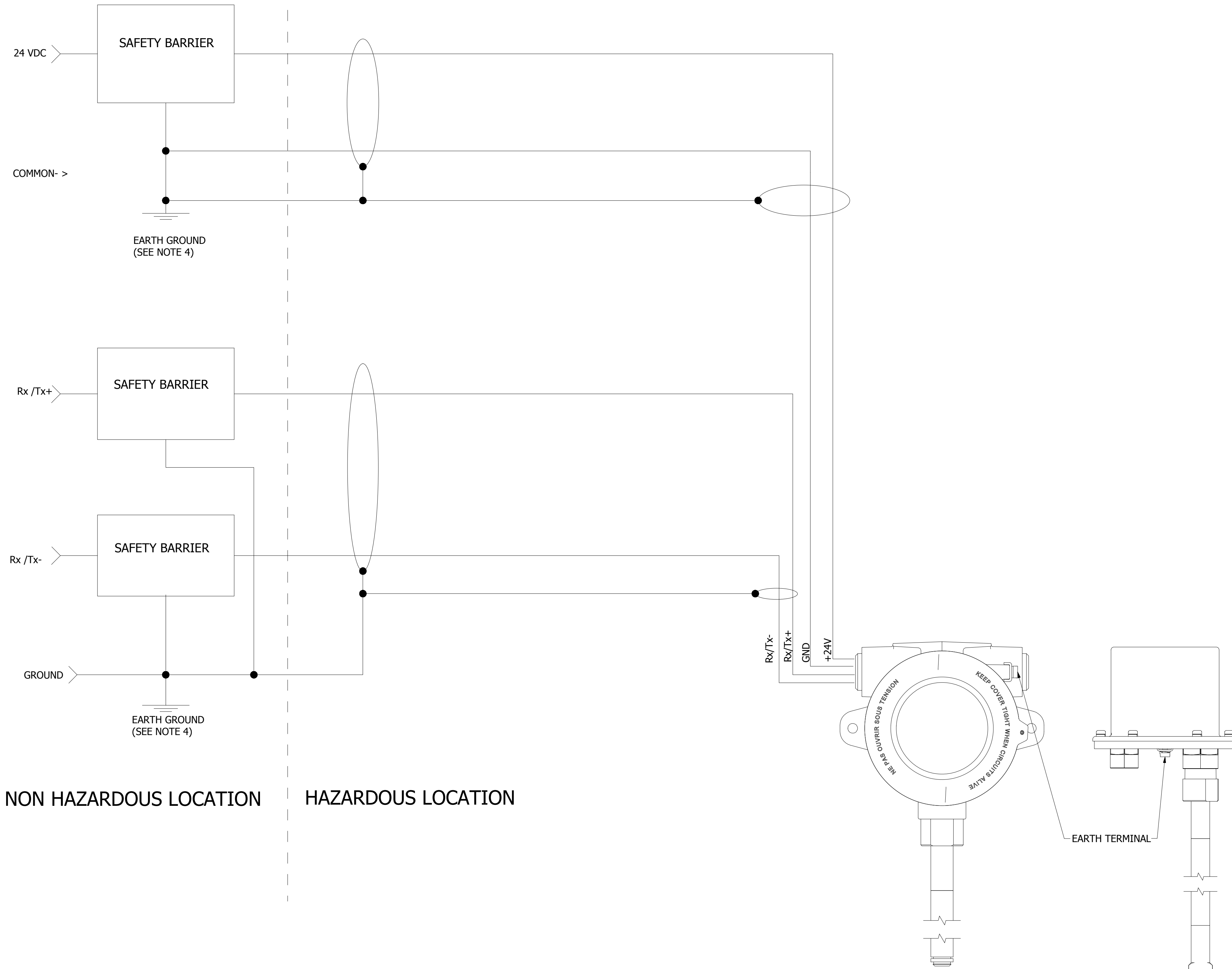


AGENCY CONTROLLED DRAWING (US). NO CHANGES WITHOUT PRIOR AGENCY APPROVAL



INTRINSICALLY SAFE
 CL. I, DIV. 1, GR. ABCD
 CL. I Zone 0/1 AEx ia IIC T4
 Ta = -50 to 71°C ; IP65



NOTES:

