

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-2--MB-AT17T

Indoor Unit: NoneAir-to-water heat pump YesBrine-to-water heat pump NoLow temperature heat pump NoEquipped with a supplementary heater NoHeat Pump Combination Heater NoParameters shall be declared for Medium-temperature applicationsParameters shall be declared for Colder Climate Conditions

Item	Symbol	Value	Unit
Rated Heat Output (*)	Prated	17.0	kW
Seasonal space heating energy efficiency	η_s	127.3	%
Energy Classes		-	
Seasonal Coefficient of Performance	SCOP	3.26	kWh/kWh
Annual Energy consumption	QHE	12863	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 TjDeclared coefficient of performance or primary energy ratio for
part load at indoor temperature 20°C and outdoor temperature Tj

Tj = -7°C	Pdh	10.56	kW	Tj = -7°C	COPd	2.89	
Degradation Coefficient (**)	Cdh	0.90	-				
Tj = +2°C	Pdh	6.45	kW	Tj = +2°C	COPd	3.83	
Degradation Coefficient (**)	Cdh	0.90	-				
Tj = +7°C	Pdh	5.63	kW	Tj = +7°C	COPd	5.12	
Degradation Coefficient (**)	Cdh	0.90	-				
Tj = +12°C	Pdh	5.66	kW	Tj = +12°C	COPd	6.36	
Degradation Coefficient (**)	Cdh	0.90	-				
Tj = bivalent temperature	Pdh	12.60	kW	Tj = bivalent temperature	COPd	2.22	
Tj = operation limit temperature (***)	Pdh	10.00	kW	Tj = operation limit temperature	COPd	1.59	
Tj = -15 ° C (if TOL < -20 ° C)	Pdh	13.30	kW	Tj = -15 ° C (if TOL < -20 ° C)	COPd	2.00	
Degradation Coefficient (**)	Cdh	0.90	-				
Bivalent temperature	Tbiv	-12	°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}	7.00	kW
Thermostat-off mode	P _{TO}	0.012	kW				
Standby mode	P _{SB}	0.011	kW	Type of energy input	-		
Crankcase heater mode	P _{CK}	0.086	kW				
Other items							
Capacity control	Variable			Rated airflow rate, outdoors		5500	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 <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-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 Colder Climate Conditions

Item	Symbol	Value	Unit
Rated Heat Output	Prated	17.0	kW
Seasonal space heating energy efficiency	ηs	154.1	%
Energy Classes		-	
Seasonal Coefficient of Performance	SCOP	3.93	kWh/kWh
Annual Energy consumption	QHE	10670	kWh
Sound power level indoors/outdoors	LWA	63	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	10.50	kW	Tj = -7°C	COPd	3.45	
Degradation Coefficient (**)	Cdh	0.90	-				
Tj = +2°C	Pdh	6.40	kW	Tj = +2°C	COPd	4.63	
Degradation Coefficient (**)	Cdh	0.90	-				
Tj = +7°C	Pdh	5.65	kW	Tj = +7°C	COPd	6.30	
Degradation Coefficient (**)	Cdh	0.90	-				
Tj = +12°C	Pdh	5.85	kW	Tj = +12°C	COPd	7.75	
Degradation Coefficient (**)	Cdh	0.90	-				
Tj = bivalent temperature	Pdh	12.60	kW	Tj = bivalent temperature	COPd	2.57	
Tj = operation limit temperature (***)	Pdh	11.00	kW	Tj = operation limit temperatur (***)	COPd	2.04	
Tj = -15 ° C (if TOL < -20 ° C)	Pdh	13.30	kW	Tj = -15°C	COPd	2.52	
Degradation Coefficient (**)	Cdh	0.90	-				
Bivalent temperature	Tbiv	-12	°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}	6.00	kW
Thermostat-off mode	P _{TO}	0.012	kW				
Standby mode	P _{SB}	0.011	kW	Type of energy input	-		
Crankcase heater mode	P _{CK}	0.086	kW				
Other items							
Capacity control	Variable			Rated airflow rate, outdoors		5500	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 *Tdesignh* of the considered climate, then the outdoor dry bulb temperature is equal to *Tdesignh* for the part load