

# Technical documentation

Model		NSKW12					
Type of heat pump	<input type="checkbox"/> Air-water <input type="checkbox"/> Exhaust-water <input type="checkbox"/> Brine-water <input checked="" type="checkbox"/> Water-water						
Low-temperature heat pump	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
Integrated immersion heater for additional heat	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
Heat pump combination heater	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
Climate	<input checked="" type="checkbox"/> Average <input type="checkbox"/> Cold <input type="checkbox"/> Warm						
Temperature application	<input type="checkbox"/> Average (55°C) <input checked="" type="checkbox"/> Low (35°C)						
Applied standards	EN-14825; EN-16147						
<b>Rated heat output</b>	Prated	14.86	kW	<b>Seasonal space heating energy efficiency</b>	N <sub>s</sub>	258	%
<i>Declared capacity for space heating at part load and at outdoor temperature T<sub>j</sub></i>				<i>Declared coefficient of performance for space heating at part load and at outdoor temperature T<sub>j</sub></i>			
T <sub>j</sub> = -7 °C	P <sub>dh</sub>	14.89	kW	T <sub>j</sub> = -7 °C	COP <sub>d</sub>	5.74	
T <sub>j</sub> = +2 °C	P <sub>dh</sub>	15.05	kW	T <sub>j</sub> = +2 °C	COP <sub>d</sub>	6.45	
T <sub>j</sub> = +7 °C	P <sub>dh</sub>	15.17	kW	T <sub>j</sub> = +7 °C	COP <sub>d</sub>	7.09	
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	15.29	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	7.86	
T <sub>j</sub> = biv	P <sub>dh</sub>	14.86	kW	T <sub>j</sub> = biv	COP <sub>d</sub>	5.60	
T <sub>j</sub> = TOL	P <sub>dh</sub>	14.86	kW	T <sub>j</sub> = TOL	COP <sub>d</sub>	5.60	
T <sub>j</sub> = -15 °C (if TOL < -20 °C)	P <sub>dh</sub>	-	kW	T <sub>j</sub> = -15 °C (if TOL < -20 °C)	COP <sub>d</sub>	-	
Bivalent temperature	T <sub>biv</sub>	-10	°C	Min. outdoor air temperature	TOL	-10	°C
Cycling interval capacity	P <sub>cyh</sub>	-	kW	Cycling interval efficiency	COP <sub>cyh</sub>	-	-
Degradation coefficient	C <sub>dh</sub>	1.00	-	Max supply temperature	WTOL	55.0	°C
<b>Power consumption in modes other than active mode Additional heat</b>				<b>Additional heat</b>			
Off mode	P <sub>OFF</sub>	0.010	kW	Rated heat output	P <sub>sup</sub>	-	kW
Thermostat-off mode	P <sub>TO</sub>	0.005	kW				
Standby mode	P <sub>SB</sub>	0.007	kW	Type of energy input		-	
Crankcase heater mode	P <sub>CK</sub>	-	kW				
<b>Other items</b>							
Capacity control	Fixed			Rated airflow (air-water)		-	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	61/0	dB	Nominal heating medium flow		2.70	m <sup>3</sup> /h
Annual energy consumption	Q <sub>HE</sub>	4709	kWh	Brine flow brine-water or water-water heat pumps		3.60	m <sup>3</sup> /h
<b>For heat pump combination heater:</b>							
<b>Declared load profile</b>	<b>XL</b>			<b>Water heating energy efficiency</b>	η <sub>wh</sub>	119	%
Daily electricity consumption	Q <sub>elec</sub>	8.64	kWh	Daily fuel consumption	Q <sub>fuel</sub>		kWh
Annual electricity consumption	AEC	1848.86	kWh	Annual fuel consumption	AFC		GJ
Reference Temperature	θ <sub>WH</sub>	51.7	°C	Standard heat loss of tank		1.98	kWh/Day
				Tank volume		384	L/tank
Approved by:							
Contact details	@ WaterFurnace International - 9000 Conservation Way, Fort Wayne, IN 46809						
The data provided is in accordance with the EU Directive No 811/2013, 812/2013, 813/2013 and 814/2013							
You can find information and precautions related to installation and maintenance in the Installation manuals							
You can find relevant information for disposal of unit at end of life in the instruction manual							