

# The technical documentation

## 1. General description

### Models:

SIH-12BIR, SOH-12BIR2

## 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

### Appendix I: information according to clause 3 of NO 206/2012 ANNEX I, for air conditioners, except single duct and double duct air conditioners

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	3.2	kW	Cooling	SEER	6.1	—
Heating/average	Pdesignh	2.7	kW	Heating/average	SCOP/A	4.0	—
Heating/warmer	Pdesignh	2.8	kW	Heating/warmer	SCOP/W	5.1	—
Heating/colder	Pdesignh	x	kW	Heating/colder	SCOP/C	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°C	Pdc	3.20	kW	Tj=35°C	EERd	3.23	—
Tj=30°C	Pdc	2.42	kW	Tj=30°C	EERd	4.66	—
Tj=25°C	Pdc	1.55	kW	Tj=25°C	EERd	6.57	—
Tj=20°C	Pdc	0.83	kW	Tj=20°C	EERd	11.70	—
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	2.53	kW	Tj=-7°C	COPd	2.58	—
Tj=2°C	Pdh	1.41	kW	Tj=2°C	COPd	4.12	—
Tj=7°C	Pdh	0.98	kW	Tj=7°C	COPd	4.81	—
Tj=12°C	Pdh	1.16	kW	Tj=12°C	COPd	6.41	—
Tj=operating limit	Pdh	2.34	kW	Tj=operating limit	COPd	2.48	—
Tj=bivalent temperature	Pdh	2.53	kW	Tj=bivalent temperature	COPd	2.58	—

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°C	Pdh	2.89	kW	Tj=2°C	COPd	2.95	—
Tj=7°C	Pdh	1.79	kW	Tj=7°C	COPd	4.93	—
Tj=12°C	Pdh	1.16	kW	Tj=12°C	COPd	6.41	—
Tj=operating limit	Pdh	2.89	kW	Tj=operating limit	COPd	2.95	—
Tj=bivalent temperature	Pdh	2.89	kW	Tj=bivalent temperature	COPd	2.95	—
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	x	kW	Tj=-7°C	COPd	x	—
Tj=2°C	Pdh	x	kW	Tj=2°C	COPd	x	—
Tj=7°C	Pdh	x	kW	Tj=7°C	C-OPd	x	—
Tj=12°C	Pdh	x	kW	Tj=12°C	COPd	x	—
Tj=operating limit	Pdh	x	kW	Tj=operating limit	COPd	x	—
Tj=bivalent temperature	Pdh	x	kW	Tj=bivalent temperature	COPd	x	—
Tj=-15°C	Pdh	--	kW	Tj=-15°C	COPd	--	—
Bivalent temperature				Operating limit temperature			
Heating/Average	Tbiv	-7	°C	Heating/Average	Tol	-10	°C
Heating/Warmer	Tbiv	2	°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	COPcy c	x,x	—
Degradation coefficient cooling (**)	Cdc	0.25	—	Degradation coefficient 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>	0.00194	kW	Cooling	Q <sub>CE</sub>	184	kWh/a
Standby mode	P <sub>SB</sub>	0.00194	kW	Heating/Average	Q <sub>HE</sub>	945	kWh/a
Thermostat-off mode	P <sub>TO</sub>	0.00444//0.01938	kW	Heating/Warmer	Q <sub>HE</sub>	769	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>	56/64	dB(A)
staged		N		Global warming potential	GWP	675	kgCO <sub>2</sub> eq.
variable		Y		Rated air flow (indoor/outdoor)	—	590/19 50	m <sup>3</sup> /h