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	Warmer Climate Conditions

Item	Symbol	Value	Unit
Rated Heat Output (*)	Prated	19.0	kW
Seasonal space heating energy efficiency	ηs	172.6	%
Energy Classes		-	
Seasonal Coefficient of Performance	SCOP	4.39	kWh/kWh
Annual Energy consumption	QHE	5782	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	-	kW	Tj = -7°C	COPd	-	
Pdh	16.2	kW	Tj = +2°C	COPd	2.20	
Pdh	12.3	kW	Tj = +7°C	COPd	3.98	
Pdh	5.7	kW	Tj = +12°C	COPd	5.89	
Pdh	16.3	kW	Tj = bivalent temperature	COPd	2.39	
Pdh	16.2	kW	Tj = operation limit temperature	COPd	2.20	
Tbiv	4	°C	Operation limit temperature	TOL	2	°C
Cdh	0.90	-	Heating water operating limit temperature	WTOL	75	°C
	Pdh Pdh Pdh Pdh Pdh Tbiv	Pdh 16.2 Pdh 12.3 Pdh 5.7 Pdh 16.3 Pdh 16.2 Tbiv 4	Pdh 16.2 kW Pdh 12.3 kW Pdh 5.7 kW Pdh 16.3 kW Pdh 16.2 kW Tbiv 4 °C	Pdh 16.2 kW $Tj = +2^{\circ}C$ Pdh 12.3 kW $Tj = +7^{\circ}C$ Pdh 5.7 kW $Tj = +12^{\circ}C$ Pdh 16.3 kW $Tj = \text{bivalent temperature}$ Pdh 16.2 kW $Tj = \text{operation limit temperature}$ Tbiv4°COperation limit temperatureCdh 0.90 -Heating water operating limit	Pdh16.2kW $Tj = +2^{\circ}C$ COPdPdh12.3kW $Tj = +7^{\circ}C$ COPdPdh5.7kW $Tj = +12^{\circ}C$ COPdPdh16.3kW $Tj = \text{bivalent temperature}$ COPdPdh16.2kW $Tj = \text{operation limit temperature}$ COPdTbiv4°COperation limit temperatureTOLCdh0.90-Heating water operating limitWTOL	Pdh16.2kWTj = +2°CCOPd2.20Pdh12.3kWTj = +7°CCOPd3.98Pdh5.7kWTj = +12°CCOPd5.89Pdh16.3kWTj = bivalent temperatureCOPd2.39Pdh16.2kWTj = operation limit temperatureCOPd2.20Tbiv4°COperation limit temperatureTOL2Cdh0.90-Heating water operating limitWTOL75

Power consumption in modes other than active mode Supplementary Heater

Off Mode	Poff	0.015	kW	Rate heat output (*)	Psup	2.80	kW
Thermostat-off mode	Рто	0.015	kW				
Standby mode	PsB	0.015	kW	Type of energy input	Electric	Electricity	
Crankcase heater mode	Pck	0.088	kW				
Other items							
Capacity control	Variable			Rated airflow rate, outdoors		5500	m³/h
Outlet temperature capacity control	Variable						
- 1 1 7							

^(*) 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

Brine-to-water heat pump

Low temperature heat pump

No

Equipped with a supplementary heater

Heat Pump Combination Heater

No

Parameters shall be declared for

None

Yes

No

No

Low-temperature applications

Parameters shall be declared for Warmer Climate Conditions

Item	Symbol	Value	Unit
Rated Heat Output	Prated	19.0	kW
Seasonal space heating energy efficiency	ηѕ	230.2	%
Energy Classes		-	
Seasonal Coefficient of Performance	SCOP	5.83	kWh/kWh
Annual Energy consumption	QHE	4355	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	-	kW	Tj = -7°C	COPd	-	
Tj = +2°C	Pdh	17.0	kW	Tj = +2°C	COPd	2.88	

^(**) 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

Tj = +7°C	Pdh	12.3	kW	Tj = +7°C	COPd	5.36	
Tj = +12°C	Pdh	6.0	kW	Tj = +12°C	COPd	7.80	
Tj = bivalent temperature	Pdh	16.3	kW	Tj = bivalent temperature	COPd	3.24	
Tj = operation limit temperature	Pdh	17.0	kW	Tj = operation limit temperature	COPd	2.88	
Bivalent temperature	Tbiv	4	°C	Operation limit temperature	TOL	2	°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	2.0	kW
Thermostat-off mode	PTO	0.015	kW				
Standby mode	PSB	PSB 0.015 kW		Type of energy input	Electrici	ty	
Crankcase heater mode	PCK	0.088	kW				
Other items							
Capacity control	Va	Variable		Rated airflow rate, outdoors		5500	m³/h
Outlet temperature capacity control	Va	Variable					
Water flow rate capacity control	F	ixed					

^(*) 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 = n o

^(***) 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