

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: HOP10WODU / Indoor unit: HOP100WIDU									
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:		YES									
Heat pump combination heater:		NO									
Declared climate condition:		AVERAGE									
Parameters are declared for medium-temperature application.											
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	P_{rated}	7.7	kW	Seasonal space heating energy efficiency	η_s	136.6	%	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature T_j			
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							
$T_j = -7\text{ °C}$	P_{dh}	6.78	kW	$T_j = -7\text{ °C}$	COP_d	2.24	-	$T_j = -7\text{ °C}$	COP_d	2.24	-
$T_j = +2\text{ °C}$	P_{dh}	4.28	kW	$T_j = +2\text{ °C}$	COP_d	3.42	-	$T_j = +2\text{ °C}$	COP_d	3.42	-
$T_j = +7\text{ °C}$	P_{dh}	2.77	kW	$T_j = +7\text{ °C}$	COP_d	4.52	-	$T_j = +7\text{ °C}$	COP_d	4.52	-
$T_j = +12\text{ °C}$	P_{dh}	1.58	kW	$T_j = +12\text{ °C}$	COP_d	5.68	-	$T_j = +12\text{ °C}$	COP_d	5.68	-
$T_j =$ bivalent temperature	P_{dh}	6.78	kW	$T_j =$ bivalent temperature	COP_d	2.24	-	$T_j =$ bivalent temperature	COP_d	2.24	-
$T_j =$ operation limit temperature	P_{dh}	5.38	kW	$T_j =$ operation limit temperature	COP_d	1.83	-	$T_j =$ operation limit temperature	COP_d	1.83	-
For air-to-water heat pumps: $T_j = -15\text{ °C}$	P_{dh}	5.47	kW	For air-to-water heat pumps: $T_j = -15\text{ °C}$	COP_d	2.00	-	For air-to-water heat pumps: $T_j = -15\text{ °C}$	COP_d	2.00	-
Bivalent temperature	T_{biv}	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°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}	-	-	Cycling interval efficiency	COP_{cyc}	-	-
Degradation co-efficient (**)	C_{dh}	0.9	-	Heating water operating limit temperature	WTOL	65	°C	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes other than active mode				Supplementary heater							
Off mode	P_{OFF}	0.014	kW	Rated heat output (*)		P_{sup}	2.28	kW			
Thermostat-off mode	P_{TO}	0.014	kW	Type of energy input		Electrical					
Standby mode	P_{SB}	0.024	kW								
Crankcase heater mode	P_{CK}	0	kW								
Other items											
Capacity control	Variable			For air-to-water heat pumps: Rated air flow rate, outdoors		-	4030	m ³ /h			
Sound power level, indoors/ outdoors	L_{WA}	42/60	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}	4539	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			
Contact details	JSC "BALTIC REFRIGERATION GROUP" S. Zukausko 11, Ramuciai, LT-54464 Kaunas distr., Lithuania										
(*) 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 $sup(T_j)$.											
(**) If C_{dh} is not determined by measurement then the default degradation coefficient is $C_{dh} = 0,9$.											