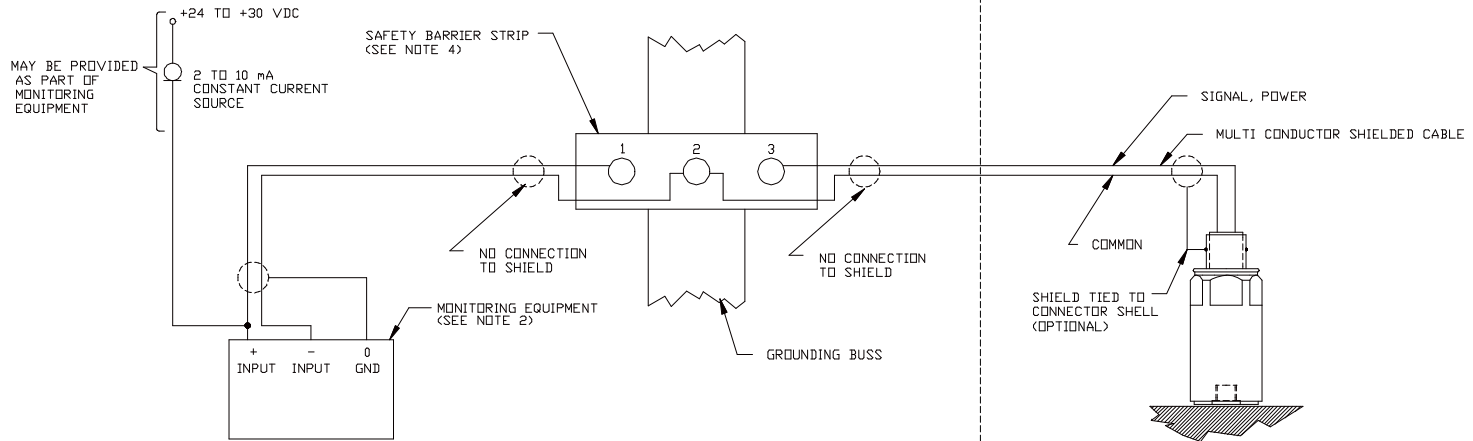


REVISIONS					
REV	ECO	DESCRIPTION	DRAFT	CHECK	APP'D
A	-	RELEASE			
B 276 UPDATE					

- NOTES:
- NO REVISION WITHOUT PRIOR CSA APPROVAL.
  - CONTROL/MONITORING EQUIPMENT CONNECTED TO ASSOCIATED INTRINSICALLY SAFE APPARATUS CAN NOT USE OR GENERATE MORE THAN 250 VRMS.
  - MAXIMUM SHOCK LIMIT FOR GROUPS A & B IS 2,300 g PEAK.
  - SAFETY BARRIER STRIP MAY BE ANY CSA APPROVED BARRIER STRIP WITH EITHER OF THE FOLLOWING PARAMETERS:
    - 31.5V MAX, 68mA MAX ( ACTIVE CURRENT LIMITING ).
    - 28V MAX, 300 OHM MIN.

NON-HAZARDOUS AREA OR CLASS I DIVISION 2 AREA

HAZARDOUS AREA CLASS I, DIV 1 GROUP A, B, C, D



MODEL NUMBERS		
CMSS762-CA	CMSS793-CA	CMSS793V-CA
CMSS766-CA	CMSS793L-CA	CMSS793V-5-CA

MAXIMUM TOTAL SERIES INDUCTANCE AND SHUNT CAPACITANCE OF WIRING BETWEEN TRANSDUCER AND BARRIER STRIP		
GROUP	INDUCTANCE	CAPACITANCE
A	8 mH	0.07µF
B	8 mH	0.07µF
C	30 mH	0.21µF
D	64 mH	0.56µF

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		TOLERANCES		TITLE	
LINEAR	T.P. ZONE	ANGULAR	CONNECTION DIAGRAM ACCELEROMETER IN HAZARDOUS LOCATION.		
XX±.03	/ 0.06 T.P.	0°30'			
XXX±.010	/ 0.020 T.P.				
DO NOT SCALE DRAWING		CODE IDENT. NO 13048			
MATERIAL		DRAWN		MODEL	
		DESIGNER M. WALTERS		SEE TABLE ABOVE	
		CHECKED M. WALTERS		SIZE	
		ENGINEER M. WALTERS		DRAWING NO. 31256700	
		APPROVED M. WALTERS		REV B	
		4-4-94		SCALE: NONE	
		4-4-94		CAD FILENAME: 31256700	
		4-4-94		SHEET 1 OF 2	

