Sensing and Control

Installation Manual for Intrinsically-Safe Transmitters
Option Code 2n
Honeywell
Sensotec Sensors
2080 Arlingate Lane
Columbus, Ohio 43228, USA
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FAX: (614)850-1111
Toll Free: 1-800-848-6564
E-mail: service@sensotec.com
http://www.honeywell.com/sensotec
http://www.sensotec.com

Intrinsically-Safe Transmitter
Option Code 2n

Document Number: 008-0547-00
Rev. C: September, 2004

⚠️ WARNING
The operator of this instrument is advised that if the equipment is used in a manner not specified in this manual, the protection provided by the equipment may be impaired.

⚠️ WARNING
PERSONAL INJURY
DO NOT USE these products as safety or emergency stop devices, or in any other application where failure of the product could result in personal injury.
Failure to comply with these instructions could result in death or serious injury.

CAUTION
Only qualified, service-trained personnel who are aware of the hazards involved should connect external wiring to these products.
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Chapter 1
Introduction

This installation manual is shipped with each transducer with an option code 2n internal amplifier. It supplements the Calibration Certificate that ships with the transducer which contains other important information about wiring and use of the transducer in hazardous locations.

The most current information is available from our website:

http://www.honeywell.com/sensotec
2.1 Introduction

2.1.1 Intrinsic Safety
A transducer ordered with option code 2n includes a 2-wire, 4-20mA amplifier that has been certified as “intrinsically safe” by the following recognized testing laboratories:

- Factory Mutual Research Corporation (FM), United States of America
- Canadian Standards Association (CSA), Canada
- Central Laboratory for the Electric Industry (LCIE), France. LCIE is a European-approved certification body. KEMA is the issuer of the EC-type Examination Certificate.

“Intrinsic safety” insures that a circuit operated under normal and specified fault conditions is not capable of causing ignition of the prescribed explosive atmosphere.

2.2 Installation

The certification of each testing laboratory is valid when the transducer has been installed according the installation drawings or certificates of conformity included in this chapter. The current versions of these installation drawings are available from our web site:

http://www.honeywell.com/sensotec
2.2.1 FM Installation Drawings For I.S. Applications

Figure 2-1: FM-Approved I.S. Wiring, two single-channel barriers

HAZARDOUS LOCATION

NON-HAZARDOUS LOCATION

NOTE 1: All equipment must be FM Approved and listed.

NOTE 2: No doubt in accordance with the NEC.

TRANSMITTER WITH INTEGRATED CIRCUIT

NOTE 4: Applicable code 3G.

NOTE 4: Applicable code 3G.

Assurance

Assurance
Intrinsically-Safe Installation

Any Single FMRC Approved barrier or multiple barrier whose combination is FMRC Approved and whose parameters meet the requirements listed below.

- **Non-Hazardous Location**
- **Hazardous Location**

**Figure 2-2: FM- Approved I.S. Wiring, one dual-channel barrier**

**NOTE 1**: Barriers must be FMRC approved and installed in accordance with manufacturer’s instructions.

**NOTE 2**: Install in accordance with the NEC (ANSI/NFPA 70) and ANSI/ISA RP 12.6

**NOTE 3**: Equipment connected to Barrier cannot use or generate in excess of 250 Volts.

**NOTE 4**: Optional Diode Barrier, Used only with Calibration Circuit Order Code 5d.

**PRESSURE/LOAD TRANSMITTER**

*With SENSOTEC ORDER CODE:

**Series**: xx, 2Nxxxxx

*(Example)* AP1213R, 2Nxxxxx

- **Vmax** = 28 VDC
- **Imin** = 110 mA
- **GI** = 60 nF
- **LI** = 0 uH

Transmitters with integral cable, use the following cable parameters:

- **Ccable** = 60 pF/ft
- **Lcable** = 0.2 uH/ft

**FMRC CONTROLLED DRAWING**
2.2.2 CSA Installation Drawings For I.S. Applications

Figure 2-3: CSA Approved Wiring, two single-channel barriers

CSA CONTROLLED DRAWING

Groups A, B, C, D
Class I, Division 1

Hazardous (classified) location

HAZARDOUS LOCATION

NON-HAZARDOUS LOCATION

NOTE 1: Optional diode barrier used only with 2-wire circuit.
Non-Hazardous Location

Typical CSA Entity Certified Barriers. Barriers must be previously Certified in this configuration, such that Vmax is greater than Voc and Imax is greater than Isc.

