

Mark* Vle and Mark VleS Control Systems Equipment in Hazardous Locations (HazLoc) Instruction Guide

Sept 2020



3.8 PDIO Discrete Input/Output Module

The following I/O pack and terminal board combinations are approved for use in hazardous locations:

- Discrete I/O pack **IS220PDIOH1A**
with terminal boards (accessories) **IS200TDBSH2A** or **IS200TDBTH2A**
- Discrete I/O pack **IS220PDIOH1B**
with terminal boards (accessories) **ISx0yTDBSH2A**, **ISx0yTDBSH8A**, **ISx0yTDBTH2A**, or **ISx0yTDBTH8A**

3.8.1 Electrical Ratings

PDIOH1A

Item	Min	Nominal	Max	Units
<i>Power Supply</i>				
Voltage	27.4	28.0	28.6	V dc
Current	—	—	0.81	A dc
<i>Contact Inputs</i>				
Voltage	0	—	32	V dc
<i>Contact Outputs</i>				
Voltage	—	—	32.0	V dc
Current	—	—	3.15	A dc
<i>Contact Wetting Outputs</i>				
Voltage	—	—	32	V dc
Current	—	—	110	mA dc

PDIOH1B

Item	Min	Nominal	Max	Units
<i>Power Supply</i>				
Voltage	27.4	28.0	28.6	V dc
Current	—	—	0.81	A dc
<i>Contact Inputs</i>				
Voltage	0	—	32	V dc
<i>TDBSH2A, TDBTH2A Contact Wetting Outputs</i>				
Voltage	16	—	32	V dc
Current	—	—	110	mA dc
<i>TDBSH8A, TDBTH8A Contact Wetting Outputs (1-21)</i>				
Voltage	—	—	31	V dc
Current	—	—	10	mA dc
<i>TDBSH8A, TDBTH8A Contact Wetting Outputs (22-24)</i>				
Voltage	—	—	31	V dc
Current	—	—	41	mA dc
<i>Contact Outputs</i>				
Voltage	—	—	32.0	V dc
Current	—	—	3.15	A dc

Mark VIe I/O Modules Classified Location Standards (continued)

Equipment	Non-hazardous	Class I, Division 2, Groups A, B, C, D	Class I, Zone 2, Group IIC	ATEX Zone 2, Group IIC
IS220PDIOH1A Accessories: IS200TDBSH2A IS200TDBTH2A	UL 508 Ed. 17 CSA-C22.2 No. 142-M1987	ANSI/ISA-12.12.01-2015 CAN/CSA-C22.2 No. 213-15	UL 60079-0 Ed. 5 UL 60079-15 Ed. 3 CAN/CSA-C22.2 No. 60079-0:11 CAN/CSA-C22.2 No. 60079-15:12	EN 60079-0:2012 EN 60079-11:2012 EN 60079-15:2010
IS220PDIOH1B Accessories: ISx0yTDBSH2A ISx0yTDBSH8A ISx0yTDBTH2A ISx0yTDBTH8A	UL 508 Ed. 17 CSA-C22.2 No. 142-M1987	ANSI/ISA-12.12.01-2015 CAN/CSA-C22.2 No. 213-15	UL 60079-0 Ed. 5 UL 60079-15 Ed. 3 CAN/CSA-C22.2 No. 60079-0:11 CAN/CSA-C22.2 No. 60079-15:12	EN 60079-0:2012 EN 60079-11:2012 EN 60079-15:2010
IS220PDOAH1A Accessories: IS200TRLYH2E IS200TRLYH3E IS200TRLYH1F IS200TRLYH2F	UL 508 Ed. 17 CSA-C22.2 No. 142-M1987	ANSI/ISA-12.12.01-2015 CAN/CSA-C22.2 No. 213-15	UL 60079-0 Ed. 5 UL 60079-15 Ed. 3 CAN/CSA-C22.2 No. 60079-0:11 CAN/CSA-C22.2 No. 60079-15:12	EN 60079-0:2012 EN 60079-11:2012 EN 60079-15:2010
IS220PDOAH1B Accessories: IS200TRLYH2E IS200TRLYH3E IS200TRLYH1F IS200TRLYH2F IS200SRLYH1A IS200SRLYH2A IS400SRLYH1A IS400SRLYH2A IS40yWROBH1A IS40yWROFH1A IS40yWROGH1A IS40yWROHH1A	UL 508 Ed. 17 CSA-C22.2 No. 142-M1987	ANSI/ISA-12.12.01-2017 CAN/CSA-C22.2 No. 213-17	UL 60079-0 Ed. 5 UL 60079-15 Ed. 3 CAN/CSA-C22.2 No. 60079-0:11 CAN/CSA-C22.2 No. 60079-15:12	EN 60079-0:2012+A11:2013 EN 60079-11:2012 EN 60079-15:2010

