Information requirements
(heat pump space heaters and heat pump combination heaters)

Model(s): AOWD-MB SMART-36K

Air-to-water heat pump	Y			Low-temperature heat pump	N		
Water-to-water heat pump	N			Equipped with a supplementary heater	N		
Brine-to-water heat pump	N			Heat pump combination heater	Y		
Parameters declared for	Medium-temperature application						
Parameters declared for	Average climate condition						
Item	symbol	value	unit	Item	symbol	value	unit
Rated heat output (*)	Prated	8	kW	Seasonal space heating energy efficiency	ηs	126	%
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 ℃	Pdh	7.10	kW	Tj = – 7 ℃	COPd	1.98	–
Degradation co-efficient (**)	Cdh	0.98	–				
Tj = 2 ℃	Pdh	4.50	kW	Tj = 2 ℃	COPd	3.15	–
Degradation co-efficient (**)	Cdh	0.98	–				
Tj = 7 ℃	Pdh	5.73	kW	Tj = 7 ℃	COPd	4.30	–
Degradation co-efficient (**)	Cdh	0.98	–				
Tj = 12℃	Pdh	6.40	kW	Tj = 12℃	COPd	5.50	–
Degradation co-efficient (**)	Cdh	0.98	–				
Tj = bivalent temperature	Pdh	7.10	kW	Tj = bivalent temperature	COPd	1.98	–
Tj = operation limit temperature	Pdh	8.00	kW	Tj = operation limit temperature	COPd	1.70	–
For air-to-water heat pumps: Tj = – 15℃ (if TOL < – 20℃)	Pdh	NA	kW	For air-to-water heat pumps: Tj = – 15℃ (if TOL < – 20℃)	COPd	NA	–
Bivalent temperature	Tbiv	-7	℃	For air-to-water heat pumps: Operation limit temperature	TOL	-10	℃
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	–
				Heating water operating limit temperature	WTOL	55	℃
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{OFF}	0.018	kW	Rated heat output (*)	Psup	0.00	kW
Thermostat-off mode	P_{TO}	0.018	kW	Type of energy input	Electric		
Standby mode	P_{SB}	0.018	kW				
Crankcase heater mode	P_{CK}	0.000	kW				
Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	–	4500	m 3 /h
Sound power level, indoors/outdoors	L_{WA}	-/69	dB	For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	–	NA	m 3 /h
Annual energy consumption	Q_{HE}	5128	kWh				
For heat pump combination heater:(Model(s): AOWD-MB SMART-36K + WITD-AQUATANK MB-300-2							
Declared load profile	XL			Water heating energy efficiency	ηwh	109.8	%
Daily electricity consumption	Qelec	7.292	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1526	kWh	Annual fuel consumption	AFC	NA	GJ
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(*) 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). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.