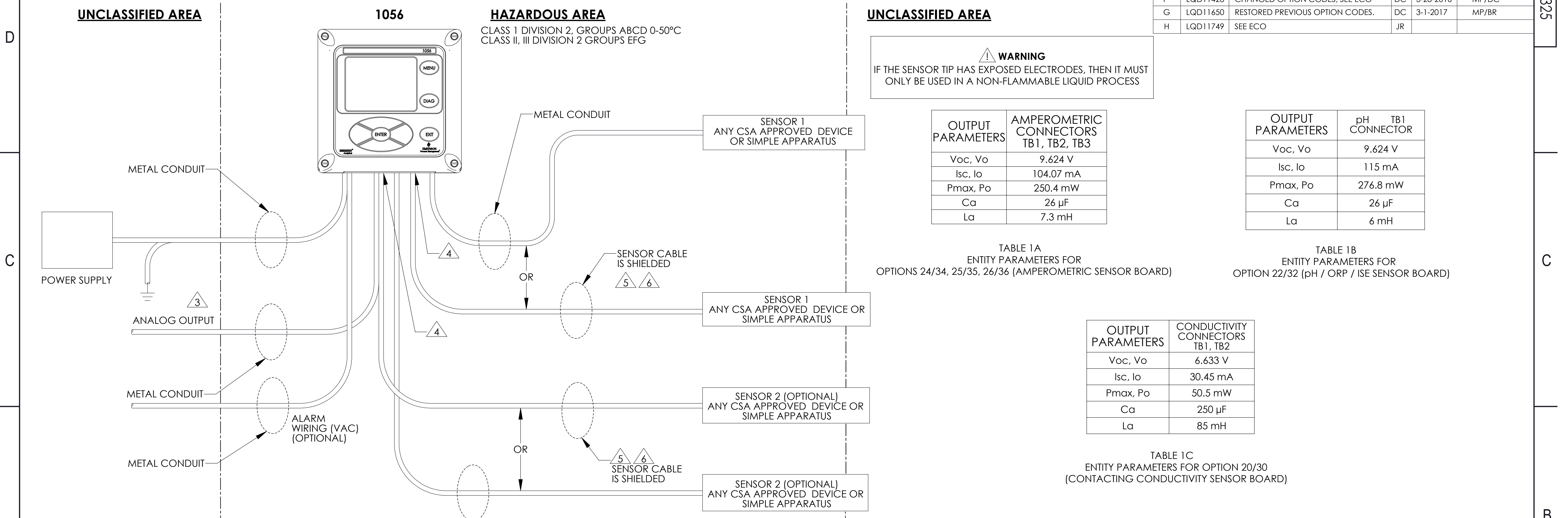


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REVISION					
LTR	ECO	DESCRIPTION	BY	DATE	CHECKED/APPROVED
C	LQD10399	SEE ECO	CH	5-11-2011	JP/DOC
D	LQD10629	SEE ECO	CH	3-28-2012	JP/DOC
E	LQD11133	DWG # 1700630 REPLACED BY 1700629	CH	9-24-2014	JP/DOC
F	LQD11428	CHANGED OPTION CODES, SEE ECO	DC	3-28-2016	MP/DC
G	LQD11650	RESTORED PREVIOUS OPTION CODES.	DC	3-1-2017	MP/BR
H	LQD11749	SEE ECO	JR		



WARNING
IF THE SENSOR TIP HAS EXPOSED ELECTRODES, THEN IT MUST ONLY BE USED IN A NON-FLAMMABLE LIQUID PROCESS

OUTPUT PARAMETERS	AMPEROMETRIC CONNECTORS TB1, TB2, TB3
Voc, Vo	9.624 V
Isc, Io	104.07 mA
Pmax, Po	250.4 mW
Ca	26 µF
La	7.3 mH

OUTPUT PARAMETERS	pH TB1 CONNECTOR
Voc, Vo	9.624 V
Isc, Io	115 mA
Pmax, Po	276.8 mW
Ca	26 µF
La	6 mH

TABLE 1A
ENTITY PARAMETERS FOR
OPTIONS 24/34, 25/35, 26/36 (AMPEROMETRIC SENSOR BOARD)

TABLE 1B
ENTITY PARAMETERS FOR
OPTION 22/32 (pH / ORP / ISE SENSOR BOARD)

OUTPUT PARAMETERS	CONDUCTIVITY CONNECTORS TB1, TB2
Voc, Vo	6.633 V
Isc, Io	30.45 mA
Pmax, Po	50.5 mW
Ca	250 µF
La	85 mH

TABLE 1C
ENTITY PARAMETERS FOR OPTION 20/30
(CONTACTING CONDUCTIVITY SENSOR BOARD)

