



FM Approvals
1151 Boston Providence Turnpike
P.O. Box 9102 Norwood, MA 02062 USA
T: 781 762 4300 F: 781-762-9375 www.fmapprovals.com

CERTIFICATE OF COMPLIANCE

HAZARDOUS LOCATION ELECTRICAL EQUIPMENT PER CANADIAN REQUIREMENTS

This certificate is issued for the following equipment:

Model TTH200-ab, Temperature Transmitter

IS/I,II,III/1/ABCDEFGF/ T*; - TTH200-L1P/F(IS) or TTH200-R1P/F(IS); Entity;
I/O/Ex ia IIC; T*- TTH200-L1P/F(IS) or TTH200-R1P/F(IS);
NI/II/2/ABCD/ T*; NI/2/II T* = Ta = *- TTH200-L1P/F(NI) or TTH200-R1P/F(NI); DIP/II,III/2/EFG T*

a = Type of protection; L1, L2, R1 or R2.

b = Communication protocol; P or F.

Entity Parameters:

FISCO: U_i (Vmax) = 17.5V, I_i (Imax) = 380mA, P_i (Pmax) = 5.32W, C_i = 5 nF, L_i = 10 μ H

Entity I.S.: U_i (Vmax) = 24V, I_i (Imax) = 250mA, P_i (Pmax) = 1.2W, C_i = 5 nF, L_i = 10 μ H

Output Terminals (1, 2, 3, 4, 5 and 6)

Group AB: U_o (Voc) = 6.5V, I_o (Isc) = 25.0mA, P_o = 38mW, C_o (Ca) = 1.55 μ F, L_o (La) = 5mH

Group CD: U_o (Voc) = 6.5V, I_o (Isc) = 25.0mA, P_o = 38mW, C_o (Ca) = 8.75 μ F, L_o (La) = 5mH

Output Terminals (JP1)

U_o (Voc) = 6.2V, I_o (Isc) = 65.2mA, P_o = 101mW, C_o (Ca) = 1.4 μ F, L_o (La) = 5mH

NonIncendive Field Wiring parameters

FISCO: U_i (Vmax) = 17.5V, I_i (Imax) = 380mA, P_i (Pmax) = 5.32W

Entity I.S.: U_i (Vmax) = 24V, I_i (Imax) = 250mA, P_i (Pmax) = 1.2W

Special Conditions of Use:

- 1 For Intrinsic Safety and Non Incendive Approvals the Temperature code and Ambient temperatures are as follows:

T* = Temperature Code T6 for a Maximum Ambient Temperature of 56°C.

T* = Temperature Code T5 for a Maximum Ambient Temperature of 71°C

T* = Temperature Code T4 for a Maximum Ambient Temperature of 85°C.

- 2 The product will be required in a enclosure which fulfill the NEMA 4X Standard for Class II and III.

Model TTH300-ab, Temperature Transmitter

IS/I,II,III/1/ABCDEFGF/ T*; - TTH300-L1P/F(IS) or TTH300-R1P/F(IS); Entity;

I/O/Ex ia IIC; T*- TTH300-L1P/F(IS) or TTH300-R1P/F(IS);
 NI/II/2/ABCD/ T*; NI/2/II T* = Ta = *- TTH300-L1P/F(NI) or TTH300-R1P/F(NI);
 DIP/II,III/2/EFG T*

a = Type of protection; L1, L2, R1 or R2.
 b = Communication protocol; P or F.

Entity Parameters:

FISCO: U_i (Vmax) = 17.5V, I_i (Imax) = 380mA, P_i (Pmax) = 5.32W, C_i = 5 nF, L_i = 10 μ H
 Entity I.S.: U_i (Vmax) = 24V, I_i (Imax) = 250mA, P_i (Pmax) = 1.2W, C_i = 5 nF, L_i = 10 μ H

Output Terminals (1, 2, 3, 4, 5 and 6)

Group AB: U_o (Voc) = 6.5V, I_o (Isc) = 25.0mA, P_o = 38mW, C_o (Ca) = 1.55 μ F, L_o (La) = 5mH
 Group CD: U_o (Voc) = 6.5V, I_o (Isc) = 25.0mA, P_o = 38mW, C_o (Ca) = 8.75 μ F, L_o (La) = 5mH

