## The technical documentation

1. General description

Models:

SIH-09BIMx4, MV-E28BI2

**2. Reference to harmonised standards:** EN 14825:2016、EN 14511-2:2013、EN 14511-3:2013、EN 12102-1:2017

## 3.Specific precautions that shall be taken when the model is assembled, installed, maintained or tested:

- ① According to the directions of Operating Instruction Manual.
- 2) Set the guide vane of air outlet at middle position by hand to achieve maximum air volume.
- ③ Set upper guide louver at the appropriate position to achieve maximum air volume.
- (4) Press any button during the testing mode, the unit will exit the lock frequency, you need repeat the process to enter testing mode if needed!
- (5) After each test a condition, need to power off and test the next working condition!

## 4. Measured technical parameters & 5. The calculations performed with the measured parameters & 6. Testing conditions

## **Information requirements**

(the number of decimals in the box indicates the precision of reporting)

Information to identify the model(s) to which the information relates to:

|                                      |              |       |                 | If function includes heating: Indicate the heating season  |              |       |      |  |
|--------------------------------------|--------------|-------|-----------------|--|--------------|-------|------|--|
| Function (indicate to which function |              |       |                 | the information relates to. Indicated values should relate |              |       |      |  |
| information applies)                 |              |       |                 | to one heating season at a time. Include at least the      |              |       |      |  |
|                                      |              |       |                 | heating season 'Average'.                                  |              |       |      |  |
| 1:                                   | Y            |       |                 | Average  | Y            |       |      |  |
| cooling                              |              |       |                 | (mandatory)  |              |       |      |  |
| 1                                    | Y            |       | Warmer          | Ν  |              |       |      |  |
| heating                              |              |       | (if designated) |  |              |       |      |  |
| I                                    |              |       |                 | Colder   | N            |       |      |  |
|                                      |              |       |                 | (if designated)  |              |       |      |  |
| Item                                 | symbol       | value | uni<br>t        | Item   | symbol       | value | unit |  |
| Design load                          |              |       |                 | Seasonal efficiency  |              |       |      |  |
| cooling                              | Pdesign<br>c | 8.0   | kW              | cooling  | Test<br>SEER | 7.21  |      |  |
| heating/Averag<br>e                  | Pdesign<br>h | 7.2   | kW              | heating/Averag<br>e  | SCOP(A)      | 4.2   |      |  |
| heating/Warme<br>r                   | Pdesign<br>h | /     | kW              | heating/Warmer   | SCOP(W)      | /     |      |  |
| heating/Colder                       | Pdesign<br>h | /     | kW              | heating/Colder   | SCOP(C)      | /     |      |  |

| Tested capacity (*) for cooling, at indoor<br>temperature 27(19) °C and outdoor<br>temperature Tj            |                  |         |    | Tested energy efficiency ratio (*), at indoor temperature 27(19) °C and outdoor temperature Tj                  |                 |       |           |  |
|--|------------------|---------|----|---|-----------------|-------|-----------|--|
| Tj = 35 °C   | Ptc              | 8.05    | kW | Tj = 35 °C  | EER             | 3.78  |           |  |
| Tj = 30 °C   | Ptc              | 5.75    | kW | Tj = 30 °C  | EER             | 5.98  |           |  |
| Tj = 25 ℃  | Ptc              | 3.64    | kW | Tj = 25 °C  | EER             | 8.91  |           |  |
| Tj = 20 °C   | Ptc              | 2.89    | kW | Tj = 20 ℃   | EER             | 12.42 |           |  |
| Tested capacity (*) for heating/Average<br>season, at indoor temperature 20 °C and<br>outdoor temperature Tj |                  |         |    | Tested coefficient of performance (*)/Average season,<br>at indoor temperature 20 °C and outdoor temperature Tj |                 |       |           |  |
| $Tj = -7 \ ^{\circ}C$  | Pth              | 6.59    | kW | Tj = -7 °C  | СОР             | 2.61  | _         |  |
| $Tj = 2 \ C$   | Pth              | 3.84    | kW | $Tj = 2 \ C$  | СОР             | 4.22  |           |  |
| $Tj = 7 \ C$   | Pth              | 2.48    | kW | $Tj = 7 \ C$  | СОР             | 5.53  |           |  |
| Tj = 12 ℃  | Pth              | 2.47    | kW | Tj = 12 ℃   | СОР             | 6.94  | _         |  |
| Tj = bivalent<br>temperature   | Pth              | 6.59    | kW | Tj = bivalent<br>temperature  | СОР             | 2.61  |           |  |
| Tj = operating<br>limit  | Pth              | 4.73    | kW | Tj = operating<br>limit   | СОР             | 2.37  |           |  |
| Bivalent temperature   |                  |         |    | Operating limit temperature   |                 |       |           |  |
| heating/Averag<br>e  | Tbiv             | -7      | °C | heating/Averag<br>e   | Tol             | -10   | °C        |  |
| heating/Warme<br>r   | Tbiv             | /       | °C | heating/Warmer  | Tol             | /     | °C        |  |
| heating/Colder   | Tbiv             | /       | °C | heating/Colder  | Tol             | /     | °C        |  |
| Power consumption of cycling   |                  |         |    | Efficiency of cycling   |                 |       |           |  |
| cooling  | Pcycc            | X,X     | kW | cooling   | EERcyc          | X,X   |           |  |
| heating  | Pcych            | x,x     | kW | heating   | COPcyc          | Х,Х   | —         |  |
| Degradation<br>co-efficient<br>cooling (**)  | Cdc              | 0.25    |    | Degradation<br>co-efficient<br>heating (**)   | Cdh             | 0.25  | _         |  |
| Electric power input in power modes other  |                  |         |    | Seasonal electricity consumption  |                 |       |           |  |
| than 'active mode'   |                  |         |    |   | -               |       |           |  |
| off mode   | P <sub>OFF</sub> | 0.01164 | kW | cooling   | Q <sub>CE</sub> | 388   | kWh/<br>a |  |

| standby mode                                     | P <sub>SB</sub> | 0.01164             | kW          | heating/Averag<br>e                          | Q <sub>HE</sub> | 2400                     | kWh/<br>a     |
|--|-----------------|---------------------|-------------|--|-----------------|--------------------------|---------------|
| thermostat-off<br>mode                           | P <sub>TO</sub> | 0.00605/0.0283<br>9 | kW          | heating/Warmer                               | Q <sub>HE</sub> | /                        | kWh/<br>a     |
| crankcase<br>heater mode                         | P <sub>CK</sub> | 0.0                 | kW          | heating/Colder                               | Q <sub>HE</sub> | /                        | kWh/<br>a     |
| Capacity control (indicate one of three options) |                 |                     | Other items |  |                 |                          |               |
| fixed  | N               |                     |             | Sound power<br>level<br>(indoor/outdoor<br>) | LWA             | 58/68                    | dB(A)         |
| staged   | Ν               |                     |             | Global<br>warming<br>potential               | GWP             | 675                      | kgCO<br>2 eq. |
| variable   |                 |                     |             | Rated air flow<br>(indoor/outdoor<br>)       |                 | 610/610/610/610/380<br>0 | m³/h          |