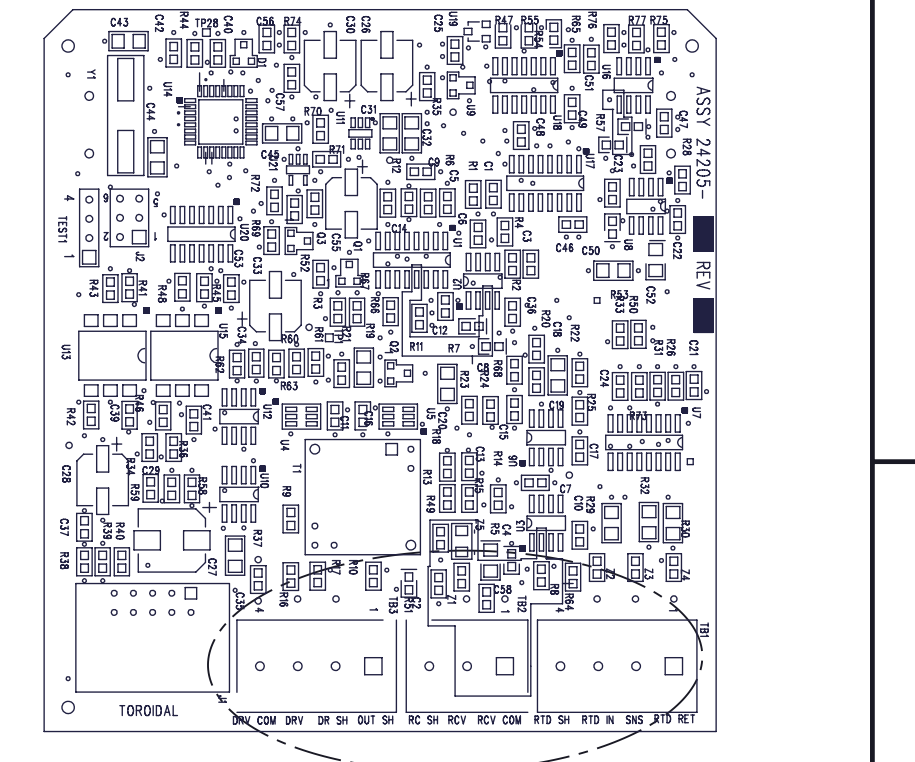
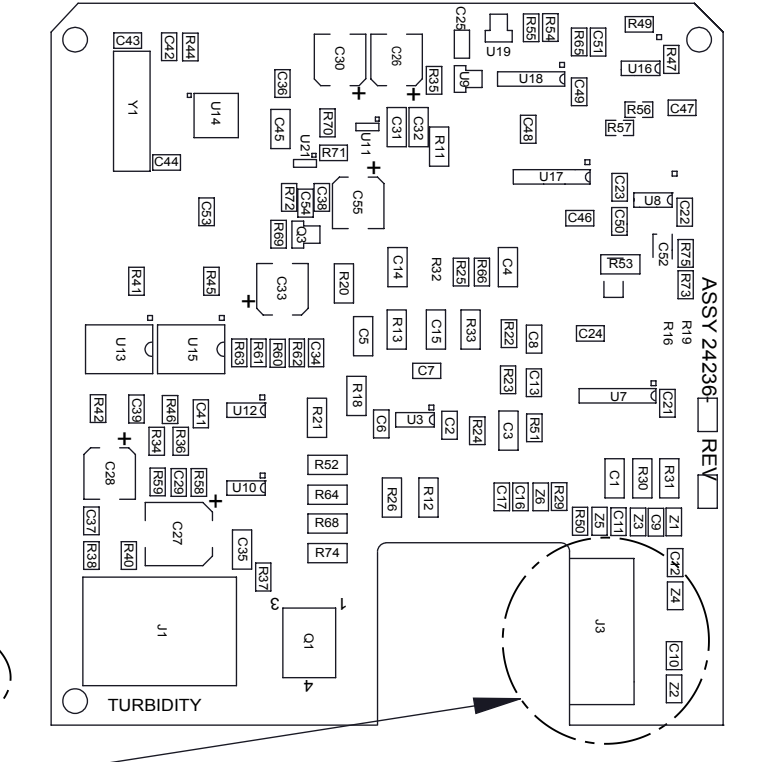
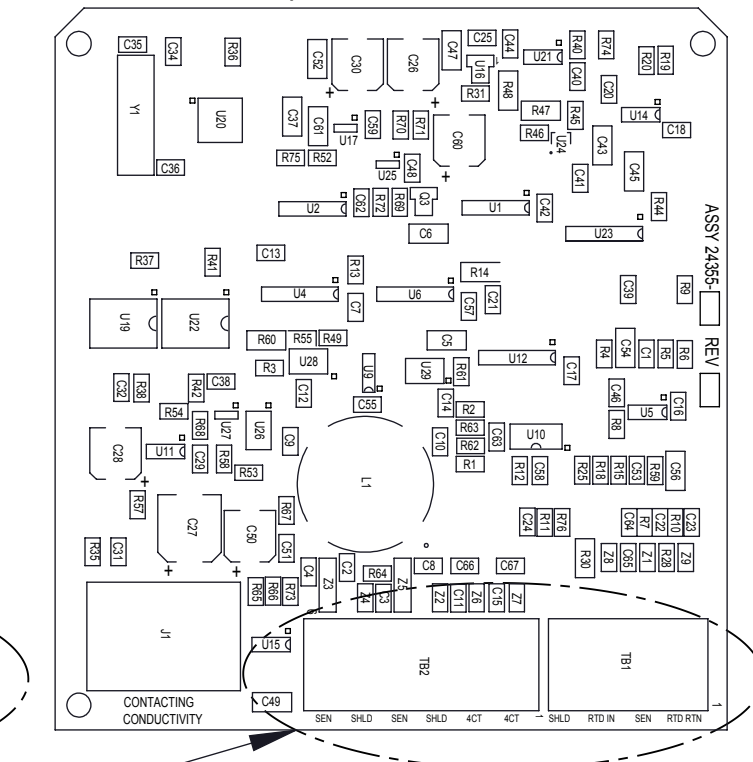
