IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

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

UNIT VERIFICATION

Certificate No.: **IECEx EESF 25.0018X**

Certificate history:

Status: **Current**

Issue No: 0

Date of Issue: 2025-06-27

Applicant: **KxS Technologies Oy**
Zirkonipolku 2 A
Vantaa FI-01700
Finland

Equipment: **INLINE BRIX MONITOR DCM-20**

Type of Protection: **Equipment protection by increased safety "e", encapsulation “m" and Separation Elements**

Marking: Ex ec mc IIC T4 Gb/Gc

Approved for issue on behalf of the IECEx Certification Body: **Jenni Hirvelä**

Position: **Senior Expert**

Signature: (for printed version)

Date: (for printed version) 2025-06-27

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 www.iecex.com or use of this QR Code.

Certificate issued by:

Eurofins Electric & Electronics Finland Oy
Kivimiehentie 4
Espoo FI-02150
Finland

IECEx Certificate of Conformity

Manufacturer: **KxS Technologies Oy**
Zirkonipolku 2 A
Vantaa FI-01700
Finland

Manufacturing locations: **KxS Technologies Oy**
Zirkonipolku 2 A
Vantaa FI-01700
Finland

This Unit verification certificate is issued as verification that the Apparatus identified on page 1, was assessed and tested and found to comply with the IEC Standard list below. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS :
The equipment 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-18:2017 Explosive atmospheres - Part 18: Protection by encapsulation "m"
Edition:4.1

IEC 60079-26:2021 Explosive atmospheres - Part 26: Equipment with Separation Elements or combined Levels of Protection
Edition:4.0

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with 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:

FI/EESF/ExTR25.0019/00

Quality Assessment Report:

As this is a Unit Verification Certificate, no QAR is applicable as this certificate is specific to the items listed by serial number or other unique identification.

IECEx Certificate of Conformity

EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

INLINE BRIX MONITOR DCM-20 is designed to define liquid product concentration is process conditions. Measurement method is refractive index measurement using low intensity yellow light reflecting back from process liquid sensor measurement window interface. With optical reflection angle measurement, liquid concentration can be calculated in corporation of liquid temperature. All measurement functions are integrated in the sensor - no transmitter required. Measurement output options are analog and digital communication protocols. Two cable connection ports are available: Dual analog 4 - 20mA and Modbus TCP.

Ratings:

U_N = 24 V $_{DC}$

I_N = 120 mA

P = 2.6 W

Sensor code nomenclature:

DCM-20-SR-***-***-SS-AX

1. DCM= Digital Concentration Monitor
2. -20 = Sensor type
3. -SR = Optical measurement range, e.g. SR= Standard Range 1.32…1.53 RIU
4. -*** = Process connection
5. -*** = Insertion length to process
6. -SS = Wetted parts material, e.g. SS= Stainless steel

-AX = Area classification, AX = ATEX /IECEx

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Allowed ambient temperature range is -15 °C ≤ Tamb ≤ +65 °C.
2. The Connector Guard protecting the connections from impacts shall be fitted when the device is installed in hazardous area.