

# The technical documentation

## 1. General description

### Models:

SIH-09BIMx2, MV-E14BI2

**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

#### Information requirements

(the number of decimals in the box indicates the precision of reporting)

Information to identify the model(s) to which the information relates to:

Function (indicate to which function information applies)				If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.			
cooling	Y			Average (mandatory)	Y		
heating	Y			Warmer (if designated)	N		
				Colder (if designated)	N		
Item	symbol	value	unit	Item	symbol	value	unit
Design load				Seasonal efficiency			
cooling	P <sub>designc</sub>	4.1	kW	cooling	Test SEER	7.4	—
heating/Average	P <sub>designh</sub>	3.8	kW	heating/Average	SCOP(A)	4.20	—
heating/Warmer	P <sub>designh</sub>	x,x	kW	heating/Warmer	SCOP(W)	x,xx	—
heating/Colder	P <sub>designh</sub>	x,x	kW	heating/Colder	SCOP(C)	x,xx	—

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			
Tj = 35 °C	Ptc	4.10	kW	Tj = 35 °C	EER	3.98	—
Tj = 30 °C	Ptc	3.01	kW	Tj = 30 °C	EER	6.11	—
Tj = 25 °C	Ptc	1.89	kW	Tj = 25 °C	EER	9.16	—
Tj = 20 °C	Ptc	1.38	kW	Tj = 20 °C	EER	14.83	—
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	Pth	3.51	kW	Tj = - 7 °C	COP	2.45	—
Tj = 2 °C	Pth	2.12	kW	Tj = 2 °C	COP	4.25	—
Tj = 7 °C	Pth	1.27	kW	Tj = 7 °C	COP	5.56	—
Tj = 12 °C	Pth	1.35	kW	Tj = 12 °C	COP	7.48	—
Tj = bivalent temperature	Pth	3.51	kW	Tj = bivalent temperature	COP	2.45	—
Tj = operating limit	Pth	3.53	kW	Tj = operating limit	COP	1.92	—
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	Pth	x,x	kW	Tj = 2 °C	COP	x,x	—
Tj = 7 °C	Pth	x,x	kW	Tj = 7 °C	COP	x,x	—
Tj = 12 °C	Pth	x,x	kW	Tj = 12 °C	COP	x,x	—
Tj = bivalent temperature	Pth	x,x	kW	Tj = bivalent temperature	COP	x,x	—
Tj = operating limit	Pth	x,x	kW	Tj = operating limit	COP	x,x	—
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	Pth	x,x	kW	Tj = - 7 °C	COP	x,x	—
Tj = 2 °C	Pth	x,x	kW	Tj = 2 °C	COP	x,x	—
Tj = 7 °C	Pth	x,x	kW	Tj = 7 °C	COP	x,x	—
Tj = 12 °C	Pth	x,x	kW	Tj = 12 °C	COP	x,x	—
Tj = bivalent temperature	Pth	x,x	kW	Tj = bivalent temperature	COP	x,x	—
Tj = operating limit	Pth	x,x	kW	Tj = operating limit	COP	x,x	—
Tj = - 15 °C	Pth	x,x	kW	Tj = - 15 °C	COP	x,x	—

Bivalent temperature				Operating limit temperature			
heating/Average	T <sub>biv</sub>	-7	°C	heating/Average	T <sub>ol</sub>	-10	°C
heating/Warmer	T <sub>biv</sub>	x	°C	heating/Warmer	T <sub>ol</sub>	x	°C
heating/Colder	T <sub>biv</sub>	x	°C	heating/Colder	T <sub>ol</sub>	x	°C
Power consumption of cycling				Efficiency of cycling			
cooling	P <sub>cycc</sub>	x,x	kW	cooling	EER <sub>cycc</sub>	x,x	—
heating	P <sub>cyhc</sub>	x,x	kW	heating	COP <sub>cyhc</sub>	x,x	—
Degradation co-efficient cooling (**)	C <sub>dc</sub>	0.25	—	Degradation co-efficient heating (**)	C <sub>dh</sub>	0.25	—
Electric power input in power modes other than 'active mode'				Seasonal electricity consumption			
off mode	P <sub>OFF</sub>	0.00793	kW	cooling	Q <sub>CE</sub>	194	kWh/a
standby mode	P <sub>SB</sub>	0.00793	kW	heating/Average	Q <sub>HE</sub>	1266	kWh/a
thermostat-off mode	P <sub>TO</sub>	0.01079/0.01848	kW	heating/Warmer	Q <sub>HE</sub>	x	kWh/a
crankcase heater mode	P <sub>CK</sub>	0.0	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)	LWA	58/62	dB(A)
staged	N			Global warming potential	GWP	675	kgCO <sub>2</sub> eq.
variable	Y			Rated air flow (indoor/outdoor)	—	610/610/2300	m <sup>3</sup> /h