

## The technical documentation

### 1. General description

**Models:**

|               |
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| SIH-SOH-24BIR |
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### 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

| Function (indicate if present)  |          |       |      | Only for heating mode, if applicable   |        |       |      |
|---|----------|-------|------|--|--------|-------|------|
| Cooling   | Y        |       |      | Average(mandatory)   | Y      |       |      |
| Heating   | Y        |       |      | Warmer(if designed)  | Y      |       |      |
|   |          |       |      | Colder(if designed)  | N      |       |      |
| Item  | Symbol   | Value | Unit | Item   | Symbol | Value | Unit |
| Design load   |          |       |      | Seasonal efficiency  |        |       |      |
| Cooling   | Pdesignc | 6.2   | kW   | Cooling  | SEER   | 6.8   | —    |
| Heating/average   | Pdesignh | 4.7   | kW   | Heating/average  | SCOP/A | 4.0   | —    |
| Heating/warmer  | Pdesignh | 4.7   | kW   | Heating/warmer   | SCOP/W | 5.1   | —    |
| Heating/colder  | Pdesignh | -     | kW   | Heating/colder   | SCOP/C | -     | —    |
| Tested capacity (*) for cooling, at indoor temperature 27(19) °C and outdoor temperature Tj |          |       |      | Tested energy efficiency ratio (*), at indoor temperature 27(19) °C and outdoor temperature Tj |        |       |      |
| Item  | Symbol   | Value | Unit | Item   | Symbol | Value | Unit |
| Tj=35°C   | Pdc      | 6.20  | kW   | Tj=35°C  | EERd   | 3.39  | —    |
| Tj=30°C   | Pdc      | 4.37  | kW   | Tj=30°C  | EERd   | 4.98  | —    |
| Tj=25°C   | Pdc      | 2.84  | kW   | Tj=25°C  | EERd   | 7.56  | —    |
| Tj=20°C   | Pdc      | 1.70  | kW   | Tj=20°C  | EERd   | 15.41 | —    |

| Tested capacity (*) for heating/Average season, at indoor temperature 20 °C and outdoor temperature Tj |        |       |      | Tested coefficient of performance(*)/Average season, at indoor temperature 20 °C and outdoor temperature Tj |        |       |      |
|--|--------|-------|------|---|--------|-------|------|
| Tj=-7°C  | Pdh    | 4.17  | kW   | Tj=-7°C   | COPd   | 2.53  | —    |
| Tj=2°C   | Pdh    | 2.62  | kW   | Tj=2°C  | COPd   | 3.91  | —    |
| Tj=7°C   | Pdh    | 1.62  | kW   | Tj=7°C  | COPd   | 5.34  | —    |
| Tj=12°C  | Pdh    | 1.51  | kW   | Tj=12°C   | COPd   | 6.49  | —    |
| Tj=operating limit   | Pdh    | 4.59  | kW   | Tj=operating limit  | COPd   | 2.11  | —    |
| Tj=bivalent temperature  | Pdh    | 4.17  | kW   | Tj=bivalent temperature   | COPd   | 2.53  | —    |
| Item   | Symbol | Value | Unit | Item  | Symbol | Value | Unit |
| Tested capacity (*) for heating/Warmer season, at indoor temperature 20 °C and outdoor temperature Tj  |        |       |      | Tested coefficient of performance(*)/Warmer season, at indoor temperature 20 °C and outdoor temperature Tj  |        |       |      |
| Tj=2°C   | Pdh    | 4.87  | kW   | Tj=2°C  | COPd   | 2.59  | —    |
| Tj=7°C   | Pdh    | 3.00  | kW   | Tj=7°C  | COPd   | 4.59  | —    |
| Tj=12°C  | Pdh    | 1.51  | kW   | Tj=12°C   | COPd   | 6.49  | —    |
| Tj=operating limit   | Pdh    | 4.87  | kW   | Tj=operating limit  | COPd   | 2.59  | —    |
| Tj=bivalent temperature  | Pdh    | 4.87  | kW   | Tj=bivalent temperature   | COPd   | 2.59  | —    |
| Tested capacity (*) for heating/Colder season, at indoor temperature 20 °C and outdoor temperature Tj  |        |       |      | Tested coefficient of performance(*)/Colder season, at indoor temperature 20 °C and outdoor temperature Tj  |        |       |      |
| Tj=-7°C  | Pdh    | -     | kW   | Tj=-7°C   | COPd   | -     | —    |
| Tj=2°C   | Pdh    | -     | kW   | Tj=2°C  | COPd   | -     | —    |
| Tj=7°C   | Pdh    | -     | kW   | Tj=7°C  | C-OPd  | -     | —    |
| Tj=12°C  | Pdh    | -     | kW   | Tj=12°C   | COPd   | -     | —    |
| Tj=operating limit   | Pdh    | -     | kW   | Tj=operating limit  | COPd   | -     | —    |
| Tj=bivalent temperature  | Pdh    | -     | kW   | Tj=bivalent temperature   | COPd   | -     | —    |

