

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.lecex.com

Certificate No.:

IECEx KEM 10.0033X

Issue No: 2

Certificate history:

Status:

Current

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Issue No. 2 (2015-06-24) Issue No. 1 (2013-10-14)

Issue No. 0 (2010-04-08)

Date of Issue:

2015-06-24

Applicant:

K-PATENTS OY

Elannontie 5 01510 Vantaa Finland

Electrical Apparatus:

Process Refractometer Series PR-23

Optional accessory:

Type of Protection:

Ex nA

Marking:

Ex nA IIC T4 Gc

Approved for issue on behalf of the IECEx

R. Schuller

Certification Body:

Position:

Certification Manager

Shuller 15-06-29

Signature:

(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.

2. This certificate is not transferable and remains the property of the issuing body.

3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website,

Certificate issued by:

DEKRA Certification B.V. Meander 1051 6825 MJ Amhem The Netherlands





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Manufacturer:

K-PATENTS OY Elannontie5 01510 Vantaa Finland

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0: 2011

Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-15: 2010

Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition:4

This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

NL/KEM/ExTR10.0025/00

NL/KEM/ExTR10.0025/01

NL/KEM/ExTR10.0025/02

Quality Assessment Report:

NL/DEK/QAR12.0032/02



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Process Refractometer Series PR-23-XX is used for inline measuring of a liquid concentration. The measurement is based on the refraction of light in the process medium.

* XX substitutes AC, AP, GC, GP, MS, SD, RP, M or W.

The enclosure provides a degree of protection of at least IP54 according to IEC 60529.

Ambient temperature range: -20 °C to +65 °C

Maximum process temperature: 150 °C

Electrical Data:

Supply: 24 Vdc, max, 60 mA.

CONDITIONS OF CERTIFICATION: YES as shown below:

Provisions shall be made to prevent the rated voltage from being exceeded by transient disturbances of more than 40%.



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DETAILS OF CERTIFICATE CHANGES (for Issues 1 and above):

Assessment in accordance with Corrigendum 1:2012 and Corrigendum 2:2013 to IEC 60079-0:2011; the range of series PR-23 has been extended with a new model PR-23-GC; the ambient temperature range of the Process Refractometer Series PR-23 has been reduced to -20°C +65°C; changed sensor head sealing.