Hazardous (Classified) Location
Rated Intrinsically Safe
Class I, Division 1
Groups A, B, C, D

NOTE 1: One dual-channel or two single-channel barriers may be used where both channels have been Certified for use together with combined entity parameters.

The following conditions must be satisfied:
- Voc or Uo ≥ Vmax or Ui
- Isc or Io ≥ Imax or Il
- Po ≥ Pi (if applicable)

NOTE 2: Equipment connected to Barrier cannot use or generate in excess of 250 Volts.

NOTE 3: Optional Diode Barrier, Used only with Calibration Circuit Order Code Sa.
2.2.3 CSA Certificate of Compliance for Intrinsically-Safe Systems
Copies of this certificate may be obtained by requesting document number 009-0028-01.

Certificate of Compliance

Certificate Number: LR 104792-6
Revision: LR 104792-8
Date Issued: September 29, 1999

Issued to: SENSOTEC INC.
2080 Arlington Lane
Columbus, OH 43228
U.S.A.
Attention: Mr. Steve Vicars

The products listed below are eligible to bear the CSA Mark shown, with adjacent indicator "C" and "US".

Issued by: E. Foo, CET

Signature: [Signature]

PRODUCTS

CLASS 2258 04 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations

CLASS 2258 84 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations - CERTIFIED TO U.S. STANDARDS

Class I, Groups A, B, C and D:

- Pressure Transmitters, Series xx2Nxxxx: input rated 9-28Vdc, 4-20mA; intrinsically safe when connected per Installation Drawing No. 001-0799-02 with Entity parameters of Vmax = 28V dc, Imax = 110mA, Li = 0 μH and Ci = 60 nF; Max. Ambient 85 Deg. C.

- Pressure Transmitters, Series xx2Nxxxxx6Y: input rated 9-28Vdc, 4-20mA; intrinsically safe when connected per Installation Drawing No. 001-0799-02 with Entity parameters of Vmax = 28V dc, Imax = 110mA, Li = 20 μH and Ci = 66 nF; Max. Ambient 85 Deg. C.

- Load Cells, Series xx2Nxxxx: input rated 9-28Vdc, 4-20mA; intrinsically safe when connected per Installation Drawing No. 001-0799-02 with Entity parameters of Vmax = 28V dc, Imax = 110mA, Li = 0 μH and Ci = 60 nF; Max. Ambient 85 Deg. C.

The "C" and "US" indicator adjacent to the CSA Mark signifies that the product has been evaluated to the applicable ANSI/UL and CSA Standards, for use in the U.S. and Canada. This includes products eligible to bear the NRTL indicator. NRTL, i.e. Nationally Recognized Testing Laboratory, is a designation granted by the U.S. Occupational Safety and Health Administration (OSHA) to laboratories which have been recognized to perform certification to U.S. Standards.

DQD 577WP 9/05/01
2 Intrinsically-Safe Installation

- Load Cell, Series xx2Nxxxx6Y; input rated 9-28Vdc, 4-20mA; intrinsically safe when connected per Installation Drawing No. 001-0799-02 with Entity parameters of $V_{\text{max}} = 28\, \text{V dc}, \, I_{\text{max}} = 110\, \text{mA}, \, L_i = 20\, \mu\text{H} \text{ and } C_i = 66\, \text{nF}; \text{ Max. Ambient 85 Deg. C.}$

**APPLICABLE REQUIREMENTS**

- **CSA Std C22.2 No.142-M1987** - Process Control Equipment
- **CAN/CSA-C22.2 No. 157-92** - Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations
- **UL Std No. 913** - Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II and III, Division 1, Hazardous Locations
- **UL Std No. 916** - Energy Management Equipment