|  |                   |      |    |  |                     |      |    |
|--|-------------------|------|----|--|---------------------|------|----|
| T <sub>j</sub> =-15°C                    | P <sub>dh</sub>   | -    | kW | T <sub>j</sub> =-15°C                    | COP <sub>d</sub>    | -    | —  |
| Bivalent temperature                     |                   |      |    | Operating limit temperature              |                     |      |    |
| Heating/Average                          | T <sub>biv</sub>  | -7   | °C | Heating/Average                          | T <sub>ol</sub>     | -10  | °C |
| Heating/Warmer                           | T <sub>biv</sub>  | 2    | °C | Heating/Warmer                           | T <sub>ol</sub>     | 2    | °C |
| Heating/Colder                           | T <sub>biv</sub>  | -    | °C | Heating/Colder                           | T <sub>ol</sub>     | -    | °C |
| Cycling interval capacity                |                   |      |    | Cycling interval efficiency              |                     |      |    |
| for cooling                              | P <sub>cycc</sub> | x,x  | kW | for cooling                              | EER <sub>cycc</sub> | x,x  | —  |
| for heating                              | P <sub>cyh</sub>  | x,x  | kW | for heating                              | COP <sub>cyh</sub>  | x,x  | —  |
| Degradation co-efficient cooling<br>(**) | C <sub>dc</sub>   | 0.25 | —  | Degradation co-efficient heating<br>(**) | C <sub>dh</sub>     | 0.25 | —  |

| Item   | Symbol           | Value           | Unit | Item                               | Symbol          | Value    | Unit                  |
|--|------------------|-----------------|------|------------------------------------|-----------------|----------|-----------------------|
| Electric power input in power modes other than 'active mode' |                  |                 |      | Annual electricity consumption     |                 |          |                       |
| Off mode   | P <sub>OFF</sub> | 0.00588         | kW   | Cooling                            | Q <sub>CE</sub> | 318      | kWh/a                 |
| Standby mode   | P <sub>SB</sub>  | 0.00588         | kW   | Heating/Average                    | Q <sub>HE</sub> | 1643     | kWh/a                 |
| Thermostat-off mode  | P <sub>TO</sub>  | 0.00595/0.01281 | kW   | Heating/Warmer                     | Q <sub>HE</sub> | 1289     | kWh/a                 |
| Crankcase heater mode  | P <sub>CK</sub>  | 0               | kW   | Heating/Colder                     | Q <sub>HE</sub> | -        | kWh/a                 |
| Capacity control (indicate one of three options)             |                  |                 |      | Other items                        |                 |          |                       |
| fixed  |                  | N               |      | Sound power level (indoor/outdoor) | L <sub>WA</sub> | 60/65    | dB(A)                 |
| staged   |                  | N               |      | Global warming potential           | GWP             | 675      | kgCO <sub>2</sub> eq. |
| variable   |                  | Y               |      | Rated air flow (indoor/outdoor)    | —               | 900/2800 | m <sup>3</sup> /h     |