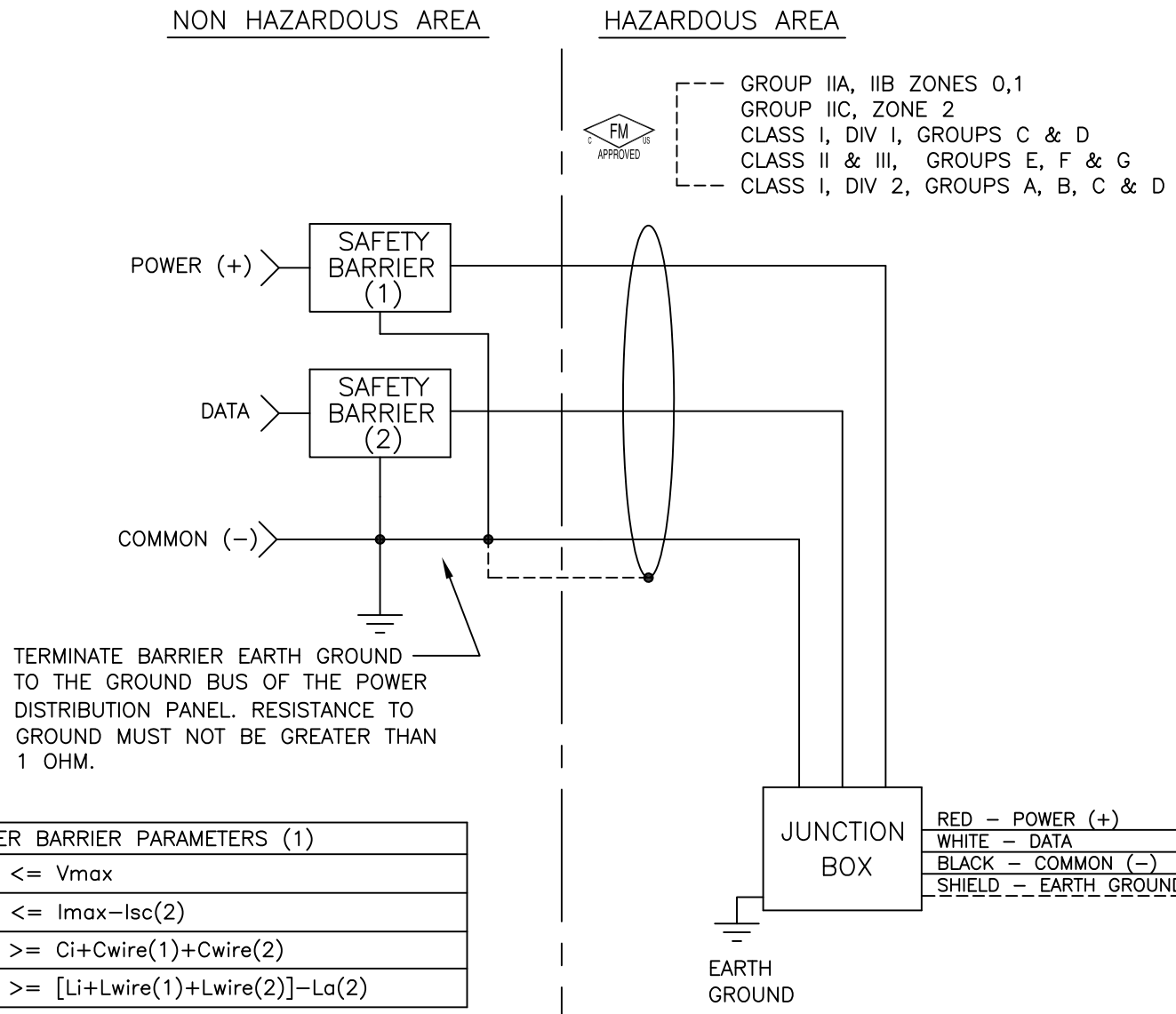
APPROVED DOCUMENT
CHANGES TO THIS DOCUMENT REQUIRE AGENCY APPROVAL

REVISION			
REV.	DESCRIPTION	DATE	BY
A	ADDED NOTE 8	07/18/05	KTP
B	CHANGED TITLE AND SERIES NAME	06/01/11	JCP



POWER (+) ZENER BARRIER PARAMETERS (1)	
Voc(1)	Voc(1) <= Vmax
Isc(1)	Isc(1) <= Imax–Isc(2)
Ca(1)	Ca(1) >= Ci+Cwire(1)+Cwire(2)
La(1)	La(1) >= [Li+Lwire(1)+Lwire(2)]–La(2)

DATA ZENER BARRIER PARAMETERS (2)	
Voc(2)	Voc(2) <= Vmax
Isc(2)	Isc(2) <= Imax–Isc(1)
Ca(2)	Ca(2) >= Ci+Cwire(2)+Cwire(1)
La(2)	La(2) >= [Li+Lwire(2)+Lwire(1)]–La(1)

It = Isc(1)+Isc(2)
It <= Imax

Vt = MAXIMUM VOLTAGE OF Voc(1) AND Voc(2)
Vt <= Vmax

La(total) = La(1)+La(2)
La(total) >= Li+Lwire(1)+Lwire(2)

IF WIRE PARAMETERS ARE UNKNOWN THEN THE FOLLOWING SHALL BE USED:

C_{wire} = 60pF/ft. (197pF/m.)
L_{wire} = .2uH/ft. (0.657uH/m.)

