GEH-6725R

Mark* VIe and Mark VIeS Control Systems Equipment in Hazardous Locations (HazLoc) Instruction Guide

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Public Information

3.5 PCNO CANopen® Master Gateway Module

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

- CANopen I/O pack **IS220PCNOH1A** or **IS220PCNOH1B** with accessory ID board **IS200SPIDG1A**

3.5.1 Electrical Ratings

Power Supply

Item	Min	Nominal	Max	Units
Voltage	27.4	28.0	28.6	V dc
Current	—	—	0.17	A dc

3.6 PDIA and YDIA Discrete Input Modules

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

- Mark VIe Discrete I/O pack **IS220PDIAH1A**
  with terminal boards (accessories) **IS200STCIH1A**, **IS200STCIH2A**, **IS200STCIH8A**, **IS200TBCIH2C**, or **IS200TBCIH4C**
- Mark VIe Discrete I/O pack **IS220PDIAH1B**
  with terminal boards (accessories) **IS200STCIH1A**, **IS200STCIH2A**, **IS200STCIH8A**, **IS200TBCIH2C**, **IS400TBCIH2C**, **IS200TBCIH4C**, **IS400STCIH1A**, **IS400STCIH2A**, or **IS400STCIH8A**
- Coated Mark VIe Discrete I/O pack **IS221PDIAH1B**
  with coated terminal boards (accessories) **IS201STCIH1A**, **IS201STCIH2A**, **IS201STCIH8A**, **IS201TBCIH2C**, or **IS201TBCIH4C**
- Mark VIeS Safety Discrete I/O pack **IS220YDIAS1A**
  with terminal boards (accessories) **IS200STCIS1A**, **IS200STCIS2A**, **IS400STCIS1A**, **IS400STCIS2A**, **IS200TBCIS2C**, or **IS400TBCIS2C**
- Mark VIeS Safety Discrete I/O pack **ISx2yYDIAS1B** (where x = 2 or 4 and y = 0 or 1)
  with terminal boards (accessories) **ISx0ySTCIS1A**, **ISx0ySTCIS2A**, **IS40ySTCIS4A**, **ISx0yTBCIS2C**, or **IS40yTBCIS3C**

3.6.1 Electrical Ratings

PDIAH1A and PDIAH1B

Item	Min	Nominal	Max	Units
Power Supply				
Voltage	PDIAH1B: 22.5 PDIAH1A: 27.4	PDIAH1B: 24.0/28.0 PDIAH1A: 28.0	28.6	V dc
Current	—	—	0.24	A dc
Contact Inputs				
Voltage	0	—	32	V dc
STCIH1A, STCIH2A, TBCIH2C Contact Wetting Outputs				
Voltage	18.5	—	32	V dc
Current	—	—	110	mA dc
STCIH8A, TBCIH4C Contact Wetting Outputs (1-21)				
Voltage	—	—	31	V dc
Current	—	—	10	mA dc
STCIH8A, TBCIH4C Contact Wetting Outputs (22-24)				
Voltage	—	—	31	V dc
Current	—	—	41	mA dc

YDIAS1A

Item	Min	Nominal	Max	Units
Power Supply				
Voltage	27.4	28.0	28.6	V dc
Current	—	—	0.24	A dc
Contact Inputs				
Voltage	0	—	32	V dc
Contact Wetting Outputs				
Voltage	PDIA	—	32	V dc
Current	—	—	110	mA dc

YDIAS1B

Item	Min	Nominal	Max	Units
Power Supply				
Voltage	22.5	28.0	28.6	V dc
Current	—	—	0.24	A dc
Contact Inputs/Wetting (via JE1) STCIS1, STCIS2, TBCIS2				
Voltage	20	24	32	V dc
Current	—	—	110	mA dc
Contact Inputs/Wetting (via JE1) STCIS4, TBCIS3				
Voltage	43	48	52.8	V dc
Current	—	—	110	mA dc

3.6.2 Field Wire Connections

Terminal Board	Terminal Block Type
STCI	Refer to the table *Euro Style Box-type Terminal Blocks* for wire size and screw torques.
TBCI	Refer to the table *Barrier-type Terminal Blocks* for wire size and screw torques.

