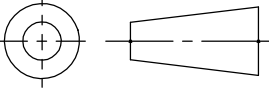


Third angle projection



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STRATFORD, CT 06614

DOCUMENT REVISION LOG

A	ECO-0001376	INSTALLATION DIAGRAM INDUSTRIAL DIGITAL GAUGE FM CLASS 1 DIVISION 1 GROUPS A, B, C, & D	DMMc	4/12/2004
B	ECO-0001577	ADD CANADIAN ELECTRICAL CODE TO SHEETS 3, 4, 5. LABEL/SHOW AREA DESIGNATIONS ON INSTALLATION DIAGRAM. ADDED A TEX MARKING	DMMc	9/8/2004
C	ECO-00001693	ADD STATEMENT FOR A TEX CONFORMITY	DMMc	12/22/2004
D	ECO-00002263	UPDATED COMPANY LOGO	JS	3/7/2006
E	ECO-0003215	ADDED SIRA CERTIFICATION NOTE.	JS	1/30/2008
F	ECO-0004475	CHANGED SIRA TO A TEX CERTIFICATION.	RJ	6/1/2010
G	ECO-0006780	MODIFIED NOTES, FM CONTROL UPDATE, UPDATED DWG, SEE ECR	JE	10/17/2013

INSTALLATION DIAGRAM, INDUSTRIAL DIGITAL GAUGE

INTRINSICALLY SAFE LOCATION
CLASS I DIVISION 1 GROUPS A, B, C, D
CLASS II DIVISION 1 GROUPS E, F, G
CLASS III DIVISION 1
T3C at 140°F (60°C) MAX. AMBIENT TYPE 4

NONINCENDIVE HAZARDOUS LOCATION
CLASS 1 DIVISION 2, GROUPS A, B, C, D
CLASS II DIVISION 2 GROUPS F, G

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DRAWN BY	DATE
C.FASCIANO	03/25/04

DIMENSIONAL TOLERANCES
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ALL DIMENSIONS ARE IN INCHES

TOLERANCES ARE:
3 place decimal .000 ±.007
2 place decimal .00 ±.015
1 place decimal .0 ±.030
Angle ± 1 deg
Chamfer ± 5 deg

DO NOT SCALE DRAWING

INSTALLATION DIAGRAM
INDUSTRIAL DIGITAL GAUGE
FACTORY MUTUAL
INTRINSICALLY SAFE LOCATION

SIZE

DWG. NO.

REV.

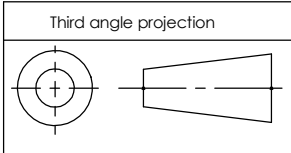
A

825A023

G

Scale: NONE

Sheet 1 of 5



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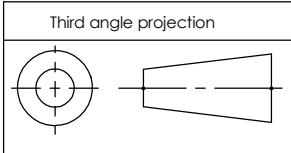
Sheet No.	Description	Revision
1	ECN REVISION SHEET & ENTITY PERAMETERS	G
2	INDEX SHEET	G
3	4-20mA UNIT - INSTALLATION DIAGRAM	G
4	XPWR UNIT - INSTALLATION DIAGRAM	G
5	BATTERY DEVICE - INSTALLATION DIAGRAM	G

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C.FASCIANO	03/25/04

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TOLERANCES ARE:	
3 place decimal .000	±.007
2 place decimal .00	±.015
1 place decimal .0	±.030
Angle	Chamfer
± 1 deg	± 5 deg
DO NOT SCALE DRAWING	

INSTALLATION DIAGRAM INDUSTRIAL DIGITAL GAUGE FACTORY MUTUAL INTRINSICALLY SAFE LOCATION		
SIZE	DWG. NO.	REV.
A	825A023	G
Scale: NONE Sheet 2 of 5		



