

The technical documentation

1. General description

Models:

SIH-09BIR,
SOH-09BIR2

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 | 2.7 | kW | Cooling | SEER | 6.6 | — |
| Heating/average | Pdesignh | 2.5 | kW | Heating/average | SCOP/A | 4.2 | — |
| Heating/warmer | Pdesignh | 2.8 | kW | Heating/warmer | SCOP/W | 5.2 | — |
| Heating/colder | Pdesignh | - | kW | Heating/colder | SCOP/C | - | — |
| Declared capacity (*) for cooling, at indoor temperature 27(19) °C and outdoor temperature Tj | | | | Declared 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 | 2.71 | kW | Tj=35°C | EERd | 3.68 | — |
| Tj=30°C | Pdc | 1.93 | kW | Tj=30°C | EERd | 5.35 | — |

| | | | | | | | |
|--|--------|-------|------|---|--------|-------|------|
| Tj=25°C | Pdc | 1.23 | kW | Tj=25°C | EERd | 7.44 | — |
| Tj=20°C | Pdc | 0.71 | kW | Tj=20°C | EERd | 11.22 | — |
| Declared capacity (*) for heating/Average season, at indoor temperature 20 °C and outdoor temperature Tj | | | | Declared coefficient of performance(*)/Average season, at indoor temperature 20 °C and outdoor temperature Tj | | | |
| Tj=-7°C | Pdh | 2.22 | kW | Tj=-7°C | COPd | 2.76 | — |
| Tj=2°C | Pdh | 1.33 | kW | Tj=2°C | COPd | 4.34 | — |
| Tj=7°C | Pdh | 0.88 | kW | Tj=7°C | COPd | 5.00 | — |
| Tj=12°C | Pdh | 0.85 | kW | Tj=12°C | COPd | 6.18 | — |
| Tj=operating limit | Pdh | 2.61 | kW | Tj=operating limit | COPd | 2.38 | — |
| Tj=bivalent temperature | Pdh | 2.61 | kW | Tj=bivalent temperature | COPd | 2.38 | — |
| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
| Declared capacity (*) for heating/Warmer season, at indoor temperature 20 °C and outdoor temperature Tj | | | | Declared coefficient of performance(*)/Warmer season, at indoor temperature 20 °C and outdoor temperature Tj | | | |
| Tj=2°C | Pdh | 2.82 | kW | Tj=2°C | COPd | 2.62 | — |
| Tj=7°C | Pdh | 1.82 | kW | Tj=7°C | COPd | 4.99 | — |
| Tj=12°C | Pdh | 0.85 | kW | Tj=12°C | COPd | 6.18 | — |
| Tj=operating limit | Pdh | 2.82 | kW | Tj=operating limit | COPd | 2.62 | — |
| Tj=bivalent temperature | Pdh | 2.82 | kW | Tj=bivalent temperature | COPd | 2.62 | — |
| Declared capacity (*) for heating/Colder season, at indoor temperature 20 °C and outdoor temperature Tj | | | | Declared 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 | Pdh | — | kW | Tj=bivalent | COPd | — | — |

| | | | | | | | |
|--------------------------------------|-------------------|------|----|--------------------------------------|---------------------|------|----|
| temperature | | | | temperature | | | |
| T _j =-15°C | P _{dh} | — | kW | T _j =-15°C | COP _d | — | — |
| Bivalent temperature | | | | Operating limit temperature | | | |
| Heating/Average | T _{biv} | -10 | °C | Heating/Average | T _{ol} | -10 | °C |
| Heating/Warmer | T _{biv} | 2 | °C | Heating/Warmer | T _{ol} | 2 | °C |
| Heating/Colder | T _{biv} | — | °C | Heating/Colder | T _{ol} | — | °C |
| Cycling interval capacity | | | | Cycling interval efficiency | | | |
| for cooling | P _{cycc} | x,x | kW | for cooling | EER _{cycc} | x,x | — |
| for heating | P _{cyhc} | x,x | kW | for heating | COP _{cyhc} | x,x | — |
| Degradation coefficient cooling (**) | C _{dc} | 0.25 | — | Degradation coefficient heating (**) | C _{dh} | 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 _{OFF} | 0.00251 | kW | Cooling | Q _{CE} | 143 | kWh/a |
| Standby mode | P _{SB} | 0.00251 | kW | Heating/Average | Q _{HE} | 833 | kWh/a |
| Thermostat-off mode | P _{TO} | 0.00441/0.01806 | kW | Heating/Warmer | Q _{HE} | 754 | kWh/a |
| Crankcase heater mode | P _{CK} | 0 | kW | Heating/Colder | Q _{HE} | — | kWh/a |
| Capacity control (indicate one of three options) | | | | Other items | | | |
| fixed | | N | | Sound power level (indoor/outdoor) | L _{WA} | 55/62 | dB(A) |
| staged | | N | | Global warming potential | GWP | 675 | kgCO ₂ eq. |
| variable | | Y | | Rated air flow (indoor/outdoor) | — | 550/1950 | m ³ /h |