Mark VIeS Safety I/O Modules

Mark VIeS Safety I/O Modules Classified Location Certifications

Equipment	Non-hazardous	Class I, Division 2, Groups A, B, C, D	Class I, Zone 2, Group IIC	ATEX Zone 2, Group IIC
IS220YAICS1A Accessories: IS200STAIS1A IS400STAIS1A IS200STAIS2A IS400STAIS2A IS200TBAIS1C IS400TBAIS1C	UL E207685	UL E207685	UL E207685	UL DEMKO 12 ATEX 1114875X
ISx2yYAICS1B Accessories: ISx0ySTAIS1A ISx0ySTAIS2A ISx0yTBAIS1C	UL E207685	UL E207685	UL E207685	UL DEMKO 13 ATEX 1214780X
IS220YDIAS1A Accessories: IS200STCIS1A IS200STCIS2A IS200TBCIS2C IS400TBCIS2C IS400STCIS1A IS400STCIS2A	UL E207685	UL E207685	UL E207685	UL DEMKO 12 ATEX 1114875X
ISx2yYDIAS1B Accessories: ISx0ySTCIS1A ISx0ySTCIS2A IS40ySTCIS4A ISx0yTBCIS2C IS40yTBCIS3C	UL E207685	UL E207685	UL E207685	UL DEMKO 18 ATEX 2032X
IS220YDOAS1A Accessories: IS200TRLYS1F IS200TRLYS2F IS400TRLYS1F IS400TRLYS2F	UL E207685	UL E207685	UL E207685	UL DEMKO 12 ATEX 1114875X

Mark VIeS Safety I/O Modules

Mark VIeS Safety I/O Modules Classified Location Standards

Equipment	Non-hazardous	Class I, Division 2, Groups A, B, C, D	Class I, Zone 2, Group IIC	ATEX Zone 2, Group IIC
IS220YAICS1A Accessories: IS200STAIS1A IS400STAIS1A IS200STAIS2A IS400STAIS2A IS200TBAIS1C IS400TBAIS1C	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
ISx2yYAICS1B Accessories: ISx0ySTAIS1A ISx0ySTAIS2A ISx0yTBAIS1C	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
IS220YDIAS1A Accessories: IS200STCIS1A IS200STCIS2A IS200TBCIS2C IS400TBCIS2C IS400STCIS1A IS400STCIS2A	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
ISx2yYDIAS1B Accessories: ISx0ySTCIS1A ISx0ySTCIS2A IS40ySTCIS4A ISx0yTBCIS2C IS40yTBCIS3C	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 60079-7 Ed. 5 (STCIS4A and TBCIS3C only) UL 60079-15 Ed. 3 (STCIS1A, STCIS2A, and TBCIS2C only) CAN/CSA-C22.2 No. 60079-0:11 CAN/CSA-C22.2 No. 60079-7:16 (STCIS4A and TBCIS3C only) CAN/CSA-C22.2 No. 60079-15:12 (STCIS1A, STCIS2A, and TBCIS2C only)	EN 60079-0:2012 EN 60079-11:2012 (does not apply to STCIS4A or TBCIS3C) EN 60079-7:2015

Mark VIeS Safety I/O Modules

Mark VIeS Safety I/O Modules Equipment Markings

Equipment	US & CAN Class I Div 2	US & CAN Class I Zone 2	ATEX Zone 2
IS220YAICS1A Accessories: IS200STAIS1A IS400STAIS1A IS200STAIS2A IS400STAIS2A IS200TBAIS1C IS400TBAIS1C	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
ISx2yYAICS1B Accessories: ISx0ySTAIS1A ISx0ySTAIS2A ISx0yTBAIS1C	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
IS220YDIAS1A Accessories: IS200STCIS1A IS200STCIS2A IS200TBCIS2C IS400TBCIS2C IS400STCIS1A IS400STCIS2A	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
ISx2yYDIAS1B Accessories: ISx0ySTCIS1A ISx0ySTCIS2A IS40ySTCIS4A ISx0yTBCIS2C IS40yTBCIS3C	Class I, Div 2, Groups A, B, C, D, T4	When used with accessories ISx0ySTCIS1A, ISx0ySTCIS2A, ISx0yTBCIS2C: Class I, Zone 2, AEx nA [nC] IIC T4, Ex nA [nL] IIC T4 Gc X When used with accessories IS40ySTCIS4A, IS40yTBCIS3C: Class I, Zone 2, AEx/Ex ec IIC T4 Gc X	When used with accessories ISx0ySTCIS1A, ISx0ySTCIS2A, ISx0yTBCIS2C: Ex ec [ic] IIC T4 Gc When used with accessories IS40ySTCIS4A, IS40yTBCIS3C: Ex ec IIC T4 Gc
IS220YDOAS1A Accessories: IS200TRLYS1F IS200TRLYS2F IS400TRLYS1F IS400TRLYS2F	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	