



ÉPÍTÉSÜGYI MINŐSÉGELLENŐRZŐ
INNOVÁCIÓS NONPROFIT KFT.

ÉMI ÉPÍTÉSÜGYI MINŐSÉGELLENŐRZŐ INNOVÁCIÓS
NONPROFIT KORLÁTOLT FELELŐSSÉGŰ TÁRSASÁG

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ÉMI NON-PROFIT LIMITED LIABILITY COMPANY FOR QUALITY CONTROL AND INNOVATION IN BUILDING

ÉMI SOCIÉTÉ À BUT NON LUCRATIF POUR LE CONTRÔLE DE QUALITÉ ET L'INNOVATION DU BÂTIMENT, RESPONSABILITÉ LIMITÉE
ÉMI NON-PROFIT GESELLSCHAFT FÜR QUALITÄTSKONTROLLE UND INNOVATION IM BAUWESEN MIT BESCHRÄNKTER HAFTUNG

ATB-13/2015

ATB APPLICATION CERTIFICATE

Trade name of the product: Venus carbon monoxide detector

Intended use of the product: Detection of carbon monoxide emitted by gas appliances in buildings

Applicant: Szenzortechnika Kft.
H-1112 Budapest Repülőtéri út 2.

Distributor: Szenzortechnika Kft.
H-1112 Budapest Repülőtéri út 2.

Manufacturer of the product: HENAN HANWEI ELECTRONICS CO., LTD No.169,
Xuesong Road National Hi-Tech Zone, Zhengzhou 450001,
Henan, China

**Valid to
with constant product characteristics:
09. 11. 2020.***

Budapest, 09. 11. 2015.




Nyiri Szabolcs
Technical Director

The Application Certificate consists of 6 pages.

* Validity of ATB is subject to conditions.

Project No.: AT-1460X-04579-2014

I. LEGAL REGULATION AND GENERAL TERMS AND CONDITIONS

1. The present Application Certificate (ATB) has been issued by ÉMI Non-profit Ltd. for Quality Control and Innovation in Building.
2. ATB holder - a natural or legal person (the applicant) who applied either directly or through a representative, and for whom the ATB EMI Nonprofit Llc. has issued. - Is responsible for ensuring that the ATB subject of suit ATB specifications, in addition to the user with all the information necessary for the intended purpose.
3. EMI Nonprofit Llc. is entitled to verify that the requirements of ATB are complied. EMI Nonprofit Llc. carry out the follow-up inspection – the applicant's expense – in the laboratory or at manufacturing location or at a reference site installation.
4. The ATB exclusively be used by the holder, and authorized distributors of the manufacturer.
5. The ÉMI Non-profit Llc. withdraws the ATB if follow-up inspection cannot be performed or the results of verification is not appropriate or object of ATB turns out to be not suitable for the intended purpose. The holder of ATB shall notify if the important features of the product, the production circumstances changed. Subsequently, the EMI Nonprofit Llc. decides that the ATB will continue to be valid or a new procedure should be initiated in addition to the withdrawal of ATB. If for the decision tests are needed, the EMI Nonprofit Llc. for this time suspends the validity of the ATB.
6. ATB may only be copied in its entirety or published by means of other data medium. Extracts are only allowed on the prior written approval of ÉMI Non-profit Llc. in case of notifying extracts this fact shall be indicated. Text and drawings of advertising materials may not be contrary to the content of the Application Certificate and may not give rise to misunderstanding.
7. The ATB will not replace other permits (e.g. environment protection and property protection, building authorities' permits), certificates (e.g. fire prevention certificate of compliance) and proposed certificates (e.g. fire prevention certificates of conformity) which necessary for distribution, utilization, installation and use of the product.

II. SPECIAL TERMS AND CONDITIONS FOR THE APPLICATION CERTIFICATE

1. DATA

1.2. Description of the product

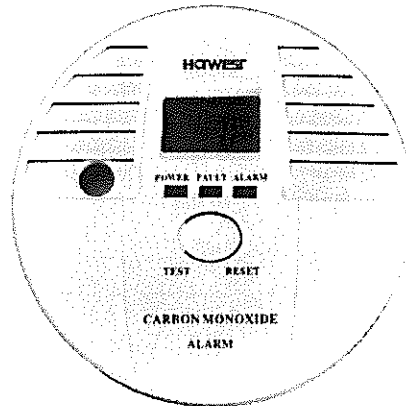


Figure 1 VENUS carbon monoxide detector

Venus carbon monoxide gas detector is electrochemical type gas sensor. The installation method can be tap-top, ceiling hung and wall mounted. When the CO concentration in the air reaches the presetting alarming level, the detector will give audio and video alarming promptly, which informs the user to adopt measurement to avoid the fire, explosion etc. dangerous accidents happening. Operation of detector is controlled by a microcontroller, the highest values of the stored CO sensors, and displays it on the LCD display.

