**Warning**

D5030, D5031, D5032 series are isolated Intrinsically Safe Associated Apparatus located in Non Hazardous Locations or Class I, Division 2, Groups A, B, C, D, Temperature Code T4 and Class I, Zone 2, Group IIC, IIB, IIA, Temperature Code T4 Hazardous Locations (according to ANSI/ISA 12.12.01-13, UL60079-15, CSA-C22.2 No. 20, M1987, CAN/CSA-C22.2 No. 60079-15-12) within 1, Groups A, B, C, D, Class I, Division 2, Zone 2, Hazardous Locations, the module must be mounted in supplemental AEx or Ex enclosure meeting at least IP54 degree protection, suitable for Division/Zone of installation, in a controlled pollution degree 2 environment. Not to be connected to control equipment that uses or generates more than 250 Vrms or Vdc with respect to earth ground. D5030, D5031, D5032 series must be isolated, operated and maintained only by qualified personnel, in accordance to the relevant national/international installation standards (e.g. ANSI/ISA RP12.06.01 Installation of Intrinsically Safe System for Hazardous (Classified) Locations, National Electrical Code NEC ANSI/NFPA 70 Section 504 and 505, Canadian Electrical Code CEC) following the established installation rules, particular care shall be given to segregation and clear identification of I.S. conductors from non-I.S. ones. Intrinsically safe circuits must be wired and separated in accordance with Article 504.20 of the National Electrical Code (ANSI/NFPA 70) or other local codes, as applicable. De-energize power source (turn off power supply voltage) before plug or unplug the terminal blocks when installed in Hazardous Locations or unless area is known to be nonhazardous. Warning: substitution of components may impair Intrinsically Safety and suitability for Division 2, Zone 2.

Avertissement: le remplacement des composants peut dégrader la Sécurité Intrinsèque et la conformité pour Div. 2, Zone 2. Explosion Hazard: to prevent ignition of flammable or combustible atmospheres, disconnect power before servicing or unless area is known to be nonhazardous. Danger d’Explosion: pour prévenir une inflammation de l’atmosphère inflammable ou combustible, couper l’alimentation avant de réparer à moins que l’emplacement n’ait pas dangereux.

**Units must be protected against dirt, dust, extreme mechanical (e.g. vibration, impact and shock) and thermal stress, and casual contacts.**

**Electrostatic Hazard: to avoid electrostatic hazard, the enclosure of D5030, D5031, D5032 must be cleaned only with a damp or antistatic cloth.**

If enclosure needs to be cleaned use only a cloth lightly moistened by a mixture of detergent in water.

Any penetration of cleaning liquid must be avoided to prevent damage to the unit.

**Failure to properly installation or use of the equipment may risk to damage the unit or severe personal injury.**

The unit cannot be repaired by the end user and must be returned to the manufacturer or his authorized representative. Any unauthorized modification must be avoided.

**SAFETY DESCRIPTION**

**Connections for Proximity or Voltage free contacts**

<table>
<thead>
<tr>
<th>Hazardous Area</th>
<th>Hazardous Locations Device Parameters</th>
<th>Associated Apparatus Parameters</th>
<th>Device + Cable Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ui / Vmax</td>
<td>10.5 V</td>
<td>Ch1 7 - 8</td>
<td>2.41 µF</td>
</tr>
<tr>
<td>22 nA</td>
<td>Ch2 9 - 10</td>
<td>Co / Ca = 16.8 µF</td>
<td>Co / Ca = 75 µF</td>
</tr>
<tr>
<td>56 mW</td>
<td>Po / Po = 56 mW</td>
<td>313.4 mH</td>
<td>16.8 µF</td>
</tr>
<tr>
<td>≤</td>
<td>≤</td>
<td>Power Supply</td>
<td>Control Equipment</td>
</tr>
</tbody>
</table>

**NOTE:** When installed in Class I, Division 2 or Class I, Zone 2 Hazardous Locations, the module must be mounted in supplemental AEx or Ex enclosure meeting at least IP54 degree protection, suitable for Division/Zone of installation, in a controlled pollution degree 2 environment. This associated apparatus may also be connected to simple apparatus as defined in Article 504.2 and installed and temperature classified in accordance with article 504.10(B) of the National Electrical Code (ANSI/NFPA 70), or other local codes, as applicable. Where multiple circuits extend from the same piece of associated apparatus, they must be installed in separate cables or in one cable having suitable insulation. Refer to Article 504.30(B) of the National Electrical Code (ANSI/NFPA 70) and Instrument Society of America Recommended Practice ISA RP12.6 for installing intrinsically safe equipment. This associated apparatus has not been evaluated for use in combination with another associated apparatus. This associated apparatus provides galvanically isolated intrinsically safe circuits.

**D5030, D5031, D5032**

**NOTE:** for installations in which both the Ci and Li of the Intrinsically Safe apparatus exceed 1% of the Co/Ca and Lo/La parameters of the Associated Apparatus (excluding the cable), then 5% of Co/Ca and Lo/La parameters are applicable and shall not be exceeded (50% of the Co/Ca and Lo/La become the limits which must include the cable such that device + cable ≤ 50% of Co/Ca and Lo/La). The reduced capacitance of the external circuit (including cable) shall not be greater than 1 µF for Groups C, D, IIA, IIB and 600 nF for Group A, B, IIC. Capacitance and inductance of the field wiring from the intrinsically safe equipment to the associated apparatus shall be calculated and must be included in the system calculations as shown in the entity parameters table. If the cable parameters are unknown, the following may be used: capacitance 50 pF per foot (200 pF per meter), inductance 0.20 µH per foot (1 µH per meter).

**NOTE:** channel 2 is not available for D5030S, D5031S and D5032S.