

# The technical documentation

## 1. General description

**Models:**

SIH-09BIK + SOH-09BIK2

## 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	COPd	—	—
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	—	—

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	2	°C	Heating/Warmer	Tol	2	°C
Heating/Colder	Tbiv	—	°C	Heating/Colder	Tol	—	°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	COPcy c	x,x	—
Degradation co-efficient cooling (**)	Cdc	0.25	—	Degradation co-efficient heating (**)	Cdh	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>	0.00251	kW	Cooling	Q <sub>CE</sub>	143	kWh/a
Standby mode	P <sub>SB</sub>	0.00251	kW	Heating/Average	Q <sub>HE</sub>	833	kWh/a
Thermostat-off mode	P <sub>TO</sub>	0.00441/0.01806	kW	Heating/Warmer	Q <sub>HE</sub>	754	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>	55/62	dB(A)		
staged	N	Global warming potential	GWP	675	kgCO <sub>2</sub> eq.		
variable	Y	Rated air flow (indoor/outdoor)	—	550/1950	m <sup>3</sup> /h		