The technical documentation

1. General description

Models:

SIH-18BIK, SOH-18BIK

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，for installing, maintaining or testing.

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	4.6	kW	Cooling	SEER	6.47	—
Heating/average	Pdesignh	3.7	kW	Heating/average	SCOP/A	4.01	—
Heating/warmer	Pdesignh	3.6	kW	Heating/warmer	SCOP/W	5.10	—
Heating/colder	Pdesignh	x.x	kW	Heating/colder	SCOP/C	x.x	—
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℃	Pdc	4.61	kW	Tj=35℃	EERd	3.24	—

Tj=30℃	Pdc	3.30	kW	Tj=30℃	EERd	4.83	—
Tj=25℃	Pdc	2.14	kW	Tj=25℃	EERd	7.52	—
Tj=20℃	Pdc	1.25	kW	Tj=20℃	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℃	Pdh	3.34	kW	Tj=-7℃	COPd	2.97	—
Tj=2℃	Pdh	1.99	kW	Tj=2℃	COPd	4.08	—
Tj=7℃	Pdh	1.32	kW	Tj=7℃	COPd	4.67	—
Tj=12℃	Pdh	0.95	kW	Tj=12℃	COPd	5.16	—
Tj=operating limit	Pdh	3.70	kW	Tj=operating limit	COPd	2.32	—
Tj=bivalent temperature	Pdh	3.34	kW	Tj=bivalent temperature	COPd	2.97	—

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
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℃	Pdh	3.73	kW	Tj=2℃	COPd	2.61	—
Tj=7℃	Pdh	2.31	kW	Tj=7℃	COPd	5.08	—
Tj=12℃	Pdh	1.08	kW	Tj=12℃	COPd	5.87	—
Tj=operating limit	Pdh	3.73	kW	Tj=operating limit	COPd	2.61	—
Tj=bivalent temperature	Pdh	3.73	kW	Tj=bivalent temperature	COPd	2.61	—
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℃	Pdh	x,x	kW	Tj=-7℃	COPd	x,x	—

Tj=2℃	Pdh	x,x	kW	Tj=2℃	COPd	x,x	—
Tj=7℃	Pdh	x,x	kW	Tj=7℃	C-OPd	x,x	—
Tj=12℃	Pdh	x,x	kW	Tj=12℃	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℃	Pdh	x,x	kW	Tj=-15℃	COPd	x,x	—
Bivalent temperature				Operating limit temperature			
Heating/Average	Tbiv	-7	℃	Heating/Average	Tol	-10	℃
Heating/Warmer	Tbiv	2	℃	Heating/Warmer	Tol	2	℃
Heating/Colder	Tbiv	x,x	℃	Heating/Colder	Tol	x,x	℃
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_{OFF}	0.00203	kW	Cooling	Q_{CE}	249	kWh/a
Standby mode	P_{SB}	0.00203	kW	Heating/Average	Q_{HE}	1290	kWh/a
Thermostat-off mode	P_{TO}	0.00552/0.02513	kW	Heating/Warmer	Q_{HE}	987	kWh/a
Crankcase heater mode	P_{CK}	0	kW	Heating/Colder	Q_{HE}	x,x	kWh/a
Capacity control (indicate one of three options)				Other items			
fixed	N			Sound power level (indoor/outdoor)	L_{WA}	58/63	dB(A)
staged	N			Global warming potential	GWP	675	$kgCO_2$ eq.
variable	Y			Rated air flow (indoor/outdoor)	—	850/1950	m^3/h