Online Application No. 28332

[I-21/283/2026-W&M Section]

GOVERNMENT OF INDIA/भारत सरकार

MINISTRY OF CONSUMER AFFAIRS, FOOD AND PUBLIC DISTRIBUTION

उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण मंत्रालय

DEPARTMENT OF CONSUMER AFFAIRS/ उपभोक्ता मामले विभाग

LEGAL METROLOGY DIVISION/ विधिक मापविज्ञान प्रभाग

Krishi Bhawan/कृषि भवन, नई दिल्ली

Dated/दिनांक-: 13.10.2026

## Certificate of Approval of Model/ मॉडल का अनुमोदन प्रमाणपत्र

Whereas the Central Government, after considering the report submitted to it by prescribed authority, along with the Type examination certificate no. LNE-23119 rev. 10 issued by LNE, France, is satisfied that the model described in the said report (see the figure given below) is in conformity with the provisions of the Legal Metrology Act, 2009 (1 of 2010) and the Legal Metrology (Approval of Models) Rules, 2011 and the said model is likely to maintain its accuracy over periods of sustained use and to render accurate service under varied conditions;

Now, therefore, in exercise of the powers conferred by section 22 of the Legal Metrology Act, 2009 (1 of 2010) read with sub-rule (6) of rule 8 and sub-rule (4) of rule 11 of the Legal Metrology (Approval of Models) Rules, 2011, the Central Government hereby issues the certificate of approval of the model Device for determining the calorific value, Type "ENCAL 3000" with brand name "Elster" (herein after referred to as the said model) manufactured by M/s Elster GmbH, Steinern Strasse 19-21, 55252 Mainz-Kastel, Germany and imported & marketed in India without any alteration before or after sale by M/s Honeywell Automation India Limited 56 & 57 Hadaspsar Industrial Estate, Pune 411013, Maharashtra and which is assigned the approval mark IND/09/26/479 (the picture of the model is given below as Figure 1);

**Valid Until: 02.10.2032**

Figure 1



**Technical Data:**

| | |
|---|---|
| Calorific value unit | kWh/m3 |
| PCS calculation accuracy class | Class A (0,5%) |
| Nature of gases measured | Natural gas or biomethane |

Characteristics of the "Natural gas" version:

| Temperature of combustion | Temperature of blend | Pressure | PCS calculation range kWh/m3 |
|---|---|---|---|
| 0 °C | 0 °C | 1.01325 bar | 7.8 to 12.5 |
| 25 °C | 0 °C | 1.01325 bar | 7.8 to 12.4 |

Measuring range of mole fractions of natural gas components:

| Components detected | Measuring range of mole fractions (in %) | |
|---|---|---|
| | Minimum threshold | Maximum threshold |
| Nitrogen* | 0.01 | 22 |
| Carbon dioxide | 0.01 | 12 |
| Methane | 55 | 100 |
| Ethane | 0.01 | 14 |
| Propane | 0.001 | 5 |
| N-butane | 0.001 | 1.8 (Column 4m)<br>1.5 (8m column) |
| 2-Methylpropane (iC4) | 0.001 | 0.9 (Column 4m)<br>1.5 (8m column) |
| N-Pentane | 0.002 | 0.12 (4m column)<br>0.30 (8m column) |
| 2-Methylbutane (iC5) | 0.0002 | 0.12 (4m column)<br>0.30 (8m column) |
| 2,2-DiMethylpropane (neoC5) | 0.0002 | 0.1 |
| C6+ | 0.0002 | 0.3 |

Software details:

| Software | Version | Checksum |
|---|---|---|
| CPG | MPU 2.20 build 19606<br>I/O Switch 1.15 | 3e9e8717983c7a7c7353b2fc0c1aedaf |
| | MPU 2.20 build 22375<br>I/O Switch 1.15 | 769d76ca423057ed3fb7179c79b90c8 |
| | MPU 2.30 build 24085<br>I/O Switch 1.15 | 4469151e147302acd54b8aa16a9e0a74 |
| | MPU 3.32 build 29607<br>I/O Switch 2.54 | 5fc70cecee1a2fff7e822ef744e1a84e |
| | MPU 4.01 build 30995<br>I/O Switch 2.54 | 72b6c7be2b9b03b993b7a5d3169bd624 |
| | MPU 4.03 build 31448<br>I/O Switch 2.71 | 129454e17e7106075c7440b5119f8745 |
| Gas-Net 3000 (Optional) | Gasnet 1.02a<br>Gasnet 1.04c<br>Gasnet 1.06b<br>Gasnet 1.07b<br>Gasnet 1.08a<br>Gasnet 1.08b | 038707B9<br>E690799B<br>913BCAFD<br>C1C429C7<br>00FE1B7D<br>20726F98 |

Characteristics of the “Biogas” version:

| Temperature of combustion | Temperature of blend | Pressure | PCS calculation range |
|---|---|---|---|
| | | | kWh/m3 |
| 0 °C | 0 °C | 1.01325 bar | 9.2 to 11.7 |
| 25 °C | 0 °C | 1.01325 bar | |

Measuring range of mole fractions of gas components:

| Components detected | Measuring range of mole fractions (in %) | |
|---|---|---|
| | Minimum threshold | Maximum threshold |
| Nitrogen* | 0.005 | 15 |
| Carbon dioxide | 0.0005 | 12 |
| Methane | 60 | 100 |
| Ethane | 0.0005 | 14 |
| Propane | 0.001 | 5 |
| N-butane | 0.001 | 3 |
| 2-Methylpropane (iC4) | 0.001 | 3 |
| Oxygen | 0.005 | 3 |
| Hydrogen | 0.05 with He carrier<br>0.001 with Ar carrier | 5 |

