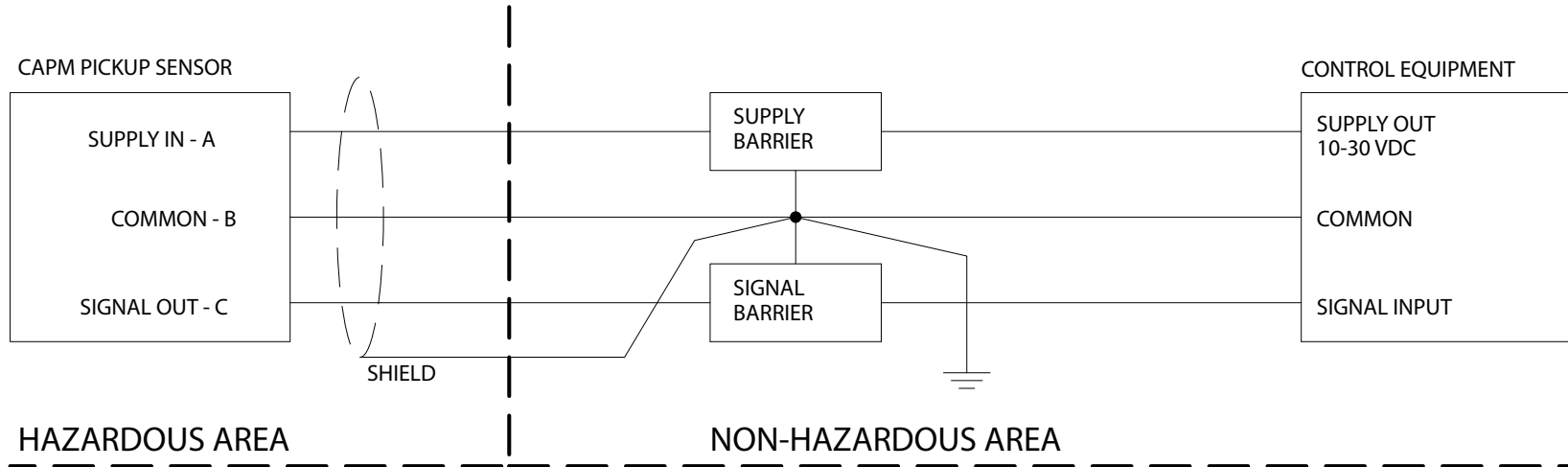



# CAPM INSTALLATION IN HAZARDOUS AREA MODELS 2o, 2i, 3o, 3i


REV	DESCRIPTION	DATE	APPR.BY
A	CONCEPT DRAWING	03-26-96	J.S.
B	ADDED o & i VERSIONS	02-20-97	J.S.
C	ADDED 2nd SET OF ENTITY PARAMETERS	07-10-98	J.S.
D	TITLE BLOCK CHANGE ONLY TO AW-LAKE	12-01-08	F.J.



## NOTES ON CAPM SENSORS

1. COMMON (B) IS CONNECTED TO SENSOR CASE, BUT CAN BE DISCONNECTED.
2. SUPPLY: 10-30 VDC  
20 mA @ 15 VOLT, MAX 35 mA
3. ENTITY PARAMETERS

FOR CAPM'S BEARING THE  MARK  
 $C_i = 0$ ,  $L_i = 1.5 \text{ mH}$   
 $V_{max} = 30 \text{ VDC}$ ,  $I_{max} = 90 \text{ mA}$

FOR CAPM'S WITHOUT THE  MARK  
 $C_i = 0$ ,  $L_i = 1.5 \text{ mH}$   
 $V_{max} = 30 \text{ VDC}$ ,  $I_{max} = 110 \text{ mA}$

## NOTES ON BARRIERS

1. MUST BE INSTALLED IN ACCORDANCE WITH GUIDELINES PROVIDED BY THE MANUFACTURER, AND SUITABLE FOR FOR CLASS 1, GROUPS A, B, C AND D HAZARDOUS LOCATIONS.
2. CABLE CAPACITANCE PLUS INTRINSICALLY SAFE EQUIPMENT CAPACITANCE MUST BE LESS THAN THE MARKED CAPACITANCE ( $C_a$ ) SHOWN ON ANY BARRIER USED. THE SAME APPLIES FOR INDUCTANCE. TYPICAL CABLE CAPACITANCE IS 60pF/ft, AND TYPICAL CABLE INDUCTANCE IS 0.20μH/ft. (FROM UL913)
3. SELECTED BARRIERS MUST MEET THE FOLLOWING CRITERIA:  
 $V_{oc} < V_{max}$   
 $I_{sc} < I_{max}$   
 $C_a > C_i + C_{cable}$   
 $L_a > L_i + L_{cable}$   
 THE SUM OF BOTH CHANNELS ON DUAL CHANNEL BARRIER AND THE SUM OF EACH CHANNEL ON SINGLE CHANNEL BARRERS MUST NOT EXCEED  $I_{max}$ .  
 ALL BARRIERS MUST HAVE SAME POLARITY.
4. CAPM MUST BE CONNECTED TO AN EARTH GROUND TERMINAL OF LESS THAN 1Ω.

## NOTES ON CONTROL EQUIPMENT

1. MAINS POWER MUST NOT EXCEED 250 VOLTS RESPECT TO EARTH.

THIS PRINT, INCLUDING THE INFORMATION CONTAINED IN IT, IS THE PROPERTY OF AW-LAKE COMPANY. IT IS CONSIDERED PROPRIETARY IN NATURE AND MAY NOT BE USED OR DISCLOSED OUTSIDE OF AW-LAKE COMPANY, EXCEPT UNDER PRIOR WRITTEN AGREEMENT. ANY MODIFICATIONS MADE TO OR COMMENTS WRITTEN ON THIS DRAWING BY UNAUTHORIZED PERSONNEL WILL VOID THIS DRAWING. ALL DIMENSIONS SHOWN ARE SUBJECT TO CHANGE WITHOUT NOTICE.



TITLE: CAPM INSTALLATION

DRAWING NUMBER: CAP2902

DATE: 03-26-96 REV: D DRAWN BY: GUS SKIAKER

CHECKED BY: G.S. PAGE OF 1 SCALE: NONE