

# The technical documentation

## 1. General description

### Models:

SIH-07BIK

## 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	2.2	kW	Cooling	SEER	6.658	—
Heating/average	Pdesignh	2.1	kW	Heating/average	SCOP/A	4.034	—
Heating/warmer	Pdesignh	2.1	kW	Heating/warmer	SCOP/W	4.803	—
Heating/colder	Pdesignh	x,x	kW	Heating/colder	SCOP/C	x,x	—
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	2.25	kW	Tj=35°C	EERd	3.86	—
Tj=30°C	Pdc	1.59	kW	Tj=30°C	EERd	5.21	—
Tj=25°C	Pdc	1.06	kW	Tj=25°C	EERd	8.31	—
Tj=20°C	Pdc	0.89	kW	Tj=20°C	EERd	10.35	—

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	1.81	kW	Tj=-7°C	COPd	2.90	—
Tj=2°C	Pdh	1.17	kW	Tj=2°C	COPd	4.08	—
Tj=7°C	Pdh	0.75	kW	Tj=7°C	COPd	4.74	—
Tj=12°C	Pdh	0.78	kW	Tj=12°C	COPd	5.83	—
Tj=operating limit	Pdh	2.18	kW	Tj=operating limit	COPd	2.46	—
Tj=bivalent temperature	Pdh	2.18	kW	Tj=bivalent temperature	COPd	2.46	—
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
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	2.12	kW	Tj=2°C	COPd	2.49	—
Tj=7°C	Pdh	1.37	kW	Tj=7°C	COPd	4.67	—
Tj=12°C	Pdh	0.78	kW	Tj=12°C	COPd	5.83	—
Tj=operating limit	Pdh	2.12	kW	Tj=operating limit	COPd	2.49	—
Tj=bivalent temperature	Pdh	1.51	kW	Tj=bivalent temperature	COPd	4.56	—
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	x,x	kW	Tj=-7°C	COPd	x,x	—
Tj=2°C	Pdh	x,x	kW	Tj=2°C	COPd	x,x	—
Tj=7°C	Pdh	x,x	kW	Tj=7°C	COPd	x,x	—
Tj=12°C	Pdh	x,x	kW	Tj=12°C	COPd	x,x	—
Tj=operating limit	Pdh	x,x	kW	Tj=operating limit	COPd	x,x	—

Tj=bivalent temperature	Pdh	x,x	kW	Tj=bivalent temperature	COPd	x,x	
Tj=-15°C	Pdh	--	kW	Tj=-15°C	COPd	--	—
Bivalent temperature				Operating limit temperature			
Heating/Average	Tbiv	-10	°C	Heating/Average	Tol	-10	°C
Heating/Warmer	Tbiv	6	°C	Heating/Warmer	Tol	2	°C
Heating/Colder	Tbiv	x	°C	Heating/Colder	Tol	x	°C
Cycling interval capacity				Cycling interval efficiency			
for cooling	Pcycc	x,x	kW	for cooling	EERcyc	x,x	—
for heating	Pcych	x,x	kW	for heating	COPcyc	x,x	—
Degradation co-efficient cooling (**)	Cdc	0.25	—	Degradation co-efficient heating (**)	Cdh	0.25	—
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
Electric power input in power modes other than 'active mode'				Annual electricity consumption			
Off mode	P <sub>OFF</sub>	0.00193	kW	Cooling	Q <sub>CE</sub>	116	kWh/a
Standby mode	P <sub>SB</sub>	0.00193	kW	Heating/Average	Q <sub>HE</sub>	729	kWh/a
Thermostat-off mode	P <sub>TO</sub>	0.00437/0.01744	kW	Heating/Warmer	Q <sub>HE</sub>	612	kWh/a
Crankcase heater mode	P <sub>CK</sub>	0	kW	Heating/Colder	Q <sub>HE</sub>	x	kWh/a
Capacity control (indicate one of three options)				Other items			
fixed	N			Sound power level (indoor/outdoor)	L <sub>WA</sub>	55/60	dB(A)
staged	N			Global warming potential	GWP	675	kgCO <sub>2</sub> eq.
variable	Y			Rated air flow (indoor/outdoor)	—	520/1400	m <sup>3</sup> /h

