

# **Certificate of Compliance**

**Certificate:** 70081253 **Master Contract:** 180737 (087499 0 000)

**Project:** 70167383 **Date Issued:** 2018-03-28

**Issued to:** K-Patents OY

PL 77

Vantaa, 01511 FINLAND

Attention: Veikko Kähkönen

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: Albert Jansen
Albert Jansen

#### **PRODUCTS**

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT – For Hazardous Locations

**CLASS 2258 82 -** PROCESS CONTROL EQUIPMENT – For Hazardous Locations – Certified to US Standards

Ex nA IIC T4 Gc;

Class I, Zone 2, AEx nA IIC T4 Gc;

Class I, Division 2, Groups A, B, C and D, T4;

-Sanitary Process Refractometer models PR-43-AC, PR-43-PC, PR-43-AP, PR-43-PP, PR-43-GC, PR-43-GP and, rated +24Vdc, max 2W ,4-20mA (maximum load  $1000\Omega$ ); Type 4X. For use in an ambient temperature range of:  $-40^{\circ}$ C to  $+65^{\circ}$ C.

#### Note:

-To be supplied by a Class 2 or Limited Energy Source in accordance with CSA 61010-1-12/UL 61010-1.

DQD 507 Rev. 2016-02-18

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### **APPLICABLE REQUIREMENTS**

C22.2 No. 0 M1991	-	General Requirements – Canadian Electrical Code Part II
CAN/CSA 61010-1-12	-	Safety Requirements for Electrical Equipment for Measurement, Control
		and Laboratory Use - Part 1: General Requirements - Third Edition
ANSI/UL 61010-1	-	Safety Requirements for Electrical Equipment for Measurement, Control
		and Laboratory Use - Part 1: General Requirements - Third Edition
C22.2 No. 213-15/ ANSI-	-	Nonincendive Electrical Equipment for use in Class I and II Division 2 and
12.12.01-2015		Class III, Divisions 1 and 2 Hazardous Locations
CAN/CSA 60079-0:15 (IEC	-	Explosive atmospheres - Part 0; General Requirements
60079-0:2011)		
CAN/CSA 60079-15:16(IEC	-	Explosive atmospheres - Part 15; Equipment protection by type of
60079-15:2010)		protection "n"
UL 60079-0:13 (IEC 60079-	-	Explosive atmospheres - Part 0; General Requirements
0:2011)		
UL 60079-15:13 ((IEC	-	Explosive atmospheres - Part 15; Equipment protection by type of
60079-15:2010)		protection "n"
CSA C22.2 No. 94.2-15,	-	Enclosures for Electrical Equipment, Environmental Considerations
Second Edition		
UL 50E, Second Edition	-	Enclosures for Electrical Equipment, Environmental Considerations



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#### **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 without an indicator for Canada only (indicating that products have been manufactured to the requirements of Canadian Standards).

The following markings appear on adhesive label affixed on the product bearing the following marking information (drawing 4142):

- Submittor's Name or Master Contract Number 180737.
- Model number.
- Serial number.
- Complete electrical ratings.
- Hazardous Locations area marking
- Ambient Temperature.
- Temperature Code
- Type Rating (Type 4X)
- The following caution markings shall appear in the Instruction Operational Manual:
  - WARNING EXPLOSION HAZARD DO NOT DISCONNECT WHILE THE CIRCUIT IS LIVE OR UNLESS THE AREA IS KNOWN TO BE FREE OF IGNITIBLE CONCENTRATIONS

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## Supplement to Certificate of Compliance

**Certificate:** 70081253 **Master Contract:** 180737 (087499\_0\_000)

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

## **Product Certification History**

Project	Date	Description
70167383	2018-03-28	Upgrade all models from Type 4 to Type 4X rating. Update several drawings. Add variant to model PR-43-GP, designated "PR-43-GP-K88-P25".
70081253	2017-03-07	Original certification of PR-43-xx series for Class I Div.2 and Class I Zone 2 . Addition of Class 2258 82





# CERTIFICATION RECORD

The company named below has been authorized by CSA International to represent the products listed in this record as "CSA Certified" and to affix the CSA Mark to these products according to the terms and conditions of the CSA Service Agreement and applicable CSA program requirements (including additional Markings).

File No: 213862

Class No: 2258 02 PROCESS CONTROL EQUIPMENT For Hazardous Locations

#### **SUBMITTOR**

Vaisala Oyj

4669224 PO Box 26

Helsinki, . 00421

Finland

#### **FACTORIES**

Vaisala Oyj

6003614 Vanha Nurmijarventie 21

Vantaa, . 01670

Finland

November 1, 2019 (Replaces: March 28, 2018)

• Inline refractometer, Series PR-23, permanently connected, rated 24 Vdc, 100 mA, Class I, Division 2, Groups A, B, C and D, T4.

### Ex nA IIC T4 Gc;

Class I, Zone 2, AEx nA IIC T4 Gc; Class I, Division 2, Groups A, B, C and D, T4;

Sanitary Process Refractometer models PR-43-AC, PR-43-PC, PR-43-AP, PR-43-PP, PR-43-GC, PR-43-GP and, rated +24Vdc, max 2W, 4-20mA (maximum load  $1000\Omega$ ). Type 4X. For use in an ambient temperature range of: -40°C to +65°C.

#### Note:

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File No: 213862

Class No: 2258 82 PROCESS CONTROL EQUIPMENT For Hazardous Locations

- Certified to US Standards

#### **SUBMITTOR**

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#### Note:

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