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-AT10
	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	Colder Climate Conditions

Item	Symbol	Value	Unit
Rated Heat Output（*）	Prated	7.9	kW
Seasonal space heating energy efficiency	ηs	138.4	%
Energy Classes		-	
Seasonal Coefficient of Performance	SCOP	3.53	kWh/kWh
Annual Energy consumption	QHE	5500	kWh
Sound power level indoors/outdoors	LWA	57	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	4.89	kW	Tj = -7°C	COPd	3.33	
Degradation Coefficient（**）	Cdh	1.00	-				
Tj = +2°C	Pdh	3.58	kW	Tj = +2°C	COPd	4.09	
Degradation Coefficient（**）	Cdh	0.90	-				
Tj = +7°C	Pdh	4.10	kW	Tj = +7°C	COPd	5.59	
Degradation Coefficient（**）	Cdh	0.90	-				
Tj = +12°C	Pdh	4.69	kW	Tj = +12°C	COPd	6.53	
Degradation Coefficient（**）	Cdh	0.90	-				
Tj = bivalent temperature	Pdh	6.44	kW	Tj = bivalent temperature	COPd	2.13	
Tj = operation limit temperature（***）	Pdh	6.58	kW	Tj = operation limit temperature	COPd	1.72	
T j = – 15 ° C (if TOL < – 20 ° C)	Pdh	6.44	kW	T j = – 15 ° C (if TOL < – 20 ° C)	COPd	2.13	
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}	0.009	kW	Rated heat output（*）	Psup	1.32	kW
Thermostat-off mode	P_{TO}	0.009	kW				
Standby mode	P_{SB}	0.009	kW	Type of energy input	-		
Crankcase heater mode	P_{CK}	0.042	kW				
Other items							
Capacity control	Variable			Rated airflow rate, outdoors		3600	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-AT10

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	8.15	kW
Seasonal space heating energy efficiency	ηs	172.6	%
Energy Classes		-	
Seasonal Coefficient of Performance	SCOP	4.39	kWh/kWh
Annual Energy consumption	QHE	4567	kWh
Sound power level indoors/outdoors	LWA	57	dB(A)

Declared capacity for heating for part load at indoor

Declared coefficient of performance or primary energy ratio for

Temperature 20°C and outdoor temperature Tj				part load at indoor temperature 20°C and outdoor temperature Tj			
Tj = -7°C	Pdh	5.19	kW	Tj = -7°C	COPd	3.86	
Degradation Coefficient（**）	Cdh	1.00	-				
Tj = +2°C	Pdh	3.81	kW	Tj = +2°C	COPd	5.15	
Degradation Coefficient（**）	Cdh	0.90	-				
Tj = +7°C	Pdh	4.01	kW	Tj = +7°C	COPd	6.91	
Degradation Coefficient（**）	Cdh	0.90	-				
Tj = +12°C	Pdh	4.80	kW	Tj = +12°C	COPd	8.48	
Degradation Coefficient（**）	Cdh	0.90	-				
Tj = bivalent temperature	Pdh	6.65	kW	Tj = bivalent temperature	COPd	2.97	
Tj = operation limit temperature（***）	Pdh	7.47	kW	Tj = operation limit temperatur（***）	COPd	2.22	
T j = – 15 ° C (if TOL < – 20 ° C)	Pdh	6.65	kW	Tj = -15°C	COPd	2.97	
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}	0.009	kW	Rated heat output（*）	Psup	0.7	kW
Thermostat-off mode	P_{TO}	0.009	kW				
Standby mode	P_{SB}	0.009	kW	Type of energy input	-		
Crankcase heater mode	P_{CK}	0.042	kW				
Other items							
Capacity control	Variable			Rated airflow rate, outdoors		3600	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