MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

GENERAL ELECTRIC

IS220PCLAH1B

CORE ANALOG I/O PACK

Used with the applicable GE Mark VIe configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: GEH-6725R Instruction Guide, section 3.4

3.4 PCLA Core Analog Module — Aero

The following hardware combinations are approved for use in hazardous locations:

- Core analog module **IS220PCLAH1A** or **IS220PCLAH1B**
- Terminal board (accessory) **IS210SCLSH1A**
- Optional terminal board (accessory) **IS200SCLTH1A**

3.4.1 Electrical Ratings

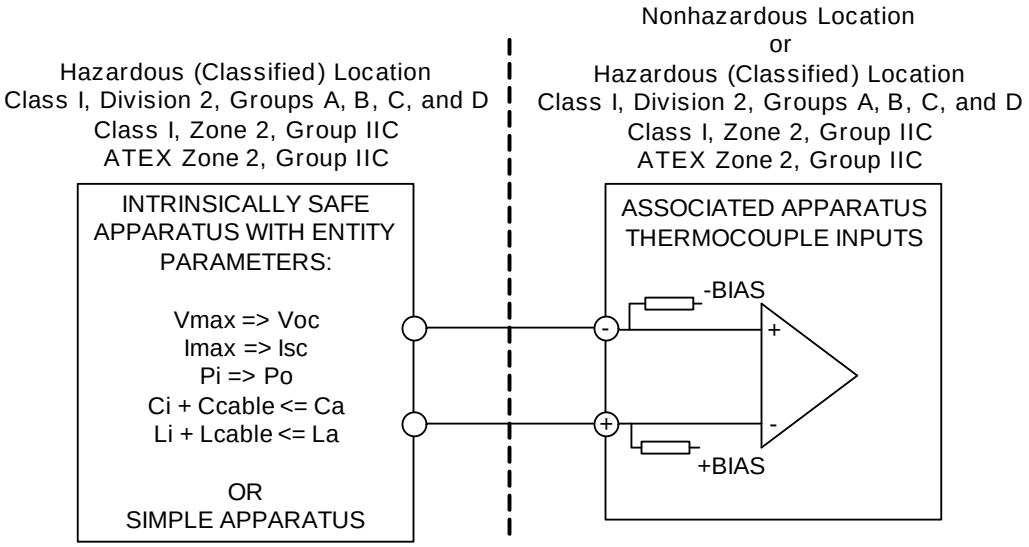
Item	Min	Nominal	Max	Units
Power Supply				
Voltage	27.4	28	28.6	V dc
Current	—	—	0.78	A dc
Analog Inputs				
Voltage	-10	—	10	V dc
Current	0	—	20	mA dc
Thermocouple Inputs				
Voltage	-16	—	63	mV dc
RTD Inputs				
Voltage	0	—	0.7	V dc
Current	—	1.0	—	mA dc
Analog Outputs				
Voltage	0	—	16.3	V dc
Current	0	—	20	mA dc
Analog Transmitter Power				
Voltage	22.8	24.0	25.2	V dc
Current	—	—	21	mA dc

3.4.2 Field Wire Connections

For the core analog terminal boards (accessories) wire sizes and screw torques, refer to the table *Euro Style Box-type Terminal Blocks*.

3.4.3 Intrinsic Safety “ic” for Thermocouple Inputs

Wiring Diagram



Entity Parameters

Thermocouple Inputs	Value	Unit
Voc or Uo	0.5	V
Isc or Io	25	nA
Po	13	nW
Ca or Co	1000	uF
La or Lo	100	mH

Note 1. This associated apparatus may also be connected to simple apparatus as defined in Article 504.2 and installed and temperature classified in accordance with Article 504.10(B) of the National Electrical Code (ANSI/NFPA 70), or other local codes, as applicable.

Note 2. Only resistive simple apparatus (such as thermocouples) shall be connected to thermocouple inputs

Note 3. Each cable used to connect the simple apparatus must have suitable insulation as required by the applicable local electrical codes.

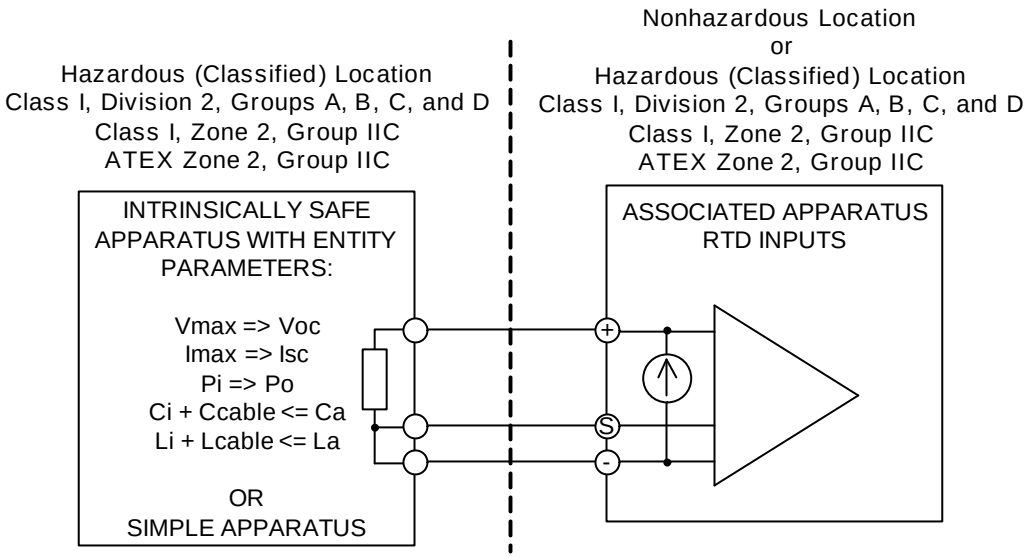
Note 4. The maximum cable length connecting each thermocouple to the device shall not exceed 1000 ft.