Software details:

| Software | Version | Checksum |
|---|---|---|
| CPG | MPU 2.20 build 19606<br>I/O Switch 1.15 | 3e9e8717983c7a7c7353b2fc0c1aedaf |
| | MPU 2.20 build 22375<br>I/O Switch 1.15 | 769d76ca423057ed3fb7179c79b90c8 |
| | MPU 2.30 build 24085<br>I/O Switch 1.15 | 4469151e147302acd54b8aa16a9e0a74 |
| | MPU 3.32 build 29607<br>I/O Switch 2.54 | 5fc70cecee1a2fff7e822ef744e1a84e |
| | MPU 4.01 build 30995<br>I/O Switch 2.71 | 72b6c7be2b9b03b993b7a5d3169bd624 |
| | MPU 4.03 build 31448<br>I/O Switch 2.71 | 129454e17e7106075c7440b5119f8745 |
| Gas-Net 3000 (Optional) | 1.07b<br>1.08a<br>1.08b | C1C429C7<br>00FE1B7D<br>20726F98 |

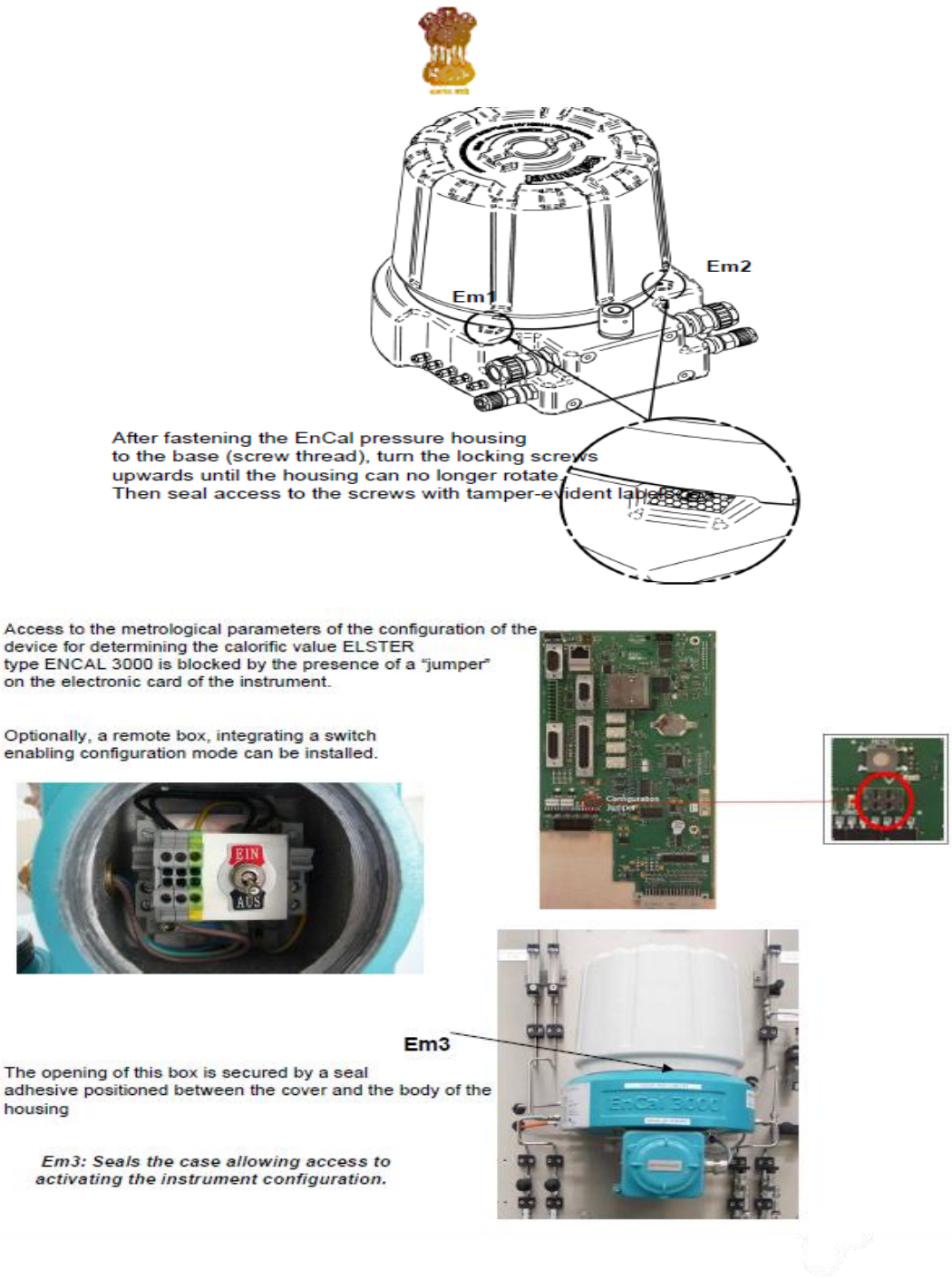



Figure 2

A typical schematic diagram of sealing provision to prevent the fraudulent practices of the model is given above as Figure 2.

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ASHUTOSH AGARWAL
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Date: 2026.10.13 10:31:08 +05'30'

(Ashutosh Agarwal/आशुतोष अग्रवाल)
Director (Legal Metrology) to Govt. of India/ निदेशक (विधिक माप विज्ञान) भारत सरकार
Phone/दूरभाष : 011-23389489
Email/ई-मेल: dirwm-ca@nic.in