3 KHz	**Input Power**	No User Supply Required

3   WIRING

Common	16	
		15 **Ch. 8+**
Common	14	
		13 **Ch. 7+**
Common	12	
		11 **Ch. 6+**
Common	10	
		9 **Ch. 5+**
Common	8	
		7 **Ch. 4+**
Common	6	
		5 **Ch. 3+**
Common	4	
		3 **Ch. 2+**
Common	2	
		1 **Ch. 1+**
N.C.	B	
		A **N.C.**

**I/O Terminal Block
with Box Terminal**

Common	16	
		15 **Ch. 8+**
Common	14	
		13 **Ch. 7+**
N.C.	E8	
		E7 **N.C.**
Common	12	
		11 **Ch. 6+**
Common	10	
		9 **Ch. 5+**
N.C.	E6	
		E5 **N.C.**
Common	8	
		7 **Ch. 4+**
Common	6	
		5 **Ch. 3+**
N.C.	E4	
		E3 **N.C.**
Common	4	
		3 **Ch.2+**
Common	2	
		1 **Ch. 1+**
N.C.	E2	
		E1 **N.C.**
N.C.	B2	
		A2 **N.C.**
N.C.	B1	
		A1 **N.C.**

**I/O Terminal Block
with Barrier Terminal**

4   INSTALLATION

4.1   Keying Locations

The following keying locations must be used**.**

Keying Locations										
A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**
x			x			x				x

4.2   Installation Hints

The following installation hints need to be followed.

a.   Wiring needs to be routed in its own conduit.

b.   Shielded, twisted pair extension wiring offers best noise immunity.

c.   If shielded wiring is used, a good earth ground connection is critical. Connect all shield points to a good earth ground.

4.3   Safety

WARNING: Do <u>not</u> insert or remove a module during operation if there is a potential that temporary, incorrect data may result, which could cause hazardous or unexpected conditions.

NOTES