REVISIONS

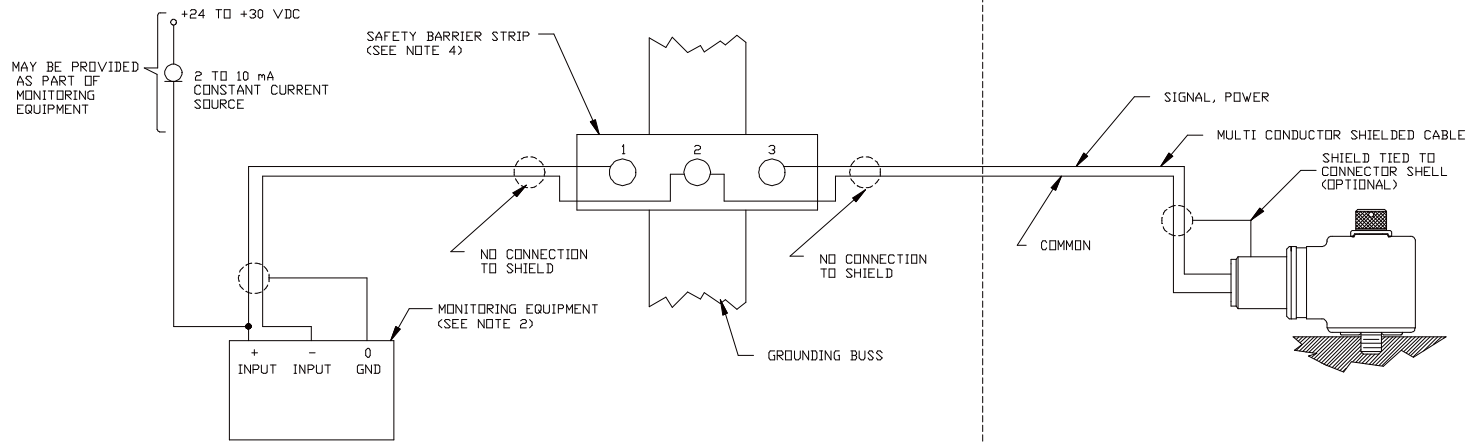
REV	ECO	DESCRIPTION	DRAFT	CHECK	APP'D
A	-	RELEASE			
B	276	UPDATE			

NOTES:

1. NO REVISION WITHOUT PRIOR CSA APPROVAL.
2. CONTROL/MONITORING EQUIPMENT CONNECTED TO ASSOCIATED INTRINSICALLY SAFE APPARATUS CAN NOT USE OR GENERATE MORE THAN 250 VRMS.
3. MAXIMUM SHOCK LIMIT FOR GROUPS A & B IS 2,300 g PEAK.
4. SAFETY BARRIER STRIP MAY BE ANY CSA APPROVED BARRIER STRIP WITH EITHER OF THE FOLLOWING PARAMETERS:  
 A) 315V MAX, 68mA MAX < ACTIVE CURRENT LIMITING >  
 B) 28V MAX, 300 OHM MIN.

NON-HAZARDOUS AREA OR  
CLASS I DIVISION 2 AREA

HAZARDOUS AREA  
CLASS I, DIV 1  
GROUP A, B, C, D



MODEL NUMBERS	
CMSS797-CA	CMSS797L-CA

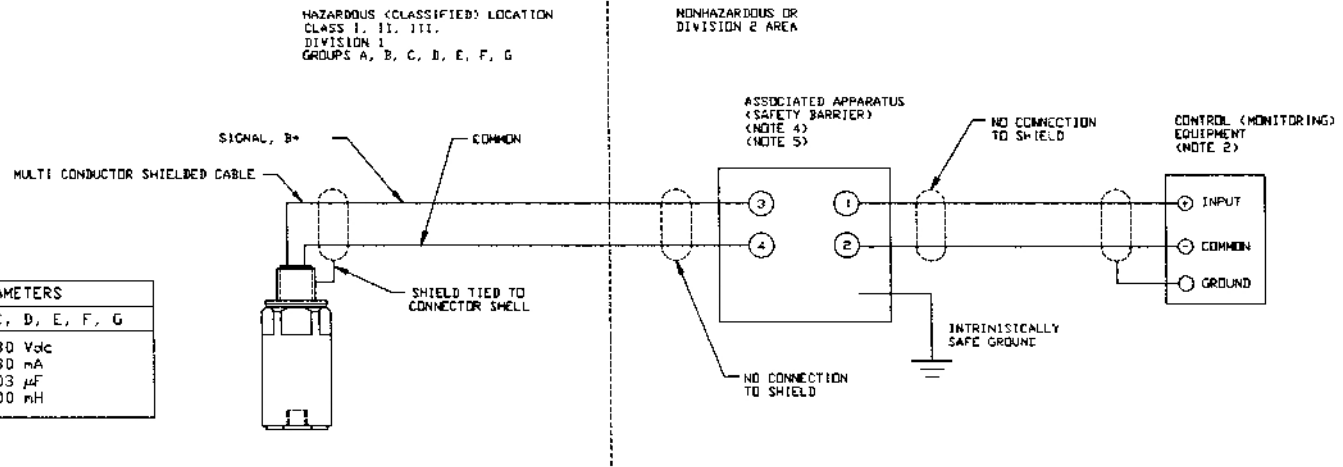
MAXIMUM TOTAL SERIES INDUCTANCE AND SHUNT CAPACITANCE OF WIRING BETWEEN TRANSDUCER AND BARRIER STRIP		
GROUP	INDUCTANCE	CAPACITANCE
A	8 mH	0.07µF
B	8 mH	0.07µF
C	30 mH	0.21µF
D	64 mH	0.56µF