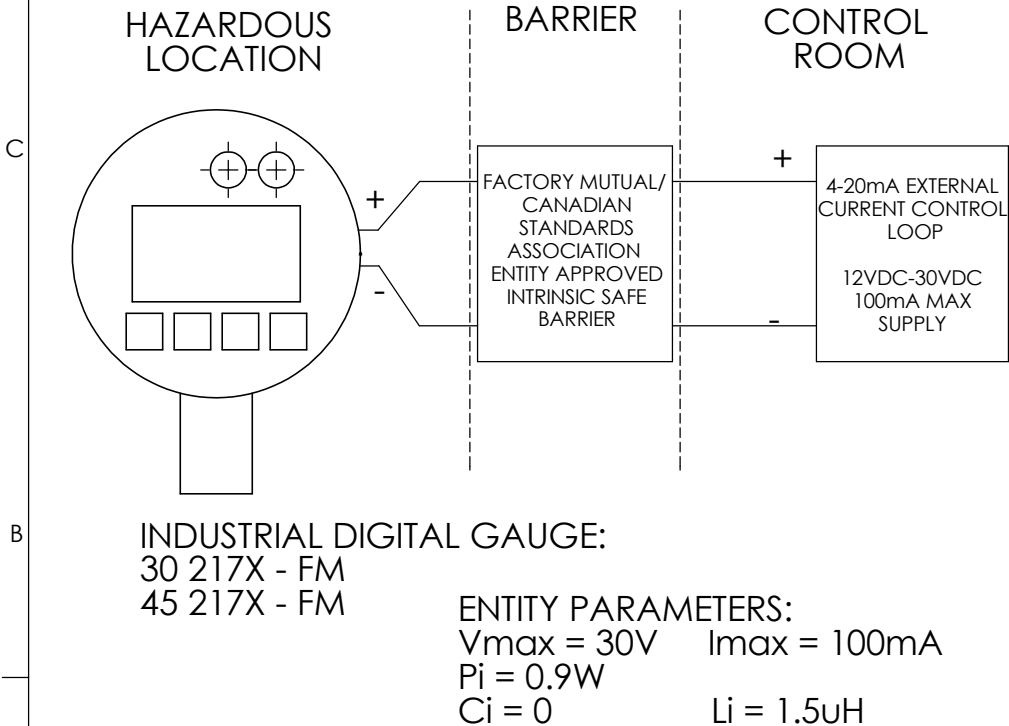
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NOTES:

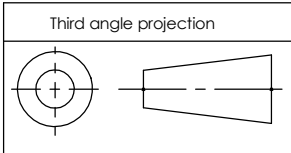
1. ENTITY CONCEPTS DEFINITION: THE ENTITY CONCEPT ALLOWS INTERCONNECTION OF INTRINSICALLY SAFE APPARATUS TO ASSOCIATED APPARATUS NOT SPECIFICALLY EXAMINED IN SUCH COMBINATION. THE CRITERIA FOR INTERCONNECTION IS THAT THE VOLTAGE AND CURRENT WHICH INTRINSICALLY SAFE APPARATUS CAN RECEIVE AND REMAIN INTRINSICALLY SAFE, CONSIDERING FAULTS, MUST BE EQUAL TO OR GREATER THAN THE VOLTAGE (VOC) AND CURRENT (ISC) LEVELS WHICH CAN BE DELIVERED BY THE ASSOCIATED APPARATUS, CONSIDERING FAULTS AND APPLICABLE FACTORS. IN ADDITION, THE MAXIMUM UNPROTECTED CAPACITANCE (CI) AND INDUCTANCE (LI) OF THE INTRINSICALLY SAFE APPARATUS, INCLUDING INTERCONNECTION WIRING, MUST BE EQUAL TO OR LESS THAN THE CAPACITANCE AND INDUCTANCE WHICH CAN BE SAFELY CONNECTED TO ASSOCIATED APPARATUS.
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4. INSTALLATION SHOULD BE IN ACCORDANCE WITH ANSI/ISA RP12.06.01 "INSTALLATION OF INTRINSICALLY SAFE SYSTEMS FOR HAZARDOUS (CLASSIFIED) LOCATION", THE NATIONAL ELECTRICAL CODE (ANSI/NFPA 70) AND THE CANADIAN ELECTRICAL CODE.
5. SUPPLY EQUIPMENT SHALL NOT USE OR GENERATE IN EXCESS OF 250V.
6. **WARNING:** PART OF THE ENCLOSURE IS CONSTRUCTED FROM PLASTIC. TO PREVENT THE RISK OF ELECTROSTATIC SPARKING THE PLASTIC SURFACE SHOULD ONLY BE CLEANED WITH A DAMP CLOTH.
7. **WARNING:** THE APPARATUS ENCLOSURE MAY CONTAIN ALUMINUM WHICH IS CONSIDERED TO CONSTITUTE A POTENTIAL RISK OF IGNITION BY IMPACT OR FRICTION. CARE MUST BE TAKEN INTO ACCOUNT DURING INSTALLATION AND USE TO PREVENT IMPACT OR FRICTION.



