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

Certificate No.: **IECEx KLCS 24.0005X**

Certificate history:

Status: **Current**

Issue No: 0

Date of Issue: 2024-11-25

Applicant: **Roop Ultrasonix Ltd.**
E-133/136, GIDC, Electronic Zone, Sector - 26
Gandhinagar - 382044 , Gujarat, India
Gandhinagar 382044
India

Equipment: **Sieving Generator, Model no. ES-35-200-Ex**

Optional accessory:

Type of Protection: **Protection by enclosure “t”**

Marking: Ex tb IIIC T85°C Db IP65 (0°C ≤ Ta ≤ +55°C)

Approved for issue on behalf of the IECEx Certification Body: **Vikram Paranjpe**

Position: **Dy. Director (Operations)**

Signature:
(for printed version)

Date:
(for printed version)

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:

Karandikar Laboratories Certification Services
Gat No. 142, Boisar Chillar Rd.,
Opp. Union Park, At Betegaon,
Boisar (E), Tal- Palghar
Maharashtra 401501
India

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Date of issue: 2024-11-25 Issue No: 0

Manufacturer: **Roop Ultrasonix Ltd.**
E-133/136, GIDC, Electronic Zone, Sector - 26
Gandhinagar - 382044 , Gujarat, India
Gandhinagar 382044
India

Manufacturing locations:

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 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 60079-31:2022 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
Edition:3.0

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:

IN/KLCS/ExTR24.0005/00

Quality Assessment Report:

IN/KLCS/QAR24.0002/00

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

Sieving generator, Model : ES-35-200-Ex is intended for generating ultrasonic frequency electrical signal for input to the ultrasonic converter (Certified vide IECEx KLCS 24.0004X).

Sievinf generator converts electrical energy in to high frequency signal of 35kHz ± 4 kHz, which is then converted to mechanical energy by the converter.

The generator is housed in a dust-proof enclosure, which prevents the ingress of dust. There is one HARTING connector, one rotary switch and two cable entries on the front wall of the enclosure. The enclosure, cable gland and rotary switch are pre-certified (Refer Table 1 below). The HARTING connectors have been assessed as part of this equipment.

Technical data:

Supply input voltage: 230 V AC, 50/60 Hz

Maximum input current: 2 A

Frequency output: 35... ± 4 kHz

Details of pre-certified equipment fitted:

TABLE 1 - Sieving generator, Model : ES-35-200-Ex is fitted with following IECEx certified equipment:

Item	*Ex code and ambient temperature range	Certificate Number	*Standard
Empty Enclosure Type 25.****** Model: 25.18 28 10	Ex tb IIIC Db -55°C to +135°C(Silicon gasket) IP66	IECEx PTB 08.0005U	IEC 60079-0:2011[1)] IEC 60079-31:2013[1)]
Selector Switch , Model: Ex-RWS 21	Ex tb IIIC T110°C Db 0°C to +55°C IP65	IECEx TUR 16.0030X	IEC 60079-0:2017 IEC 60079-31:2013[1)]
Cable gland Model: HSK-M-Ex	Ex ta IIIC Da -20°C to +95°C	IECEx BVS 07.0019X	IEC 60079-0:2017 IEC 60079-31:2013[1)]

* Only applicable Ex marking and associated standards have been listed

[1)] Applicable technical differences have been assessed.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The enclosure may present a potential electrostatic charging hazard. See the Manufacturer's instructions for further information. The manual contains instructions as "The equipment must only be cleaned with a damp cloth in order to avoid ignition hazard caused by static electricity".
2. Dust layers shall be prevented from building up on the outside surface of the enclosure, and the enclosure shall be routinely cleaned.
3. Plug and socket of connector shall not be connected /disconnected when explosive atmosphere is present.
4. For pre-certified device, Empty Enclosure Type 25.18 28 10 certified vide IECEx PTB 08.0005U

- The empty enclosure with a coating must not be used in areas affected by charge-producing processes, mechanical friction and separation processes, electron emission (e.g. in the vicinity of electrostatic coating equipment), and pneumatically conveyed dust.

5. For pre-certified device, Empty Enclosure Type 25.18 28 10 certified vide IECEx PTB 08.0005U

- The user must ensure protection against permanent UV exposure when using certain controls.
- The presence of small dust particles must be excluded inside the dust-tight IP 65 housing.
- The maximum proven impact energy for selector switch is 4J. This equipment must be installed mechanically protected.