

AquaThermica Eco

Air-to-water heat pump water heater for domestic hot water

The AquaThermica range includes models with volumes of 200 and 260 litres with and without a heat exchanger.

- ⊞ An environmentally friendly product, operating with renewable energy sources resulting in lower CO₂ emissions¹.
- ⊞ The highest energy efficiency class **A+** in its category, according to ErP regulations.
- ⊞ Operates within a wide temperature range of incoming air from **-10°C to 43°C**.
- ⊞ **Heats up water to 65°C with the heat pump unit only.**
- ⊞ Electric heating element for **faster heating up** and reaching of higher temperature of 75°C.
- ⊞ **Highly efficient²** with a precisely balanced refrigerant cycle due to an electronically commutated motor and an electronic expansion valve.
- ⊞ **Up to a 75% lower power consumption³.**
- ⊞ Can be connected to **other renewable energy sources** like PV and solar systems or boilers.
- ⊞ **Programmable with a user friendly control panel.**
- ⊞ **Automatic anti-legionella cycle.**
- ⊞ **Self-diagnostic system.**



¹ According to the European Heat Pump Market and Statistics Report 2020.
² Compared to a 2001 TESI electric water heater with a load profile L.



Renewable Energy



Energy efficiency class A+



Low CO₂ emissions



Electronic step motor for precisely balanced refrigerant cycle



Operating temperature range -10°C to +43°C