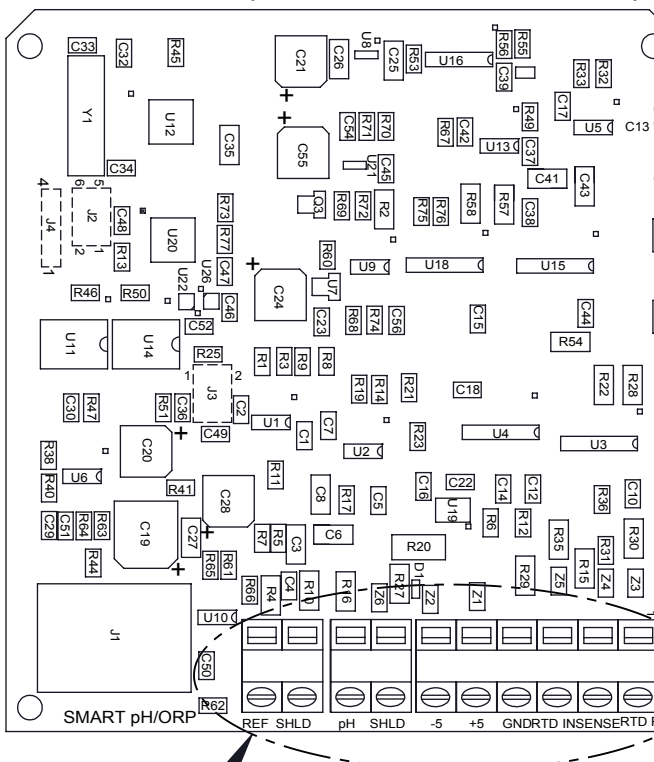
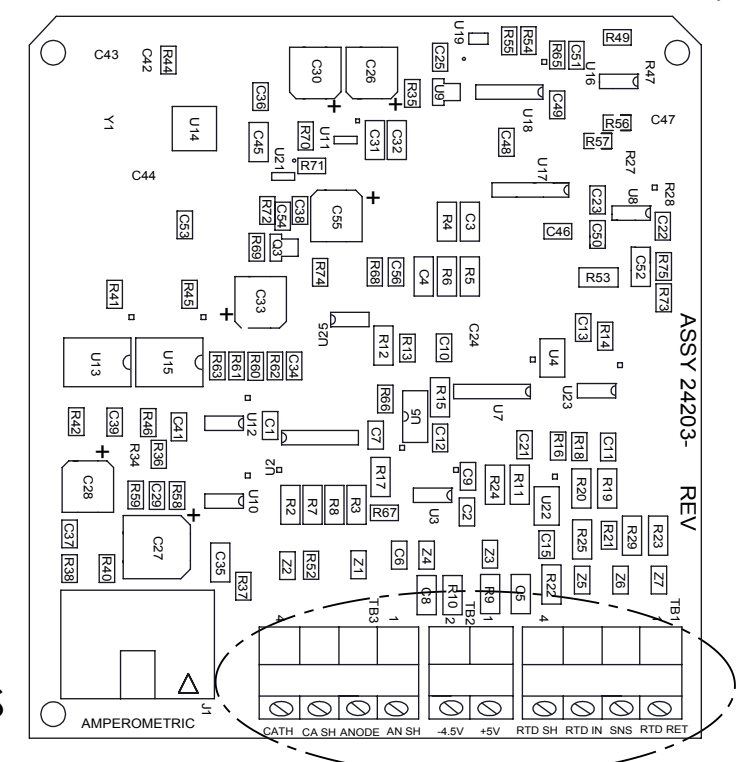
OPTION 24/34, 25/35, 26/36 (CHLORINE, DISSOLVED OXYGEN & OZONE SENSOR BOARD)

