1 General Instructions

1.1 Introduction

This document is provided for use in parallel with the installation and operating instructions provided for each system when equipment is applied in hazardous (classified) locations (HazLoc).

For more information, refer to the following related documents:

GEH-6703	ToolboxST* User Guide for Mark Controls Platform
GEH-6723	Mark* VIeS Safety Control Functional Safety Instruction Guide
GEH-6721_Vol_I	Mark VIe and Mark VIeS Controls System Guide
GEH-6721_Vol_II	Mark VIe and Mark VIeS Controls Volume II: General-purpose Applications

Attention

The information in this document applies to the overall Mark* VIe control system or Mark VIeS Functional Safety System control products; however, your application may not be licensed to access full system capability and I/O packs as described in this document. For example, the Mark VIeS Functional Safety System for General Markets only utilizes the following I/O packs:

- **Analog I/O (YAIC)**
- **Universal Analog (YUAA)**
- **Vibration Input Monitor (YVIB)**
- **Relay Output (YDOA)**
- **Discrete Contact Input (YDIA)**
- **Power Distribution System Diagnostics (PPDA)**
- **Serial Modbus Communication (PSCA)**
- **Mark VIeS Safety Controller (UCSCS2x)**
- **Mark VIe Controller for Gateway (UCSCH1x)**

4.4 JPDH High Density Power Distribution

The IS210JPDHG1A, IS410JPDHG1A, and IS411JPDHG1A (coated) 28 V dc power distribution modules are approved for use in hazardous locations.

4.4.1 Electrical Ratings

Item	Min	Nominal	Max	Units
Power Supply Inputs (J1, J1X)				
Voltage	22.5	24.0/28.0	28.6	V dc
Current	—	—	13	A dc
Power Supply Outputs (JR1-8, JS1-8, JT1-8)				
Voltage	—	24.0/28.0	-	V dc
Current	—	—	0.8	A dc

4.5 PPDA Power Distribution System Feedback

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

- Mark VIe Power Distribution system feedback I/O pack **IS220PPDAH1A** or **ISx2yPPDAH1B** with accessory **ISx0yJPDSG1A** or **IS40yJPDGH1A** (where x = 2 or 4 and y = 0 or 1)

4.5.1 Electrical Ratings

PPDA Power Supply

Item	Min	Nominal	Max	Units
Voltage	PPDAH1B: 22.5 PPDAH1A: 27.4	PPDAH1B: 24.0/28.0 PPDAH1A: 28.0	28.6	V dc
Current	—	—	0.24	A dc

ISx2yPPDAH1B used with Accessory IS40yJPDGH1A

Item	Min	Nominal	Max	Units
Control Power Input (JR, JS)				
Voltage	22.5	24.0/28.0	28.6	V dc
Current at 70°C (158 °F)	—	—	36	A dc
Current at 55°C (131 °F)	—	—	40	A dc
Control Power Outputs (J1-J4)				
Continuous Current	—	—	7	A dc
Control Power Outputs (JC1-JC4)				
Continuous Current	—	—	1.5	A dc
Continuous Current with Ambient 55°C (131 °F)	—	—	2	A dc

ISx2yPPDAH1B used with Accessory IS40yJPDGH1A (continued)

Item	Min	Nominal	Max	Units
Control Power Outputs (JD1-JD5)				
Continuous Current	—	—	0.5	A dc
Continuous Current with Ambient 55°C (131 °F)	—	—	0.9	A dc
Wetting Power Inputs (JPS1, JPS2)				
Voltage	22.5	24.0/48.0	52.8	V dc
Current	—	—	40	A dc
Wetting Power Outputs (JFA-JFG)				
Continuous Current	—	—	8	A dc
Continuous Current with Ambient 55°C (131 °F)	—	—	10	A dc
AC Feedback (JAC1)				
Voltage	—	120/240	—	V ac

ISx2yPPDAH1B used with Accessory ISx0yJPDSG1A

Item	Min	Nominal	Max	Units
Control Power Input (JR, JS, JT)				
Voltage	—	24.0/28.0	—	V dc
Current	—	—	20	A dc
Control Power Outputs (J1-J6)				
Continuous Current	—	—	13	A dc
Control Power Outputs (JAR, JAS, JAT)				
Continuous Current	—	—	0.8	A dc