WARNING: SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR HAZARDOUS LOCATIONS.

WARNING: Resistance between Intrinsically Safe Ground and earth ground shall be less than 1.5 Ohm.

1. Installations in the Canada shall be in accordance with C22.1 Canadian Electrical Code, Part 1.
2. Associated apparatus must be approved by authorities having jurisdiction and must be installed in accordance with manufacturers instructions.
3. The RISCO Supply, RISCO Field Device(s), and RISCO Terminators shall be Canadian Approved for installations in Canada.
4. RISCO Supply manufacturer’s installation drawing shall be followed when installing this equipment.
5. Associated apparatus parameters must meet the following requirements:
   - $\frac{V_{oc}}{U_{o}} < \frac{P_{o}}{P_{t}}$
   - $\frac{I_{sc}}{I_{o}} < \frac{P_{o}}{P_{t}}$
   - $\frac{L_{a}}{C_{a}} + \frac{L_{c}}{C_{c}} \geq \frac{L_{i}}{C_{i}}$
6. The control room equipment connected to FISCO Supply must not generate more than 250 Vrms or Vdc, or marked 50m on the associated apparatus.
7. A dust tight seal must be used at the conduit entry when the Transmitter is used in a Class II & III location.
8. Suitable separation must be maintained between input wiring and sensor wiring.
9. WARNING: DO NOT DISCONNECT EQUIPMENT WHILE LIVE UNLESS THE AREA IS KNOWN TO BE NON-HAZARDOUS.

The FISCO Intrinsically Safe Concept (FISCO) allows the interconnection one FISCO certified power supply, an unlimited number of RISCO certified intrinsically safe field apparatus, and two RISCO certified terminators, one of each end of the trunk cable (for a 1-km interconnection, the supply end is usually incorporated to the FISCO Power Supply.)

Each piece of apparatus will be marked with the word “FISCO” followed by the indication of its function, i.e. “Power Supply”, “Field Device” or “Terminator”.

Interconnection of the RISCO Field Device, RISCO terminators and FISCO Power Supply must be suitable for the same Division or type of protection as the FISCO Power Supply.

The FISCO power supply shall be located not more than 30m from one end of the trunk cable, where the power supply is connected via a spur, than that spur is restricted to a length of 30 m.

The cable used to interconnect the devices needs to comply with the following parameter:

- Loop resistance $R_c$: 1500 Ohm to 150 W/km
- Inductance per unit length $L_a$: 0.4mH/km to 10 H/km
- Capacitance per unit length $C_a$: 40mF/km to 2000 mF/km
- Maximum Length of spur Cable: 30m for IIC, and 30 km for IIB (or Group A and B). Maximum length of each trunk cable, including the extensions of the trunk cable, is 1 km in IIC and 3 km in IIB (Groups A, B, and C) and IIC (Group E).

Terminators:

At each end of the trunk cable a line terminator with the following parameters is suitable:

- $I_m$: 300 to 1000 mA
- $P_{o}$: 1 W to 100 W
- $C_a$: 0.1 to 2 mF

**2 WIRE HOOKUP**

ASSOCIATED APPARATUS

$< 250 \text{V}$