OPTION 22/32 (pH/ORP SENSOR BOARD)

OPTION 20/30 (CONTACTING CONDUCTIVITY SENSOR BOARD)

OPTION 27/37 (TURBIDITY SENSOR BOARD) MAY ONLY BE USED WITH A CLARITY II SENSOR.

OPTION 21/31 (TOROIDAL CONDUCTIVITY SENSOR BOARD) MAY ONLY BE USED WITH 200 SERIES SENSORS.



NON-INCENDIVE FIELD WIRING CONNECTIONS FOR CLASS 1, DIVISION 2, GROUPS ABCD

THIS DOCUMENT IS CERTIFIED BY CSA (REVISION F)
REVISIONS ARE NOT PERMITTED WITHOUT CSA APPROVAL

FEB 25, 2009	9956	B
RELEASE DATE	ECO NO	REV

DIMENSIONS ARE IN INCHES
REMOVE BURRS & SHARP EDGES
MACHINE FILLET RADII .020 MAX
NOMINAL SURFACE FINISH: 125 ANGLES ± 1/2°
.XX ± .03 .XXX ± .010

MATERIAL: NA
FINISH: NA

APPROVALS	DATE
DRAWN: B. JOHNSON	9-16-2008
CHECKED: J. PERKINS	2-26-2009
ENG APPR: D. CROWLEY	2-26-2009

THIS FILE CREATED USING SOLIDWORKS

Emerson ROSEMOUNT PROCESS MANAGEMENT ANALYTICAL
TITLE: NON INCENDIVE FIELD WIRING INSTALLATION (CSA) 1056
SIZE: D DWG NO: 1400325 REV: H
SCALE: 1:1 SHEET 1 OF 1

10. THIS DRAWING HAS BEEN SUBMITTED FOR THIRD PARTY CERTIFICATION. ANY CHANGE TO THIS DRAWING REQUIRES THIRD PARTY APPROVAL.
 9. THE EPA AND ISO CLARITY II TURBIDITY SENSORS ARE APPROVED BY CSA FOR CLASS 1 DIVISION 2 GROUPS ABCD AND NIFW FOR USE WITH THE OPTIONS 27 AND 37.
 8. THE 200 SERIES TOROIDAL CONDUCTIVITY SENSORS ARE APPROVED BY CSA FOR CLASS 1 DIVISION 2 GROUPS ABCD AND NIFW FOR USE WITH THE OPTIONS 21 AND 31.
 7. SIMPLE APPARATUS IS DEFINED AS AN ELECTRICAL DEVICE THAT DOES NOT GENERATE MORE THAN 1.2 V, 100mA, 25mW, 20µJ OR A PASSIVE COMPONENT THAT DOES NOT DISSIPATE MORE THAN 1.3W. CONTACTING CONDUCTIVITY SENSORS AND pH, ORP, AMPEROMETRIC SENSORS WITHOUT PREAMPS QUALIFY AS SIMPLE APPARATUS.
 6. NON-INCENDIVE FIELD WIRING METHODS MAY BE USED FOR CONNECTING SENSORS TO THE 20/30, 21/31, 22/32, 24/34, 25/35, 26/36 AND 27/37 OPTION BOARDS. SENSORS MUST BE CSA APPROVED AS NON-INCENDIVE FOR CLASS I, DIVISION 2, GROUPS ABCD WITH ENTITY INPUT VALUES OF Vmax AND Imax ≥ Voc AND Isc LISTED IN TABLES 1A TO 1C AND THE Ca AND Li OF THE SENSOR AND INTERCONNECTED WIRING MUST BE ≤ Ca AND La LISTED IN TABLES 1A TO 1C OR BE CLASSIFIED AS SIMPLE APPARATUS.
 5. MAXIMUM CABLE LENGTH IS 50 FEET FOR TURBIDITY SENSORS (OPTIONS 27 AND 37).
 4. DURING INSTALLATION, LEAVE MAXIMUM AMOUNT OF JACKET INSULATION POSSIBLE ON N.I. FIELD WIRING WITHIN INSTRUMENT ENCLOSURE. AFTER TERMINATION, WRAP N.I. FIELD WIRING WITHIN ENCLOSURE WITH MYLAR TAPE, TO ENSURE ADEQUATE DOUBLE INSULATION REMAINS.
 3. GROUND CONNECTION MAY BE MADE IN HAZARDOUS AREA.
 2. SEAL REQUIRED AT EACH CONDUIT ENTRANCE, WHEN CONDUIT IS USED.
 1. INSTALLATION MUST CONFORM TO THE CEC.
- NOTES: UNLESS OTHERWISE SPECIFIED