Output Terminals (JP1)

U_o (Voc) = 6.2V, I_o (Isc) = 65.2mA, P_o = 101mW, C_o (Ca) = 1.4 μ F, L_o (La) = 5mH

NonIncendive Field Wiring parameters

FISCO: U_i (Vmax) = 17.5V, I_i (Imax) = 380mA, P_i (Pmax) = 5.32W
 Entity I.S.: U_i (Vmax) = 24V, I_i (Imax) = 250mA, P_i (Pmax) = 1.2W

Special Conditions of Use:

- 1 For Intrinsic Safety and Non Incendive Approvals the Temperature code and Ambient temperatures are as follows:

T* = Temperature Code T6 for a Maximum Ambient Temperature of 56°C.
 T* = Temperature Code T5 for a Maximum Ambient Temperature of 71°C
 T* = Temperature Code T4 for a Maximum Ambient Temperature of 85°C.

- 2 The product will be required in a enclosure which fullfil the NEMA 4X Standard for Class II and III.

Model TTR200-ab, Temperature Transmitter

IS/I,II,III/1/ABCDEFGF/ T*; - TTR200_TTR200-L6H(IS); Entity;
 I/O/Ex ia/IIC; T*- TTR200_TTR200-L6H(IS);
 NI/II/2/ABCD/ T*; NI/2/II T* = Ta = *- TTR200_TTR200-L6H(NI).

a = Type of protection; L6, R6.
 b = Communication protocol; P or F.

Entity Parameters:

FISCO: U_i (Vmax) = 17.5V, I_i (Imax) = 380mA, P_i (Pmax) = 5.32W, C_i = 5 nF, L_i = 10 μ H
 Entity I.S.: U_i (Vmax) = 24V, I_i (Imax) = 250mA, P_i (Pmax) = 1.2W, C_i = 5 nF, L_i = 10 μ H

Sensor Terminals (1, 2, 3, 4, 5 and 6)

Group AB: U_o (Voc) = 6.5V, I_o (Isc) = 25.0mA, P_o = 38mW, C_o (Ca) = 1.55 μ F, L_o (La) = 5mH
 Group CD: U_o (Voc) = 6.5V, I_o (Isc) = 25.0mA, P_o = 38mW, C_o (Ca) = 8.75 μ F, L_o (La) = 5mH

Display Connector

U_o (Voc) = 6.2V, I_o (Isc) = 65.2mA, P_o = 101mW, C_o (Ca) = 1.4 μ F, L_o (La) = 5mH

NonIncendive Field Wiring parameters

FISCO: U_i (Vmax) = 17.5V, I_i (Imax) = 380mA, P_i (Pmax) = 5.32W
 Entity I.S.: U_i (Vmax) = 24V, I_i (Imax) = 250mA, P_i (Pmax) = 1.2W

Special Conditions of Use:

1. For Intrinsic Safety and Non Incendive Approvals the Temperature code and Ambient temperatures are as follows:

T* = Temperature Code T6 for a Maximum Ambient Temperature of 56°C.
 T* = Temperature Code T5 for a Maximum Ambient Temperature of 71°C
 T* = Temperature Code T4 for a Maximum Ambient Temperature of 85°C.

2. For a Class II,III rating the instrument is required to be mounted into a Class II, Class III rated



Member of the FM Global Group

enclosure that is compliant to ANSI/ISA 61010 standard.

Model TTR300-ab, Temperature Transmitter

IS/I,II,III/1/ABCDEFGH/ T*; - TTR200_TTR300-L6H(IS); Entity;
I/O/Ex ia/IIC; T*- TTR200_TTR300-L6H(IS);
NI/II/2/ABCD/ T*; NI/2/II T* = Ta = *- TTR200_TTR300-L6H(NI).

a = Type of protection; L6, R6.

b = Communication protocol; P or F.

