

DO NOT SCALE DRAWING

TOLERANCES (UNLESS NOTED)		DRAWN	Gus H. Elias	09/00
DECIMALS - \pm inch/mm	XX	CHECKED	W. Ho	02/03
X	± 0.1 / 2.54	ENGINEER	Gus H. Elias	09/00
XX	± 0.03 / 0.76	SCALE	NONE	
XXX	± 0.001 / 0.25			
HOLE	± 0.005 / 0.13			
ANGLES	$\pm 30'$			

CATEGORY CONTROL DRAWING

TITLE
Field Installation Diagram:
TRX, TRX-R & T2X [HPP]
Non-Isolated PC-Prog. Temp. Xmitters.
Intrinsically Safe System
For Hazardous "Classified" Locations

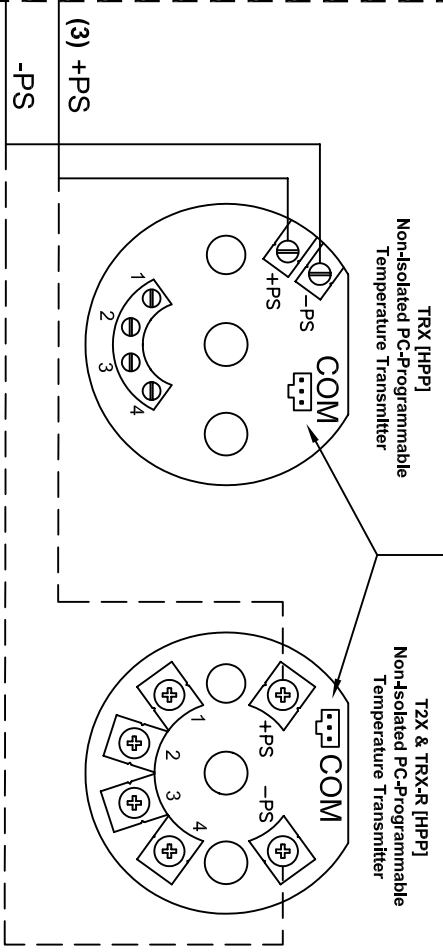
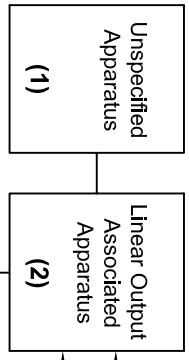
DRAWING NUMBER 100-100-38

REVISED BY	DATE	BY	APPROVAL
ECO 15730	12/09	CW	CB

NOTICE RE PROPRIETARY INFORMATION: This drawing and the information contained herein are the proprietary property of Moore Industries International, Inc. (MII) and should not be reproduced or disclosed to any third party without the written consent of an authorized officer of MII.

Certified Product
This is a controlled 'Revised' or 'Schedule' drawing. No modifications are permitted without the notification and final approval of the Certifying Engineer (related dvgs.) or the Certifying Agency (schedule dvgs.)

Non-Hazardous (Safe) Area



Caution: The 'COM' Port Must Not Be Used In Hazardous 'Classified' Locations

ANZEx Scheme [TRX-R only]
Input Parameters (+PS & -PS)
U _i = 30 V
I _i = 110 mA
P _i = 0.825 W
C _i = 5.2 nF
L _i = 0 mH
RTD & T/C (1, 2, 3, 4)
U _o = 6.51V
I _o = 110 mA
P _o = 0.532 W
L _o = 1.4 mH
C _o = 2.262 μF

ATEX/FM/CSA Scheme
Entry 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 = 4.7 nF
L _i = 0 μH
Ca or Co ≥ C _i + C _{cable}
La or Lo ≥ L _i + L _{cable}
V _{max} or U _i ≥ Voc or Vt
Voc or Vt ≥ 6.2VDC
I _{sc} or I _t ≥ I _{sc} or I _t
P _o ≥ Po
RTD & T/C [T2X: RTD only] (1, 2, 3, 4)
Ca or Co = 2.262 μF
La or Lo = 3.0 mH
Voc or Vt = 6.51 VDC
I _{sc} or I _t = 110 mA
P _o = 0.716 W

Hazardous 'Classified' Locations/Areas:
CSA International
Intrinsically Safe: Class I, Div. 1, Groups A-D.
Non-Incendive: Class I, Div. 2, Groups A-D.
KEMA/CENELEC I.S. (TRX only): EEx ia IIC T4/T5
LCIE/ATEX I.S. (T2X/TRX-R): Ⓢ II 1G EEx ia IIC T6

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.
US NEC 505 (T2X & TRX-R only); Class I, Zone 0, AEX ia IIC

Input device must be 'Agency' approved per application area (CSA, FM, ISSaP, KEMA, LCIE, TestSafe, SIRA, TÜV, etc.)

Notes:

- 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.
- The Barrier or other Associated Apparatus **must** be approved by the "specific" (CSA/ECCS/FM/LCIE/SIRATUV, etc.) certifying agency for I.S. connections in: "Class I-III, Division 1, Groups A-G" locations. The output voltage **6.2VDC ≤ (Voc, Vt or Vo) ≤ 30VDC** & the output current **I_{sc}, It or I_t** **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.
- 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.
- For FM applications, installation **must** be in accordance to **ANSI-P-12.6'** (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.
- Warning:** Substitution of components may impair the Intrinsic Safety of the unit. **DO NOT** open the unit when either energized or if an explosive gas/dust atmosphere is present. Disconnect power before servicing. Also read, understand and adhere to the manufacturer's installation and operating procedures.
- The maximum power parameters of the COM port (to be used only in safe/non-hazardous areas) are: V_{max} = 3.0 VDC, I_{max} = 300 μA, P_{max} = 240 μW.