MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

GENERAL ELECTRIC

IS210BAPAH1A

ACOUSTIC-MONITOR ANALOG PROCESSOR

Used with the applicable Mark VIe PAMC acoustic monitoring configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: General Electric Mark VIe PAMC acoustic monitoring applicable manufacturer documentation

Document Updates — continued

Rev	Location	Description
L	*Conditions of Safe Use*	Updated as follows: • 1. Updated: removed specified power supply voltage • 2. Updated: specified equipment is power distribution boards powered using wire harnesses, referenced to wire harnesses specified in this document, added 20 A max for JPDS and 40 A max for JPDG, added redundancy and diode block accessory instructions • 3. New: added statement that equipment does not provide over-current protection for contact wetting/control power input harnesses • 4. Updated: specified equipment as Ethernet switches, controllers, and I/O modules as supplied with limited power • 8. Update: added must only be accessible by use of a tool • 18. New: thermocouple and RTD field wiring terminals • 19. New: wiring harnesses in North American locations • 20. New: explosion hazard • Deleted previous number 13
	Wire Size and Screw Torques	Updated Notes for both barrier types with temperatures
	UCSA, UCSB, and UCSC Controllers	Added UCSC as certified for use in certain specified hazardous (classified) locations, including *Electrical Ratings* table
	ESWx Industrial Switch *Electrical Ratings*, *Power Supply* table	Updated minimum and nominal voltage for ESWx switches
	PAIC and YAIC Analog I/O Modules	Added RoHS compliant versions, removed coated non-compliant versions, and updated minimum and nominal voltage electrical ratings, and updated Intrinsic Safety Field Terminal tables
	PDIA and YDIA Discrete Input Modules	
	Intrinsic Safety "ic" for Accessory Terminal Boards ISx00STCI_1A, ISx00STCI_2A, IS200TBCI_2C	
	PDOA and YDOA Discrete Output Modules	
	Intrinsic Safety "ic" for Accessory Terminal Board ISx00SRLY	
	Intrinsic Safety "ic" for Accessory Terminal Board IS40yTRLYS1D	
	Intrinsic Safety "ic" for Accessory Terminal Boards ISx0yTRLY_1F, ISx0yTRLY_2F	
	PVIB and YVIB Vibration Monitor Modules	
	Power Distribution, *Overview*	Added two new sections, *TMR Control Power using JPDS* and *Dual Control Power and I/O Wetting Power using JPDG*, to add JPDG power distribution board, new IEC color compliant cables for JPDS and JPDG, and *JPDG Power Distribution One-line Diagram*
	Power Distribution, *JPDH High Density Power Distribution*	Updated minimum and nominal voltage electrical ratings
	Power Distribution, *PPDA Power Distribution System Feedback*	Added RoHS compliant versions, removed coated non-compliant versions, and updated additional minimum and nominal voltage electrical ratings

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3.2 PAMC Acoustic Monitoring Module

The following equipment combination is approved for use in hazardous locations:

- *Mark VIe UCSA* processor used for the PAMC module
- Mark VIe Analog processor **IS210BAPAH1A** and **IS41yBAPBH1A** with terminal board (accessory) **IS210SAMBH1A**

