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℃	Pdc	2.72	kW	Tj=35℃	EERd	4.03	—
Tj=30℃	Pdc	1.97	kW	Tj=30℃	EERd	6.18	—
Tj=25℃	Pdc	1.27	kW	Tj=25℃	EERd	10.90	—
Tj=20℃	Pdc	0.70	kW	Tj=20℃	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℃	Pdh	2.41	kW	Tj=-7℃	COPd	3.05	—
Tj=2℃	Pdh	1.43	kW	Tj=2℃	COPd	4.51	—
Tj=7℃	Pdh	0.94	kW	Tj=7℃	COPd	5.95	—
Tj=12℃	Pdh	0.92	kW	Tj=12℃	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℃	Pdh	2.96	kW	Tj=2℃	COPd	2.82	—
Tj=7℃	Pdh	1.84	kW	Tj=7℃	COPd	5.25	—
Tj=12℃	Pdh	0.92	kW	Tj=12℃	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℃	Pdh	2.41	kW	Tj=-7℃	COPd	3.05	—
Tj=2℃	Pdh	1.43	kW	Tj=2℃	COPd	4.51	—
Tj=7℃	Pdh	0.94	kW	Tj=7℃	COPd	5.95	—
Tj=12℃	Pdh	0.92	kW	Tj=12℃	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℃	Pdh	2.41	kW	Tj=-15℃	COPd	2.06	—

Bivalent temperature				Operating limit temperature			
Heating/Average	Tbiv	-10	℃	Heating/Average	Tol	-10	℃
Heating/Warmer	Tbiv	2	℃	Heating/Warmer	Tol	2	℃
Heating/Colder	Tbiv	-10	℃	Heating/Colder	Tol	-22	℃

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)	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