

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-AT6
	<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	4.13	kW
Seasonal space heating energy efficiency	η_s	127.7	%
Energy Classes		/	
Seasonal Coefficient of Performance	SCOP	3.28	kWh/kWh
Annual Energy consumption	QHE	3107	kWh
Sound power level indoors/outdoors	LWA	60	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	2.51	kW	Tj = -7°C	COPd	2.78	
Degradation Coefficient (**)	Cdh	1.00	-				
Tj = +2°C	Pdh	1.66	kW	Tj = +2°C	COPd	4.09	
Degradation Coefficient (**)	Cdh	0.90	-				
Tj = +7°C	Pdh	1.86	kW	Tj = +7°C	COPd	4.78	
Degradation Coefficient (**)	Cdh	0.90	-				
Tj = +12°C	Pdh	2.23	kW	Tj = +12°C	COPd	5.98	
Degradation Coefficient (**)	Cdh	0.90	-				
Tj = bivalent temperature	Pdh	3.40	kW	Tj = bivalent temperature	COPd	2.00	
Tj = operation limit temperature (***)	Pdh	3.30	kW	Tj = operation limit temperature	COPd	1.49	
Tj = -15 ° C (if TOL < -20 ° C)	Pdh	3.40	kW	Tj = -15 ° C (if TOL < -20 ° C)	COPd	2.00	
Degradation Coefficient (**)	Cdh	1.00	-				
Bivalent temperature	Tbiv	-15	°C	Operation limit temperature	TOL	-22	°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}	0.010	kW	Rate heat output (*)	P _{sup}	0.83	kW
Thermostat-off mode	P _{TO}	0.010	kW				
Standby mode	P _{SB}	0.010	kW	Type of energy input	-		
Crankcase heater mode	P _{CK}	0.042	kW				
Other items							
Capacity control	Variable			Rated airflow rate, outdoors		2400	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> . (**) 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 <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-AT6
 _____ 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	4.25	kW
Seasonal space heating energy efficiency	η_s	160.5	%
Energy Classes		-	
Seasonal Coefficient of Performance	SCOP	4.09	kWh/kWh
Annual Energy consumption	QHE	2.555	kWh
Sound power level indoors/outdoors	LWA	60	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

T _j = -7°C	P _{dh}	2.62	kW	T _j = -7°C	COP _d	3.67	
Degradation Coefficient (**)	C _{dh}	1.00	-				
T _j = +2°C	P _{dh}	1.58	kW	T _j = +2°C	COP _d	4.87	
Degradation Coefficient (**)	C _{dh}	0.90	-				
T _j = +7°C	P _{dh}	1.76	kW	T _j = +7°C	COP _d	5.88	
Degradation Coefficient (**)	C _{dh}	0.90	-				
T _j = +12°C	P _{dh}	2.23	kW	T _j = +12°C	COP _d	7.67	
Degradation Coefficient (**)	C _{dh}	0.90	-				
T _j = bivalent temperature	P _{dh}	3.47	kW	T _j = bivalent temperature	COP _d	2.38	
T _j = operation limit temperature (***)	P _{dh}	4.23	kW	T _j = operation limit temperature (***)	COP _d	2.03	
T _j = -15 ° C (if TOL < -20 ° C)	P _{dh}	3.47	kW	T _j = -15°C	COP _d	2.38	
Degradation Coefficient (**)	C _{dh}	1.00	-				
Bivalent temperature	T _{biv}	-15	°C	Operation limit temperature	TOL	-25	°C
Reference design temperature	T _{designh}	-22	°C	Heating water operating limit temperature	WTOL	75	°C

Power consumption in modes other than active mode				Supplementary Heater			
Off Mode	P _{OFF}	0.010	kW	Rate heat output (*)	P _{sup}	0.02	kW
Thermostat-off mode	P _{TO}	0.010	kW				
Standby mode	P _{SB}	0.010	kW	Type of energy input	-		
Crankcase heater mode	P _{CK}	0.042	kW				

Other items							
Capacity control	Variable			Rated airflow rate, outdoors		2400	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 $sup(T_j)$.

(**) 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 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