Entity Parameters:

FISCO: U_i (Vmax) = 17.5V, I_i (Imax) = 380mA, P_i (Pmax) = 5.32W, C_i = 5 nF, L_i = 10 μ H

Entity I.S.: U_i (Vmax) = 24V, I_i (Imax) = 250mA, P_i (Pmax) = 1.2W, C_i = 5 nF, L_i = 10 μ H

Sensor Terminals (1, 2, 3, 4, 5 and 6)

Group AB: U_o (Voc) = 6.5V, I_o (Isc) = 25.0mA, P_o = 38mW, C_o (Ca) = 1.55 μ F, L_o (La) = 5mH

Group CD: U_o (Voc) = 6.5V, I_o (Isc) = 25.0mA, P_o = 38mW, C_o (Ca) = 8.75 μ F, L_o (La) = 5mH

Display Connector

U_o (Voc) = 6.2V, I_o (Isc) = 65.2mA, P_o = 101mW, C_o (Ca) = 1.4 μ F, L_o (La) = 5mH

NonIncendive Field Wiring parameters

FISCO: U_i (Vmax) = 17.5V, I_i (Imax) = 380mA, P_i (Pmax) = 5.32W

Entity I.S.: U_i (Vmax) = 24V, I_i (Imax) = 250mA, P_i (Pmax) = 1.2W

Special Conditions of Use:

1. For Intrinsic Safety and Non Incendive Approvals the Temperature code and Ambient temperatures are as follows:

T* = Temperature Code T6 for a Maximum Ambient Temperature of 56°C.

T* = Temperature Code T5 for a Maximum Ambient Temperature of 71°C

T* = Temperature Code T4 for a Maximum Ambient Temperature of 85°C.

2. For a Class II,III rating the instrument is required to be mounted into an Class II, Class III rated enclosure that is compliant to ANSI/ISA 61010 standard.

Model TTF300-abcd, Temperature Transmitter

IS/I,II,III/1/ABCDEFGH/ T*; - TTF300-L1..P/F(IS) or TTF300-R1..P/F(IS); Entity;
I/O/AEx ia IIC; T*- TTF300-L1..P/F(IS) or TTF300-R1..P/F(IS);
NI/II/2/ABCD/ T*; NI/2/II T* = Ta = *- TTF300-L2..P/F(NI) or TTF300-R2..P/F(NI);
S/II,III/2/EFG T**;
XP/II/ABCD/ T*;
DIP/II,III/EFG/ T**

a = Type of protection; L1, L2, L3,R1, R2 or R3.

b = Housing/Display; A or B or C or D.

c = Cable Entry; 1 or 2 or 3 or 4

d = Communication protocol; P or F.

Entity Parameters:

FISCO: U_i (Vmax) = 17.5V, I_i (Imax) = 380mA, P_i (Pmax) = 5.32W, C_i = 5 nF, L_i = 10 μ H

Entity I.S.: U_i (Vmax) = 24V, I_i (Imax) = 250mA, P_i (Pmax) = 1.2W, C_i = 5 nF, L_i = 10 μ H

Output Terminals (1, 2, 3, 4, 5 and 6)

Group AB: U_o (Voc) = 6.5V, I_o (Isc) = 25.0mA, P_o = 38mW, C_o (Ca) = 1.55 μ F, L_o (La) = 5mH

Group CD: U_o (Voc) = 6.5V, I_o (Isc) = 25.0mA, P_o = 38mW, C_o (Ca) = 8.75 μ F, L_o (La) = 5mH

Output Terminals (JP1)

U_o (Voc) = 6.2V, I_o (Isc) = 65.2mA, P_o = 101mW, C_o (Ca) = 1.4 μ F, L_o (La) = 5mH

NonIncendive Field Wiring parameters

FISCO: U_i (Vmax) = 17.5V, I_i (Imax) = 380mA, P_i (Pmax) = 5.32W

Entity I.S.: U_i (Vmax) = 24V, I_i (Imax) = 250mA, P_i (Pmax) = 1.2W

Special Conditions of Use:

- 1 For Intrinsic Safety and Non Incendive Approvals the Temperature code and Ambient temperatures are as follows:

T* = Temperature Code T6 for a Maximum Ambient Temperature of 44°C.
 T* = Temperature Code T5 for a Maximum Ambient Temperature of 56°C
 T* = Temperature Code T4 for a Maximum Ambient Temperature of 84°C.

- 2 For Explosionproof and Dust-Ignitionproof Approvals the Temperature code and Ambient temperatures are as follows:

T** = Temperature Code T6 for a Maximum Ambient Temperature of 56°C.
 T** = Temperature Code T5 for a Maximum Ambient Temperature of 71°C
 T** = Temperature Code T4 for a Maximum Ambient Temperature of 85°C.

