



# Certificate of Compliance

**Certificate:** 70067850

**Master Contract:** 179123

**Project:** 70067850

**Date Issued:** July 28, 2017

**Issued to:** **Otis Instruments, Incorporated**  
**301 S. Texas Ave.**  
**Bryan, Texas, 77803**  
**USA**

Attention: Nicholas Sandera

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.*



**Issued by:** Bill Bizuk, P.Eng.  
Bill Bizuk, P.Eng.

## PRODUCTS

CLASS 2252 06 - PROCESS CONTROL EQUIPMENT

CLASS 2252 86 - PROCESS CONTROL EQUIPMENT - Certified to US Standards

Combustible Gas Detector, Model: OI-6000-IR-152

Rated: 12 - 35Vdc max, 1A max., IP43, Type 4

Operating temperature range: -40 °C to +54 °C

## Notes:

1. The above model is permanently connected Equipment Class III, Pollution Degree:2
2. Mode of operation: Continuous
3. Environmental Conditions: 1) -40°C to 54°C; 0 to 2000m; 0 to 98% RH

CLASS 4828 01 - SIGNAL APPLIANCES - Combustible Gas Detection Instruments - For Hazardous Locations

CLASS 4828 81 - SIGNAL APPLIANCES - Combustible Gas Detection Instruments - For Hazardous Locations

Certified to U.S. Standards

For Canada:

- **Class I, Division 1, Groups C and D T4**
- **Ex d ib IIB T4 Gb**

For U.S. :



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- **Class I, Division 1, Groups C and D T4**
- **Class I, Zone 0, IIB AEx d ib T4 Gb**

Combustible Gas Detector, Model: OI-6000-IR-152

Rated: 12 - 35Vdc max, 1A max.

Operating temperature range: -40 °C to +54 °C

### **Conditions of Acceptability**

1. Connect ONLY to approved Class 2 Equipment with Class 2 power supply
2. Equipment is not to be used with flammable liquids in Non-Hazardous areas

### **APPLICABLE REQUIREMENTS**

|   |   |   |
|---|---|---|
| CAN/CSA C22.2 No. 30-M1986(R2012)             | - | Explosion-Proof Enclosures for Use in Class I Hazardous Locations   |
| CSA C22.2 No. 61010-1-12, 3 <sup>rd</sup> Ed. | - | Safety requirements for electrical equipment for measurement, control, and laboratory use — Part 1: General requirements        |
| CAN/CSA C22.2 No 152-M1984 (R2011)            | - | Combustible gas detection instruments   |
| CAN/CSA C22.2 No. 60079-0:15                  | - | Explosive atmospheres - Part 0: Equipment - General requirements  |
| CAN/CSA C22.2 No. 60079-1:16                  | - | Electrical apparatus for explosive gas atmospheres Part 1: Flameproof enclosures "d"  |
| CAN/CSA C22.2 No. 60079-11:14                 | - | Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"   |
| CAN/CSA C22.2 No. 60529:16                    | - | Degrees of protection provided by enclosures (IP Code)  |
| CAN/CSA C22.2 No. 94-M91                      | - | Special Purpose Enclosures  |
| ANSI/ISA 61010-1, Ed. 3                       | - | Electrical equipment for measurement, control, and laboratory use — Part 1: General requirements                                |
| UL Std. No 913, 8th Edition                   | - | Intrinsically Safe Apparatus and Associated Apparatus for use in Class I, II, III, Division 1, Hazardous (Classified) Locations |
| UL Std. No. 60079-0, 6 <sup>th</sup> Edition  | - | Explosive atmospheres – Part 0: Equipment - General requirements  |
| UL 60079-1 7 <sup>th</sup> Edition            | - | Electrical apparatus for explosive gas atmospheres Part 1: Flameproof enclosures "d"  |
| UL Std. No. 60079-11, 6 <sup>th</sup> Edition | - | Explosive atmospheres – Part 11: Equipment Protection by Intrinsic safety "i"   |
| FM 3600:2011                                  | - | Electrical Equipment for use in Hazardous (Classified) Locations General Requirements   |



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|                                 |   |   |
|---------------------------------|---|---|
| FM 3615:2006                    | - | Explosion-proof Electrical Equipment General Requirements   |
| ANSI/ISA-12.13.01-2000          | - | Explosive Atmospheres – Part 29-1:Gas detectors – Performance requirements of detectors for flammable gases |
| ANSI/IEC 60529:2004             | - | Degrees of protection provided by enclosures (IP Code)  |
| UL 50, 11 <sup>th</sup> Edition | - | Enclosures for Electrical Equipment   |

## **MARKINGS**

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

## **Nameplate adhesive label material approval information:**

Label using a metalphoto process onto 0.005" anodized aluminum with 3M 9671 2.3MIL high strength acrylic adhesive as per. OTIS 1-002252 marking drawing. Labels are manufactured using metalphoto process.

- CSA Monogram.
- Submitter's name, trademark, or the CSA file number (adjacent the CSA Mark).
- Catalog or Model designation or equivalent, traceable to the month and year (at least) of manufacture
- Electrical ratings
- Temperature code or equivalent, Ambient temperature range
- Hazardous Locations Area Markings
- serial number, date code or equivalent
- The equipment supply is identified by the symbol IEC 60417 No 5031 ——

The following Caution markings or equivalents are required in English and French.

Label may be marked with Caution Symbol pointing to Manual indicating warnings are found in user manual.



-WARNING – EXPLOSION HAZARD – SUBSTITUTION OF COMPONENTS MAY IMPAIR  
SUITABILITY FOR CLASS I, DIVISION 1, or equivalent as stated in user manual



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- AVERTISSEMENT – RISQUE D'EXPLOSION-LA SUBSTITUTION DE COMPOSANTS PEUT RENDRE CE MATERIEL INACCEPTABLE POUR LES EMPLACEMENTS DE CLASSE I, DIVISION
- TO PREVENT IGNITION OF EXPLOSIVE ATMOSPHERES, DISCONNECT POWER BEFORE SERVICING
- “A SEAL SHALL BE INSTALLED WITHIN 18” OF THE ENCLOSURE”
- “WARNING - DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT”
- CAUTION: FOR SAFETY REASONS THIS EQUIPMENT MUST BE OPERATED AND SERVICED BY QUALIFIED PERSONNEL ONLY. READ AND UNDERSTAND INSTRUCTION MANUAL COMPLETELY BEFORE OPERATING OR SERVICING
- ATTENTION: POUR DES RAISONS DESECURITE, CET EQUIPEMENT DOIT ETRE UTILISE, ENTRETENU ET REPARER UNIQUEMENT PAR UN PERSONNEL QUALIFIE. ETUDIER LE MANUEL D'INSTRUCTIONS EN ENTIER AVANT D'UTILISER, 'ENTREtenir OU DE REPARER L'EQU I PEM ENT
- CAUTION: THIS AREA MUST BE FREE OF FLAMMABLE GASES DURING CALIBRATION
- ATTENTION : CETTE ZONE DOIT ETRE EXEMpte DE GAZ INFLAMMABLES PENDANT L'ETALONNAGE.



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### *Supplement to Certificate of Compliance*

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

### **Product Certification History**

| <b>Project</b> | <b>Date</b> | <b>Description</b>  |
|----------------|-------------|---|
| 70067850       | 2017-07-28  | CSA Service: North American Certification Possible New North American Certification of Combustible Gas Detector, Model OI-6000-IR-152-X-X-O, as Intrinsically Safe for Class I, Division 1, Groups C & D, and Zone 1 Group IIB. |