The technical documentation

1. General description

Models:

AST-24BI

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	Pdesignc	7.2	kW	cooling	Test SEER	6.14	—
heating/Average	Pdesignh	6.1	kW	heating/Average	SCOP(A)	4.00	—
heating/Warmer	Pdesignh	x,x	kW	heating/Warmer	SCOP(W)	x,xx	—

heating/Colder	Pdesignh	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 ℃	Ptc	7.53	kW	Tj = 35 ℃	EER	3.65	—
Tj = 30 ℃	Ptc	5.51	kW	Tj = 30 ℃	EER	5.17	—
Tj = 25 ℃	Ptc	3.27	kW	Tj = 25 ℃	EER	7.20	—
Tj = 20 ℃	Ptc	2.64	kW	Tj = 20 ℃	EER	9.40	—
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 ℃	Pth	5.42	kW	Tj = – 7 ℃	COP	2.73	—
Tj = 2 ℃	Pth	3.41	kW	Tj = 2 ℃	COP	3.96	—
Tj = 7 ℃	Pth	2.18	kW	Tj = 7 ℃	COP	4.96	—
Tj = 12 ℃	Pth	1.93	kW	Tj = 12 ℃	COP	6.34	—
Tj = bivalent temperature	Pth	5.42	kW	Tj = bivalent temperature	COP	2.73	—
Tj = operating limit	Pth	4.97	kW	Tj = operating limit	COP	2.60	—
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 ℃	Pth	x,x	kW	Tj = 2 ℃	COP	x,x	—
Tj = 7 ℃	Pth	x,x	kW	Tj = 7 ℃	COP	x,x	—
Tj = 12 ℃	Pth	x,x	kW	Tj = 12 ℃	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 ℃	Pth	x,x	kW	Tj = – 7 ℃	COP	x,x	—
Tj = 2 ℃	Pth	x,x	kW	Tj = 2 ℃	COP	x,x	—
Tj = 7 ℃	Pth	x,x	kW	Tj = 7 ℃	COP	x,x	—
Tj = 12 ℃	Pth	x,x	kW	Tj = 12 ℃	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 ℃	Pth	x,x	kW	Tj = – 15 ℃	COP	x,x	—
Bivalent temperature				Operating limit temperature			
heating/Average	Tbiv	-7	℃	heating/Average	Tol	-10	℃
heating/Warmer	Tbiv	x	℃	heating/Warmer	Tol	x	℃
heating/Colder	Tbiv	x	℃	heating/Colder	Tol	x	℃
Power consumption of cycling				Efficiency of cycling			
cooling	Pcycc	x,x	kW	cooling	EERcyc	x,x	—
heating	Pcych	x,x	kW	heating	COPcyc	x,x	—
Degradation co-efficient cooling (**)	Cdc	0.25	—	Degradation co-efficient heating (**)	Cdh	0.25	—
Electric power input in power modes other than ‘active mode’				Seasonal electricity consumption			
off mode	P_{OFF}	0.00799	kW	cooling	Q_{CE}	413.00	kWh/a
standby mode	P_{SB}	0.00799	kW	heating/Average	Q_{HE}	2135.00	kWh/a
thermostat-off mode	P_{TO}	0.00186/0.01465	kW	heating/Warmer	Q_{HE}	x	kWh/a
crankcase heater mode	P_{CK}	0.0	kW	heating/Colder	Q_{HE}	x	kWh/a
Capacity control (indicate one of three options)				Other items			

fixed	N	Sound power level (indoor/outdoor)	LWA	60/70	dB(A)
staged	N	Global warming potential	GWP	675	kgCO_2 eq.
variable	Y	Rated air flow (indoor/outdoor)	—	1250/3200	m^3/h