Model TTF350-abcd, Temperature Transmitter

IS/I,II,III/1/ABCDEFGH/ T*; - TTF350-L4..P/F(IS); Entity;
 I/O/Ex ia IIC; T*-TTF350-L4..P/F;
 NI/II/2/ABCD/ T*; NI/2/II T* = Ta = *-TTF350-L5..P/F(NI) or TTF350-L5..P/F(NI); DIP/II,III/2/EFG T**,
 XP/II/ABCD/ T*;
 DIP/II,III/EFG/ T**; Type 4X; IP66 IP67 TTF350-L3..(FM).

Vmax=30v, Imax= 130mA, Pmax= 0.8W a = Type of protection; L3, L4, L5, R3, R4 or R5.

b = Housing/Display; N, or R.

c = Cable Entry; 5,6 or 8.

d = Communication protocol; P or F.

Entity Parameters:

FISCO: Ui (Vmax) = 17.5V, Ii (Imax) = 380mA, Pi (Pmax) = 5.32W, Ci = 5 nF, Li = 10µH
 Entity I.S.: Ui (Vmax) = 24V, Ii (Imax) = 250mA, Pi (Pmax) = 1.2W, Ci = 5 nF, Li = 10µH

Vmax=30v, Imax= 130mA, Pmax= 0.8W Ci=5nF, Li=500µH

Output Terminals (1, 2, 3, 4, 5 and 6)

Group AB: Uo (Voc) = 6.5V, Io (Isc) = 25.0mA, Po = 38mW, Co (Ca) = 1.55µF, Lo (La) = 5mH
 Group CD: Uo (Voc) = 6.5V, Io (Isc) = 25.0mA, Po = 38mW, Co (Ca) = 8.75µF, Lo (La) = 5mH

Output Terminals (JP1)

Uo (Voc) = 6.2V, Io (Isc) = 65.2mA, Po = 101mW, Co (Ca) = 1.4µF, Lo (La) = 51mH

NonIncendive Field Wiring parameters

FISCO: Ui (Vmax) = 17.5V, Ii (Imax) = 380mA, Pi (Pmax) = 5.32W, Ci = 5 nF, Li = 10µH
 Entity I.S.: Ui (Vmax) = 24V, Ii (Imax) = 250mA, Pi (Pmax) = 1.2W, Ci = 5 nF, Li = 10µH

Special Conditions of Use:

1. For Intrinsic Safety and Non Incendive Approvals the Temperature code and Ambient temperatures are as follows:

T* = Temperature Code T6 for a Maximum Ambient Temperature of 44°C.
 T* = Temperature Code T5 for a Maximum Ambient Temperature of 56°C
 T* = Temperature Code T4 for a Maximum Ambient Temperature of 84°C.

2. For Explosionproof and Dust-Ignitionproof Approvals the Temperature code and Ambient temperatures are as follows:

T** = Temperature Code T6 for a Maximum Ambient Temperature of 56°C.
 T** = Temperature Code T5 for a Maximum Ambient Temperature of 71°C
 T** = Temperature Code T4 for a Maximum Ambient Temperature of 85°C.
 T** = Temperature Code T3 for a Maximum Ambient Temperature of 120°C.



Member of the FM Global Group

Equipment Ratings:

The TTH200-.P/F, TTH300-.P/F, TTF300-.P/F, TTF350-.P/F, TTR200-.P/F and TTR300-.P/F Profibus/Fieldbus Series Temperature Transmitters are FM Approved for Intrinsic Safety for Class I, II, III, Division 1, Groups A, B, C, D, E, F and G; Non Incendive for Class I, Division 2, Groups A, B, C, D and Suitable for Class II, III, Division 2, Groups E, and G when connected in conjunction with Control Drawings. In addition, the TTF300-.P/F, TTF350-.P/F Temperature Transmitter is FM Approved for Explosionproof For Class I, Division 1, Groups A, B, C and D and Dust-Ignition Proof for Class II, III, Division 1, Groups E, F and G Hazardous(classified) Locations Indoors and Outdoors Type 4X, IP66, IP67.