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES				TITLE	
TOLERANCES				CONNECTION DIAGRAM ACCELEROMETER IN HAZARDOUS LOCATION.	
LINEAR	T.P. ZONE	ANGULAR			
XX=±.03	/ 0.06 T.P.	0°30'			
XXX=±.010	/ 0.020 T.P.				
DO NOT SCALE DRAWING		CODE IDENT. NO 13048			
MATERIAL		DRAWN		MODEL	
		DESIGNER M. WALTERS		SIZE	
		CHECKED M. WALTERS		DRAWING NO.	
		ENGINEER M. WALTERS		31256700	
		APPROVED M. WALTERS		REV	
		4-4-94		B	
		4-4-94		SCALE: NONE	
		4-4-94		CAD FILENAME: 31256700	
				SHEET 2 OF 2	

31413400

REVISIONS					
REV	ECO	DESCRIPTION	DRAFT	CHECK	APP'D
A	-	RELEASE	BLC	SHB	SHB
B	8079	REDRAWN, REVISED INDUCTANCE AND SHUNT CHART, ADDED HTL BARRIER 1/27/93	BLC	SHB	SHB
C	1624	REVISED FOR ENTITY CERT. CHANGED MODEL NUMBERS	CM	MW	MW

- NOTES:
- $V_{oc} \text{ OR } V_t \leq V_{max}$ ,  $I_{sc} \text{ OR } I_t \leq I_{max}$ ,  $C_a \geq C_1 + C_{cable}$ ,  $L_a \geq L_1 + L_{cable}$ .
  - CONTROL EQUIPMENT CONNECTED TO BARRIER MUST NOT USE OR GENERATE MORE THAN 250 Vrms OR Vdc.
  - INSTALLATION SHOULD BE IN ACCORDANCE WITH ANSI/ISA RP12.6 "INSTALLATION OF INTRINSICALLY SAFE SYSTEMS FOR HAZARDOUS (CLASSIFIED) LOCATIONS" AND THE NATIONAL ELECTRICAL CODE (ANSI/NFPA 70).
  - THE CONFIGURATION OF ASSOCIATED APPARATUS MUST BE FMRC APPROVED.
  - ASSOCIATED APPARATUS MANUFACTURER'S INSTALLATION DRAWING MUST BE FOLLOWED WHEN INSTALLING THIS EQUIPMENT.
  - NO REVISION TO DRAWING WITHOUT PRIOR FMRC APPROVAL.



ENTITY PARAMETERS	
GROUPS: A, B, C, D, E, F, G	
$V_{max}$	= 30 Vdc
$I_{max}$	= 180 mA
$C_1$	= 0.03 $\mu$ F
$L_1$	= 0.00 mH

MODEL NUMBERS	ADDITIONAL RESTRICTIONS FOR MAXIMUM ALLOWED CABLE CAPACITANCE		
	GRP A,B	GRP C,E	GRP D,F,G
CMSS762-FM, CMSS762SG-FM CMSS766-FM, CMSS766SG-FM CMSS786A-FM, CMSS786B-FM, CMSS786F-FM	NONE	NONE	NONE
CMSS793-FM, CMSS793SG-FM	0.07 $\mu$ F	0.21 $\mu$ F	0.56 $\mu$ F
CMSS793L-FM, CMSS793LSG-FM	0.02 $\mu$ F	0.06 $\mu$ F	0.16 $\mu$ F
CMSS797-FM, CMSS797L-FM	0.03 $\mu$ F	0.09 $\mu$ F	0.24 $\mu$ F

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES				TITLE	
TOLERANCES				CONNECTION DIAGRAM	
LINEAR	XX=±0.03 / 10.06 T.P.	ANGULAR	0°30'	ACCELEROMETER IN HAZARDOUS LOCATION, SHIELDED TWISTED PAIR	
XXX=±0.010 / 10.020 T.P.		DO NOT SCALE DRAWING		CODE IDENT. NO.	13048
MATERIAL		DESIGNER	CMSS793L-FM	MODEL	S2E
FINISH		CHECKED	M.W.	SEE TABLE ABOVE	DRAWING NO.
		ENGINEER	M.W.		31413400
		APPROVED	M.W.	SCALE: NONE	REV
				CAD FILENAME: WR_31413400	C
					SHEET 1 OF 1