FOR EXAMPLE: 1000 ft X 60 pF/ft. = 0.06uF
100 m X 197 pF/m. = 0.0197uF

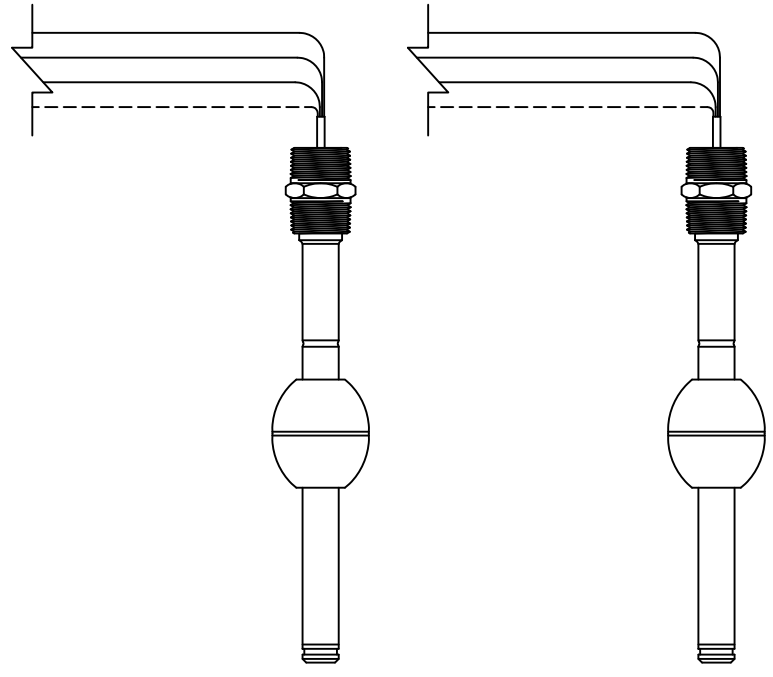
PROBE ENTITY PARAMETERS				
Pi	Vmax	Imax	Ci	Li
1W	7.93V	280mA	30.1µF	0µH

ENTITY PARAMETER NOTES:

1. PARAMETERS APPLY COLLECTIVELY TO BOTH "POWER (+)" AND "DATA" TERMINALS WITH RESPECT TO "COMMON (–)".
2. Pi IS THE TOTAL (OR SUM) OF THE POWER APPLIED TO BOTH THE POWER (+)" AND "DATA" TERMINALS.
3. Vmax IS THE MAXIMUM VOLTAGE THAT CAN BE APPLIED TO EITHER THE POWER (+)" OR "DATA" TERMINALS.
4. Imax IS THE TOTAL (OR SUM) OF THE CURRENT APPLIED TO BOTH THE POWER (+)" AND "DATA" TERMINALS.
5. Ci & Li IS THE TOTAL CAPACITANCE AND INDUCTANCE OF THE PROBE AND IS THE MAXIMUM VALUE THAT CAN APPEAR ON EITHER THE "POWER (+)" OR "DATA" TERMINALS INDIVIDUALLY OR THE COMBINATION OF BOTH.

NOTES: UNLESS OTHERWISE SPECIFIED

1. MINIMUM VOLTAGE TO OPERATE THE 7250 PROBE IS 3.6V.
2. THE SELECTED BARRIER SHALL BE APPROVED WITH INTRINSICALLY SAFE CIRCUITS FOR THE HAZARDOUS LOCATION GROUP AND ZONE AS APPROPRIATE FOR THE APPLICATION AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.
3. ELECTRONIC EQUIPMENT CONNECTED TO THE ASSOCIATED APPARATUS MUST NOT USE OR GENERATE MORE THAN 250Vrms, WITH RESPECT TO EARTH GROUND.
4. INSTALLATIONS SHALL COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (ANSI/NFPA 70) AND THE CANADIAN ELECTRICAL CODE (CEC).
5. ALL CABLES MUST BE 24 GAUGE OR HEAVIER.
6. INSTALLATIONS SHALL BE IN ACCORDANCE WITH ANSI/ASI RP 12.06.01, INSTALLATION OF INTRINSICALLY SAFE SYSTEMS FOR HAZARDOUS (CLASSIFIED) LOCATIONS.
7. FOR FM APPROVAL, THE ASSOCIATED APPARATUS MUST BE FM APPROVED.
8. IN ACCORDANCE WITH ATEX SPECIAL CONDITIONS FOR USE, THE FOLLOWING SHOULD BE CONSIDERED; THE SURFACE OF THE ISOLATING MATERIAL (PVDF) EXCEEDS THE LIMIT OF 4CM^2 AS SPECIFIED IN EN50284, AND THE PROBABILITY OF ELECTROSTATIC CHARGING NEEDS TO BE CONSIDERED FOR USE IN CATEGORY 1 (ZONE 0).



NOTE: MAXMIMUM NUMBER OF PROBES AND CABLE LENGTH DEPENDS ON ENTITY PARAMETERS OF ASSOCIATED APPARATUS.

THIRD ANGLE PROJECTION

SURFACE FINISH 63 UNLESS OTHERWISE SPECIFIED

TOLERANCE ALLOWANCE UNLESS OTHERWISE SPECIFIED:
+/– 0.010 ON 2 PLACE DECIMALS
+/– 0.005 ON 3 PLACE DECIMALS
+/– 0.0005 ON 4 PLACE DECIMALS
+/– 30 MIN. ON ALL ANGLES

AMETEK®
AUTOMATION & PROCESS TECHNOLOGIES
Clawson, MI 48017 U.S.A.

DR. KTP
DATE 6/16/05
APP. JCP
DATE 6/1/11
SCALE NONE

TITLE
INSTALLATION DRAWING
I.S. VERSION
HR DIGITAL STIK

DRAWING NO.	REV.	SIZE
E0241200	B	B