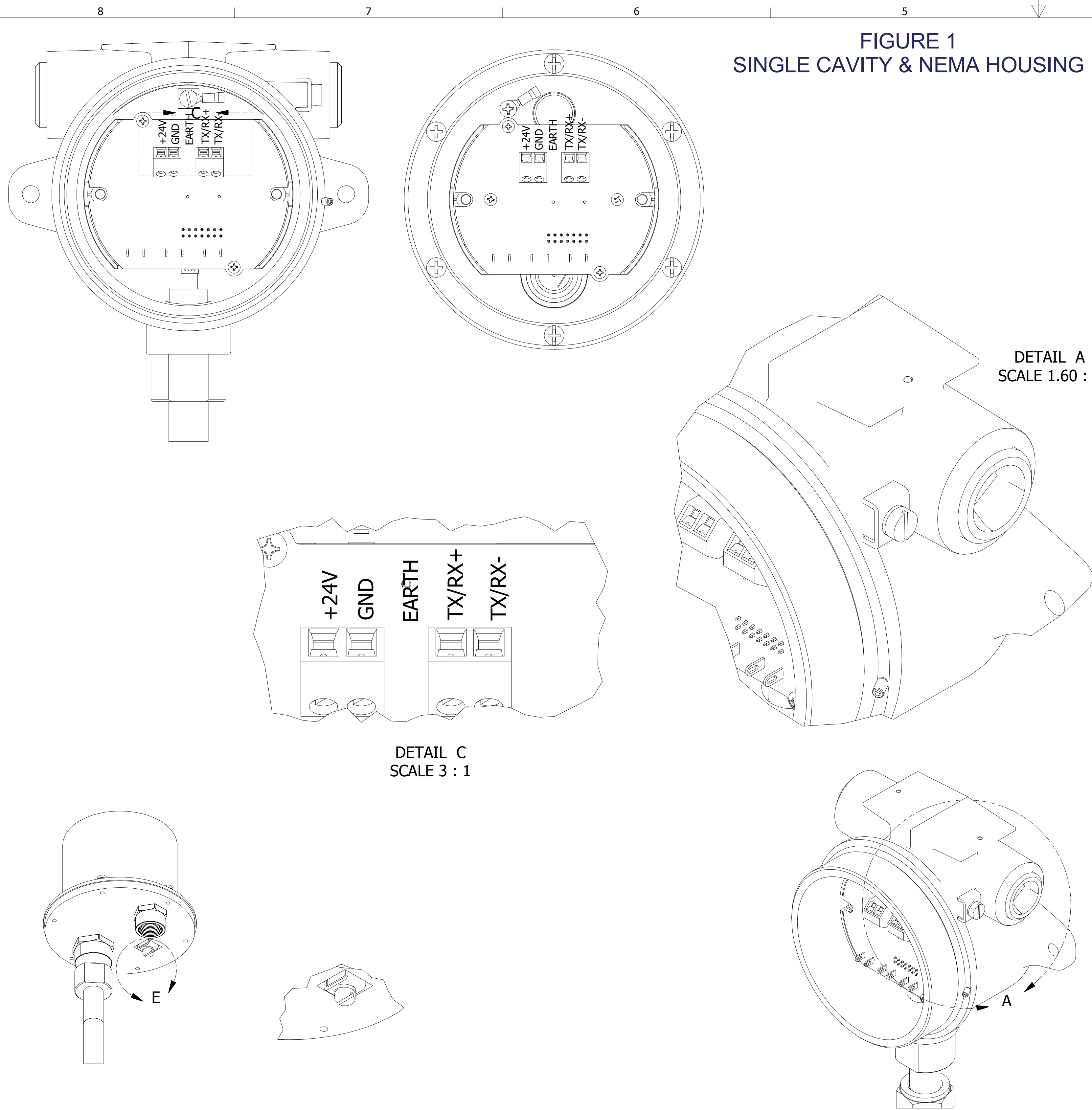
1. ALL NATIONAL AND LOCAL CODES AND REGULATIONS MUST BE ADHERED TO WHEN INSTALLING THE LEVEL SENSOR IN HAZARDOUS ENVIRONMENTS. SEAL ALL CONDUITS WITHIN 457 MM(18").
2. LOOP CABLE MUST BE 24 AWG TO 14 AWG (.511MM² TO 1.6MM²) SHIELDED TWISTED PAIR CABLE WITH SHIELD. CABLE CAPACITANCE MUST BE LESS THAN 30 pF PER FOOT (98 pF PER M). CABLE SHIELD IS CONNECTED TO SYSTEM GROUND IN NON-HAZARDOUS AREA. SEE INSTALLATION MANUAL FOR ADDITIONAL CABLE INFORMATION.
3. THE RESISTANCE BETWEEN EARTH GROUND AND THE INTRINSICALLY SAFE GROUND MUST BE LESS THAN 1 OHM.
4. THE TRANSDUCER FRAME SHALL BE GROUNDED TO EARTH GROUND DIRECTLY OR THROUGH THE EQUIPMENT ON WHICH IT IS MOUNTED.
5. CONTROL EQUIPMENT CONNECTED TO ASSOCIATED APPARATUS MUST NOT USE OR GENERATE MORE THAN 250 VRMS OR VDC
6. ASSOCIATED APPARATUS MANUFACTURER'S INSTALLATION DRAWING MUST BE FOLLOWED WHEN INSTALLING THIS EQUIPMENT.
7. ONLY USE NEC (e.g FM) APPROVED BARRIERS.
8. ENTITY PARAMETERS:

