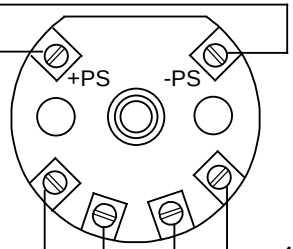
MOORE INDUSTRIES	DO NOT SCALE DRAWING			CATEGORY	DRAWING NUMBER			REVISION
	TOLERANCES (UNLESS NOTED)	DRAWN		CONTROL DRAWING	100-100-57			D
	DECIMALS = ±inch/mm	Gus H. Elias	09/00	TITLE	REVISED BY	DATE	BY	APPROVAL
	.X = ±.1 /2.54	CHECKED		Field Installation Diagram: THZ [HPP] Intrinsically Safe System For Hazardous 'Classified' Locations.	ECO 13262	G.E.	02/01	CB
	.XX = ±.03 /0.76	W. Ho	02/01					
	.XXX = ±.010/0.25	ENGINEER						
	HOLES:=+.003-.002/+.08-.05	Gus H. Elias	09/00					
	ANGLES: = ± 30'	SCALE						
		NONE						

CERTIFIED PRODUCT

This is a controlled 'Related' or 'Schedule' drawing. No modifications are permitted without the notification and final approval of the Q.A. Certification Engineer (related dwgs.) or the Certifying Agency (schedule dwgs.).

PC-Programmable Smart HART Temperature Transmitter



Entity Parameters
(Power/Loop, +PS & -PS):

V_{max} or U_i = 30 VDC
I_{max} or I_i = 110 mA
P_{max} or P_i = 0.825 W
C_i = 43 nF
L_i = 0 µH
L_o/R_o = 43.1 µH/Ω

C_a or $C_o \geq C_i + C_{cable}$
L_a or $L_o \geq L_i + L_{cable}$
V_{max} or $U_i \geq V_{oc}$ or V_t
I_{max} or $I_i \geq I_{sc}$ or I_t

Non-Hazardous Safe Area

Unspecified Apparatus (1)

Barrier or other Associated Apparatus (2)

Ground/Earth Path Resistance Must Not Exceed 1 Ω

-PS
+PS

4
3
2
1

RTD, Ω, T/C, mV:
C_a or C_o = 2.96 µF
L_a or L_o = 2.9 mH
V_{oc} or V_t = 6.51 VDC
I_{sc} or I_t = 110 mA
P_o = 0.825 W

Input device must be 'Agency' approved per application area (CSA, EECS, FM, ISSEP, LCIE, SIRA, SAA, TUV, etc...).

Hazardous (Classified) Locations - FM (US NEC 500):
Intrinsically Safe: Class I,II,III; Div. 1; Groups A-G.
Non-Incendive: Class I, Div. 2, Groups A-D.
Class II, Div. 2, Groups F & G and Class III, Div. 2.

T. Code: **T6 @ 60°C** Maximum Operating Ambient.
Temperature Range: **-40°C ≤ $T_{amb.}$ ≤ +60°C**

Hazardous 'Classified' Locations/Areas:
CSA International
Intrinsically Safe: Class I, Div. 1; Groups A-D.
Class I, Div. 2, Groups A-D.
CENELEC/ATEX
Intrinsically Safe: Ⓔx II 2G EEx ib IIC T6

Notes:

(1) Apparatus which is unspecified except that it **must not** be supplied from, or contain under normal or abnormal conditions a source of potential with respect to earth in excess of 250 VRMS or 250 VDC which is considered to be the Safe Area's maximum voltage.

(2) The Barrier or other Associated Apparatus **must** be approved by the **"specific"** (CSA/EECS/FM/LCIE/SAA/SIRA/TUV, etc..) certifying agency for I.S. connections in: "Class I-III, Division 1, Groups A-G" locations. The output voltage **(Voc, Vt or Vo) must not** exceed **30 VDC** & the output current **(Isc, It or Io) must not** exceed **110 mA**. Also, it **must** be installed per the manufacturer's guidelines. *A Shunt Zener Barrier is NOT required for Non-Incendive (or Class I, Division 2 or Type N) installations.*

(3) The combined Capacitance and Inductance of the inter-connecting cables and the PC Prog. Transmitters **must not** exceed the values indicated on the Associated Apparatus.

4- For FM applications, installation **must** be in accordance to '**ANSI-P12.6'** (Installation of I.S. Systems for Hazardous 'Classified' Locations) and the National Electric Code **'ANSI/NFPA 70'**. Also, a dust-tight conduit seal **must** be used when installed in Class II and Class III environments. For CSA applications, adhere to the 'Canadian Electric Code C22.1' most current publication on I.S. installation guidelines. For CENELEC/ATEX applications, adhere to 'EN 60079-14:1997' or any equivalent, most current and pertaining publication on I.S. installation guidelines.

5- **Warning:** Substitution of components may impair the Intrinsic Safety and/or Non-Incendivity of the unit. DO NOT open the unit when either energized or when an explosive gas/dust atmoshpere is present. Disconnect power before servicing. Also read, understand and adhere to the manufacturer's installation and operating procedures.