**MARKINGS**

- CSA Monogram, with NRTL/C or CUS indicator;
- Submitter Identification;
- Model Number;
- Serial Number;
- Hazardous Location Designation;
- Maximum Ambient rating
- Enclosure Designation;
- The words "Intrinsically Safe"; and
- Reference to Installation Instructions.
Certificate No.: LR 104792-6

Issued to: SENSOTEC INC.
2880 Arlingate Lane
Columbus, OH 43228
U.S.A.
Attention: Mr. Steve Vicars

The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Issued By: E. Foo, CET

Signature: [Signature]

Product Certification History

<table>
<thead>
<tr>
<th>Revision</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-8</td>
<td>Sept. 29/99</td>
<td>Revision to include EMI filter cct. and addition of alternative model order codes.</td>
</tr>
<tr>
<td>-6</td>
<td>Aug. 4, 1999</td>
<td>Original Certification.</td>
</tr>
</tbody>
</table>
2.2.4 EC type Examination Certificate
Copies of this certificate are available as document number 009-0027-01.

ATTESTATION D’EXAMEN CE DE TYPE

1.

EC TYPE EXAMINATION CERTIFICATE

2.

Appareils et systèmes de protection destinés à être utilisés en atmosphères explosibles
Directive 94/9/EC

3.

Numéro de l’attestation CE de type
LCIE 03 ATEX 6268 X

4.

Capteurs de pression et de charge
Type : xx2Nxxxx, xx2Nxxx6y

5.

Demandeur : HONEYWELL Inc

6.

Adresse : 2080 Arlington Lane
Columbus, Ohio, 43228 USA

7.

Cet appareil ou système de protection et ses variantes éventuelles acceptées est décrit dans l’annexe de la présente attestation et dans les documents descriptifs cités en annexe.

8.

Le LCIE, organisme notifié sous la référence 0081 conformément à l’article 9 de la directive 94/9/CE du Parlement européen et du Conseil du 23 mars 1994, certifie que cet appareil ou système de protection est conforme aux exigences essentielles en ce qui concerne la sécurité et la santé pour la conception et la construction d’appareils et de systèmes de protection destinés à être utilisés en atmosphères explosibles, données dans l’annexe II de la directive. Les vérifications et épreuves figurent dans notre rapport confidentiel N°600111788-505347.

9.

Le respect des exigences essentielles en ce qui concerne la sécurité et la santé est assuré par la conformité aux documents suivants :
-EN 50014 (1997) + amendements 1 et 2

10.

Le signe X lorsqu’il est placé à la suite du numéro de l’attestation, indique que ce matériel ou système de protection est soumis aux conditions spéciales pour une utilisation sûre, mentionnées dans l’annexe de la présente attestation.

11.

Cette attestation d’examen CE de type concerne uniquement la conception et la construction de l’appareil ou du système de protection spécifié, conformément à la directive 94/9/CE. Des exigences supplémentaires de cette directive sont applicables pour la fabrication et la fourniture de l’appareil ou du système de protection.

12.

Le marquage de l’appareil ou du système de protection devra comporter, entre autres indications utiles, les mentions suivantes :

II 1 G
EEx ia IIC T5

Fontenay-aux-Roses, le 26 Août 2003

Le Directeur de l’organisme certificateur
Manager of the certification body

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The LCIE’s liability applies only to the French text. This document may be reproduced in full and without any change.

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France

Société anonyme à directoire
tél : +33 1 40 95 60 00
Fax : +33 1 40 95 86 56
contact@lcie.fr
www.lcie.fr

Laboratoire Central des Industries Électriques
De RCS Nanterre B 408 563 174

(A1) ANNEXE

(A2) ATTESTATION D’EXAMEN CE DE TYPE
LCIE 03 ATEX 6268 X

(A3) Description de l’équipement ou du système de protection :
Transmetteur de pression et de charge
Type : xx2Nxxxx et xx2Nxxxx6Y
Les transmetteurs de pression comprennent un capteur, un amplificateur et une carte entrée/sortie et délivrent un signal 0-5 V ou 4-20 mA. Les types xx2Nxxxx ont un connecteur externe alors que les types xx2Nxxxx6y ont un câble permanent (jusqu’à 30,5 mètres).

