

Technical parameters							
Model(s):				Outdoor unit: KHON-08PMA1			
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 (*)	Prated	8,2	kW	Seasonal space heating energy efficiency	$\eta_s$	159,6	%
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°C	Pdh	7,26	kW	Tj = -7°C	COPd	2,46	-
Tj = 2°C	Pdh	4,51	kW	Tj = 2°C	COPd	4,02	-
Tj = 7°C	Pdh	3,72	kW	Tj = 7°C	COPd	5,27	-
Tj = 12°C	Pdh	4,40	kW	Tj = 12°C	COPd	6,90	-
Tj = bivalent temperature	Pdh	7,27	kW	Tj = bivalent temperature	COPd	2,46	-
Tj = operating limit	Pdh	8,20	kW	Tj = operating limit	COPd	2,11	-
For air-to-water heat pumps: Tj = -15°C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C	COPd	-	-
Bivalent temperature	T <sub>biv</sub>	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P <sub>cyc</sub>	-	kW	Cycling interval efficiency	COP <sub>cyc</sub>	-	-
Degradation co-efficient (**)	C <sub>dh</sub>	0,9	--	Heating water operating limit temperature	WTOL	80	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>off</sub>	0,011	kW	Rated heat output (**)	P <sub>sup</sub>	0	kW
Standby mode	P <sub>sb</sub>	0,011	kW	Type of energy input	electrical		
Thermostat-off mode	P <sub>to</sub>	0,016	kW				
Crankcase heater mode	P <sub>ck</sub>	0,000	kW				
Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	-	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	-/53	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h
Annual energy consumption	Q <sub>HE</sub>	4168	kWh				
For heat pump combination heater:							
<b>Declared load profile</b>	-			<b>Water heating energy efficiency</b>	$\eta_{wh}$	-	%
Daily electricity consumption	Q <sub>elec</sub>	-	kWh	Daily fuel consumption	Q <sub>fuel</sub>	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ
Contact details	KLIMA-THERM ul. Ostrobramska 101A, 04-041 Warszawa, Polska						
(*) 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.							

Technical parameters							
Model(s):				Outdoor unit: KHON-10PMA1			
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 (*)	Prated	10	kW	Seasonal space heating energy efficiency	$\eta_s$	157,5	%
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°C	Pdh	8,85	kW	Tj = -7°C	COPd	2,23	-
Tj = 2°C	Pdh	5,48	kW	Tj = 2°C	COPd	3,98	-
Tj = 7°C	Pdh	3,78	kW	Tj = 7°C	COPd	5,48	-
Tj = 12°C	Pdh	4,43	kW	Tj = 12°C	COPd	7,03	-
Tj = bivalent temperature	Pdh	8,85	kW	Tj = bivalent temperature	COPd	2,23	-
Tj = operating limit	Pdh	8,98	kW	Tj = operating limit	COPd	2,06	-
For air-to-water heat pumps: Tj = -15°C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C	COPd	-	-
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P <sub>cyc</sub>	-	kW	Cycling interval efficiency	COP <sub>cyc</sub>	-	-
Degradation co-efficient (**)	Cdh	0.9	--	Heating water operating limit temperature	WTOL	80	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>off</sub>	0,011	kW	Rated heat output (**)	P <sub>sup</sub>	1,02	kW
Standby mode	P <sub>sb</sub>	0,011	kW	Type of energy input	electrical		
Thermostat-off mode	P <sub>to</sub>	0,016	kW				
Crankcase heater mode	P <sub>ck</sub>	0,000	kW				
Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	-	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	-/54	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h
Annual energy consumption	Q <sub>HE</sub>	5148	kWh				
For heat pump combination heater:							
<b>Declared load profile</b>	-			<b>Water heating energy efficiency</b>	$\eta_{wh}$	-	%
Daily electricity consumption	Q <sub>elec</sub>	-	kWh	Daily fuel consumption	Q <sub>fuel</sub>	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ
Contact details	KLIMA-THERM ul. Ostrobramska 101A, 04-041 Warszawa, Polska						
(*) 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.							