

TECHNICAL DOCUMENTATION

according Directive 2010/30/EU and corresponding Regulation (EU) No. 811/2013 (Energy Labelling),

Directive 2009/125/EC and corresponding Regulation (EU) No. 813/2013 (Ecodesign)



Model:	iPump A 2-7
Type of heat pump:	Air-to-water heat pump
Low-temperature heat pump: (Yes/No)	Yes
Temperature application: (35°C/55°C)	low temperature (35°C)
Equipped with supplementary heater: (Yes/No)	Yes
Heat pump combination heater: (Yes/No)	Yes

	P_{rated}	Climate condition			kW
		cold	average	warm	
Rated heat output		5,8	5,4	6,3	
Outdoor temperature T_j	Declared capacity for part load (indoor temperature = 20 °C)				
$T_j = -15\text{ °C}$	P_{dh}	4,8	-	-	kW
$T_j = -7\text{ °C}$	P_{dh}	3,5	4,9	-	kW
$T_j = +2\text{ °C}$	P_{dh}	2,2	2,9	6,3	kW
$T_j = +7\text{ °C}$	P_{dh}	2,0	2,0	4,2	kW
$T_j = +12\text{ °C}$	P_{dh}	2,3	2,3	2,3	kW
T_j = Bivalenz temperature (T_{biv})	P_{dh}	4,8	5,4	6,3	kW
T_j = Operation limit temperature (TOL)	P_{dh}	4,4	5,4	6,3	kW
Bivalenz temperature (T_{biv})	T_{biv}	-15,0	-10,0	2,0	°C
Cycling interval capacity for heating	P_{cych}				kW
Degradation co-efficient	C_{dh}	0,9	0,9		---
Power consumption in modes other than active mode					
Thermostat-off mode	P_{TO}	0,025	0,025	0,025	kW
Standby mode	P_{SB}	0,022	0,022	0,022	kW
Off-mode	P_{OFF}	0,022	0,022	0,022	kW
Crankcase heater mode	P_{CK}	0	0	0	kW
Other items					
Capacity control		variable			
Sound power levels, indoors/outdoors	L_{WA}	42.3/45.7	42.3/45.7	42.3/45.7	dB
Annual energy consumption	Q_{HE}	3.136	2.166	1.304	kWh
For heat pump combination heater:					
Declared load profile		XL			
Daily electricity consumption	Q_{elec}		8,180		kWh
Annual electricity consumption	AEC		1.749		kWh

Contact details:

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	η_s	Climate condition			%
		cold	average	warm	
Seasonal space heating efficiency		178	202	281	
Outdoor temperature T_j	Declared capacity for part load (indoor temperature = 20 °C)				
$T_j = -15\text{ °C}$	COP_d	2,80	-	-	---
$T_j = -7\text{ °C}$	COP_d	3,90	3,38	-	---
$T_j = +2\text{ °C}$	COP_d	5,88	5,23	3,45	---
$T_j = +7\text{ °C}$	COP_d	7,89	1,95	6,12	---
$T_j = +12\text{ °C}$	COP_d	9,64	2,31	2,26	---
T_j = Bivalenz temperature (T_{biv})	COP_d	2,80	2,95	3,45	---
T_j = Operation limit temperature (TOL)	COP_d	2,67	2,95	3,45	---
Operation limit temperature	TOL	-18,0	-10,0	2,0	°C
Cycling interval capacity for heating	COP_{cyc}				---
Heating water operating limit temperature	WTOL	62	62	62	°C
Supplementary heater					
Rated heat output (*)	P_{sup}	1-6	1-6	1-6	kW
Type of energy input		electrical			
For air-to-water heat pumps:					
Rated air flow rate, outdoors		---	2.500		m ³ /h
For water- or brine-to-water heat pumps:					
Rated brine or water flow rate, outdoor heat exchanger		---	n.a.	n.a.	n.a.
					m ³ /h
Water heating energy efficiency					
	η_{wh}	95,8			%
Daily fuel consumption	Q_{fuel}	n.a.	n.a.	n.a.	kWh
Annual fuel consumption	AFC	n.a.	n.a.	n.a.	GJ