# The technical documentation

## 1. General description

## Models:

SIH-SOH-18BIT2

# 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	uni t	Item	symbol	value	unit
Design load				Seasonal efficiency			
cooling	Pdesig nc	5.3	kW	cooling	Test SEER	7.656	—
heating/Avera ge	Pdesig nh	4.3	kW	heating/Avera ge	SCOP(A )	4.325	—
heating/Warm er	Pdesig nh	4.8	kW	heating/Warm er	SCOP( W)	<mark>5.708</mark>	—
heating/Colde r	Pdesig nh	6.0	kW	heating/Colde r	SCOP(C )	3.566	—

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					
Tj = 35 °C	Ptc	5.30	kW	Tj = 35 °C	EER	3.70			
Tj = 30 °C	Ptc	3.79	kW	Tj = 30 °C	EER	5.60	—		
Tj = 25 °C	Ptc	2.40	kW	Tj = 25 °C	EER	9.10	—		
Tj = 20 °C	Ptc	1.65	kW	Tj = 20 °C	EER	16.23	—		
Tested capacity	Tested capacity (*) for heating/Average				Tested coefficient of performance (*)/Average				
season, at indoor temperature 20 °C and outdoor temperature Tj				season, at indoor temperature 20 °C and outdoor temperature Tj					
Tj = − 7 °C	Pth	3.75	kW	Tj = − 7 °C	COP	3.21	—		
Tj = 2 °C	Pth	2.23	kW	Tj = 2 °C	COP	4.08	_		
Tj = 7 °C	Pth	1.43	kW	Tj = 7 °C	COP	5.45	_		
Tj = 12 °C	Pth	1.65	kW	Tj = 12 °C	COP	7.02	_		
Tj = operating limit	Pth	4.35	kW	Tj = operating limit	COP	2.72			
Tj = bivalent temperature	Pth	4.35	kW	Tj = bivalent temperature	COP	2.72	—		
Tested capacity	Tested capacity (*) for heating/Warmer season,				Tested coefficient of performance (*)/Warmer				
at indoor tempe	erature 20 °	°C and outdoor		season, at indoor temperature 20 °C and					
temperature Tj	temperature Tj				outdoor temperature Tj				
Tj = 2 °C	Pth	4.82	kW	Tj = 2 °C	COP	3.20			
Tj = 7 °C	Pth	<mark>2.91</mark>	kW	Tj = 7 °C	COP	<mark>5.35</mark>			
Tj = 12 °C	Pth	1.65	kW	Tj = 12 °C	COP	7.02			
Tj = operating limit	Pth	4.82	kW	Tj = operating limit	COP	3.20	—		
Tj = bivalent temperature	Pth	4.82	kW	Tj = bivalent temperature	COP	3.20			
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	Pth	3.75	kW	Tj = − 7 °C	COP	3.21	_		
Tj = 2 °C	Pth	2.23	kW	Tj = 2 °C	COP	4.08	_		
Tj = 7 °C	Pth	1.43	kW	Tj = 7 °C	COP	5.45	_		
Tj = 12 °C	Pth	1.65	kW	Tj = 12 °C	COP	7.02			
Tj = operating limit	Pth	4.11	kW	Tj = operating limit	COP	1.89			
Tj = bivalent temperature	Pth	5.04	kW	Tj = bivalent temperature	COP	2.12	_		

Tj = − 15 °C	Pth	5.04	kW	Tj = − 15 °C	COP	2.12			
Bivalent temperature				Operating limit temperature					
heating/Avera ge	Tbiv	-10	°C	heating/Avera ge	Tol	-10	°C		
heating/Warm er	Tbiv	2	°C	heating/Warm er	Tol	2	°C		
heating/Colde r	Tbiv	-15	°C	heating/Colde r	Tol	-22	°C		
Power consump	otion of cyc	ling		Efficiency of cycling					
cooling	Pcycc	X,X	kW	cooling	EERcyc	X,X			
heating	Pcych	X,X	kW	heating	COPcyc	X,X			
Degradation co-efficient cooling (**)	Cdc	0.25	_	Degradation co-efficient heating (**)	Cdh	0.25	_		
Electric power input in power modes other than 'active mode'				Seasonal electricity consumption					
off mode	Poff	0.00555	kW	cooling	QCE	242	kWh/ a		
standby mode	Psb	0.00555	kW	heating/Avera ge	Qhe	1392	kWh/ a		
thermostat-off mode	Рто	0.00193/0.0133 9	kW	heating/Warm er	QHE	<mark>1153</mark>	kWh/ a		
crankcase heater mode	Рск	0	kW	heating/Colde r	Q <sub>HE</sub>	3534	kWh/ a		
Capacity contro	Capacity control (indicate one of three options)				Other items				
fixed	Ν			Sound power level (indoor/outdo or)	LWA	(60/64)	dB(A)		
staged	Ν			Global warming potential	GWP	675	kgCO 2 eq.		
variable	Y			Rated air flow (indoor/outdo or)	_	(850/3600)	m³/h		