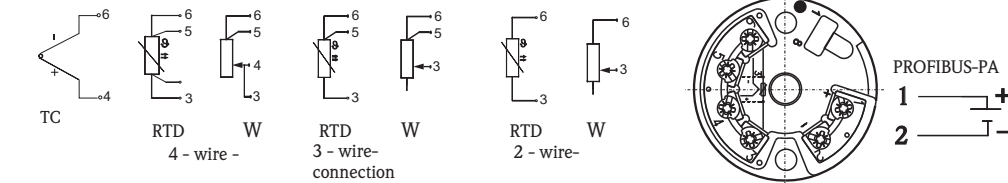
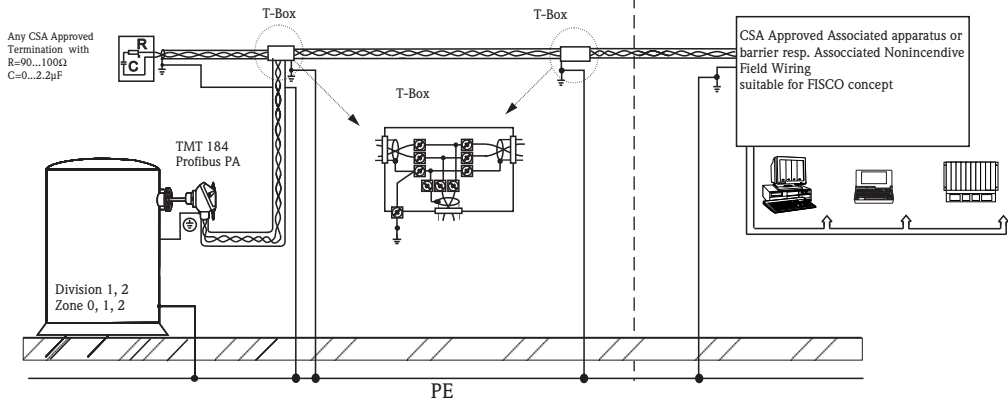


Hazardous (Classified) Location  
 Class 1 / Division 1, 2 / Groups ABCD  
 Class I, Zone 0, IIC  
 NI / Class 1 / Div. 2 / GR. ABCD



Nonhazardous Locations



**Temperature range**

- T4 -40°C ... +85°C
- T5 -40°C ... +65°C
- T6 -40°C ... +50°C

**INTRINSICALLY SAFE**

Class I / Div. 1 / Groups ABCD  
 Class I / Zone 0 / Ex ia IIC

**NONINCENDIVE, FIELD WIRING**

Class I / Div. 2 / Groups ABCD

Sensor circuits (Terminals 3...6)

- $U_o$  or  $V_{oc}$  or  $V_t = 5.0$  V       $I_o$  or  $I_{sc} = 12$  mA       $P_o = 15$  mW
- Group A, B resp. IIC       $C_o$  or  $C_a = 100$   $\mu$ F       $L_o$  or  $L_a = 500$  mH
- Group C, D resp. IIB, IIA       $C_o$  or  $C_a = 100$   $\mu$ F       $L_o$  or  $L_a = 1$  H

**Installation Notes TMT 184**



- CSA certified Apparatus must be installed in accordance with manufacturer's instructions.
- The installation must be in accordance with the Canadian Electrical Code.
- Use supply wires suitable for 5°C above surroundings.
- Shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application.
- Only simple apparatus should be terminated to the sensor connection.  
Simple apparatus are components as defined by the CEC (1.2 V, 0.1 A, 0.25 mW or 20  $\mu$ J).
- Terminals 3 to 6 provide Intrinsically Safe and Nonincendive circuits to RTD, Thermocouples, and other passive resistive devices.
- Warning: Substitution of components may impair intrinsic safety or suitability for Class I, Division 2.

**INTRINSICALLY SAFE**

Class I / Div. 1 / Groups ABCD

- CSA certified 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 FISCO parameters are as follows:

- $U_i$  or  $V_{max} \leq 17.5$  V DC       $C_i = 0$
- $I_i$  or  $I_{max} \leq 500$  mA       $L_i = 0$
- $P_i \leq 5.5$  W

**NONINCENDIVE**

Class I / Div. 2 / Groups ABCD

- Intrinsic safety barrier not required.  $V_{max} \leq 30$  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  $V_{max} \leq 30$  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  
 $U_{nom} \leq 30$  DC     $I_{nom} \leq 11$  mA

Approved	Pfanzelt	Date (yyyy-mm-dd)	2004-06-12	Drawing No.	14 07 00 112	Dwg.rev.		Revision no.		Revision date (yyyy-mm-dd)		Name		Material	51006177 ZD 029R/09/en/02.05	<b>Endress+Hauser</b>
Volume (mm³)	Designed	Pfanzelt	2004-06-12	Unit	iTEMP TMT184	Scale	1:1	Title	CONTROL DRAWING CSA			Series				
Refer to protection notice ISO 16016	Edge of working parts ISO 13715	Geometrical tolerancing ISO 2768-mH-E		Part No.	-	Format	A4					Objekt version	Sheet	1 of 1	Endress + Hauser Wetzlar GmbH+Co. KG Nesselwang / Germany	