The notes below apply to all 5 pages in this control document

1. No revision to the drawing without prior UL approval.
2. Associated apparatus manufacturer's installation drawing must be followed when installing this equipment.
3. Install Intrinsic Safe Barriers in accordance with barrier instructions.
4. The total combined length of all wiring in the system, including the cable from each associated apparatus to and from the summing box, and to each load cell must not exceed 300 feet.
5. Installation should be in accordance with any applicable local electrical code, which may include ANSI/ISA RP12.06.1 "Installation of Intrinsically Safe System for Hazardous (Classified) Locations," the electrical safety code (ANSI/NFA 70) Article 504.
6. The product for use in both Class I,II,III Division 1 and 2 areas (NEC 501, 502) and Class 1, Zone 0 and 2, Group IIC, and Zone 20 and 22, Group IIIC areas (NEC 505, 506) is the HI 6011IT-SS1 (shipped with cable glands):
   SS = Stainless Steel enclosure
   1 = Without trim pots
7. SB (summing box) maximum cable length 250 ft; used between the summing box and IS barriers.

WARNINGS:
1. To prevent ignition of flammable or combustible atmospheres, disconnect power before servicing
<table>
<thead>
<tr>
<th>Component Description</th>
<th>Supplier</th>
<th>Model</th>
<th>Class</th>
<th>Division</th>
<th>Class</th>
<th>Group</th>
<th>Uo (V)</th>
<th>Io (mA)</th>
<th>Po (mW)</th>
<th>Co (uF)</th>
<th>Lo (mH)</th>
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</thead>
<tbody>
<tr>
<td>IS Barrier Type 1 (excitation)</td>
<td>MTL</td>
<td>7766Pac</td>
<td>AB</td>
<td>CE</td>
<td>1,II,III</td>
<td>12.0</td>
<td>157.0</td>
<td>471.0</td>
<td>1.41</td>
<td>1.47</td>
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<td>1,II,III</td>
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<td>7710+</td>
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<td>CE</td>
<td>1,II,III</td>
<td>10.0</td>
<td>200.0</td>
<td>500.0</td>
<td>3.00</td>
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<td>AB</td>
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<td>492.0</td>
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<td>1.38</td>
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<td>AB</td>
<td>CE</td>
<td>1,II,III</td>
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<td>25.0</td>
<td>54.4</td>
<td>4.90</td>
<td>57.00</td>
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<td>AB</td>
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<td>1,II,III</td>
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<td>466.1</td>
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<td>0.86</td>
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<td>9002/11-130-360-001</td>
<td>ABE</td>
<td>CDFG</td>
<td>1,II,III</td>
<td>13.0</td>
<td>321.0</td>
<td>1040.0</td>
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<td>ABE</td>
<td>CDFG</td>
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<td>ABE</td>
<td>CDFG</td>
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<td>150.0</td>
<td>322.5</td>
<td>6.2</td>
<td>1.30</td>
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</tbody>
</table>

Notes:
1. For more information, please refer to the Zener barrier manufacturer control drawings.
2. IS Barriers used within a single system must be from the same supplier. Do not mix barrier suppliers within the same system.
The entity concept allows interconnection of intrinsically safe apparatus with associated apparatus when the following is true:

[Field device] [Barrier]

Vmax or U1 ≥ V0C, Vb, or U0
Imax or I1 ≥ I50, I5 or I0
Pmax or P1 ≥ P0

Ci + Ccable ≤ C0 or C0
L1 + Lcable ≤ L0 or L0

Substitution of components may impair Intrinsic Safety and/or void Hazardous Area Approval

**Terminology:**
- Load Sensor = Load Cell or C2 Load Cell
- Load Point = Load Sensor and Mounting Hardware

**Load Cell or C2 Load Cell Wiring to Connectors TB2, TB3, TB4 & TB5 on HI 6011IT Summing Card**

**Load Cell I.S. Entity Parameters**

<table>
<thead>
<tr>
<th>Component Description</th>
<th>Uo (V)</th>
<th>Io (mA)</th>
<th>Po (mW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load Sensor or Load Point</td>
<td>29.9</td>
<td>511</td>
<td>1470</td>
</tr>
<tr>
<td>C2 Load Sensor or Load Point</td>
<td>29.9</td>
<td>511</td>
<td>1470</td>
</tr>
</tbody>
</table>

This device is intended for connection to load cells which are considered simple apparatus with the following parameters:

Ci = 0uF
Li = 0uF
1. C2 wires only connected when using C2 load cells. If C2 wires are not used, the IS barrier for the C2 lines is not required.

2. Optional IS barrier on the sense lines is used to automatically compensate for losses through the IS barrier on the excitation lines. If the sense lines are not used, the IS Barrier for the sense lines is not required.

3. For customers using an instrument or module without a Class 2 rated excitation power supply, a separate Class 2 power supply can be used to power IS Barrier Type 1.

Substitution of components may impair Intrinsic Safety and/or void Hazardous Area Approval.
**Notes for summing box and the HI 6011IT summing card**

1. Refer to load cell Calibration sheet or weighing assembly selection guide for load cell wiring code

2. Refer to inside of junction box cover for guidelines

3. Load Cell wire tightening torque for the terminal blocks is 2lb-in minimum to 4lb-in maximum

4. The following parts are shipped inside the junction box and are to be installed in locations required by the customer. Torque settings shown must be observed.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PART NUMBER</th>
<th>QTY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>6007-0097-0</td>
<td>5</td>
<td>½ NPT Cord Grip and Sealing Nut</td>
</tr>
<tr>
<td>(2)</td>
<td>2814-0095-0</td>
<td>5</td>
<td>½ NPT Lock Nut</td>
</tr>
</tbody>
</table>

   **Installation Instructions**
   - Torque setting = 50-55 in/lb, 5.6 – 6.2 Nm
   - Torque setting = 40-45 in/lb, 4.5 – 5.1 Nm

   The above parts are suitable for:
   - Class I, Division 1, Groups A, B, C, D, T4
   - Class II, Division 1, Groups E, F, G, T4
   - Class III, Division 1, T4
   - Class I, Zone 0, Group IIC, T4
   - Class II, Zone 20, Group IIC, T4
   - Class I, Division 2, Groups A, B, C, D, T5
   - Class II, Division 2, Groups F, G, T5
   - Class III, Division 2, T5

5. The screws on the summing box top cover must be tightened to a torque setting of 10 in/lb, 1.2 Nm