FM Approved for:

ABB Automation Products GmbH
Alzenau, Germany



Member of the FM Global Group

This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

CSA C22.2 No.142	1992
CSA C22.2 No.157	1992
CSA C22.2 No.213	1987
CSA C22.2 No. 60529	2005
CSA C22.2 No 94	1976
CAN/ CSA E60079-0;00	2006
CAN/CSA E60079-11	2007

Original Project ID: 3027610

Canadian Project ID: 3037064

Approval Granted: December 18, 2009

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
---------------	------	---------------	------

FM Approvals LLC

J. E. Marquedant

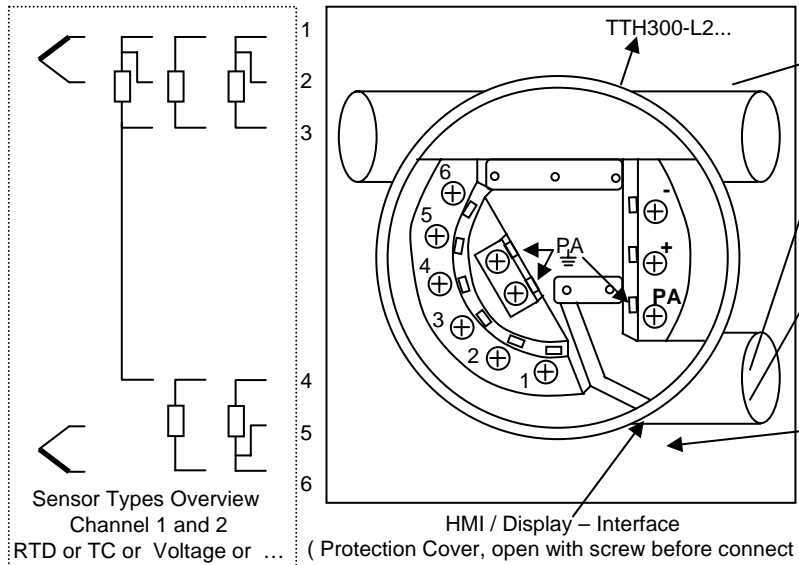
J. E. Marquedant
Group Manager, Electrical

18 December 2009
Date

Hazardous Location

Non – Hazardous Location

Sensor must be a simple apparatus
RTD`s, TC, LED`s



Type 2-2 T,
Enclosure Type 4X

Electrical Rating 11 – 30V dc;
IEC 1158-2

**HMI / Display Interface Circuit
Nonincendive output Parameters**

Voc/Uo = 6.2 V; Isc/Io < 65.2 mA; Po = 101 mW

Terminals: 6 PIN Connector

GP A,B Ca = 1.4 µF; La = 5.0 mH

C,D Ca = 8.9 µF; La = 5.0 mH

Power Supply

< 250 V

2 wire hookup

Suitable for use in Class I, Div. 2 Groups A, B, C, D, Class II, Div.1 Group E,F,G; Class III without safety barriers(ie. conduit connected), and provides non-incendive circuits for Class I, Div. 2, Group A,B,C,D to RTD`s, Thermocouples for passiv-resistive non-energy-storing switch devices. Temp. Ident T6 at Tamb = 56°C, T4 at Tamb = 85°C

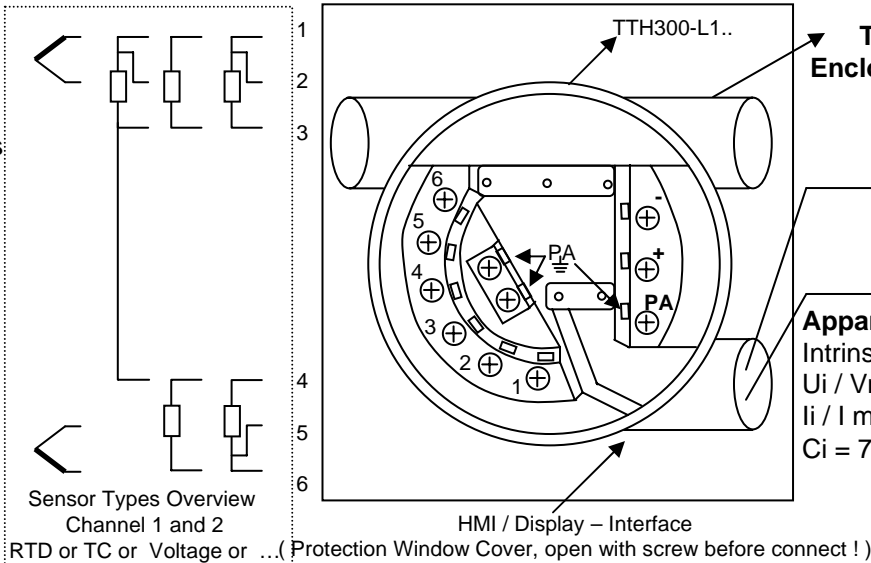
Temperature Transmitter Model "TTF350" Ordering Code "TTF350-R2..." is an Temperature Transmitter type TTH300-R2 which is installed in an enclosure Type 2-2 T Dual Chamber, w/wo CSA approved display HMI-Ex type B.