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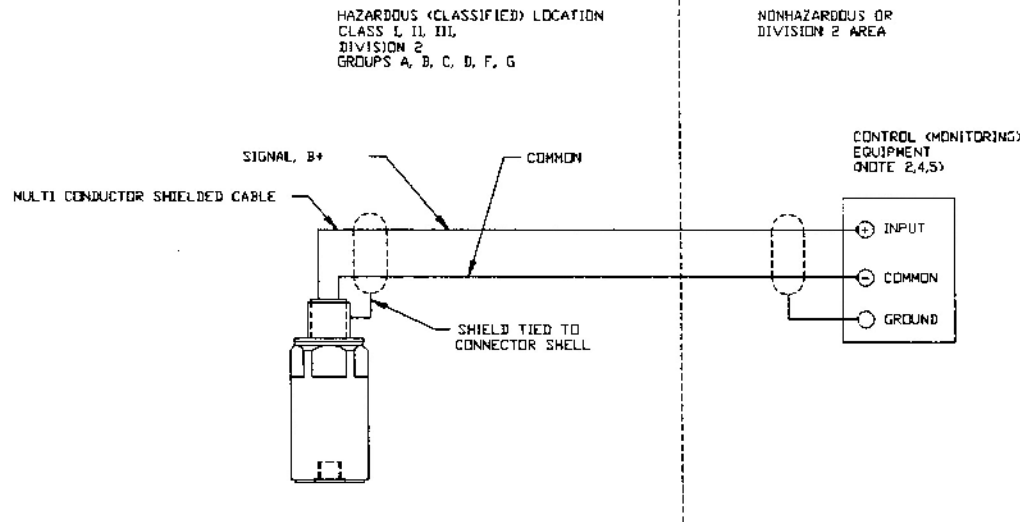
31533500

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## NOTES:

1.  $V_{oc}$  OR  $V_t \leq V_{max}$ ,  $I_{sc}$  OR  $I_t \leq I_{max}$ ,  $C_a \geq C_i + C_{cable}$ ,  $L_a \geq L_i + L_{cable}$ .
2. EQUIPMENT CONNECTED TO ASSOCIATED INTRINSICALLY SAFE APPARATUS MUST NOT USE OR GENERATE MORE THAN 250 Vrms OR Vdc.
3. INSTALLATION SHOULD BE IN ACCORDANCE WITH ANSI/ISA RP12.6 "INSTALLATION OF INTRINSICALLY SAFE SYSTEMS FOR HAZARDOUS (CLASSIFIED) LOCATIONS" AND THE NATIONAL ELECTRICAL CODE (ANSI/NFPA 70).
4. CONTROL (MONITORING) EQUIPMENT MUST BE FMRC APPROVED.
5. THE CONTROL (MONITORING) EQUIPMENT MANUFACTURER'S INSTALLATION DRAWING MUST BE FOLLOWED WHEN INSTALLING THIS EQUIPMENT.
6. NO REVISION TO DRAWING WITHOUT PRIOR FMRC APPROVAL.

REVISIONS					
REV	ECO	DESCRIPTION	DRAFT	CHECK	APP'D
A	-	RELEASE	CM	MW	MW 5-6-94



## ENTITY PARAMETERS

GROUPS: A, B, C, D, F, G

$V_{max} = 30$  Vdc  
 $I_{max} = 150$  mA  
 $C_i = 0.32$   $\mu$ F  
 $L_i = 0.00$  mH

## MODEL NUMBERS

CMSS793V-FM, CMSS793VSG-FM	CMSS797V-FM
CMSS793V-1-FM, CMSS793VSG-1-FM	
CMSS793V-5-FM, CMSS793VSG-5-FM	

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES

TOLERANCES

LINEAR	T.P. ZONE	ANGULAR
XX=±.03	/ ±0.06 T.P.	°030'
XXX=±.010	/ ±0.020 T.P.	

DO NOT SCALE DRAWING

MATERIAL

FINISH

CODE IDENT. NO.  
13048

DRAWN *C. J. Moran* 5-6-94

DESIGNER *M. J. Walton* 5-6-94

CHECKED *M. J. Walton* 5-6-94

ENGINEER *M. J. Walton* 5-6-94

APPROVED *M. J. Walton* 5-6-94

TITLE

CONNECTION DIAGRAM, VELOCITY  
TRANSDUCER IN DIVISION 2  
LOCATION, SHIELDED TWISTED PAIR

MODEL  
SEE TABLE  
ABOVE

SIZE

DRAWING NO.

31533500

REV

A

SCALE: NONE

CAD FILENAME:  
WR: 31533500

SHEET 1 OF 1

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