

# The technical documentation

## 1. General description

Models: \_

**MV-C12BI2**

**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>design c</sub>	8.0	kW	cooling	Test SEER	6.17	—
heating/Average	P <sub>design h</sub>	7.2	kW	heating/Average	SCOP(A)	3.80	—
heating/Warmer	P <sub>design h</sub>	x,x	kW	heating/Warmer	SCOP(W)	x,xx	—
heating/Colder	P <sub>design h</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	8.22	kW	Tj = 35 °C	EER	3.23	—
Tj = 30 °C	Ptc	5.66	kW	Tj = 30 °C	EER	4.52	—
Tj = 25 °C	Ptc	3.69	kW	Tj = 25 °C	EER	7.42	—
Tj = 20 °C	Ptc	2.55	kW	Tj = 20 °C	EER	12.57	—
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	6.42	kW	Tj = - 7 °C	COP	2.15	—
Tj = 2 °C	Pth	3.85	kW	Tj = 2 °C	COP	3.94	—
Tj = 7 °C	Pth	2.43	kW	Tj = 7 °C	COP	4.93	—
Tj = 12 °C	Pth	1.91	kW	Tj = 12 °C	COP	6.18	—
Tj = bivalent temperature	Pth	6.42	kW	Tj = bivalent temperature	COP	2.15	—
Tj = operating limit	Pth	5.32	kW	Tj = operating limit	COP	2.03	—
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	—

T <sub>j</sub> = 7 °C	P <sub>th</sub>	x,x	kW	T <sub>j</sub> = 7 °C	COP	x,x	—
T <sub>j</sub> = 12 °C	P <sub>th</sub>	x,x	kW	T <sub>j</sub> = 12 °C	COP	x,x	—
T <sub>j</sub> = bivalent temperature	P <sub>th</sub>	x,x	kW	T <sub>j</sub> = bivalent temperature	COP	x,x	—
T <sub>j</sub> = operating limit	P <sub>th</sub>	x,x	kW	T <sub>j</sub> = operating limit	COP	x,x	—
T <sub>j</sub> = - 15 °C	P <sub>th</sub>	x,x	kW	T <sub>j</sub> = - 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>cyh</sub>	x,x	kW	heating	COP <sub>cyh</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>	0.01117	kW	cooling	Q <sub>CE</sub>	453.00	kWh/a
standby mode	P <sub>SB</sub>	0.01117	kW	heating/Average	Q <sub>HE</sub>	2648.00	kWh/a
thermostat-off mode	P <sub>TO</sub>	0.00919/0.02373	kW	heating/Warmer	Q <sub>HE</sub>	x	kWh/a
crankcase heater mode	P <sub>CK</sub>	0.00	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	57/68	dB(A)
staged	N			Global warming potential	GWP	675	kgCO <sub>2</sub> eq.

variable	Y	Rated air flow (indoor/outdoor )	—	560/560/560/400 0	m <sup>3</sup> /h
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