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 AT20T

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[i]	17.23	kW
Seasonal space heating energy efficiency	ηs	136.4	%
Energy Classes		A++	
Seasonal Coefficient of Performance	SCOP	3.49	kWh/kWh
Annual Energy consumption	QHE	10215	kWh/year
Sound power level indoors/outdoors	LWA	51	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	15.243	kW	Tj = -7°C	COPd	2.31	
Tj = +2°C	Pdh	9.409	kW	Tj = +2°C	COPd	3.45	
Tj = +7°C	Pdh	7.919	kW	Tj = +7°C	COPd	4.52	
Tj = +12°C	Pdh	9.115	kW	Tj = +12°C	COPd	5.93	
Tj = bivalent temperature	Pdh	15.243	kW	Tj = bivalent temperature	COPd	2.31	
Tj = operation limit temperature (***)	Pdh	17.046	kW	Tj = operation limit temperature	COPd	1.97	
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-10	°C
Degradation Coefficient (**)	Cdh	0.90	-	Heating water operating limit temperature	WTOL	70	°C
Power consumption in modes other than active mode				**Supplementary Heater**			

Off Mode	P_{OFF}	0.016	kW	Rate heat output（*）	Psup	0	kW
Thermostat-off mode	P_{TO}	0.016	kW				
Standby mode	P_{SB}	0.016	kW	Type of energy input	Electricity		
Crankcase heater mode	P_{CK}	0.086	kW				
Other items							
Capacity control	Variable			Rated airflow rate, outdoors		7000	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 AT20T

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	19.755	kW
Seasonal space heating energy efficiency	ηs	185.5	%
Energy Classes		A+++	
Seasonal Coefficient of Performance	SCOP	4.72	kWh/kWh
Annual Energy consumption	QHE	8661	kWh
Sound power level indoors/outdoors	LWA	48	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	17.476	kW	Tj = -7°C	COPd	2.90	

Tj = +2°C	Pdh	10.728	kW	Tj = +2°C	COPd	4.69	
Tj = +7°C	Pdh	8.354	kW	Tj = +7°C	COPd	6.38	
Tj = +12°C	Pdh	9.253	kW	Tj = +12°C	COPd	7.87	
Tj = bivalent temperature	Pdh	17.476	kW	Tj = bivalent temperature	COPd	2.90	
Tj = operation limit temperature	Pdh	18.758	kW	Tj = operation limit temperature	COPd	2.48	
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-10	°C
Degradation Coefficient（**）	Cdh	0.90	-	Heating water operating limit temperature	WTOL	70	°C
Power consumption in modes other than active mode				**Supplementary Heater**			
Off Mode	POFF	0.016	kW	Rate heat output	Psup	0	kW
Thermostat-off mode	PTO	0.016	kW				
Standby mode	PSB	0.016	kW	Type of energy input	Electricity		
Crankcase heater mode	PCK	0.086	kW				
Other items							
Capacity control	Variable			Rated airflow rate, outdoors		7000	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

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