PRODUCT FICHE
NØRDIS air-to-water heat pump

Energy labelling regulation: (EU)811/2013
Ecodesign regulation: (EU)813/2013

Technical parameters

Model(s):	Outdoor unit: HOP22WMONO3
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	AVERAGE
Parameters are declared for medium-temperature application.	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	P_{rated}	*22.4*	kW	Seasonal space heating energy efficiency	η_s	*126*	%
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T_j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature T_j			
T_j = – 7 °C	P_{dh}	*19.8*	kW	T_j = – 7 °C	COP_d	*1.74*	-
T_j = + 2 °C	P_{dh}	*11.9*	kW	T_j = + 2 °C	COP_d	*3.3*	-
T_j = + 7 °C	P_{dh}	*8.0*	kW	T_j = + 7 °C	COP_d	*4.62*	-
T_j = + 12 °C	P_{dh}	*3.6*	kW	T_j = + 12 °C	COP_d	*5.2*	-
T_j = bivalent temperature	P_{dh}	*19.8*	kW	T_j = bivalent temperature	COP_d	*1.74*	-
T_j = operation limit temperature	P_{dh}	*13.8*	kW	T_j = operation limit temperature	COP_d	*1.08*	-
For air-to-water heat pumps: T_j = – 15 °C	P_{dh}	*13.78*	kW	For air-to-water heat pumps: T_j = – 15 °C	COP_d	*1.24*	-
Bivalent temperature	T_{biv}	*-7*	°C	For air-to-water heat pumps: Operation limit temperature	TOL	*-10*	°C
Cycling interval capacity for heating	P_{cych}	-	kW	Cycling interval efficiency	COP_{cyc}	-	-
Degradation co-efficient (**)	C_{dh}	*0.9*	-	Heating water operating limit temperature	WTOL	*60*	°C

Power consumption in modes other than active mode			
Off mode	P_{OFF}	*0.018*	kW
Thermostat-off mode	P_{TO}	*0.018*	kW
Standby mode	P_{SB}	*0.096*	kW
Crankcase heater mode	P_{CK}	*0*	kW

Supplementary heater			
Rated heat output (*)	P_{sup}	-	kW
Type of energy input	*Electrical*		

Other items							
Capacity control	*Variable*			For air-to-water heat pumps: Rated air flow rate, outdoors	-	*10650*	m^3/h
Sound power level, indoors/ outdoors	L_{WA}	*-/73*	dB	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m^3/h
Annual energy consumption	Q_{HE}	*14390*	kWh				

For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Q_{elec}	-	kWh	Daily fuel consumption	Q_{fuel}	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	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(T_j).
(**) If C_{dh} is not determined by measurement then the default degradation coefficient is C_{dh} = 0,9.