Paramètres spécifiques du ou des modes de protection concerné(s)

<table>
<thead>
<tr>
<th>Type</th>
<th>Type xx2Nxxxx</th>
<th>Type xx2Nxxxx6Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ui (V)</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>ii (mA)</td>
<td>110</td>
<td>110</td>
</tr>
<tr>
<td>Pi (W)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Li (µH)</td>
<td>0</td>
<td>30,5</td>
</tr>
<tr>
<td>Cl (nF)</td>
<td>60</td>
<td>66</td>
</tr>
</tbody>
</table>

Le marquage est le suivant :
HONEYWELL Inc
Adresse
Type : xx2Nxxxx, xx2Nxxxx6y
N° de fabrication : ... Année de construction : ...
LCIE 03 ATEX 6268 X
Ex II 1 G EEEx ia IIC T5

Le marquage CE est accompagné du numéro d’identification de l’organisme notifié responsable de la surveillance du système apprové de qualité (0081 pour le LCIE).
Le matériel devra également comporter le marquage normalement prévu par les normes de construction du matériel électrique concerné.

(A4) Documents descriptifs :

(A5) Conditions spéciales pour une utilisation sûre :
Température ambiante d'utilisation : -40°C à +93°C
Lors de l'installation, le boîtier de l'appareil doit être soit isolé de surfaces mises à la terre soit être au même potentiel que la terre du matériel associé.

(A6) Exigences essentielles en ce qui concerne la sécurité et la santé :

Vérifications et essais individuels :
Néant

(A1) SCHEDULE

(A2) EC TYPE EXAMINATION CERTIFICATE
LCIE 03 ATEX 6268 X

(A3) Description of Equipment or Protective System:
Pressure and load transmitter
Type : xx2Nxxxx and xx2Nxxxx6Y
The pressure transmitters include a sensor, an amplifier, and an in/out board and deliver 0-5V DC or 4-20 mA signal. The models xx2Nxxxx are provided with an external connector, while the models xx2Nxxxx6y are provided with a permanent cable (up to 30.5 meters).

Specific parameters of the mode of protection concerned:

<table>
<thead>
<tr>
<th>Type</th>
<th>Type xx2Nxxxx</th>
<th>Type xx2Nxxxx6Y</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>Pi (W)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Li (µH)</td>
<td>0</td>
<td>30,5</td>
</tr>
<tr>
<td>Cl (nF)</td>
<td>60</td>
<td>66</td>
</tr>
</tbody>
</table>

The marking is the following :
HONEYWELL Inc
Address
Type : xx2Nxxxx, xx2Nxxxx6y
Serial number : ... Year of construction : ...
LCIE 03 ATEX 6268 X
Ex II 1 G EEEx ia IIC T5

The CE marking shall be accompanied by the identification number of the notified body responsible for surveillance of the approved quality system (0081 for LCIE).
The equipment must also carry the usual marking required by the manufacturing standards applying to such equipments.

(A4) Descriptive documents:
Technical file No 089-0005-00 Rev A dated August 16th, 2003. This file includes 6 items (7 pages).

(A5) Special conditions for safe use:
Ambient operating temperature: -40°C to +93°C
On installation the case of the device shall either be isolated from grounded surfaces, or be at the same potential as associated apparatus ground.

(A6) Essential Health and Safety Requirements:

Individual examinations and tests:
None
2.2.5 ATEX Declaration of Conformity

We declare under our sole responsibility that the following products,

Pressure and Load Transmitter
Types: xx2Nxxxx and xx2Nxxxx6Y

to which this declaration relates, are in conformity with the protection require-
ments of Council directive: 94/9/EC (ATEX Directive) concerning equipment and
protective systems intended for use in potentially explosive atmospheres.

Conformity to the ATEX Directive is in accordance with the following European
standards. Conformity with this product with any other “CE Mark” Directive(s) shall
not be assumed.

**EC type Examination Certificate number:** LCIE 03 ATEX 6268 X. The letter X
behind the certificate number indicates that this equipment is subject to special
conditions for safe use listed in the section A5 of the Certificate.