65°C DHW with the heat pump only



Up to 75% lower power consumption



Connectivity to solar and PV panels



User-friendly LCD display

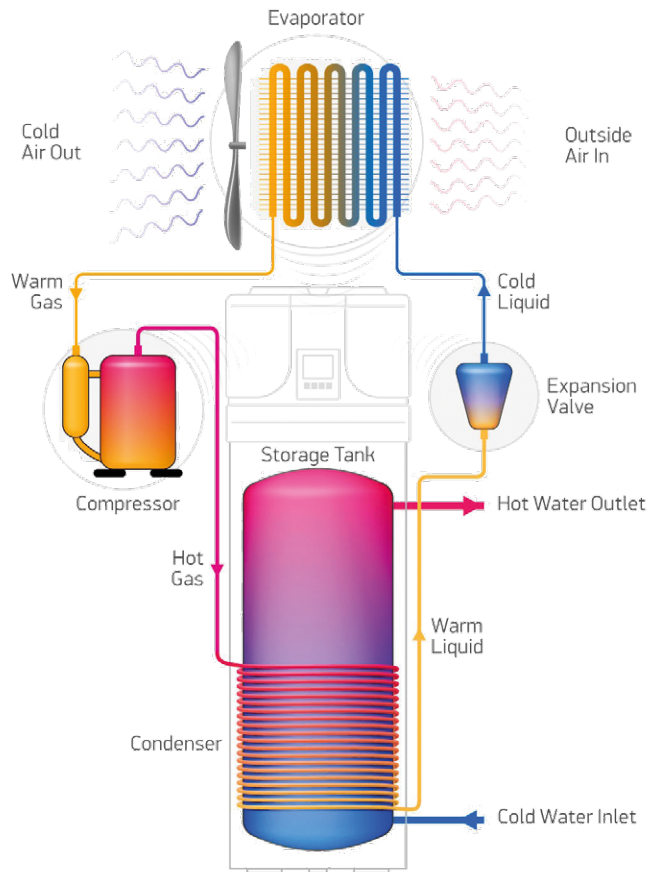


Ecological refrigerant

OPERATING PRINCIPLE

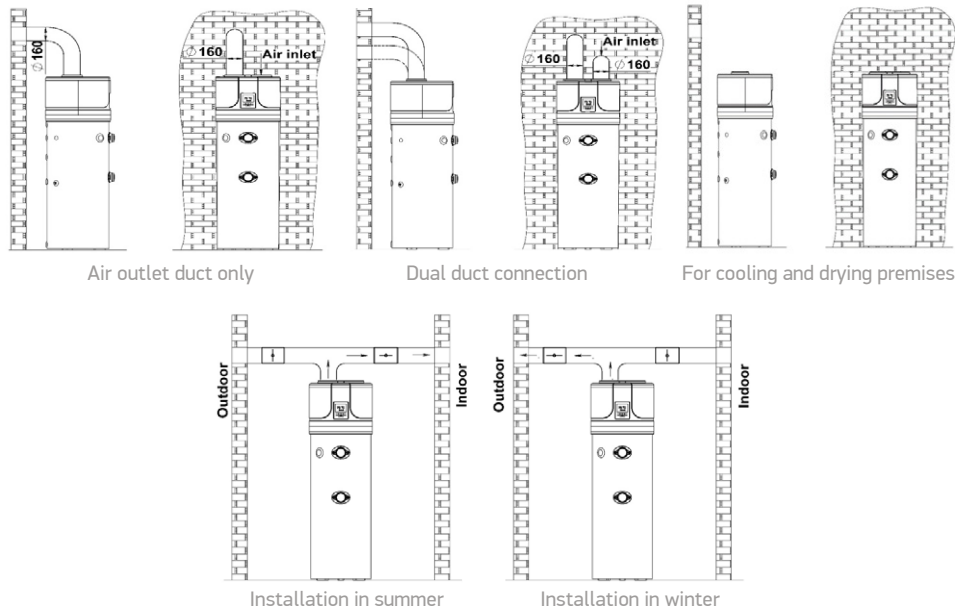


Programmable with a user-friendly display



AIR-DUCT SYSTEM INSTALLATION

Applications for cooling and drying premises

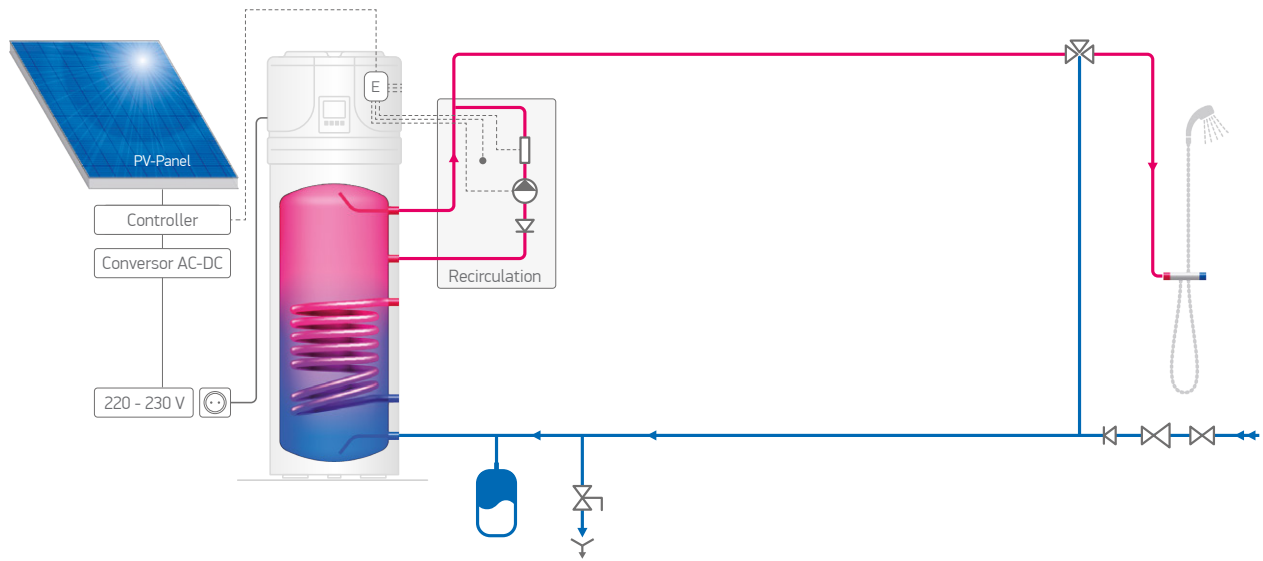


DRAWINGS AND TECHNICAL DATA

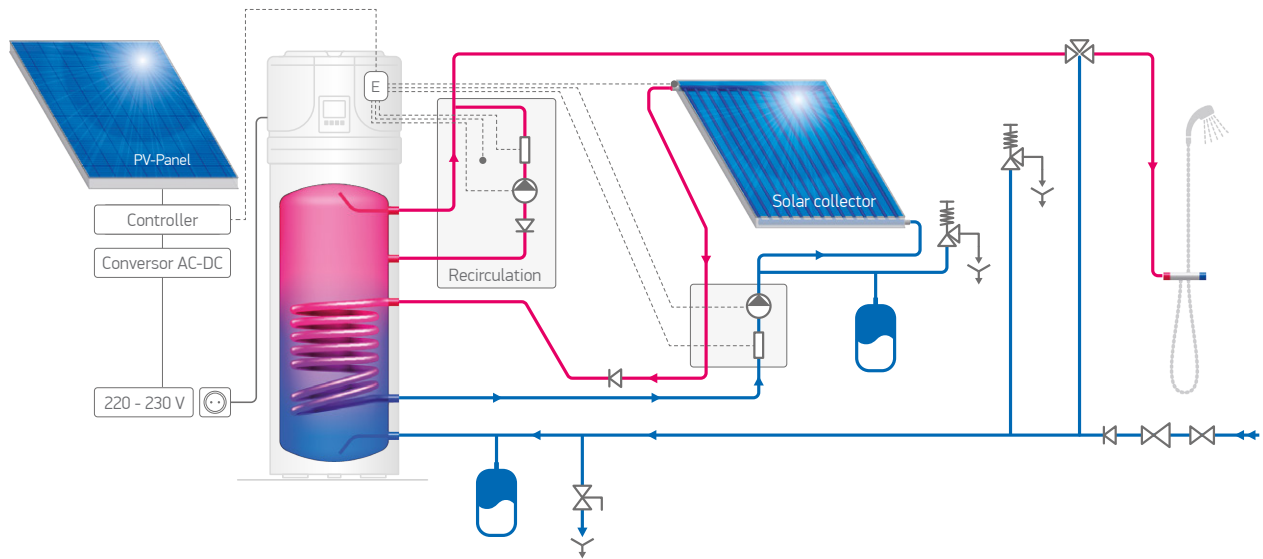
Model		AquaThermica Eco 200 with heat exchanger HPWH 3.1 200 U 01 S	AquaThermica Eco 200 HPWH 3.1 200 U 01	AquaThermica Eco 260 with heat exchanger HPWH 3.1 260 U 01 S	AquaThermica Eco 260 HPWH 3.1 260 U 01
Art. Number	No	305765	305764	305763	305762
Performance					
Load profile		L	L	XL	XL
Hot water temperature set point		°C	55	55	55
Heating up time; th	Condition EN 16147:2017 - A20/W55	h:m	5:41	5:41	7:23
	Condition EN 16147:2017 - A14/W55		6:33	6:33	8:49
	Condition EN 16147:2017 - A7/W55		7:45	7:45	10:12
Heating up time in BOOST mode (A7/W10-55)		h:m	3:47	3:47	4:21
Degree of protection			IPX4		
COP _{DHW}	Condition EN 16147:2017 - A20/W55	kW	3,9	3,9	3,9
	Condition EN 16147:2017 - A14/W55		3,5	3,5	3,6
	Condition EN 16147:2017 - A7/W55		3	3	3,2
	Condition EN 16147:2017 - A2/W55		2,5	2,5	2,8
Water heating energy efficiency; ErP class	Condition EN 16147:2017 - A20/W55	%	A++	A++	A++
