Product fiche concerning the

COMMISSION DELEGATED REGULATIONS

(EU)No 811/2013 of 18 February 2013

(EU)No 813/2013 of 02 August 2013

Models:	Outdoor Unit: AOWD-MB-AT10
	Indoor Unit: None
Air-to-water heat pump	Yes
Brine-to-water heat pump	No
Low temperature heat pump	No
Equipped with a supplementary heater	No
Heat Pump Combination Heater	No
Parameters shall be declared for	Medium-temperature applications
Parameters shall be declared for	Average Climate Conditions

Item	Symbol	Value	Unit
Rated Heat Output (*)	Prated	9.024	kW
Seasonal space heating energy efficiency	ηs	147.4	%
Energy Classes		A++	
Seasonal Coefficient of Performance	SCOP	3.76	kWh/kWh
Annual Energy consumption	QHE	4959	kWh
Sound power level indoors/outdoors	LWA	57	dB(A)

Declared capacity for heating for part load at indoor Temperature 20°C and outdoor temperature Tj

Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature Tj

Tj = -7°C	Pdh	7.983	kW	Tj = -7°C	COPd	2.38	
Tj = +2°C	Pdh	4.895	kW	Tj = +2°C	COPd	3.66	
Tj = +7°C	Pdh	5.728	kW	Tj = +7°C	COPd	4.84	
Tj = +12°C	Pdh	6.113	kW	Tj = +12°C	COPd	6.08	
Tj = bivalent temperature	Pdh	7.983	kW	Tj = bivalent temperature	COPd	2.38	
Tj = operation limit temperature (***)	Pdh	8.996	kW	Tj = operation limit temperature	COPd	1.99	
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-10	°C
Degradation Coefficient (**)	Cdh	0.99	-	Heating water operating limit temperature	WTOL	75	°C
Power consumption in modes other than active mode				**Supplementary Heater**			
Off Mode	P_{OFF}	0.009	kW	Rate heat output (*)	Psup	0	kW

Thermostat-off mode	P_{TO}	0.009	kW				
Standby mode	P_{SB}	0.009	kW	Type of energy input	-		
Crankcase heater mode	P_{CK}	0.042	kW				
Other items							
Capacity control	Variable			Rated airflow rate, outdoors		3600	m³/h
Outlet temperature capacity control	Variable						
Water flow rate capacity control	Fixed						

（*）For heat pump space heaters and heat pump combination heaters, the rated heat output *Prated* is equal to the design load for heating *Pdesignh*， and the rated heat output of a supplementary heater *Psup* is equal to the supplementary capacity for heating *sup(Tj)*.

（**）Cdh shall be determined for each part load ratio, where applicable, by measurement. If not, the default degradation coefficient is Cdh = 0,9

（***）If the declared *TOL* is lower than the *T*designh of the considered climate, then the outdoor dry bulb temperature is equal to *T*designh for the part load

Models: Outdoor Unit: AOWD-MB-AT10

Indoor Unit: None

Air-to-water heat pump Yes

Brine-to-water heat pump No

Low temperature heat pump No

Equipped with a supplementary heater No

Heat Pump Combination Heater No

Parameters shall be declared for Low-temperature applications

Parameters shall be declared for Average Climate Conditions

Item	Symbol	Value	Unit
Rated Heat Output（*）	Prated	9.460	kW
Seasonal space heating energy efficiency	ηs	193.0	%
Energy Classes		A+++	
Seasonal Coefficient of Performance	SCOP	4.90	kWh/kWh
Annual Energy consumption	QHE	3988	kWh
Sound power level indoors/outdoors	LWA	57	dB(A)

Declared capacity for heating for part load at indoor Temperature 20°C and outdoor temperature Tj

Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature Tj

Tj = -7°C	Pdh	8.368	kW	Tj = -7°C	COPd	3.20	
Tj = +2°C	Pdh	5.232	kW	Tj = +2°C	COPd	4.82	
Tj = +7°C	Pdh	5.760	kW	Tj = +7°C	COPd	6.09	
Tj = +12°C	Pdh	6.249	kW	Tj = +12°C	COPd	7.52	
Tj = bivalent temperature	Pdh	8.368	kW	Tj = bivalent temperature	COPd	3.20	
Tj = operation limit temperature	Pdh	9.474	kW	Tj = operation limit temperature	COPd	2.82	

（***）							
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-10	°C
Degradation Coefficient（**）	Cdh	0.99	-	Heating water operating limit temperature	WTOL	75	°C
Power consumption in modes other than active mode				**Supplementary Heater**			
Off Mode	P_{OFF}	0.009	kW	Rate heat output（*）	Psup	0	kW
Thermostat-off mode	P_{TO}	0.009	kW				
Standby mode	P_{SB}	0.009	kW	Type of energy input	-		
Crankcase heater mode	P_{CK}	0.042	kW				
Other items							
Capacity control	Variable			Rated airflow rate, outdoors		3600	m^3/h
Outlet temperature capacity control	Variable						
Water flow rate capacity control	Fixed						

（*）For heat pump space heaters and heat pump combination heaters, the rated heat output *Prated* is equal to the design load for heating *Pdesignh*，and the rated heat output of a supplementary heater *Psup* is equal to the supplementary capacity for heating *sup(Tj)*.

（**）Cdh shall be determined for each part load ratio, where applicable, by measurement. If not, the default degradation coefficient is Cdh = 0,9

（***）If the declared *TOL* is lower than the *T*designh of the considered climate, then the outdoor dry bulb temperature is equal to *T*designh for the part load