

## 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<br>PVIBH1A / YVIBS1A: 27.4 | PVIBH1B / YVIBS1B: 28.0<br>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<br>Accessories:                                 |               |  |                            |                           |
| IS200STTCH1A   | UL E207685    | UL E207685                             | UL E207685                 | UL DEMKO 12 ATEX 1114875X |
| IS200STTCH2A   |               |  |                            |                           |
| IS200BTCH1B  |               |  |                            |                           |
| IS200BTCH1C  |               |  |                            |                           |
| IS220PTCCH1B<br>Accessories:                                 |               |  |                            |                           |
| IS200STTCH1A   | UL E207685    | UL E207685                             | UL E207685                 | UL DEMKO 13 ATEX 1214780X |
| IS200STTCH2A   |               |  |                            |                           |
| IS200BTCH1B  |               |  |                            |                           |
| IS200BTCH1C  |               |  |                            |                           |
| IS220PTURH1A<br>Accessories:                                 |               |  |                            |                           |
| IS200TRPAH1A   | UL E207685    | UL E207685                             | UL E207685                 | UL DEMKO 12 ATEX 1114875X |
| IS220PTURH1B<br>Accessories:                                 |               |  |                            |                           |
| IS200TRPAH1A   | UL E207685    | UL E207685                             | UL E207685                 | UL DEMKO 13 ATEX 1214780X |
| IS42yPUAAH1A<br>Accessories:                                 |               |  |                            |                           |
| IS410SUAAH1A   | UL E207685    | UL E207685                             | UL E207685                 | UL DEMKO 16 ATEX 1738X    |
| IS220PVIBH1A<br>Accessories:                                 |               |  |                            |                           |
| IS200TVBAH2A   | UL E207685    | UL E207685                             | UL E207685                 | UL DEMKO 12 ATEX 1114875X |
| IS200WNPSH1A<br>IS420PVIBH1B<br>Accessories:                 |               |  |                            |                           |
| IS200TVBAH2A   | UL E207685    | UL E207685                             | UL E207685                 | UL DEMKO 13 ATEX 1214780X |
| IS40yTVBAH2B   |               |  |                            |                           |
| IS200WNPSH1A<br>IS400WNPSH1A<br>IS42yPDASH1A<br>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<br>Accessories:                                 | UL 508 Ed. 17<br>CSA-C22.2 No. 142-M1987 | ANSI/ISA-12.12.01-2015<br>CAN/CSA-C22.2 No. 213-15 | UL 60079-0 Ed. 5<br>UL 60079-15 Ed. 3<br>CAN/CSA-C22.2 No. 60079-0:11<br>CAN/CSA-C22.2 No. 60079-15:12 | EN 60079-0:2012<br>EN 60079-15:2010 |
| S420PVIBH1B<br>Accessories:                                  | UL 508 Ed. 17<br>CSA-C22.2 No. 142-M1987 | ANSI/ISA-12.12.01-2015<br>CAN/CSA-C22.2 No. 213-15 | UL 60079-0 Ed. 5<br>UL 60079-15 Ed. 3<br>CAN/CSA-C22.2 No. 60079-0:11<br>CAN/CSA-C22.2 No. 60079-15:12 | EN 60079-0:2012<br>EN 60079-15:2010 |
| IS40yTVBAH2B<br>IS200TVBAH2A<br>IS200WNPSH1A<br>IS400WNPSH1A |  |  |  |                                     |

Mark Vle I/O Modules Equipment Markings (continued)

| Equipment   | US & CAN Class I Div 2                | US & CAN Class I Zone 2   | ATEX Zone 2             |
|---|---------------------------------------|---|-------------------------|
| IS220PSVOH1B<br>Accessories:<br>IS200TSVCH2A<br>IS210WSVOH1A<br>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<br>Accessories:<br>IS200STTCH1A<br>IS200STTCH2A<br>IS200BTCH1B<br>IS200BTCH1C                  | 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<br>Accessories:<br>IS200STTCH1A<br>IS200STTCH2A<br>IS200BTCH1B<br>IS200BTCH1C                  | 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<br>Accessories:<br>IS200TRPAH1A<br>IS220PTURH1B<br>Accessories:<br>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<br>Accessories:<br>IS41ySUAAH1A<br>IS220PVBH1A<br>Accessories:<br>IS200TVBAH2A<br>IS200WNPSH1A | 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 |
|   | 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         |