1. Install per Canadian Electrical Code (CEC) using threaded metal conduit.
2. **Warning: Explosion hazard, do not disconnect equipment unless power has been switched off, or the area is known to be non-hazardous.**
3. **Warning: Substitution of components may impair suitability for Class 1 Division 2.**
3. **A dust tight seal must be used at the conduit entry when the transmitter is used in a Class II & III location.**

						Title:	Scale:	
				Approv.	04.12.06	Müller	TTF350	
				Date		Name	N. I. Temperature Transmitter Control Drawing	
				ABB Automation Products			Drawing / Part No.:	Page : of
1.00	Release	04.12.06	Zeiger				TTF350-R2 (1)	
Rev.	Desc.	Date	Name	Replacement of: -----				

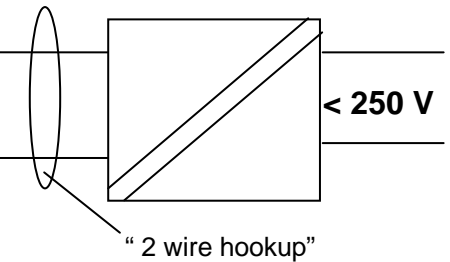
Hazardous Location

Sensors must be CSA approved or be a simple apparatus. Simple apparatus is a device which will neither generate or store more than 1.5 V; 0.1 A; 25 mW or 20 μJ such as switches; RTD's, TC or LED's



Non - Hazardous Location

Barrier
Galvanic Isolator



Apparatus input values.

Intrinsic Safe
 $U_i / V_{max} \leq 30,0V$ DC;
 $I_i / I_{max} \leq 130mA$, $P_i \leq 0,8 W$,
 $C_i = 7,4 nF$; $L_i = 0,51mH$

Associated Apparatus

- Barrier or Galvanic Isolator must be CSA approved and must be installed in accordance with manufactures instructions.
 - Barrier or Galvanic Isolator parameters must meet the following Requirements : $Voc / U_o \leq V_{max}$;
 $Isc / I_o \leq I_{max}$;
 $P_o \leq P_{max}$
 $Ca \geq Ci + C_{cable}$
 $La \geq Li + L_{cable}$
- Maximum non hazardous area voltage must not exceed 250V.
 - Install in accordance with the CEC, Part 1.

I.S. Sensor Field Circuit Parameters

$Voc/U_o = 6.5 V$; $Isc/I_o < 25.0 mA$; $P_o = 38 mW$
 Tem. Ident. T6 at $T_{amb} = 56 ^\circ C$; T4 at $T_{amb} = 85 ^\circ C$;
 Class I Div 1 and Div 2; ; Groups: A,B,C,D Class II
 Group E,F,G and Class III or Class I Zone 0 Ex ia IIC
 Terminals: 1,2,3,4,5,6
 GP A,B $Ca = 1.54 \mu F$; $La = 5.0 mH$
 C,D $Ca = 8.74 \mu F$; $La = 5.0 mH$

Temperature Transmitter Model "TTF350" Ordering Code

"TTF350-R1..." is an Temperature Transmitter Type TTH300-R1, which is installed in an enclosure Type 2-2 T Dual Chamber w / wo CSA Approved display HMI type B .

