

The technical documentation

1. General description

Models:

SIH-09BIM/X + SOH-09BIM

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)	Y		
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Design load				Seasonal efficiency			
Cooling	Pdesignc	2.7	kW	Cooling	SEER	8.512	—
Heating/average	Pdesignh	2.7	kW	Heating/average	SCOP/A	4.613	—
Heating/warmer	Pdesignh	2.9	kW	Heating/warmer	SCOP/W	5.772	—
Heating/colder	Pdesignh	4.0	kW	Heating/colder	SCOP/C	3.534	—
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	2.72	kW	Tj=35°C	EERd	4.03	—
Tj=30°C	Pdc	1.97	kW	Tj=30°C	EERd	6.18	—
Tj=25°C	Pdc	1.27	kW	Tj=25°C	EERd	10.90	—
Tj=20°C	Pdc	0.70	kW	Tj=20°C	EERd	15.50	—

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	2.41	kW	Tj=-7°C	COPd	3.05	—
Tj=2°C	Pdh	1.43	kW	Tj=2°C	COPd	4.51	—
Tj=7°C	Pdh	0.94	kW	Tj=7°C	COPd	5.95	—
Tj=12°C	Pdh	0.92	kW	Tj=12°C	COPd	7.40	—
Tj=operating limit	Pdh	2.73	kW	Tj=operating limit	COPd	2.59	—
Tj=bivalent temperature	Pdh	2.73	kW	Tj=bivalent temperature	COPd	2.59	—

Function (indicate if present)				Only for heating mode, if applicable			
Cooling	Y			Average(mandatory)		Y	
Heating	Y			Warmer(if designed)		Y	
				Colder(if designed)		Y	
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	2.96	kW	Tj=2°C	COPd	2.82	—
Tj=7°C	Pdh	1.84	kW	Tj=7°C	COPd	5.25	—
Tj=12°C	Pdh	0.92	kW	Tj=12°C	COPd	7.40	—
Tj=operating limit	Pdh	2.96	kW	Tj=operating limit	COPd	2.82	—
Tj=bivalent temperature	Pdh	2.96	kW	Tj=bivalent temperature	COPd	2.82	—
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	2.41	kW	Tj=-7°C	COPd	3.05	—
Tj=2°C	Pdh	1.43	kW	Tj=2°C	COPd	4.51	—
Tj=7°C	Pdh	0.94	kW	Tj=7°C	COPd	5.95	—
Tj=12°C	Pdh	0.92	kW	Tj=12°C	COPd	7.40	—
Tj=operating limit	Pdh	2.00	kW	Tj=operating	COPd	1.95	—

				limit			
Tj=bivalent temperature	Pdh	2.73	kW	Tj=bivalent temperature	COPd	2.59	
Tj=-15°C	Pdh	2.41	kW	Tj=-15°C	COPd	2.06	—
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	-10	°C	Heating/Colder	Tol	-22	°C
Cycling interval capacity				Cycling interval efficiency			
for cooling	Pcycc	x,x	kW	for cooling	EERcyc	x,x	—
for heating	Pcyh	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)	Y		
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}	0.0022	kW	Cooling	Q _{CE}	111	kWh/a
Standby mode	P _{SB}	0.0022	kW	Heating/Average	Q _{HE}	819	kWh/a
Thermostat-off mode	P _{TO}	0.005/0.0136	kW	Heating/Warmer	Q _{HE}	703	kWh/a
Crankcase heater mode	P _{CK}	0	kW	Heating/Colder	Q _{HE}	2377	kWh/a
Capacity control (indicate one of three options)				Other items			
fixed	N			Sound power level (indoor/outdoor)	L _{WA}	58/61	dB(A)
staged	N			Global warming potential	GWP	675	kgCO ₂ eq.
variable	Y			Rated air flow	—	610/1950	m ³ /h