## 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-2MB-AT17T
	Indoor Unit: None
Air-to-water heat pump	Yes
Brine-to-water heat pump	<u>No</u>
Low temperature heat pump	<u>No</u>
Equipped with a supplementary heater	<u>No</u>
Heat Pump Combination Heater	<u>No</u>
Parameters shall be declared for	Medium-temperature applications
Parameters shall be declared for	Average Climate Conditions

Item	Symbol	Value	Unit
Rated Heat Output (*)	Prated	16.615	kW
Seasonal space heating energy efficiency	ηѕ	141.8	%
Energy Classes		A++	
Seasonal Coefficient of Performance	SCOP	3.62	kWh/kWh
Annual Energy consumption	QHE	9486	kWh
Sound power level indoors/outdoors	LWA	63	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

Pdh	14.698	kW	Tj = -7°C	COPd	2.15	
Pdh	9.088	kW	Tj = +2°C	COPd	3.54	
Pdh	5.759	kW	Tj = +7°C	COPd	4.87	
Pdh	5.856	kW	Tj = +12°C	COPd	6.91	
Pdh	14.698	kW	Tj = bivalent temperature	COPd	2.15	
Pdh	14.048	kW	Tj = operation limit temperature	COPd	1.89	
Tbiv	-7	°C	Operation limit temperature	TOL	-10	°C
Cdh	0.90	-	Heating water operating limit temperature	WTOL	75	°C
	Pdh Pdh Pdh Pdh Pdh Tbiv	Pdh         9.088           Pdh         5.759           Pdh         5.856           Pdh         14.698           Pdh         14.048           Tbiv         -7	Pdh         9.088         kW           Pdh         5.759         kW           Pdh         5.856         kW           Pdh         14.698         kW           Pdh         14.048         kW           Tbiv         -7         °C	Pdh $9.088$ kW $Tj = +2^{\circ}C$ Pdh $5.759$ kW $Tj = +7^{\circ}C$ Pdh $5.856$ kW $Tj = +12^{\circ}C$ Pdh $14.698$ kW $Tj = \text{bivalent temperature}$ Pdh $14.048$ kW $Tj = \text{operation limit temperature}$ Tbiv $-7$ $^{\circ}C$ Operation limit temperatureCdh $0.90$ $-$ Heating water operating limit	Pdh $9.088$ kW $Tj = +2^{\circ}C$ COPdPdh $5.759$ kW $Tj = +7^{\circ}C$ COPdPdh $5.856$ kW $Tj = +12^{\circ}C$ COPdPdh $14.698$ kW $Tj = \text{bivalent temperature}$ COPdPdh $14.048$ kW $Tj = \text{operation limit temperature}$ COPdTbiv $-7$ °COperation limit temperatureTOLCdh $0.90$ -Heating water operating limitWTOL	Pdh $9.088$ kW $Tj = +2^{\circ}C$ COPd $3.54$ Pdh $5.759$ kW $Tj = +7^{\circ}C$ COPd $4.87$ Pdh $5.856$ kW $Tj = +12^{\circ}C$ COPd $6.91$ Pdh $14.698$ kW $Tj = \text{bivalent temperature}$ COPd $2.15$ Pdh $14.048$ kW $Tj = \text{operation limit temperature}$ COPd $1.89$ Tbiv $-7$ $^{\circ}C$ Operation limit temperatureTOL $-10$ Cdh $0.90$ $-$ Heating water operating limitWTOL $75$

Power consumption in modes other than active mode Supplementary Heater

Off Mode	Poff	0.015	kW	Rate heat output (*)	Psup	2.567	kW
Thermostat-off mode	Рто	0.015	kW				
Standby mode	P <sub>SB</sub> 0.015 kW Type of energy input		Type of energy input	Electricity			
Crankcase heater mode	Рск	0.088	kW				
Other items							
Capacity control	Variable			Rated airflow rate, outdoors		5500	m³/h
Outlet temperature capacity control	Variable						
Water flow rate capacity control	Fixed						

<sup>(\*)</sup> 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)*.

Models: Outdoor Unit: AOWD-2--MB-AT17T

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	16.712	kW
Seasonal space heating energy efficiency	ηѕ	182.6	%
Energy Classes		A+++	
Seasonal Coefficient of Performance	SCOP	4.64	kWh/kWh
Annual Energy consumption	QHE	7440	kWh
Sound power level indoors/outdoors	LWA	63	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	14.784	kW	Tj = -7°C	COPd	2.85	
Tj = +2°C	Pdh	9.159	kW	Tj = +2°C	COPd	4.49	

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

<sup>(\*\*\*)</sup> 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

Tj = +7°C	Pdh	5.797	kW	Tj = +7°C	COPd	6.27	
Tj = +12°C	Pdh	6.042	kW	Tj = +12°C	COPd	8.36	
Tj = bivalent temperature	Pdh	14.784	kW	Tj = bivalent temperature	COPd	2.85	
Tj = operation limit temperature	Pdh	15.573	kW	Tj = operation limit temperature	COPd	2.56	
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-10	°C
Degradation Coefficient (**)	Cdh	0.90	-	Heating water operating limit temperature	WTOL	75	°C
Power consumption in modes of	ther than act	ive mode		Supplementary Heater			
Off Mode	POFF	0.015	kW	Rate heat output	Psup	1.139	kW
Thermostat-off mode	PTO	0.015	kW				
Standby mode	PSB	PSB 0.015 kW		Type of energy input	Electrici	ity	
Crankcase heater mode	PCK	0.088	kW				
Other items							
Capacity control	Va	riable		Rated airflow rate, outdoors		5500	m³/h
Outlet temperature capacity control	Va	Variable					
Water flow rate capacity control	F	ixed					

<sup>(\*)</sup> 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)*.

<sup>(\*\*)</sup> Cdh shall be determined for each part load ratio, where applicable, by measurement. If not, the default degradation coefficient is Cdh = n o

<sup>(\*\*\*)</sup> 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