HMI / Display Interface Circuit

I.S. Output Parameters

$Voc/U_o = 6.2 V$; $Isc/I_o < 65.2 mA$;
 $P_o = 101 mW$
 Class I Div 1 and Div 2; ; Groups:
 A,B,C,D or Class I Zone 0 AEx ia IIC;
 Terminals: 6 PIN Connector
 GP A,B $Ca = 1.4 \mu F$; $La = 5.0 mH$;
 C,D $Ca = 8.9 \mu F$; $La = 5.0 mH$;

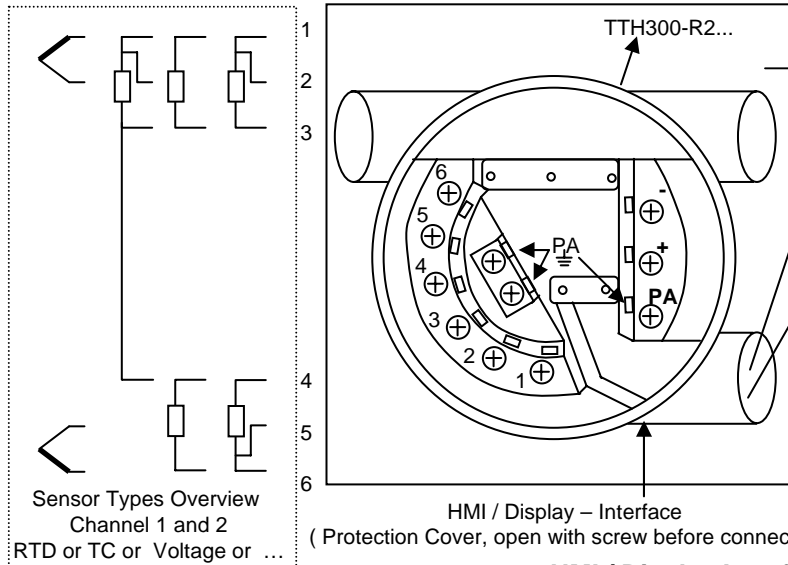
A dust tight seal must be used at the conduit entry when the transmitter is used in a Class II & III location.

				Title:		Scale:	
				TTF350		----	
				I.S. Temperature Transmitter			
				Control Drawing			
				Drawing / Part No.:		Page : of	
				TTF350-R1.		1 / 1	
				Replacement of: -----			
1.00	Release	04.12.06	Zeiger				
Rev.	Desc.	Date	Name				
				Approv.	04.12.06	Müller	
				Date		Name	

Division 2 Hazardous Location

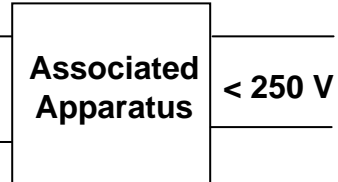
Non – Hazardous Location

Sensors must be a simple apparatus. RTD's, TC or LED's



Type 2-2 T, Enclosure Type 4X

Apparatus Input Values
 N.I. V max ≤ 30.0 V ;
 I max ≤ 130 mA ; Pi ≤ 0,8W
 Ci = 7,4 nF; Li = 0,51 mH



Associated Apparatus
 Nonincendive Parameters must meet the following Requirements :
 $V_{oc} \leq V_{max}$; $C_a \geq C_i + C_{cable}$;
 $I_{sc} \leq I_{max}$; $L_a \geq L_i + L_{cable}$

Sensor Field Circuit Nonincendive Parameters

Voc = 6.5 V; Isc < 25.0 mA; Po = 38 mW
 Temp. Ident T6 at Tamb = 56 °C;
 T4 at Tamb = 85 °C; CLASS I DIV 2;
 Groups: A,B,C,D or CLASS I Zone 2 Group IIC T6
 Terminals: 1,2,3,4,5,6 GP A,B Ca = 1.54 μF; La = 5.0 mH
 C,D Ca = 8.74 μF; La = 5.0 mH

HMI / Display Interface Non-incendive Output Parameters

Voc = 6.2 V; Isc < 65.2 mA; Po = 101 mW
 Terminals: 6 PIN Connector
 GP A,B Ca = 1.4 μF; La = 5.0 mH
 C,D Ca = 8.9 μF; La = 5.0 mH

Temperature Transmitter Model "TTF350" Ordering Code "TTF350-R2..." is an Temp. Transmitter Type TTH300-L2 which is installed in an enclosure Type 2-2, w/wo CSA approved display HMI-Ex type B..