SUPPLY:	Rx/Tx-:	Rx/Tx+:
U _i = 28VDC	U _i = 8.6V	U _i = 8.6V
I _i = 100mA	I _i = 10mA	I _i = 10mA
C _i = 0 μF	C _i = 0 μF	C _i = 0 μF
L _i = 0 μH	L _i = 0 μH	L _i = 0 μH
P _i = 0.7 W	P _i = 0.0215 W	P _i = 0.0215 W
9. THE ENTITY CONCEPT ALLOWS INTERCONNECTION OF INTRINSICALLY SAFE APPARATUS WITH ASSOCIATED APPARATUS WHEN THE FOLLOWING IS TRUE:
 - V_{max} or U_i ≥ V_{oc}, V_t or U_o;
 - I_{max} or I_i ≥ I_{sc}, I_t or I_o;
 - P_{max} or P_i ≥ P_o;
 - C_a ≥ C_i + C_{cable};
 - L_a ≥ L_i + L_{cable}.
10. DUAL-CAVITY ENCLOSURES: CUSTOMER CONNECTIONS WILL BE MADE AT TERMINAL BLOCK ON POWER SIDE OF HOUSING (NOT TO TERMINAL BLOCK ON INTERCONNECT BOARD).
11. INSTALLATION SHOULD BE IN ACCORDANCE WITH ANSI/ISA RP12.06.01 "INSTALLATION OF INTRINSICALLY SAFE SYSTEMS FOR HAZARDOUS (CLASSIFIED) LOCATIONS" AND THE NATIONAL ELECTRICAL CODE (ANSI/NFPA 70).
12. THE MAXIMUM PERMITTED AMBIENT TEMPERATURE OF THE KT PLUS DIGITAL/ANALOG LEVEL TRANSMITTER IS 71 °C. TO AVOID THE EFFECTS OF PROCESS TEMPERATURE AND OTHER THERMAL EFFECTS CARE SHALL BE TAKEN TO ENSURE THE SURROUNDING AMBIENT AND THE AMBIENT INSIDE THE TRANSMITTER HOUSING DOES NOT EXCEED 71°C
13. CAUTION: FLEXIBLE GAUGES HAVE A MINIMUM BEND DIAMETER OF 406MM(16")
14. WARNING: THE APPARATUS ENCLOSURE 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
15. WARNING: SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY.
16. WARNING: TO PREVENT IGNITION OF FLAMMABLE OR COMBUSTIBLE ATMOSPHERES, DISCONNECT POWER BEFORE SERVICING
17. WARNING: THE EQUIPMENT CONTAINS NON-METALLIC ENCLOSURE PARTS, TO PREVENT THE RISK OF ELECTROSTATIC SPARKING. THE NON-METALLIC SURFACE SHOULD ONLY BE CLEANED WITH A DAMP CLOTH.

