

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: HLT12MONO-S / Indoor unit: HLT-9-250-3S									
Air-to-water heat pump:		YES									
Water-to-water heat pump:		NO									
Brine-to-water heat pump:		NO									
Low-temperature heat pump:		YES									
Equipped with a supplementary heater:		YES									
Heat pump combination heater:		YES									
Declared climate condition:		AVERAGE									
Parameters are declared for low-temperature application.											
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	P_{rated}	8.97	kW	Seasonal space heating energy efficiency	η_s	188	%	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}	7.93	kW	$T_j = -7\text{ °C}$	COP_d	2.87	-	$T_j = -7\text{ °C}$	COP_d	2.87	-
$T_j = +2\text{ °C}$	P_{dh}	5.06	kW	$T_j = +2\text{ °C}$	COP_d	4.71	-	$T_j = +2\text{ °C}$	COP_d	4.71	-
$T_j = +7\text{ °C}$	P_{dh}	4.51	kW	$T_j = +7\text{ °C}$	COP_d	6.83	-	$T_j = +7\text{ °C}$	COP_d	6.83	-
$T_j = +12\text{ °C}$	P_{dh}	4.23	kW	$T_j = +12\text{ °C}$	COP_d	8.4	-	$T_j = +12\text{ °C}$	COP_d	8.4	-
$T_j =$ bivalent temperature	P_{dh}	7.93	kW	$T_j =$ bivalent temperature	COP_d	2.87	-	$T_j =$ bivalent temperature	COP_d	2.87	-
$T_j =$ operation limit temperature	P_{dh}	7.22	kW	$T_j =$ operation limit temperature	COP_d	2.65	-	$T_j =$ operation limit temperature	COP_d	2.65	-
For air-to-water heat pumps: $T_j = -15\text{ °C}$	P_{dh}	-	kW	For air-to-water heat pumps: $T_j = -15\text{ °C}$	COP_d	-	-	For air-to-water heat pumps: $T_j = -15\text{ °C}$	COP_d	-	-
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	60	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater							
Off mode	P_{OFF}	0.023	kW	Rated heat output (*)		P_{sup}	1.752	kW			
Thermostat-off mode	P_{TO}	0.02	kW	Type of energy input		Electrical					
Standby mode	P_{SB}	0.03	kW								
Crankcase heater mode	P_{CK}	0.02	kW								
Other items											
Capacity control	Variable			For air-to-water heat pumps: Rated air flow rate, outdoors		-	3300	m ³ /h			
Sound power level, indoors/ outdoors	L_{WA}	34/56	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}	3889	kWh								
For heat pump combination heater:											
Declared load profile	L			Water heating energy efficiency		η_{wh}	123.7	%			
Daily electricity consumption	Q_{elec}	3.907	kWh	Daily fuel consumption		Q_{fuel}	-	kWh			
Annual electricity consumption	AEC	827	kWh	Annual fuel consumption		AFC	-	GJ			
Contact details	JSC "BALTIC REFRIGERATION GROUP" S. Zukausko 11, Ramučiai, 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 $C_{dh} = 0,9$.											