

# The technical documentation

## 1. General description

### Models:

ASH-18BIS2/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	5.3	kW	Cooling	SEER	6.62	—
Heating/average	Pdesignh	5.9	kW	Heating/average	SCOP/A	4.42	—
Heating/warmer	Pdesignh	6.4	kW	Heating/warmer	SCOP/W	5.17	—
Heating/colder	Pdesignh	8.0	kW	Heating/colder	SCOP/C	3.40	—
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	5.40	kW	Tj=35°C	EERd	3.95	—
Tj=30°C	Pdc	3.97	kW	Tj=30°C	EERd	5.91	—
Tj=25°C	Pdc	2.56	kW	Tj=25°C	EERd	7.86	—
Tj=20°C	Pdc	2.09	kW	Tj=20°C	EERd	8.25	—

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	5.57	kW	Tj=-7°C	COPd	2.84	—
Tj=2°C	Pdh	3.46	kW	Tj=2°C	COPd	4.57	—
Tj=7°C	Pdh	2.09	kW	Tj=7°C	COPd	5.42	—
Tj=12°C	Pdh	2.02	kW	Tj=12°C	COPd	6.16	—
Tj=operating limit	Pdh	5.15	kW	Tj=operating limit	COPd	2.57	—
Tj=bivalent temperature	Pdh	5.57	kW	Tj=bivalent temperature	COPd	2.84	—

Function (indicate if present)				Only for heating mode, if applicable			
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	6.47	kW	Tj=2°C	COPd	2.74	—
Tj=7°C	Pdh	4.11	kW	Tj=7°C	COPd	4.78	—
Tj=12°C	Pdh	2.02	kW	Tj=12°C	COPd	6.16	—
Tj=operating limit	Pdh	6.47	kW	Tj=operating limit	COPd	2.74	—
Tj=bivalent temperature	Pdh	6.47	kW	Tj=bivalent temperature	COPd	2.74	—
Declared capacity (*) for heating/Colder season, at				Declared coefficient of performance(*)/Colder			

indoor temperature 20 °C and outdoor temperature Tj				season, at indoor temperature 20 °C and outdoor temperature Tj			
Tj=-7°C	Pdh	4.89	kW	Tj=-7°C	COPd	2.92	—
Tj=2°C	Pdh	2.97	kW	Tj=2°C	COPd	4.37	—
Tj=7°C	Pdh	1.92	kW	Tj=7°C	C-OPd	5.16	—
Tj=12°C	Pdh	2.02	kW	Tj=12°C	COPd	6.16	—
Tj=operating limit	Pdh	5.67	kW	Tj=operating limit	COPd	1.63	—
Tj=bivalent temperature	Pdh	5.80	kW	Tj=bivalent temperature	COPd	2.40	—
Tj=-15°C	Pdh	5.70	kW	Tj=-15°C	COPd	1.80	—
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	-10	°C	Heating/Colder	Tol	-22	°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)		Y	
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>	0.00133	kW	Cooling	Q <sub>CE</sub>	280	kWh/a
Standby mode	P <sub>SB</sub>	0.00133	kW	Heating/Average	Q <sub>HE</sub>	1868	kWh/a
Thermostat -off mode	P <sub>TO</sub>	0.00832/0.01234	kW	Heating/Warmer	Q <sub>HE</sub>	1732	kWh/a
Crankcase heater mode	P <sub>CK</sub>	0	kW	Heating/Colder	Q <sub>HE</sub>	4933	kWh/a
Capacity control (indicate one of three options)				Other items			
fixed	N			Sound power level (indoor/outdoor )	L <sub>WA</sub>	60/63	dB(A)
staged	N			Global warming potential	GWP	675	kgCO <sub>2</sub> eq.
variable	Y			Rated air flow (indoor/outdoor )	—	1200/4000	m <sup>3</sup> /h