Mark VIe I/O Modules Equipment Markings (continued)

Equipment	US & CAN Class I Div 2	US & CAN Class I Zone 2	ATEX Zone 2
IS221PDIAH1B Accessories: IS201STCIH1A IS201STCIH2A IS201STCIH8A IS201TBCIH2C IS201TBCIH4C	Class I, Div 2, Groups A, B, C, D, T4	Class I, Zone 2, AEx nA [nC] IIC T4, Ex nA [nL] IIC T4 Gc X	Ex nA [ic] IIC T4 Gc
IS220PDIIH1B Accessories: IS200SDIIH1A	Class I, Div 2, Groups A, B, C, D, T4	Class I, Zone 2, AEx nA IIC T4, Ex nA IIC T4 Gc X	Ex nA IIC T4 Gc
IS220PDIOH1A Accessories: IS200TDBSH2A IS200TDBTH2A	Class I, Div 2, Groups A, B, C, D, T4	Class I, Zone 2, AEx nA nC [nC] IIC T4, Ex nA nL [nL] IIC T4 Gc X	Ex ic nA [ic] IIC T4 Gc
IS220PDIOH1B Accessories: ISx0yTDBSH2A ISx0yTDBTH2A ISx0yTDBSH8A ISx0yTDBTH8A	Class I, Div 2, Groups A, B, C, D, T4	Class I, Zone 2, AEx nA nC [nC] IIC T4, Ex nA nL [nL] IIC T4 Gc X	Ex ic nA [ic] IIC T4 Gc
IS220PDOAH1A Accessories: IS200TRLYH2E IS200TRLYH3E IS200TRLYH1F IS200TRLYH2F	Class I, Div 2, Groups A, B, C, D, T4	Class I, Zone 2, AEx nA nC IIC T4, Ex nA nL IIC T4 Gc X	Ex ic nA IIC T4 Gc

Appendix D Ambient Temperature Ratings

Note In the following tables, **y** = 0 or 1 for module part numbers.

Ambient Temperature Ratings

GE Part Number	Ambient Temperature Rating
IS200JPDLG1A	-30 to + 65 °C (-22 to +149 °F)
IS210BAPAH1A	
IS220PAICH1A	
IS220PAOCH1B	
IS220PCLAH1A	
IS220PCLAH1B	
IS220PDIAH1A	
IS220PDIIH1B	
IS220PDIOH1A	
IS220PDIOH1B	
IS220PDOAH1A	
IS220PHRAH1A	
IS220PHRAH1B	
IS220PPDAH1A	
IS220PPRAH1A	
IS220PPRAS1A	
IS220PPRAS1B	
IS220PPROH1A	
IS220PPROS1B	
IS220PRTDH1A	
IS220PRTDH1B	
IS220PSCAH1A	
IS220PSCAH1B	
IS220PSCHH1A	
IS220PSVOH1A	
IS220PSVOH1B	
IS220PTCCH1A	
IS220PTCCH1B	
IS220PTURH1A	
IS220PTURH1B	
IS220PVIBH1A	
IS220YAICS1A	
IS220YDIAS1A	
IS220YDOAS1A	
IS220YHRAS1A	
IS220YPROS1A	
IS220YSILS1A	
IS220YSILS1B	
IS220YTCCS1A	
IS220YTURS1A	
IS220YVIBS1A	
IS221PHRAH1B	