**Notified Body Identification:** KEMA, identification number: 0344

**Manufacturer:** Honeywell Sensotec
2080 Arlingate Lane
Columbus, OH 43228-4112 USA

**Production Site:** Honeywell Sensotec
2080 Arlingate Lane
Columbus, OH 43228-4112 USA

(ATEX Authorized Person)
Issue Date: December 21, 2004
Chapter 3
Non-Incendive Installation

3.1 Introduction

3.1.1 Non-Incendive
A transducer ordered with option code 2n includes a 2-wire, 4-20mA amplifier that has been certified as “non-incendive” by the following recognized testing laboratories:

- Factory Mutual Research Corporation (FM), United States of America
- Canadian Standards Association (CSA), Canada

“Non-incendive” circuits are designed and constructed so that they are not capable under normal operating conditions or due to opening, shorting, or grounding of field wiring, of causing an ignition of the prescribed flammable gas or vapor.

3.2 Installation
The certification of each testing laboratory is valid when the transducer has been installed according the installation drawings included in this chapter. The current versions of these installation drawings are available from our web site:

http://www.honeywell.com/sensotec
3.2.1 FM Installation Drawings for Non-Incendive Applications

Figure 3-1: FM Approved Wiring, two single-channel barriers

**HAZARDOUS LOCATION**

**NON-HAZARDOUS LOCATION**

NOTE: Equipment connected to barrier (ANSI/UL 717 and ANSI/ISA RP 12.6) must be installed in accordance with the NEC.

In accordance with manufacturer's instructions.

Any Single FM Approved barrier or multiple barriers whose combination is FM approved shall meet the requirements listed below.
Figure 3-2: FM Approved Wiring, one dual-channel barrier

Non-Hazardous Location

- Class 1, Division 2 wiring practices permitted by the NEC (NFPA70)
- Calibration

Hazardous (Classified) Location

- Hazardous Non-Incendive
- Class 1, Division 2, Groups A, B, C, D
- Suitable for Class I, II, III, Groups F, G
- Tamb = 85°C T5

Pressure/Load Transmitter

SENSOTEC ORDER CODE

Series 2N

Power Supply

0V

R_Load

28 VDC, 110 mA

NO

Close to Enable Calibration Circuit

FMRC

CONTROLLED DWG.

NO CHANGES WITHOUT AUTHORIZATION

INITIAL RELEASE TO PRODUCTION

REV | DESCRIPTION | INITIAL | RELEASE |
--- | --- | --- | ---
00 | 00 | 00 | 00

Sensotec Inc.

2080 Arlingate Lane, Columbus, Ohio 43228

© Sensotec Inc. All Rights Reserved

EXH. WIRING CODE: FM APPROVED
NON-INCENDIVE TRANSMITTER DIVISION 2 WIRING PRACTICE

Engineering Number

Sheet 2 of 2 001-1086-00
Figure 3-3: CSA Approved Wiring, two single-channel barriers.

- **NOTE 1**: Equipment connected to barrier use only when calibration circuit order code 30.
- **NOTE 2**: Optional control block failure barrier with IEC = 0 mA.
Figure 3.4: CSA Approved Wiring, one dual-channel barrier

Intrinsically-Safe Transmitter

3 Non-Incendive Installation

Class 1, Division 2 wiring practices permitted by Part 1 of the CEC

Hazardous (Classified) Location
Rated Non-Incendive
Class 1, Division 2, Groups A,B,C,D
Class 1, Zone 2, Group IIC

Pressure/Load Transmitter
Type 2N

NOTE:
Transmitter case must be connected to supply source ground with either of the following methods:
A. A separate conductor connecting the transmitter connector shell to supply source ground.
B. The transmitter is mounted directly on a conductive structure which is connected to the supply source ground.

NOTE: EXPLOSION HAZARD — DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON-HAZARDOUS.
3.2.3 CSA Certificate of Compliance for Non-Incendive Systems
Copies of this certificate may be obtained by requesting document number 009-0028-02.