Field Terminals

Accessory TB	Name	(-) Terminal	Name	(+)Terminal
SCLS	TC1H	TB1B.25	TC1L	TB1B.26
	TC2H	TB1B.27	TC2L	TB1B.28
	TC3H	TB1B.29	TC3L	TB1B.30
	TC4H	TB1B.31	TC4L	TB1B.32
	TC5H	TB1B.33	TC5L	TB1B.34
	TC6H	TB1B.35	TC6L	TB1B.36
	TC7H	TB1B.37	TC7L	TB1B.38
	TC8H	TB1B.39	TC8L	TB1B.40
SCLT	TC9H	TB1.1	TC9L	TB1.2
	TC10H	TB1.3	TC10L	TB1.4
	TC11H	TB1.5	TC11L	TB1.6
	TC12H	TB1.7	TC12L	TB1.8
	TC13H	TB1.9	TC13L	TB1.10
	TC14H	TB1.11	TC14L	TB1.12
	TC15H	TB1.13	TC15L	TB1.14
	TC16H	TB1.15	TC16L	TB1.16

3.4.4 Intrinsic Safety "ic" for RTD Inputs

Wiring Diagram



Entity Parameters

RTD Inputs	Value	Unit
Voc or Uo	15	V
Isc or Io	1.0	mA
Po	15	mW
Ca or Co	3	uF
La or Lo	100	mH

***Note** 1.* This associated apparatus may also be connected to simple apparatus as defined in Article 504.2 and installed and temperature classified in accordance with Article 504.10(B) of the National Electrical Code (ANSI/NFPA 70), or other local codes, as applicable.

***Note** 2.* Only resistive simple apparatus (such as RTDs) shall be connected to RTD inputs.

***Note** 3.* Each cable used to connect the simple apparatus must have suitable insulation as required by the applicable local electrical codes.

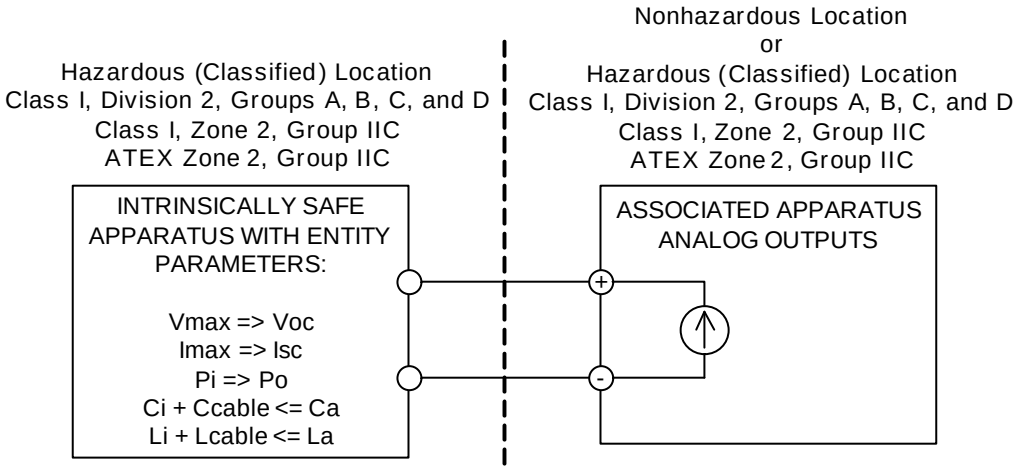
***Note** 4.* The maximum cable length connecting each RTD to the device shall not exceed 1000 ft.

Field Terminals

Accessory TB	Name	(+) Terminal	Name	(S) Terminal	Name	(-)Terminal
SCLS	RTDEXC1	TB1C.49	RTDSIG1	TB1C.50	RTDRET1	TB1C.51
	RTDEXC2	TB1C.52	RTDSIG2	TB1C.53	RTDRET2	TB1C.54
	RTDEXC3	TB1C.55	RTDSIG3	TB1C.56	RTDRET3	TB1C.57
	RTDEXC4	TB1C.58	RTDSIG4	TB1C.59	RTDRET4	TB1C.60
	RTDEXC5	TB1C.61	RTDSIG5	TB1C.62	RTDRET5	TB1C.63
	RTDEXC6	TB1C.64	RTDSIG6	TB1C.65	RTDRET6	TB1C.66
	RTDEXC7	TB1C.67	RTDSIG7	TB1C.68	RTDRET7	TB1C.69
	RTDEXC8	TB1C.70	RTDSIG8	TB1C.71	RTDRET8	TB1C.72

3.4.5 Intrinsic Safety “ic” for Analog Outputs

Wiring Diagram



Entity Parameters

Analog Outputs	Value	Unit
Voc or Uo	28.6	V
Isc or Io	22.4	mA
Po	0.64	W
Ca or Co	0.26	uF
La or Lo	100	mH

Note Analog outputs may be used with non-sparking (nA) devices using appropriate Class I Division 2 or Zone 2 wiring practices.

Field Terminals

Accessory TB	Name	(+) Terminal	Name	(-)Terminal
SCLS	OP1	TB1A.21	OR1	TB1A.22
SCLT	OP2	TB1.37	OR2	TB1.38
	OP3	TB1.39	OR3	TB1.40
	OP4	TB1.41	OR4	TB1.42
	OP5	TB1.43	OR5	TB1.44
	OP6	TB1.45	OR6	TB1.46
	OP7	TB1.47	OR7	TB1.48