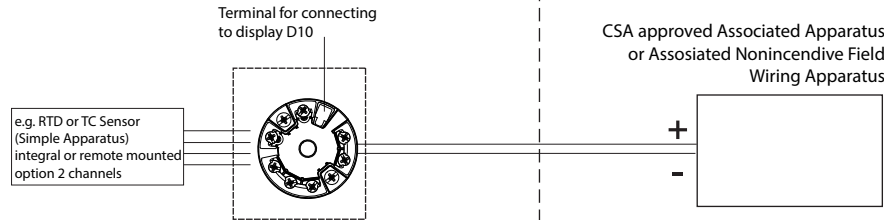


Hazardous (Classified) Location  
Class I / Division 1, 2 / Groups ABCD  
Class I / Zone 0 / IIC



Nonhazardous Locations



**Temperature range**

	without display, D10	with display, D10
T4	-50 °C ... +85 °C	T4 -30 °C ... +85 °C
T5	-50 °C ... +75 °C	T5 -30 °C ... +70 °C
T6	-50 °C ... +58 °C	T6 -30 °C ... +55 °C

**INTRINSICALLY SAFE** **Class I / Div. 1 / Groups ABCD**  
**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.
- Use supply wires suitable for 5 °C above surroundings.
- Stating that only simple apparatus should be terminated to the sensor connection. Simple apparatus is defined as a device that will neither generate nor store more than 1.2V, 0.1A, 0.25mW or 20µJ. Examples are Thermocouples or RTDs.

**INTRINSICALLY SAFE** **Class I / Div. 1 / Groups ABCD** **Ex ia IIC**


- Installation should be in accordance with the Canadian Electrical Code (CEC).
- CSA Approved Associated Apparatus must meet the following parameters:  
 $U_o \leq U_i$        $I_o \leq I_i$        $P_o \leq P_i$        $C_a \geq C_i + C_{cable}$        $L_a \geq L_i + L_{cable}$   
 Transmitter entity parameters are as follows:  
 $U_i$  or  $V_{max} \leq 30 V dc$        $C_i = 0$   
 $I_i$  or  $I_{max} \leq 130 mA$        $L_i = 0$   
 $P_i \leq 800 mW$   
 $V_{oc} + V_{oc}$  of Handheld device  $< V_{max}$ ,  $I_{sc} + I_{sc}$  of Handheld device  $< I_{max}$ ,  
 $P_o + P_o$  of Handheld device  $< P_i$ ,  $C_a > C_i + C_{cable} + C_i$  of Handheld device,  
 $L_a > L_i + L_{cable} + L_i$  of Handheld device, when Programming Handheld device is used.
- Warning: Substitution of components may impair intrinsic safety.

**NONINCENDIVE** **Class I / Div. 2 / Groups ABCD** **Ex nA II**

- Intrinsic safety barrier is not required.  $V_{max} \leq 35 V dc$ .
- 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  $V_{max} \leq 35 V dc$        $C_i = 0$        $L_i = 0$   
 $I_i$  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: <b>T82 CSA Control Drawing IS, NI</b>	PART NUMBER:	DATE: <b>11/05/2012</b>	 <b>pyromation</b> <small>beyond measure</small>
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