

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-AT17
	<u>Indoor Unit: None</u>
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	Colder Climate Conditions

Item	Symbol	Value	Unit
Rated Heat Output (*)	Prated	10.95	kW
Seasonal space heating energy efficiency	η_s	132.5	%
Energy Classes		-	
Seasonal Coefficient of Performance	SCOP	3.39	kWh/kWh
Annual Energy consumption	QHE	7961	kWh
Sound power level indoors/outdoors	LWA	64	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	6.67	kW	Tj = -7°C	COPd	2.87	
Degradation Coefficient (**)	Cdh	1.00	-				
Tj = +2°C	Pdh	4.60	kW	Tj = +2°C	COPd	4.10	
Degradation Coefficient (**)	Cdh	0.90	-				
Tj = +7°C	Pdh	5.16	kW	Tj = +7°C	COPd	5.61	
Degradation Coefficient (**)	Cdh	0.90	-				
Tj = +12°C	Pdh	6.28	kW	Tj = +12°C	COPd	6.8	
Degradation Coefficient (**)	Cdh	0.90	-				
Tj = bivalent temperature	Pdh	8.9	kW	Tj = bivalent temperature	COPd	2.01	
Tj = operation limit temperature (***)	Pdh	9.45	kW	Tj = operation limit temperature	COPd	1.86	
Tj = -15 ° C (if TOL < -20 ° C)	Pdh	8.9	kW	Tj = -15 ° C (if TOL < -20 ° C)	COPd	2.01	
Degradation Coefficient (**)	Cdh	1.00	-				
Bivalent temperature	Tbiv	-15	°C	Operation limit temperature	TOL	-25	°C
Reference design temperature	Tdesignh	-22	°C	Heating water operating limit	WTOL	75	°C

				temperature			
Power consumption in modes other than active mode				Supplementary Heater			
Off Mode	P _{OFF}	0.011	kW	Rated heat output (*)	P _{sup}	1.5	kW
Thermostat-off mode	P _{TO}	0.011	kW				
Standby mode	P _{SB}	0.011	kW	Type of energy input	-		
Crankcase heater mode	P _{CK}	0.058	kW				
Other items							
Capacity control	Variable			Rated airflow rate, outdoors		5000	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 <i>Prated</i> is equal to the design load for heating <i>Pdesignh</i> , and the rated heat output of a supplementary heater <i>Psup</i> is equal to the supplementary capacity for heating <i>sup(Tj)</i> . (**) C _{dh} shall be determined for each part load ratio, where applicable, by measurement. If not, the default degradation coefficient is C _{dh} = 0,9 (***) If the declared <i>TOL</i> is lower than the <i>Tdesignh</i> of the considered climate, then the outdoor dry bulb temperature is equal to <i>Tdesignh</i> for the part load							

Models:

Outdoor Unit: AOWD-MB-AT17

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 Colder Climate Conditions

Item	Symbol	Value	Unit
Rated Heat Output	Prated	11.95	kW
Seasonal space heating energy efficiency	η_s	170	%
Energy Classes		-	
Seasonal Coefficient of Performance	SCOP	4.33	kWh/kWh
Annual Energy consumption	QHE	6796	kWh
Sound power level indoors/outdoors	LWA	64	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	7.41	kW	Tj = -7°C	COPd	3.83	
Degradation Coefficient (**)	Cdh	1.00	-				
Tj = +2°C	Pdh	4.82	kW	Tj = +2°C	COPd	5.06	
Degradation Coefficient (**)	Cdh	0.90	-				
Tj = +7°C	Pdh	5.29	kW	Tj = +7°C	COPd	6.80	
Degradation Coefficient (**)	Cdh	0.90	-				
Tj = +12°C	Pdh	6.38	kW	Tj = +12°C	COPd	8.19	
Degradation Coefficient (**)	Cdh	0.90	-				
Tj = bivalent temperature	Pdh	9.78	kW	Tj = bivalent temperature	COPd	2.71	
Tj = operation limit temperature (***)	Pdh	10.17	kW	Tj = operation limit temperature (***)	COPd	2.24	
Tj = -15 ° C (if TOL < -20 ° C)	Pdh	9.78	kW	Tj = -15°C	COPd	2.71	
Degradation Coefficient (**)	Cdh	1.00	-				
Bivalent temperature	Tbiv	-15	°C	Operation limit temperature	TOL	-25	°C
Reference design temperature	Tdesignh	-22	°C	Heating water operating limit temperature	WTOL	75	°C

Power consumption in modes other than active mode				Supplementary Heater			
Off Mode	P _{OFF}	0.011	kW	Rated heat output (*)	P _{sup}	1.8	kW
Thermostat-off mode	P _{TO}	0.011	kW				
Standby mode	P _{SB}	0.011	kW	Type of energy input	-		
Crankcase heater mode	P _{CK}	0.058	kW				
Other items							
Capacity control	Variable			Rated airflow rate, outdoors		5000	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 P_{rated} is equal to the design load for heating $P_{designh}$, and the rated heat output of a supplementary heater P_{sup} 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 Tdesignh of the considered climate, then the outdoor dry bulb temperature is equal to Tdesignh for the part load