

## Technical parameters

Model(s):	KHC-12RY3-B
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:	COLDER

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated heat output (*)	Prated	10.3	kW	Seasonal space heating energy efficiency	$\eta_s$	117.7	%		
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	6.63	kW	Tj = -7°C	COPd	2.63	-		
Tj = 2°C	Pdh	4.06	kW	Tj = 2°C	COPd	3.60	-		
Tj = 7°C	Pdh	2.78	kW	Tj = 7°C	COPd	4.54	-		
Tj = 12°C	Pdh	3.33	kW	Tj = 12°C	COPd	6.25	-		
Tj = bivalent temperature	Pdh	8.41	kW	Tj = bivalent temperature	COPd	1.84	-		
Tj = operating limit	Pdh	4.19	kW	Tj = operating limit	COPd	1.13	-		
For air-to-water heat pumps: Tj = -15°C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C	COPd	-	-		
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C		
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-		
Degradation co-efficient (**)	Cdh	0.9	--	Heating water operating limit temperature	WTOL	51	°C		
Power consumption in modes other than active mode				Supplementary heater					
Off mode	Poff	0.020	kW	Rated heat output (**)	Psup	6.11	kW		
Standby mode	Psb	0.020	kW						
Thermostat-off mode	Pto	0.030	kW	Type of energy input	Electrical				
Crankcase heater mode	Pck	0.000	kW						

Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4060	m³/h
Sound power level, indoors/outdoors	LWA	-	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h
Annual energy consumption	QHE	8420	kWh				

For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	$\eta_{wh}$	-	%
Daily electricity consumption	Qelec	-	kWh	Daily fuel consumption	Qfuel	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ

Contact details	KLIMA-THERM Sp. z o. o. ul. Ostrobramska 101A, 04-041 Warszawa, Polska						
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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(Tj).  
(\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.