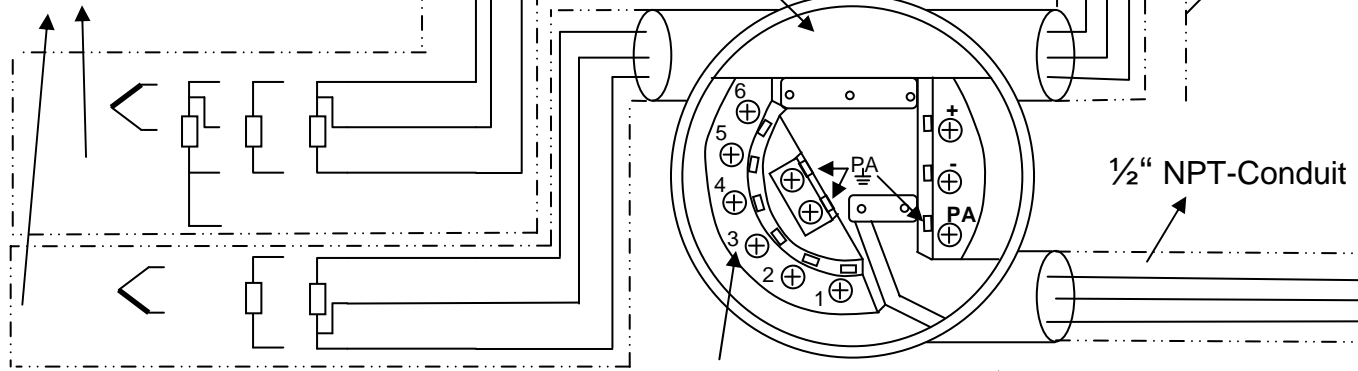
Attention: No Conduit Seal Required.

The Temperature Transmitter is CSA Certified as Non-Incendive for use in Class I, Div. 1 Groups A, B, C, D hazardous locations, with Entity input parameters, and provides Non-Incendive Circuits for Class I, Div. 1 Groups A, B, C, D hazardous locations, with Entity output parameters

				Title:		Scale:	
				TTF350		----	
				N. I. Temperature Transmitter			
				Control Drawing			
				Drawing / Part No.:		Page : of	
				TTF350-R2 (2)		1 / 1	
				Replacement of: -----			
Rev.	Desc.	Date	Name	Approv.	Date	Name	
1.00	Release	04.12.06	Zeiger	04.12.06		Müller	
ABB							
Automation Products							

Hazardous Location

Thermowell with 1/2" NPT-Conduit or Sheathed cable with 1/2" NPT Thread.



Non – Hazardous Location

Normal Operating Conditions

Us = 11...42 V DC

Output Signal

4 ...20 mA

TTH300-Y0..

HMI / Display – Interface
(Protection Cover, open with screw before connect !)

Field Mounted Temperature Transmitter Type TTF350-L3..... (FM)
Type TTF350-R3.... (CSA)

Sensor Types Overview
Channel 1 and 2
RTD or TC or Voltage or ...

Temperature Transmitter Model „TTF350“

FM Ordering Code „TTF350-L3.....“ or

CSA Ordering Code „TTF350-R3.....“

is an Temp. Transmitter Type TTH300-Y0... which is installed in an explosion-proofed enclosure w / wo display HMI type B.

Use wires suitable for 5°C above ambiente temperature.

Explosionproof for Class I, Division 1, Group A, B, C, D

Dust-Ignitioproof Clas II and III, Division 1, Group E, F, G

For Indoor and Outdoor use (NEMA 4X)

Ambient Temperature: Temperatur Transmitter w / wo Indicator

Ta: T6 = -40°C...+56°C; T5 = -40°C...+71°C; T4= -40°C...+85°C

					Title:		Scale:
					Temperature Transmitter TTF350-L3...(FM) TTF350-R3....(CSA) Explosion-Proof Control Drawing		-----
				Approv.	30.11.07	Müller	
				Date		Name	
						Drawing / Part No.:	Page : of
1.01	tamb	30.11.07	Zeiger			TTF350-L3...(FM) TTF350-R3....(CSA)	1 / 1
1.00	Release	09.07.07	Zeiger				
Rev.	Desc.	Date	Name			Replacement of: -----	