TOLERANCES ARE:
3 place decimal .000

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

DIMENSIONAL TOLERANCES
3 place decimal .000
2 place decimal .015
1 place decimal 0 ±.030

DATUMS
A
B
C
D

REV.
A
B
C
D

G

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/SOW AREA DESIGNATIONS ON INSTALLATION DIAGRAM. ADDED ATEX MARKING | DMMc | 9/8/2004 |
| C   | ECO-00001693 | ADD STATEMENT FOR ATEX 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 ATEX CERTIFICATION. | RJ | 6/1/2010 |
| G   | ECO-0006780 | MODIFIED NOTES, FM CONTROL UPDATE, UPDATED DWG, SEE ECR | JE | 10/17/2013 |
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Third angle projection

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.

2. USE OF THE INDUSTRIAL DIGITAL GAUGE IN THE FIELD SHALL BE IN ACCORDANCE WITH THE MANUFACTURER’S INSTRUCTIONS AND THE INDUSTRIAL DIGITAL GAUGE MANUFACTURER’S INSTALLATION DIAGRAM.

3. INTRINSIC SAFETY IS CONTINGENT UPON THE INDUSTRIAL DIGITAL GAUGE’S INPUT / OUTPUT CABLE CLAMP, FRONT HOUSING, BATTERY COMPARTMENT AND REAR COVERS BEING PROPERLY INSTALLED ON THE INDUSTRIAL DIGITAL GAUGE AS REFERENCED IN THE INDUSTRIAL DIGITAL GAUGE OPERATING MANUAL.

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.

INDUSTRIAL DIGITAL GAUGE:
30 217X - FM
45 217X - FM

ENTITY PARAMETERS:
Vmax = 30V   Imax = 100mA
Pi = 0.9W   Li = 1.5uH
Ci = 0

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45 227X - FM

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V_max = 30V
I_max = 100mA
P_i = 0.9W
C_i = 0
L_i = 1.5uH

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

DIMENSIONAL TOLERANCES
UNLESS OTHERWISE SPECIFIED
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

FILE/CERT# 3047550

CAD GENERATED DRAWING
DO NOT MANUALLY UPDATE

SCALE: NONE

Sheet 4 of 5
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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 ALKALINE DURACELL MN1500 NON-RECHARGEABLE BATTERIES.

DO NOT MIX AGES OR BRANDS OF BATTERIES.

DO NOT REPLACE BATTERIES IN HAZARDOUS LOCATION.