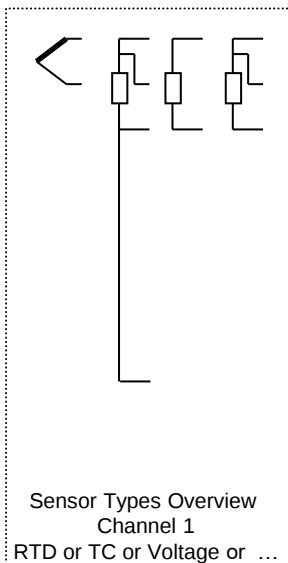


Sensors

must be FM approved or be a simple apparatus. Simple apparatus is a device which will neither generate nor store more than 1.5 V; 0.1 A; 25mW resp. 20 µJ such as switches, RTD's, TC.



I.S. Sensor Field Circuit Entity Parameters

$V_{oc} = 6.5 \text{ V}$; $I_{sc} = 17.8 \text{ mA}$; $P_o = 29 \text{ mW}$

Terminals: 1,2,3,4: GP: A,B $C_a = 1.65 \mu\text{F}$; $L_a = 5.0 \text{ mH}$
C,D $C_a = 8.85 \mu\text{F}$; $L_a = 5.0 \text{ mH}$

FM intrinsically safe field circuit approval

Tem. Ident.: T6, T5 at $T_{amb} = 56 \text{ }^\circ\text{C}$;
T4 ... T1 at $T_{amb} = 85 \text{ }^\circ\text{C}$;

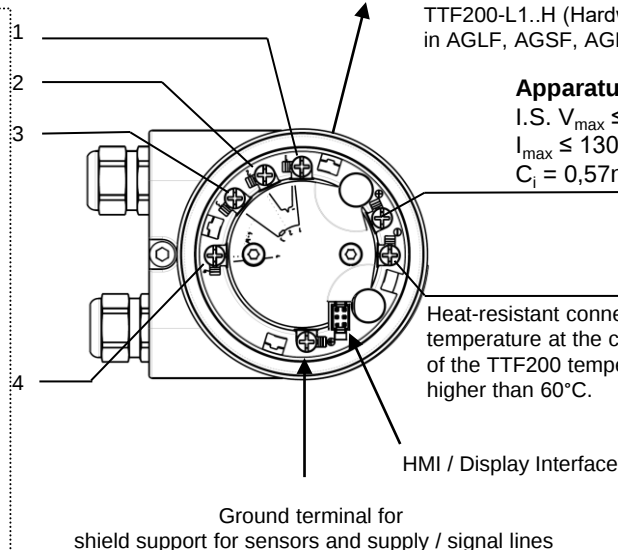
Class I,II,III Div. 1 and Div. 2; Groups A,B,C,D,E,F,G or
Class I Zone 0 AEx/Ex ia IIC

Temperature Transmitter Model "TTF200" Ordering Code "TTF200-L1..H" is a Temperature Transmitter Type, which is installed in an enclosure type AGLF, AGSF or AGLFD, AGSFD w/wo FM Approved display HMI-Ex type B, BS.

Warning:

Resistance between barrier ground and earth ground must be less than 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.



TTF200-L1..H (Hardware Rev.: $\geq 02.00.00$)
in AGLF, AGSF, AGLFD, AGSFD Enclosure Type 4X

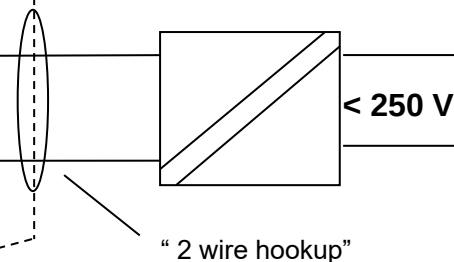
Apparatus Input Values

I.S. $V_{max} \leq 30.0 \text{ V DC}$;
 $I_{max} \leq 130 \text{ mA}$; $P_i \leq 0.8 \text{ W}$
 $C_i = 0,57 \text{ nF}$ $L_i = 160 \mu\text{H}$

Heat-resistant connection cables shall be used if the temperature at the cable entries or inside the enclosure of the TTF200 temperature measuring transducer is higher than 60°C .

Hazardous Location Non – Hazardous Location

Barrier Galvanic Isolator



- Barrier or Galvanic Isolator must be FM approved (US) or listed for Canada (cFM/CSA) and must be installed in accordance with manufacturers instructions.
- Barrier or Galvanic Isolator parameters must meet the following Requirements :
 $V_{oc} \text{ or } V_t \leq V_{max}$; $C_a \leq C_i + C_{cable}$;
 $I_{sc} \text{ or } I_t \leq I_{max}$; $L_a \leq L_i + L_{cable}$;
 $P_o \text{ or } P_t \leq P_{max}$
- Maximum non - hazardous area voltage must not exceed 250V
- Install in accordance with the CE Code CSA C22.1 61010-1, or NEC (ANSI/NFPA 70) and ANSI/ISA RP12.06.01 " Part 1: Intrinsic Safety'

				Do not alter without FM authorization			Title: TTF200 HART (HW Rev. ≥ 02.00.00) I.S. Temperature Transmitter Control Drawing	Scale: -----
				Approv.	17.07.07	Müller		
					Date	Name		
2.02	CI II,III	01.02.23	Peterich	ABB Automation Products				Drawing / Part No.:
2.01	misc	02.12.22	Peterich				TTF200-L1H	1 / 1
2.00	HW02.00	30.03.22	Peterich					
Rev.	Desc.	Date	Name					
							Replacement of: -----	