3.2.1 Electrical Ratings

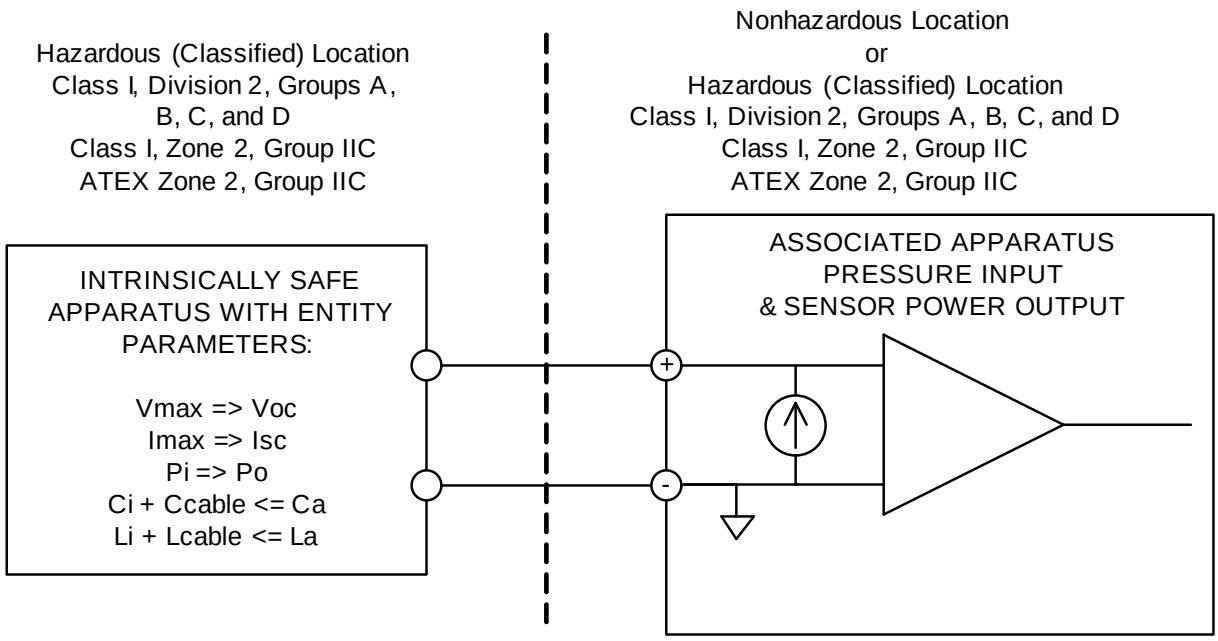
Item	Min	Nominal	Max	Units
BAPA / BAPB Power Supply				
Voltage	27.4	28	28.6	V dc
Current	—	—	0.5	A dc
Pressure Inputs (SAMB)				
Voltage	12	—	18.5	V dc
Sensor Power Outputs (SAMB)				
Voltage	12	—	18.5	V dc
Current	2.9	—	4.3	mA dc
Buffered Outputs (SAMB)				
Voltage	-10	—	10	V dc
Current	—	5	—	mA dc

3.2.2 Field Wire Connections

For the IS210SAMBH1A terminal board (accessory) wire sizes and screw torques, refer to the table *Euro Style Box-type Terminal Blocks*.

3.2.3 Intrinsic Safety “ic”

Wiring Diagram



***Note** 1.* BAPA pressure inputs and sensor power outputs may be used with non-sparking (nA) devices using appropriate Class I Division 2 or Zone 2 wiring practices.

***Note** 2.* Set jumpers JP1 – JP18 on SAMB accessory terminal board to the PCB position.

***Note** 3.* he Analog Processor, IS410BAPBH1A (comprised of IS400BAPBH1A and IS400BBAAH2A), and the IS210SAMBH1A terminal board should only be powered by the ISxxxJPDHG1A distribution board, which is a limited voltage limited current (LVLC) circuit, or similar.

Entity Parameters

Pressure Inputs	Value	Unit		Sensor Power Outputs	Value	Unit
Vmax	25	V		Voc or Uo	25	V
Imax	4.3	mA		Isc or Io	4.3	mA
Pi	108	mW		Po	108	mW
Ci	0.011	uF		Ca or Co	0.4	uF
Li	0	mH		La or Lo	100	mH

Field Terminals

Name	(+) Terminal		Name	(-) Terminal
SIG1	TB1A.2		RET1	TB1A.4
SIG2	TB1A.6		RET2	TB1A.8
SIG3	TB1A.10		RET3	TB1A.12
SIG4	TB1A.14		RET4	TB1A.16
SIG5	TB1A.18		RET5	TB1A.20
SIG6	TB1A.22		RET6	TB1A.24
SIG7	TB1B.26		RET7	TB1B.28
SIG8	TB1B.30		RET8	TB1B.32
SIG9	TB1B.34		RET9	TB1B.36
SIG10	TB1B.38		RET10	TB1B.40
SIG11	TB1B.42		RET11	TB1B.44
SIG12	TB1B.46		RET12	TB1B.48
SIG13	TB1C.50		RET13	TB1C.52
SIG14	TB1C.54		RET14	TB1C.56
SIG15	TB1C.58		RET15	TB1C.60
SIG16	TB1C.62		RET16	TB1C.64
SIG17	TB1C.66		RET17	TB1C.68
SIG18	TB1C.70		RET18	TB1C.72