



Hazardous (Classified) Location  
 Class I / Division 1, 2 / Groups ABCD  
 Class II / Division 1 / Groups EFG  
 Class III

Nonhazardous Locations

e.g. Remote mount sensor configuration



Hazardous (Classified) Location  
 Class I / Division 2 / Groups ABCD

Nonhazardous Locations



**Temperature range**

|                      |                      |
|----------------------|----------------------|
| without display, D10 | with display, D10    |
| T4 -40 °C ... +85 °C | T4 -40 °C ... +85 °C |
| T5 -40 °C ... +80 °C | T5 -40 °C ... +80 °C |
| T6 -40 °C ... +70 °C | T6 -40 °C ... +70 °C |

**NONINCENDIVE, FIELD WIRING Class I / Div. 2 / Groups ABCD**

Sensor circuits (Terminals 3...7)

|                                    |                             |                          |
|------------------------------------|-----------------------------|--------------------------|
| $U_o$ or $V_{oc}$ or $V_t = 7.6 V$ | $I_o$ or $I_{sc} = 13 mA$   | $P_o = 24.7 mW$          |
| Group A, B resp. IIC               | $C_o$ or $C_a = 10.4 \mu F$ | $L_o$ or $L_a = 236 mH$  |
| Group C, D resp. IIB               | $C_o$ or $C_a = 160 \mu F$  | $L_o$ or $L_a = 946 mH$  |
| Group C, D resp. IIA               | $C_o$ or $C_a = 1000 \mu F$ | $L_o$ or $L_a = 1.893 H$ |

**Installation Notes T82**

- CSA approved apparatus must be installed in accordance with manufacturer's instructions.
- Install per Canadian Electrical Code.
- Temperature Sensor assembly must be CSA approved for appropriate area classification.
- Use supply wires suitable for 5 °C above surroundings.
- Keep tight when circuits alive.
- Warning: Substitution of components may impair intrinsic safety or suitability for Class I, Division 2.

**EXPLOSION PROOF DUST IGNITION PROOF Class I / Div. 1 / Groups ABCD Class II, III / Div. 1 / Groups EFG**


- All conduits must be assembled with a minimum of five full threads engagement.
- Seal all conduits within 18 inches of enclosure.
- In Class II use a dust tight seal.
- Warning: Do not disconnect equipment unless power has been switched off or the area is known to be nonhazardous.

**NONINCENDIVE Class I / Div. 2 / Groups ABCD**

- Intrinsic safety barrier not required.
- Warning: Do not disconnect equipment unless power has been switched off or the area is known to be nonhazardous.
- Nonincendive field wiring installation:  
 The Nonincendive Field Wiring Circuit Concept allows interconnection of Nonincendive Field Wiring Apparatus with Associated Nonincendive Field Wiring Apparatus or Associated Intrinsically Safe Apparatus or Associated Apparatus not specifically examined in combination as a system using any of the wiring methods permitted for unclassified locations, when  $V_{oc} \leq V_{max}$ ,  $C_a \geq C_i + C_{cable}$ ,  $L_a \geq L_i + L_{cable}$ .  
 Transmitter Nonincendive Field Wiring parameters are as follows:  
 $U_i$  or  $V_{max} \leq 35 V dc$        $C_i = 0 nF$        $L_i = 0$   
 $I_i$  or  $I_{max} =$  see following note below  
 For these current controlled circuits, the parameter  $I_{max}$  is not required and need not to be aligned with parameter  $I_{sc}$  and  $I_t$  of the Associated Nonincendive Field Wiring Apparatus or Associated Apparatus.

**Functional ratings**

These ratings do not supersede Hazardous Location values  
 $U_{nom} \leq 42 dc$      $I_{nom} \leq (4 to 20) mA$

|  |  |                   |                               |                            |                      |   |
|--|--|-------------------|-------------------------------|----------------------------|----------------------|---|
| TITLE:<br><b>T82 CSA Control Drawing XP, NI, DIP</b> |  | PART NUMBER:      |                               | DATE:<br><b>11/05/2012</b> |                      | <br>FORT WAYNE, INDIANA (260) 484-2580 |
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