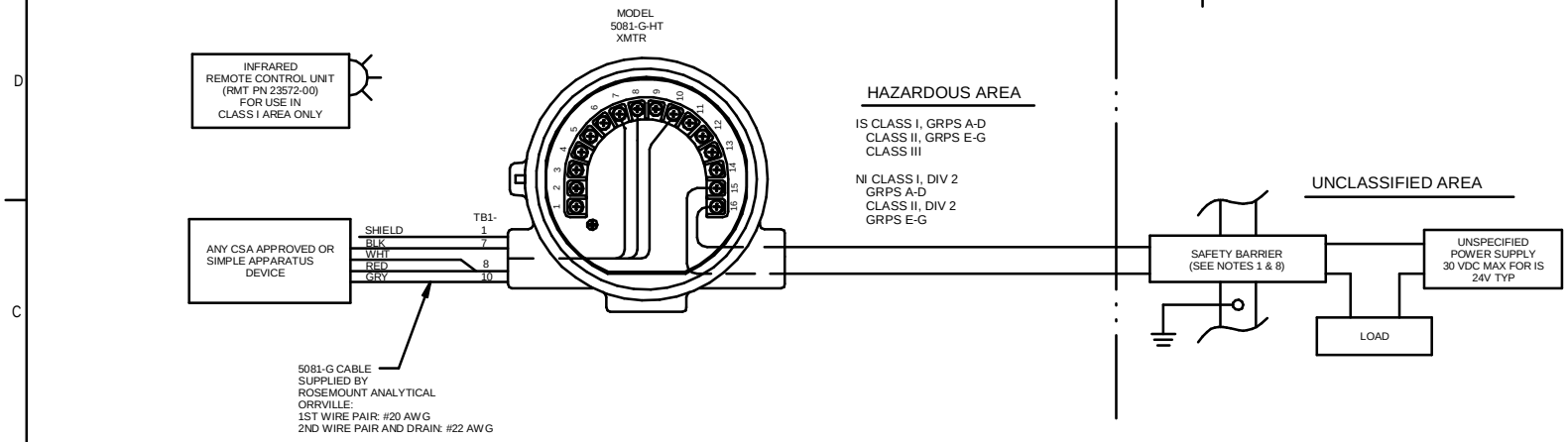
REVISION					
LTR	ECO	DESCRIPTION	BY	DATE	CHK

D 1400229



WARNING- SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY OR SUITABILITY FOR DIVISION 2.

WARNING- TO PREVENT IGNITION OF FLAMMABLE OR COMBUSTIBLE ATMOSPHERES, DISCONNECT POWER BEFORE SERVICING.

THIS DOCUMENT IS CERTIFIED BY
CSA REV. A
REV.
REV.
REV.
REV.
REV.
REVISIONS NOT PERMITTED W/O AGENCY APPROVAL

NOTES ON SHEET 2 OF 2

NOTES: UNLESS OTHERWISE SPECIFIED

ITEM	PART NO.	DESCRIPTION	QTY
BILL OF MATERIAL			

UNLESS OTHERWISE SPECIFIED
TOLERANCES
.XX ± .03
.XXX ± .013
ANGES ± 1°
DIMENSIONS ARE IN INCHES
REMOVE BURRS & SHARP EDGES .020 MAX
MACHINED FILLET RADII .020 MAX
NOMINAL SURFACE FINISH 125
MATERIAL
FINISH

APPROVALS		DATE
DRAWN	N. KOUMBIS	07/10/03
CHECKED	D. CROWLEY	08/02/03
PROJECT ENGR APVD	D. CROWLEY	08/02/03

THIS DWG CONVERTED TO SOLID EDGE

Rosemount Analytical, Uniloc Division
2400 Barranca Pkwy
Irvine, CA 92606

Uniloc

TITLE
SCHEMATIC, INSTALLATION
MOD 5081-G-HT XMTR
CSA

SIZE	DWG NO.	REV
D	1400229	A

SCALE NONE | TYPE | SHEET 1 OF 2

RELEASE DATE	ECO NO.	REV
02-06-04	8788	A

12. NO REVISION TO DRAWING WITHOUT PRIOR CSA APPROVAL.

11. THE ASSOCIATED APPARATUS MUST BE CSA APPROVED.

10. CONTROL EQUIPMENT CONNECTED TO ASSOCIATED APPARATUS MUST NOT USE OR GENERATE MORE THAN 250 Vrms OR Vdc.

9. ASSOCIATED APPARATUS MANUFACTURER'S INSTALLATION DRAWING MUST BE FOLLOWED WHEN INSTALLING THIS EQUIPMENT.

8. THE ENTITY CONCEPT ALLOWS INTERCONNECTION OF INTRINSICALLY SAFE APPARATUS WITH ASSOCIATED APPARATUS WHEN THE FOLLOWING IS TRUE:

