

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

Sept 2020



3.20 PVIB and YVIB Vibration Monitor Modules

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

- Mark VIe Vibration Monitor I/O pack **IS220PVIBH1A** with terminal board (accessory) **IS200TVBAH2A** and three negative power supply daughterboards (accessories) **IS200WNPSH1A**
- Mark VIe Vibration Monitor I/O pack **IS420PVIBH1B** with terminal board (accessory) **IS200TVBAH2A** and three negative power supply daughterboards (accessories) **IS200WNPSH1A**, **IS400WNPSH1A**, or **IS40yTVBAH2B**
- Mark VIeS Vibration Monitor I/O pack **IS220YVIBS1A** with terminal board **IS200TVBAS2A** and three negative power supply daughterboards (accessories) **IS200WNPSS1A**
- Mark VIeS Vibration Monitor I/O pack **IS42yYVIBS1B** (where y = 0 or 1) with terminal board **ISx0yTVBAS2A** (where x = 2 or 4 and y = 0 or 1) and three negative power supply daughterboards (accessories) **ISx0yWNPSS1A**, or **IS40yTVBAS2B**

3.20.1 Electrical Ratings

Item	Min	Nominal	Max	Units
<i>Power Supply</i>				
Voltage	PVIBH1B / YVIBS1B: 27.4 PVIBH1A / YVIBS1A: 27.4	PVIBH1B / YVIBS1B: 28.0 PVIBH1A / YVIBS1A: 28.0	28.6	V dc
Current	—	—	0.98	A dc
<i>Vibration Inputs</i>				
Voltage	-20	—	15.6	V dc
<i>Position Inputs</i>				
Voltage	-20	—	-0.5	V dc
<i>Buffered Outputs</i>				
Voltage	-20	—	4.5	V dc
Current	-3	—	—	mA dc
<i>Probe Power</i>				
Voltage	-25.2	-24	-22.8	V dc
Current	—	—	12	mA dc

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

Equipment	Non-hazardous	Class I, Division 2, Groups A, B, C, D	Class I, Zone 2, Group IIC	ATEX Zone 2, Group IIC
IS220PTCCH1A Accessories: IS200STTCH1A IS200STTCH2A IS200TBCH1B IS200TBCH1C	UL E207685	UL E207685	UL E207685	UL DEMKO 12 ATEX 1114875X
IS220PTCCH1B Accessories: IS200STTCH1A IS200STTCH2A IS200TBCH1B IS200TBCH1C	UL E207685	UL E207685	UL E207685	UL DEMKO 13 ATEX 1214780X
IS220PTURH1A Accessories: IS200TRPAH1A	UL E207685	UL E207685	UL E207685	UL DEMKO 12 ATEX 1114875X
IS220PTURH1B Accessories: IS200TRPAH1A	UL E207685	UL E207685	UL E207685	UL DEMKO 13 ATEX 1214780X
IS42yPUAAH1A Accessories: IS410SUAAH1A	UL E207685	UL E207685	UL E207685	UL DEMKO 16 ATEX 1738X
IS220PVIBH1A Accessories: IS200TVBAH2A IS200WNPSH1A	UL E207685	UL E207685	UL E207685	UL DEMKO 12 ATEX 1114875X
IS420PVIBH1B Accessories: IS200TVBAH2A IS40yTVBAH2B IS200WNPSH1A IS400WNPSH1A	UL E207685	UL E207685	UL E207685	UL DEMKO 13 ATEX 1214780X
IS42yPDASH1A Accessories: IS40yTCDMS1A	UL E207685	UL E207685	UL E207685	UL DEMKO 18 ATEX 2032X

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
IS220PVIBH1A Accessories: IS200TVBAH2A IS200WNPSH1A	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 60079-15:2010
S420PVIBH1B Accessories: IS40yTVBAH2B IS200TVBAH2A IS200WNPSH1A IS400WNPSH1A	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 60079-15:2010

Mark VIe I/O Modules Equipment Markings (continued)

Equipment	US & CAN Class I Div 2	US & CAN Class I Zone 2	ATEX Zone 2
IS220PSVOH1B Accessories: IS200TSVCH2A IS210WSVOH1A IS410WSVOH1A	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
IS220PTCCH1A Accessories: IS200STTCH1A IS200STTCH2A IS200TBCH1B IS200TBCH1C	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
IS220PTCCH1B Accessories: IS200STTCH1A IS200STTCH2A IS200TBCH1B IS200TBCH1C	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
IS220PTURH1A Accessories: IS200TRPAH1A	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
IS220PTURH1B Accessories: IS200TRPAH1A	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
IS42yPUAAH1A Accessories: IS41ySUAH1A	Class I, Div 2, Groups A, B, C, D, T4	Class I, Zone 2, AEx ic nA [ic] IIC T4, Ex ic nA [ic] IIC T4 Gc X	Ex ic nA [ic] IIC T4 Gc
IS220PVIBH1A Accessories: IS200TVBAH2A IS200WNPSH1A	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