Table 1

| | |
|--------------------------------|-----------------------|
| Supply voltage: | 9 VDC |
| Operating current consumption: | < 170 μ A |
| Alarm current consumption: | < 20 mA |
| Detected gas: | carbon monoxide |
| Operating temperature: | -10...+50 °C |
| Operating relative humidity: | <95 % |
| Gas sampling: | natural diffusion |
| Alarm sound level: | \geq 90 dB (at 1 m) |
| Sensor lifetime: | > 5 years |
| Weight: | about 240 g |
| Dimensions: | 124×38 mm |

1.2. Description of the intended use the products

Detection of carbon monoxide emitted by gas appliances in buildings

2. ESSENTIAL CHARACTERISTICS, PERFORMANCE AND ASSESSMENT METHODS

2.1 Technical characteristics, their approved values and testing/evaluating methods

2.1.1 Mechanical resistance and stability

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2.1.2. Safety in case of fire

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2.1.3. Hygiene, health and the environment

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2.1.4. Safety and accessibility in use

| Product essential characteristics | Performance | Assessment method |
|---|--|---------------------------------|
| Tests for Venus detector | | |
| Alarm conditions | A, B, C, D test gases | EN 50291-1:2014 5.3.1; 5.3.4 |
| Unpowered storage | -20°C 24 h 50°C 24 h | EN 50291-1:2014 5.3.2 |
| Output signal for type A apparatus | type B apparatus no performance determined | EN 50291-1:2014 5.3.3 |
| Alarm during warm-up time | unenergized condition, D test gas and switch on | EN 50291-1:2014 5.3.5 |
| Response and recovery to a high CO volume ratio | 5000 ppm 15 min B test gas to alarm | EN 50291-1:2014 5.3.6 |
| Temperature effects | -10°C 6 h 40°C 6 h | EN 50291-1:2014 5.3.7 |
| Humidity effects | 30 RH% 15°C 6 h 90 RH% 40 °C 6 h | EN 50291-1:2014 5.3.8 |
| Speed of test gas | A test gas 1,2 m/s 2 h no alarm | EN 50291-1:2014 5.3.9 |
| Long term stability | no performance determined | EN 50291-1:2014 5.3.14 |
| Drop test (applicable to apparatus not intended for fixed installation) | no performance determined | EN 50291-1:2014 5.3.15 |
| Alarm sound level | 86,5 dB(A) from 1 m | EN 50291-1:2014 5.3.16 |

| | | |
|---|--|---------------------------|
| Degree of protection (mains powered apparatus only) | not necessary test but IPX2D | EN 50291-1:2014 5.3.17 |
| Mechanical strength | resists to an impact of $1\pm 0,2$ J | EN 50291-1:2014 5.3.18 |
| Battery fault warning | subject to test gases at $U_E+0,1= 4,7$ V | EN 50291-1:2014 6.1 |
| Battery capacity | Operating current consumption 22..81,1 μ A, Alarm current consumption 2,5... 15 mA, Battery capacity 382 mAh | EN 50291-1:2014 6.2 |
| Battery reversal | battery reversal not possible | EN 50291-1:2014 6.3 |
| Battery connections | pull of 20 N for 1 min | EN 50291-1:2014 6.4 |

2.1.5. Protection against noise

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2.1.6. Energy economy and heat retention

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2.1.7. Sustainable use of natural resources

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3. APPLICATIONS CONDITIONS

VENUS carbon monoxide detector application instructions can be marketed. The installations of the manufacturer's specifications must be taken into account.

4 FOLLOW-UP INSPECTION

Revisions to be made during the ATB term: 1 times.

A mandate have to submit for revision to the EMI Nonprofit Llc. to 02.03.2018. If submission of revision obligation fails, the ATB is repealed and the EMI Nonprofit Llc. will delete from valid Application Certificates database.

5. ANNEXES —

ATB compiled by:


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Professionally checked by:


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