

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:	TERRA SWM 6-17
Type of heat pump:	Brine-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)	No
Heat pump combination heater: (Yes/No)	No

		Climate condition			
		cold	average	warm	
Rated heat output	P_{rated}	21,4	21,4	21,4	kW

Outdoor temperature T_j		Declared capacity for part load (indoor temperature = 20 °C)			
		P_{dh}			
$T_j = -15\text{ °C}$	P_{dh}	17,4	-	-	kW
$T_j = -7\text{ °C}$	P_{dh}	12,9	18,9	-	kW
$T_j = +2\text{ °C}$	P_{dh}	7,9	11,5	21,4	kW
$T_j = +7\text{ °C}$	P_{dh}	5,0	7,4	13,8	kW
$T_j = +12\text{ °C}$	P_{dh}	3,6	3,6	6,1	kW
T_j = Bivalenz temperature (T_{biv})	P_{dh}	21,4	21,4	21,4	kW
T_j = Operation limit temperature (TOL)	P_{dh}	21,4	21,4	21,4	kW
Bivalenz temperature (T_{biv})	T_{biv}	-22,0	-10,0	2,0	°C
Cycling interval capacity for heating	P_{cyc}				kW
Degradation co-efficient	C_{dh}	0,981	0,985	0,991	---

Power consumption in modes other than active mode					
Thermostat-off mode	P_{TO}	0,021	0,021	0,021	kW
Standby mode	P_{SB}	0,021	0,021	0,021	kW
Off-mode	P_{OFF}	0,021	0,021	0,021	kW
Crankcase heater mode	P_{CK}	0,000	0,000	0,000	kW

Other items					
Capacity control		variable			
Sound power levels, indoors/outdoors	L_{WA}		44		dB
Annual energy consumption	Q_{HE}	8.612	7.551	4.848	kWh

For heat pump combination heater:					
Declared load profile		n.a.			
Daily electricity consumption	Q_{elec}		n.a.		kWh
Annual electricity consumption	AEC		n.a.		kWh

Contact details:

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		Climate condition			
		cold	average	warm	
Seasonal space heating efficiency	η_s	237	226	227	%

Outdoor temperature T_j		Declared capacity for part load (indoor temperature = 20 °C)			
		COP_d			
$T_j = -15\text{ °C}$	COP_d	4,81	-	-	---
$T_j = -7\text{ °C}$	COP_d	5,63	4,46	-	---
$T_j = +2\text{ °C}$	COP_d	6,63	5,81	4,09	---
$T_j = +7\text{ °C}$	COP_d	7,41	6,75	5,40	---
$T_j = +12\text{ °C}$	COP_d	7,88	7,88	0,87	---
T_j = Bivalenz temperature (T_{biv})	COP_d	4,09	4,09	4,09	---
T_j = Operation limit temperature (TOL)	COP_d	4,09	4,09	4,09	---
Operation limit temperature	TOL	-22,0	-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}	n.a.	n.a.	n.a.	kW
Type of energy input		electrical			

For air-to-water heat pumps:					
Rated air flow rate, outdoors		---			m ³ /h
For water- or brine-to-water heat pumps:					
Rated brine or water flow rate, outdoor heat exchanger		---	n.a.	n.a.	m ³ /h

Water heating energy efficiency					
Daily fuel consumption	Q_{fuel}	n.a.	n.a.	n.a.	kWh
Annual fuel consumption	AFC	n.a.	n.a.	n.a.	GJ