FIELD DEVICE INPUT		ASSOCIATED APPARATUS OUTPUT
Vmax OR Ui	≥	Voc, Vt OR Uo;
Imax OR Ii	≥	Isc, It OR Io;
Pmax OR Pi	≥	Po;
Ci+ C cable;	≥	Ca, Ct OR Co
Li+ L cable.	≥	La, Lt OR Lo

7. RESISTANCE BETWEEN INTRINSICALLY SAFE GROUND AND EARTH GROUND MUST BE LESS THAN 1.0 Ohm.

6. DUST-TIGHT CONDUIT SEAL MUST BE USED WHEN INSTALLED IN CLASS II AND CLASS III ENVIRONMENTS.

5. SENSORS SHALL MEET THE REQUIREMENTS OF SIMPLE APPARATUS AS DEFINED IN ANSI/ISA RP12.06.01 AND THE CEC (CSA C22.1). THEY CAN NOT GENERATE NOR STORE MORE THAN 1.5V, 0.1A, 25mW OR A PASSIVE COMPONENT THAT DOES NOT DISSIPATE MORE THAN 1.3W. SEE TABLES I AND II.

4. INSTALLATION SHOULD BE IN ACCORDANCE WITH ANSI/ISA RP12.06.01 "INSTALLATION OF INTRINSICALLY SAFE SYSTEMS FOR HAZARDOUS (CLASSIFIED) LOCATIONS" AND THE CANADIAN ELECTRICAL CODE (CSA C22.1).

3. INTRINSICALLY SAFE APPARATUS (MODEL 5081-FG-HT, IRC TRANSMITTER) AND ASSOCIATED APPARATUS (SAFETY BARRIER) SHALL MEET THE FOLLOWING REQUIREMENTS: THE VOLTAGE (Vmax) AND CURRENT (Imax) OF THE INTRINSICALLY SAFE APPARATUS MUST BE EQUAL TO OR GREATER THAN THE VOLTAGE (Voc OR Vt) AND CURRENT (Isc OR It) WHICH CAN BE DELIVERED BY THE ASSOCIATED APPARATUS (SAFETY BARRIER). IN ADDITION, THE MAXIMUM UNPROTECTED CAPACITANCE (Ci) AND INDUCTANCE (Li) OF THE INTRINSICALLY SAFE APPARATUS, INCLUDING INTERCONNECTING WIRING, MUST BE EQUAL OR LESS THAN THE CAPACITANCE (Ca) AND INDUCTANCE (La) WHICH CAN BE SAFELY CONNECTED TO THE APPARATUS. (REF. TABLES I, II & III).

2. THE CAPACITANCE AND INDUCTANCE OF THE LOAD CONNECTED TO THE SENSOR TERMINALS MUST NOT EXCEED THE VALUES SPECIFIED IN TABLE I
WHERE Ca ≥ Ci (SENSOR) + C cable;
La ≥ Li (SENSOR) + L cable.

1. ANY SINGLE SHUNT ZENER DIODE SAFETY BARRIER APPROVED BY CSA HAVING THE FOLLOWING OUTPUT PARAMETERS:
SUPPLY/SIGNAL TERMINALS TB1-15, 16

Voc OR Vt GREATER THAN 13 V BUT NOT GREATER THAN 30 V
Isc OR It NOT GREATER THAN 200 mA
Pmax NOT GREATER THAN 0.9 W

NOTES: UNLESS OTHERWISE SPECIFIED

TABLE I

GAS GROUPS	OUTPUT PARAMETERS	
	Ca (uF)	La (mH)
A, B	10.63	4.28
C	488.63	17.9
D	10,000	34.9

TABLE II

OUTPUT PARAMETERS	MODEL 5081-G-HT TB1-1 THRU 12
Vt	6.51 V
It	86.8 mA
Po	141.27 mA

TABLE III

5081-G-HT ENTITY PARAMETERS SUPPLY / SIGNAL TERMINALS TB 1-15, 16					
MODEL NO.	Vmax (Vdc)	Imax (mA)	Pmax (W)	Ci (nF)	Li (mH)
5081-G-HT	30	200	0.9	27.9	0

SIZE	DWG NO.	REV
D	1400229	A
SCALE: NONE	TYPE	SHEET 2 OF 2