

# The technical documentation

## 1. General description

### Models:

SIH+SOH-09BIT

## 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:

Function (indicate to which function information applies)				If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.			
cooling	Y			Average (mandatory)	Y		
heating	Y			Warmer (if designated)	Y		
				Colder (if designated)	Y		
Item	symbol	value	unit	Item	symbol	value	unit
Design load				Seasonal efficiency			
cooling	Pdesig <sub>nc</sub>	2,7	kW	cooling	Test SEER	7.5	—
heating/Average	Pdesig <sub>nh</sub>	2.7	kW	heating/Average	SCOP(A)	4.2	—
heating/Warmer	Pdesig <sub>nh</sub>	3.0	kW	heating/Warmer	SCOP(W)	5.3	—

heating/Colder	P <sub>design</sub>	4,0	kW	heating/Colder	SCOP(C)	3.4	—
Tested capacity (*) for cooling, at indoor temperature 27(19) °C and outdoor temperature T <sub>j</sub>				Tested energy efficiency ratio (*), at indoor temperature 27(19) °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = 35 °C	P <sub>tc</sub>	2.79	kW	T <sub>j</sub> = 35 °C	EER	3.89	—
T <sub>j</sub> = 30 °C	P <sub>tc</sub>	2.06	kW	T <sub>j</sub> = 30 °C	EER	5.82	—
T <sub>j</sub> = 25 °C	P <sub>tc</sub>	1.27	kW	T <sub>j</sub> = 25 °C	EER	9.35	—
T <sub>j</sub> = 20 °C	P <sub>tc</sub>	0.77	kW	T <sub>j</sub> = 20 °C	EER	11.87	—
Tested capacity (*) for heating/Average season, at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Tested coefficient of performance (*)/Average season, at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>th</sub>	2.43	kW	T <sub>j</sub> = - 7 °C	COP	3.00	—
T <sub>j</sub> = 2 °C	P <sub>th</sub>	1.40	kW	T <sub>j</sub> = 2 °C	COP	4.16	—
T <sub>j</sub> = 7 °C	P <sub>th</sub>	0.95	kW	T <sub>j</sub> = 7 °C	COP	5.12	—
T <sub>j</sub> = 12 °C	P <sub>th</sub>	0.97	kW	T <sub>j</sub> = 12 °C	COP	6.44	—
T <sub>j</sub> = operating limit	P <sub>th</sub>	2.82	kW	T <sub>j</sub> = operating limit	COP	2.70	—
T <sub>j</sub> = bivalent temperature	P <sub>th</sub>	2.82	kW	T <sub>j</sub> = bivalent temperature	COP	2.70	—
Tested capacity (*) for heating/Warmer season, at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Tested coefficient of performance (*)/Warmer season, at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = 2 °C	P <sub>th</sub>	3,10	kW	T <sub>j</sub> = 2 °C	COP	2,66	—
T <sub>j</sub> = 7 °C	P <sub>th</sub>	1.92	kW	T <sub>j</sub> = 7 °C	COP	5,18	—
T <sub>j</sub> = 12 °C	P <sub>th</sub>	0.97	kW	T <sub>j</sub> = 12 °C	COP	6.44	—
T <sub>j</sub> = operating limit	P <sub>th</sub>	3.10	kW	T <sub>j</sub> = operating limit	COP	2,68	—
T <sub>j</sub> = bivalent temperature	P <sub>th</sub>	3.10	kW	T <sub>j</sub> = bivalent temperature	COP	2,68	—
Tested capacity (*) for heating/Colder season, at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Tested coefficient of performance (*)/Colder season, at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>th</sub>	2.43	kW	T <sub>j</sub> = - 7 °C	COP	3.00	—
T <sub>j</sub> = 2 °C	P <sub>th</sub>	1.40	kW	T <sub>j</sub> = 2 °C	COP	4.16	—
T <sub>j</sub> = 7 °C	P <sub>th</sub>	0.95	kW	T <sub>j</sub> = 7 °C	COP	5.12	—
T <sub>j</sub> = 12 °C	P <sub>th</sub>	0.97	kW	T <sub>j</sub> = 12 °C	COP	6.44	—
T <sub>j</sub> = operating limit	P <sub>th</sub>	2.1	kW	T <sub>j</sub> = operating limit	COP	1.88	—
T <sub>j</sub> = bivalent temperature	P <sub>th</sub>	2.82	kW	T <sub>j</sub> = bivalent temperature	COP	2,70	—

T <sub>j</sub> = - 15 °C	P <sub>th</sub>	2.58	kW	T <sub>j</sub> = - 15 °C	COP	2,18	—
Bivalent temperature				Operating limit temperature			
heating/Average	T <sub>biv</sub>	-10	°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>	-10	°C	heating/Colder	T <sub>ol</sub>	-22	°C
Power consumption of cycling				Efficiency of cycling			
cooling	P <sub>cycc</sub>	x,x	kW	cooling	EER <sub>cycc</sub>	x,x	—
heating	P <sub>cyh</sub>	x,x	kW	heating	COP <sub>cycc</sub>	x,x	—
Degradation co-efficient cooling (**)	C <sub>dc</sub>	0.25	—	Degradation co-efficient heating (**)	C <sub>dh</sub>	0.25	—
Electric power input in power modes other than 'active mode'				Seasonal electricity consumption			
off mode	P <sub>OFF</sub>	0.00194	kW	cooling	Q <sub>CE</sub>	126	kWh/a
standby mode	P <sub>SB</sub>	0.00194	kW	heating/Average	Q <sub>HE</sub>	897	kWh/a
thermostat-off mode	P <sub>TO</sub>	0.005210/0.22310	kW	heating/Warmer	Q <sub>HE</sub>	792	kWh/a
crankcase heater mode	P <sub>CK</sub>	0.0	kW	heating/Colder	Q <sub>HE</sub>	2470	kWh/a
Capacity control (indicate one of three options)				Other items			
fixed	N			Sound power level (indoor/outdoor)	LWA	(54/61)	dB(A)
staged	N			Global warming potential	GWP	675	kgCO <sub>2</sub> eq.
variable	Y			Rated air flow (indoor/outdoor)	—	(610/1950)	m <sup>3</sup> /h