

The technical documentation

1. General description

Models:

ASH-09BIS2/W

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

Function (indicate if present)				Only for heating mode, if applicable			
Cooling	Y			Average(mandatory)	Y		
Heating	Y			Warmer(if designed)	Y		
				Colder(if designed)	Y		
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Design load				Seasonal efficiency			
Cooling	Pdesignc	2,7	kW	Cooling	SEER	9.117	—
Heating/average	Pdesignh	3,5	kW	Heating/average	SCOP/A	5,1	—
Heating/warmer	Pdesignh	3,8	kW	Heating/warmer	SCOP/W	5,72	—
Heating/colder	Pdesignh	4,8	kW	Heating/colder	SCOP/C	3.822	—
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	2.73	kW	Tj=35°C	EERd	5.34	—
Tj=30°C	Pdc	2.09	kW	Tj=30°C	EERd	7.89	—
Tj=25°C	Pdc	1.23	kW	Tj=25°C	EERd	11.80	—

Tj=20°C	Pdc	1.19	kW	Tj=20°C	EERd	16.37	—
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	3.10	kW	Tj=-7°C	COPd	3.31	—
Tj=2°C	Pdh	1.89	kW	Tj=2°C	COPd	5.12	—
Tj=7°C	Pdh	1.26	kW	Tj=7°C	COPd	6.33	—
Tj=12°C	Pdh	0.80	kW	Tj=12°C	COPd	7.35	—
Tj=operating limit	Pdh	3.60	kW	Tj=operating limit	COPd	2.85	—
Tj=bivalent temperature	Pdh	3.10	kW	Tj=bivalent temperature	COPd	3.31	—
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	3.89	kW	Tj=2°C	COPd	3.38	—
Tj=7°C	Pdh	2.45	kW	Tj=7°C	COPd	5.45	—
Tj=12°C	Pdh	1.09	kW	Tj=12°C	COPd	6.53	—
Tj=operating limit	Pdh	3.89	kW	Tj=operating limit	COPd	3.38	—
Tj=bivalent temperature	Pdh	3.89	kW	Tj=bivalent temperature	COPd	3.38	—
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	2.95	kW	Tj=-7°C	COPd	3.12	—
Tj=2°C	Pdh	1.78	kW	Tj=2°C	COPd	4.87	—
Tj=7°C	Pdh	1.15	kW	Tj=7°C	COPd	5.25	—
Tj=12°C	Pdh	0.73	kW	Tj=12°C	COPd	6.65	—
Tj=operating limit	Pdh	3.90	kW	Tj=operating limit	COPd	2.11	—
Tj=bivalent temperature	Pdh	4.11	kW	Tj=bivalent temperature	COPd	2.12	—

T _j =-15°C	P _{dh}	4.11	kW	T _j =-15°C	COP _d	2.12	—
Bivalent temperature				Operating limit temperature			
Heating/Average	T _{biv}	-7	°C	Heating/Average	T _{ol}	-10	°C
Heating/Warmer	T _{biv}	2	°C	Heating/Warmer	T _{ol}	2	°C
Heating/Colder	T _{biv}	-15	°C	Heating/Colder	T _{ol}	-30	°C
Cycling interval capacity				Cycling interval efficiency			
for cooling	P _{cycc}	x,x	kW	for cooling	EER _{cycc}	x,x	—
for heating	P _{cyhc}	x,x	kW	for heating	COP _{cyhc}	x,x	—
Degradation coefficient cooling (**)	C _{dc}	0.25	—	Degradation coefficient heating (**)	C _{dh}	0.25	—

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}	0.0048	kW	Cooling	Q _{CE}	104	kWh/a
Standby mode	P _{SB}	0.0048	kW	Heating/Average	Q _{HE}	961	kWh/a
Thermostat-off mode	P _{TO}	0.0051/0.00913	kW	Heating/Warmer	Q _{HE}	930	kWh/a
Crankcase heater mode	P _{CK}	0	kW	Heating/Colder	Q _{HE}	2637	kWh/a
Capacity control (indicate one of three options)				Other items			
fixed		N		Sound power level (indoor/outdoor)	L _{WA}	58/62	dB(A)
staged		N		Global warming potential	GWP	675	kgCO ₂ eq.
variable		Y		Rated air flow (indoor/outdoor)	—	800/2400	m ³ /h