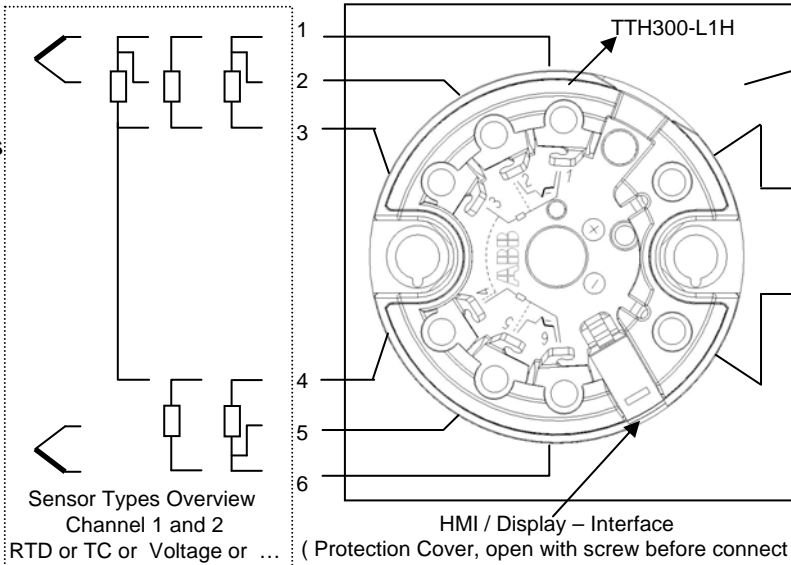


Hazardous Location

Sensors must be FM 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

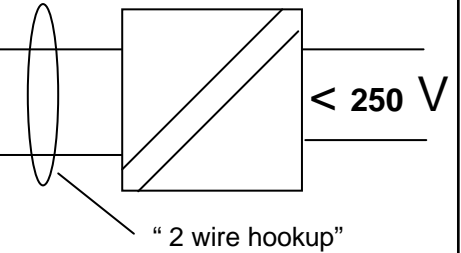


AGLF, AGSF, AGLFD, AGSFD Enclosure Type 4X

Apparatus input Values
 I. S. V max ≤ 30.0 V DC ;
 I max ≤ 130 mA ; Pi ≤ 0.8W
 Ci = 0,57nF Li = 0,5mH

Non – Hazardous Location

Barrier Galvanic Isolator



Associated Apparatus

- Barrier or Galvanic Isolator must be FM approved and must be installed in accordance with manufactures instructions.
- Barrier or Galvanic Isolator parameters must meet the following Requirements :
 V_{oc} or $V_t \leq V_{max}$; $C_a \geq C_i + C_{cable}$;
 I_{sc} or $I_t \leq I_{max}$; $L_a \geq L_i + L_{cable}$;
 P_o or $P_t \leq P_{max}$
- Maximum non hazardous area voltage must not exceed 250V.
- Install in accordance with the NEC (ANSI/NFPA 70) and ANSI/ISA RP12.6. " Installation of intrinsically safe systems" Do not alter without FM authorization

I.S. Sensor Field Circuit Parameters

$V_{oc} = 6.5 V$; $I_{sc} < 25.0 mA$; $P_o = 38 mW$
 Tem. Ident. for Class I Div 1 and Div 2; Groups: A,B,C,D
 T_6 at $T_{amb} = 56 ^\circ C$; T_5 at $T_{amb} = 71 ^\circ C$; T_4 at $T_{amb} = 85 ^\circ C$;
 Temp. Ident. for Class I Zone 0 AEx ia IIC
 T_6 at $T_{amb} = 44 ^\circ C$; T_5 at $T_{amb} = 56 ^\circ C$; T_4 at $T_{amb} = 84 ^\circ C$;
 Terminals: 1,2,3,4,5,6 GP A,B $C_a = 1.55 \mu F$; $L_a = 5.0 mH$
 C,D $C_a = 8.75 \mu F$; $L_a = 5.0 mH$

HMI / Display Interface

Intrinsically Safe output Parameters
 $V_{oc} = 6.2 V$; $I_{sc} < 65.2 mA$; $P_o = 101 mW$
 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 $C_a = 1.4 \mu F$; $L_a = 5.0 mH$
 C,D $C_a = 8.9 \mu F$; $L_a = 5.0 mH$

Temperature Transmitter Model "TTF300" Ordering Code "TTF300-L1..H" is an Temperature Transmitter Type TTH300-L1H, which is installed in an enclosure type AGLF, AGSF or AGLFD, AGSFD w/wo FM Approved display HMI-Ex type A, AS, B, BS.

WARNING!

Resistance between barrier ground and earth ground must be less then 1.0 Ohm!
 „The apparatus enclosure AGL... contains aluminum and is considered to constitute a potential risk of ignition by impact or friction. Care must be taken into account during installation and use to prevent impact or friction“.

Rev.	Desc.	Date	Name
1.05	New Ci	03.08.12	Zeiger
1.04	Warning	24.11.11	Zeiger
1.03	HART	17.07.07	Zeiger
1.02	FM Report	05.10.06	Zeiger
1.01	FM input	10.07.06	Zeiger
1.00	Release	23.05.06	Zeiger

Approv.	Date	Name
	17.07.07	Müller

ABB
Automation Products

Title:	TTF300 HART I.S. Temperature Transmitter Control Drawing	Scale:	----
Drawing / Part No.:	SAP_214832	Page :	of 1 / 1
Replacement of:	-----		