



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 KSCP 24.0025X** Page 1 of 3 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2024-07-05

Applicant: **SENKO Co., Ltd.**
445, Doksanseong-ro
Osan-si, Gyeonggi-do 18111
Korea, Republic of

Equipment: **Portable Dual Gas Detector DUO TRACER Series**

Optional accessory:

Type of Protection: **intrinsic safety "i", Protection of optical radiation "op"**

Marking: Ex ia op is IIC T4 Ga or
Ex ia IIC T4 Ga
Ta: - 20 °C ~ + 50 °C

Approved for issue on behalf of the IECEx
Certification Body:

Sang He Kim

Position:

President of the Board

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:

KSC POLAND Sp. z o.o.
Chorzowska 150 Street
Katowice 40-101
Poland





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Manufacturing
locations: **SENKO Co., Ltd.**
445, Doksanseong-ro
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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 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

IEC 60079-28:2015 Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
Edition:2

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:

PL/KSCP/ExTR24.0025/00

Quality Assessment Report:

KR/KTL/QAR14.0003/09



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Duo tracer series is a portable dual gas detector through the diffusion method that works to detect ambient oxygen, toxic and explosive gases. Refer to certificate addendum.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- Only the battery SB-AA02(P) (Vitzrocell) can be used. The battery can only be replaced in safe area.
- The LCD screen is covered with an electrostatic dissipating film and must be inspected periodically according to the equipment instructions. If the film is found not complying with the inspection conditions, it must be reapplied according to the manufacturer instructions.

Annex:

[IECEx_KSCP_24.0025_Addendum.pdf](#)



Addendum to IECEx Certificate

| | |
|------------------------|----------------------------|
| Reference Number.....: | IECEx KSCP 24.0025X |
| Issue.....: | Issue 0 |

Description

The Duo tracer series is a portable dual gas detector through the diffusion method that works to detect ambient oxygen, toxic and explosive gases.

This gas detector includes two sensors. One is a oxygen or toxic gas sensor and the other one is a choice between the toxic or explosive gas sensor. An LCD display panel on the front of the instrument displays sensor readings in real time and displays selected functions. One button on the front allows users to select pre-programmed functions and turn the device on and off.

The Duo tracer series provides audible, visible and tactile alarms when the measured gas concentration reaches a preset alarm concentration. Audible and visual alarm indicators are placed on the front panel for easy recognition. The device is operated on battery power from a lithium thionyl chloride primary battery 1-cell which is replaceable when the battery has gone out.

The model formation rule is according to the following:

| (a) Model name | Gas Type | | (b) Ex mark | |
|-------------------|----------|------|--------------------|-----------------------|
| | X | Ch-A | | Ch-B |
| DUO TRACER-x | 1 | O2 | CH4 ^(*) | Ex ia op is IIC T4 Ga |
| | 2 | | CO2 ^(*) | |
| | 3 | O2 | CO | Ex ia IIC T4 Ga |
| | 4 | | H2S | |
| | 5 | | SO2 | |
| | 6 | | H2 | |
| | 7 | | NO2 | |
| | 8 | | NH3 | |
| | 9 | | O3 | |
| | A | NO2 | CO | |
| | B | | H2S | |
| | C | | SO2 | |
| | D | SO2 | H2S | |
| | E | | CO | |
| | F | | NH3 | |

※ These sensors are NDIR sensors, and the rest are electrochemical sensors.

Product will be marked as follows:

| Item | Detail |
|------------------------------------|--|
| Name of Manufacturer/Trade mark | Senko Co., Ltd. SENKO |
| Address of manufacturer | 445, Doksanseong-ro, Osan-si, Gyeonggi-do, Republic of Korea |
| Equipment name | Portable Dual Gas Detector |
| Type identification | Duo Tracer series |
| Serial No. and year of manufacture | SPXXXXXXXXX |

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| | |
|--------------------------|---|
| IECEX certificate number | IECEX KSCP 24.0025X |
| Code | Ex ia op is IIC T4 Ga or Ex ia IIC T4 Ga |
| Ambient | - 20 °C ~ + 50 °C |
| Warnings | WARNING – DO NOT OPEN OR REPLACE BATTERY WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT |
| Rating | The product is battery powered 1P1S (1x Primary Lithium Thionyl- Chloride Li-SOCl ₂), nominal voltage 3.6 V – Battery SB-AA02(P) (Vitzrocell) |

Used cell is as follows:

| Type name | Cell type | Nominal Ratings | Max. Open-circuit voltage (V) | Temperature range specified on battery data sheet | Equipment ambient temperature range | Manufacturer |
|------------|---|-----------------|-------------------------------|---|-------------------------------------|--------------|
| SB-AA02(P) | Anode: Lithium (Li) Cathode: Thionyl Chloride (SOCl ₂) | 3.6 V 1.2 Ah | 3.90 V | -55 °C to +85 °C | -20 °C to +50 °C | Vitzrocell |

Conditions of manufacture:

None routine testing is required.

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