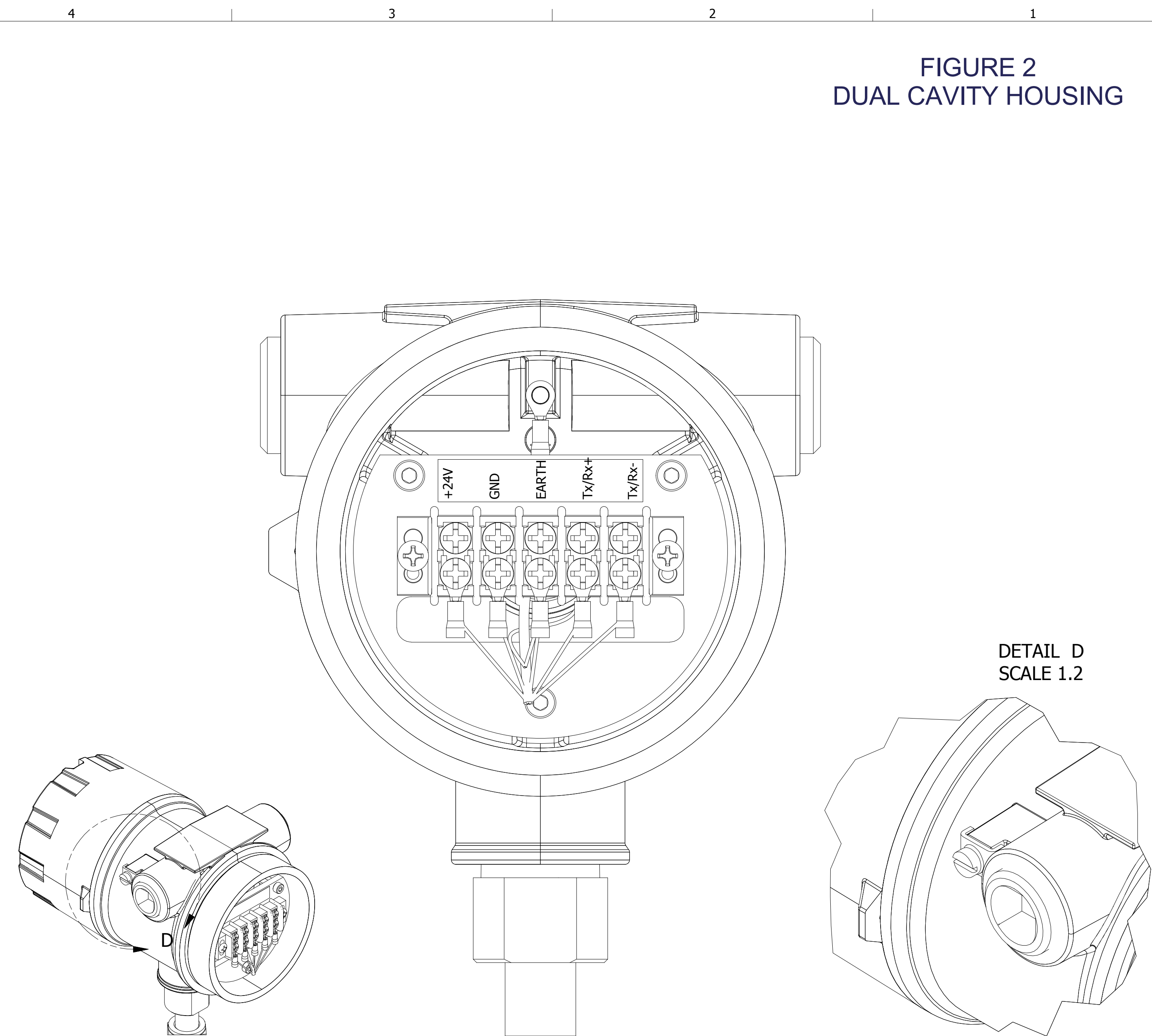
NO REVISIONS SHALL BE MADE WITHOUT THE NOTIFICATION TO APPROVAL AGENCY(S).