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CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE		DIMENSIONAL TOLERANCES UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES		4-20mA UNIT INSTALLATION DIAGRAM INDUSTRIAL DIGITAL GAUGE FACTORY MUTUAL INTRINSICALLY SAFE LOCATION			
		TOLERANCES ARE:					
		3 place decimal .000 ±.007					
		2 place decimal .00 ±.015					
DRAWN BY		DATE		SIZE	DWG. NO.		
C.FASCIANO		03/25/04		A	825A023		
				DO NOT SCALE DRAWING	Scale: NONE		
					Sheet 3 of 5		

REV.	G
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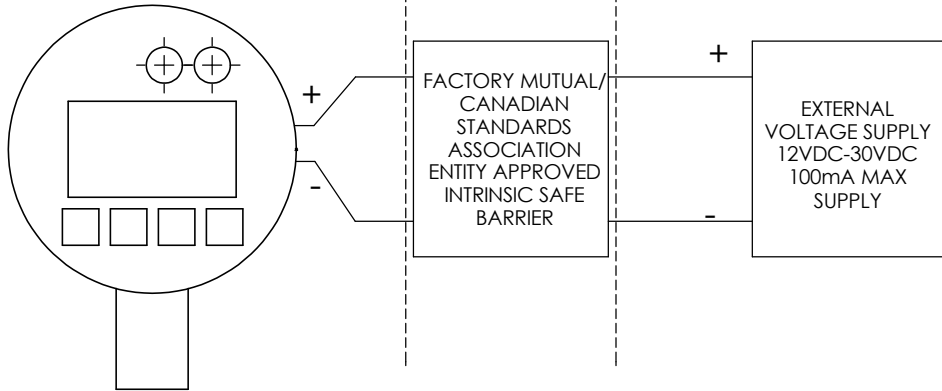
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HAZARDOUS
LOCATION

BARRIER

CONTROL
ROOM



INDUSTRIAL DIGITAL GAUGE:

30 227X - FM
45 227X - FM

ENTITY PARAMETERS:

$V_{max} = 30V$ $I_{max} = 100mA$
 $P_i = 0.9W$
 $C_i = 0$ $L_i = 1.5uH$

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TOLERANCES ARE:

3 place decimal .000	±.007
2 place decimal .00	±.015
1 place decimal .0	±.030

Angle	Chamfer
± 1 deg	± 5 deg

CAD GENERATED DRAWING,
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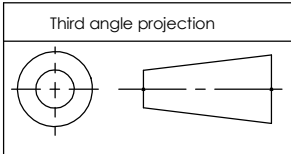
DRAWN BY	DATE
C.FASCIANO	03/25/04

DO NOT SCALE DRAWING

XPWR UNIT
INSTALLATION DIAGRAM
INDUSTRIAL DIGITAL GAUGE
FACTORY MUTUAL
INTRINSICALLY SAFE LOCATION

SIZE	DWG. NO.	REV.
A	825A023	G

Scale: NONE Sheet 4 of 5

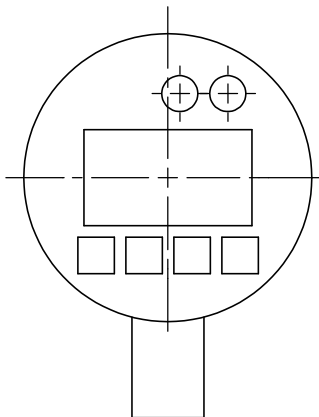


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HAZARDOUS LOCATION



INDUSTRIAL
DIGITAL GAUGE:
30 207X - FM
45 207X - FM

BATTERY INFORMATION AND REPLACEMENT:

4.5 INCH SYSTEM: ONLY USE (2) "C" CELL ALKALINE
DURACELL MN1400 OR ENERGIZER E93 OR EN93.
NON-RECHARGEABLE BATTERIES.

3.0 INCH SYSTEM: ONLY USE (2) "AA" CELL ALALINE
DURACELL MN1500 NON-RECHARGEABLE BATTERIES.

DO NOT MIX AGES OR BRANDS OF BATTERIES.

DO NOT REPLACE BATTERIES IN HAZARDOUS LOCATION

NOTES:

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TOLERANCES ARE:

3 place decimal .000 ±.007

2 place decimal .00 ±.015

1 place decimal .0 ±.030

Angle

± 1 deg

Chamfer

± 5 deg

DO NOT SCALE DRAWING

BATTERY DEVICE
INSTALLATION DIAGRAM
INDUSTRIAL DIGITAL GAUGE
FACTORY MUTUAL
INTRINSICALLY SAFE LOCATION

SIZE

DWG. NO.

REV.

A

825A023

G

Scale: NONE Sheet 5 of 5

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