Certificate of Compliance

Certificate: 1156893
Project: 1156893
Issued to: SENSOTEC INC.
2080 Arlingate Lane
Columbus, OH 43228
USA
Attention: Mr. Steve Vicars

The products listed below are eligible to bear the CSA Mark shown

Issued by: M. Bani
Authorized by: Brian Rossborough, P. Eng
Operations Manager

PRODUCTS

CLASS 2258 03 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non Incendive Systems -
For Hazardous Locations

Class I, Div. 2 Groups A, B, C and D, T5:

- Pressure Transmitters, Series xx2Nxxxx; input rated 9-28Vdc, 4-20mA. Max. Ambient 85 Deg.C. Non-incendive when connected to CSA Certified Class I safety barrier rated 28 Vdc max, 277 ohms min. and install per Dwg. 001-1087-00 (sheet 1)

- Pressure Transmitters, Series xx2Nxxxx6Y; rated 9-28Vdc, 4-20mA. Max. Ambient 85 Deg. C. Non-incendive when connected to CSA Certified Class I safety barrier rated 28 Vdc max, 277 ohms min. and installed per Dwg. 001-1087-00 (sheet 1).

- Load Cells, Series xx2Nxxxx; rated 9-28Vdc, 4-20mA; Max. Ambient 85 Deg. C. Non-incendive when connected to CSA Certified Class I safety barrier rated 28 Vdc max, 277 ohms min., and installed per Dwg. 001-1087-00 (sheet 1).

- Load Cells, Series xx2Nxxxx6Y; rated 9-28Vdc, 4-20mA; Max. Ambient 85 Deg. C. Non-incendive when connected to CSA Certified Class I zener barrier 28 Vdc max, 277 ohms min., and installed per Dwg. 001-1087-00 (sheet 1).
CLASS 2258 02 - PROCESS CONTROL EQUIPMENT- For Hazardous Locations

Class I, Div. 2 Groups A, B, C and D, T5:

- Pressure Transmitters, Series xx2Nxxxx; input rated 9-28Vdc, 4-20mA; Max. Ambient 85 Deg.C. Suitable for Class I, Div. 2 Groups A, B, C and D when installed per Dwg. 001-1087-00 (sheet 2)

- Pressure Transmitters, Series xx2Nxxxx6Y; rated 9-28Vdc, 4-20mA; Max. Ambient 85 Deg. C. Suitable for Class I, Div. 2 Groups A, B, C and D when installed per Dwg. 001-1087-00 (sheet 2)

- Load Cells, Series xx2Nxxxx; rated 9-28Vdc, 4-20mA; Max. Ambient 85 Deg. C. Suitable for Class I, Div. 2 Groups A, B, C and D when installed per Dwg. 001-1087-00 (sheet 2)

- Load Cells, Series xx2Nxxxx6Y; rated 9-28Vdc, 4-20mA; Max. Ambient 85 Deg. C. Suitable for Class I, Div. 2 Groups A, B, C and D when installed per Dwg. 001-1087-00 (sheet 2).

Note: Device model Series 2N is provided with prefixes and suffixes denoting Product Order Code, Range, Series, and other variations

APPLICABLE REQUIREMENTS

<table>
<thead>
<tr>
<th>CSA Std C22.2 No.</th>
<th></th>
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</tr>
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<tbody>
<tr>
<td>142-M1987</td>
<td>- Process Control Equipment</td>
<td></td>
</tr>
<tr>
<td>213-M1987</td>
<td>- Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations</td>
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</tr>
</tbody>
</table>

MARKINGS

- CSA Monogram
- Submitter Identification;
- Model Number;
- Serial Number;
- Electrical ratings;
- Temperature Code;
- Hazardous Location Designation;
- Maximum Ambient Temperature;
- A reference to Installation Instructions, (eg. MUST BE INSTALLED PER INSTRUCTIONS DRAWING 001-1087-00 sheet 1 and 2);
- Caution: Use supply wires suitable for 5°C above surrounding ambient;
- Warning: Explosion Hazard- Do not disconnect equipment unless power has been switched off or the area is known to be non-hazardous;
- Warning: Explosion Hazard-Substitution of components may impair suitability for class I, Division 2.
Supplement to Certificate of Compliance

Certificate: 1156893
Project: 1156893

Master Contract: 162245 (LR 104792)

The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

<table>
<thead>
<tr>
<th>Project</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
</table>
Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. The foregoing is the Buyer’s sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

While we provide applications assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.