A	8193	RELEASE FOR PRODUCTION	MS	9/2/16	
REV	ECO #	DESCRIPTION	BY	DATE	
PROPRIETARY DATA		UNLESS OTHERWISE SPECIFIED			
<small>THE INFORMATION AND DESIGN(S) DISCLOSED HEREIN ARE THE PROPERTY OF KENCO ENGINEERING AND MAY NOT BE USED, REPRODUCED OR DISCLOSED IN ANY FORM EXCEPT AS GRANTED IN WRITING BY KENCO ENGINEERING. THIS RESTRICTION EXCLUDES INFORMATION THAT IS IN THE PUBLIC DOMAIN OR WAS LEGITIMATELY IN THE PRIOR POSSESSION OF THE RECIPIENT.</small>		TOLERANCES	TITLE (ACP) INST IS DWG KT DIGITAL-USA		
		0 PLACES MM ± 0.5	1 PLACE MM ± 0.1	ANGLES ± 1°	KENCO 10001 E 54th ST, TULSA, OK 74146 FIRST ANGLE SIZE DWG NO. 651543-11 PRODUCT LINE LEVEL SCALE: N/A METRIC DRAWN BY: MS SHEET 1 OF 2
		<small>- THREAD DEPTHS ARE TO MIN. FULL THDS - DRILL DEPTHS ARE TO FULL DIA. - REMOVE BURRS AND SHARP EDGES - DO NOT SCALE PRINT - MACHINED SURFACE FINISH 3.2μM [125 μin]</small>			

**FIGURE 1
SINGLE CAVITY & NEMA HOUSING**



**FIGURE 2
DUAL CAVITY HOUSING**



WIRING CHART (FOR NEMA GAUGE)

WIRE COLOR	SIGNAL
RED	24 V PWR
BLACK	0 V PWR
BLUE	N/A
WHITE	RX TX +
GREEN	RX TX -
DRAIN WIRE	EARTH GROUND

PIN WIRING CHART (FOR NEMA GAUGE)

PIN #	SIGNAL
PIN 1	24 V PWR
PIN 2	0 V PWR
PIN 3	N/A
PIN 4	RX TX+
PIN 5	RX TX-
PIN 6	EARTH GROUND

NO REVISIONS SHALL BE MADE WITHOUT THE NOTIFICATION TO APPROVAL AGENCY(S)

REV	ECO #	DESCRIPTION	MS	9/2/16
A	8193	RELEASE FOR PRODUCTION	BY	DATE

TOLERANCES		ANGLES	
0 PLACES	1 PLACE	MM	MM
± 0.5	± 0.1	± 1°	

PROPRIETARY DATA
 THE INFORMATION AND DESIGN(S) DISCLOSED HEREIN ARE THE PROPERTY OF KENCO ENGINEERING AND MAY NOT BE USED, REPRODUCED OR DISCLOSED IN ANY FORM EXCEPT AS GRANTED IN WRITING BY KENCO ENGINEERING. THIS RESTRICTION EXCLUDES INFORMATION THAT IS IN THE PUBLIC DOMAIN OR WAS LEGITIMATELY IN THE PRIOR POSSESSION OF THE RECIPIENT.

TITLE (ACP) INST IS DWG KT DIGITAL-USA
 HENCO 10001 E 54th ST, TULSA, OK 74146

FIRST ANGLE SIZE DWG NO. 651543-11 REV A
 PRODUCT LINE LEVEL DRAWN BY: MS
 SCALE: METRIC SHEET 2 OF 2

NOTES:

1. THE CUSTOMER SHOULD CONNECT THE OUTSIDE GROUND LUG TO THE SAFETY EARTHING GROUND SYSTEM

WARNING:
CONDUIT SEALS REQUIRED WITHIN 457 MM (18") OF HOUSING.