	Condition EN 16147:2017 - A14/W55		A+	A+	A+
	Condition EN 16147:2017 - A7/W55		A+	A+	A+
	Condition EN 16147:2017 - A2/W55		A	A	A
Annual power consumption; AEC	Condition EN 16147:2017 - A20/W55	kWh/a	622	622	1042
	Condition EN 16147:2017 - A14/W55		702	702	1136
	Condition EN 16147:2017 - A14/W55		822	822	1250
Maximum volume of mixed water at 40°C /V40		l	277	283	352
Rated heat output	Condition EN 16147:2017 - A20/W55	kW	1,75	1,75	1,63
	Condition EN 16147:2017 - A14/W55		1,53	1,53	1,43
	Condition EN 16147:2017 - A7/W55		1,27	1,27	1,23
Electrical data					
Power supply (Frequency)	V (Hz)	1/N/220-240 (50)			
Degree of protection level		IPX4			
HP maximum power consumption	kW	0.663+1,500 (e-heater) = 2,163			
Electric heating element power	kW	1.5			
Maximum current of appliance	A	3.1+6.5 (e-heater) = 9.6			
Max. starting current of heat pump	A	13.5			
Required overload protections	A	16A T fuse/ 16A automatic switch, characteristic C (to be expected during installation on power supply systems)			
Internal protection		Safety thermostat with manual reset			
Operating conditions					
Min. + max temperature heat pump air intake (90% R.H.)	°C	-10 ÷ 43			
Min. + max temperature installation site	°C	4 ÷ 40			
Working temperature					
Max. settable water temperature [with E-heater]; EN 16147:2017	°C	65 [75]			

CONNECTIVITY AND INSTALLATION OPTIONS

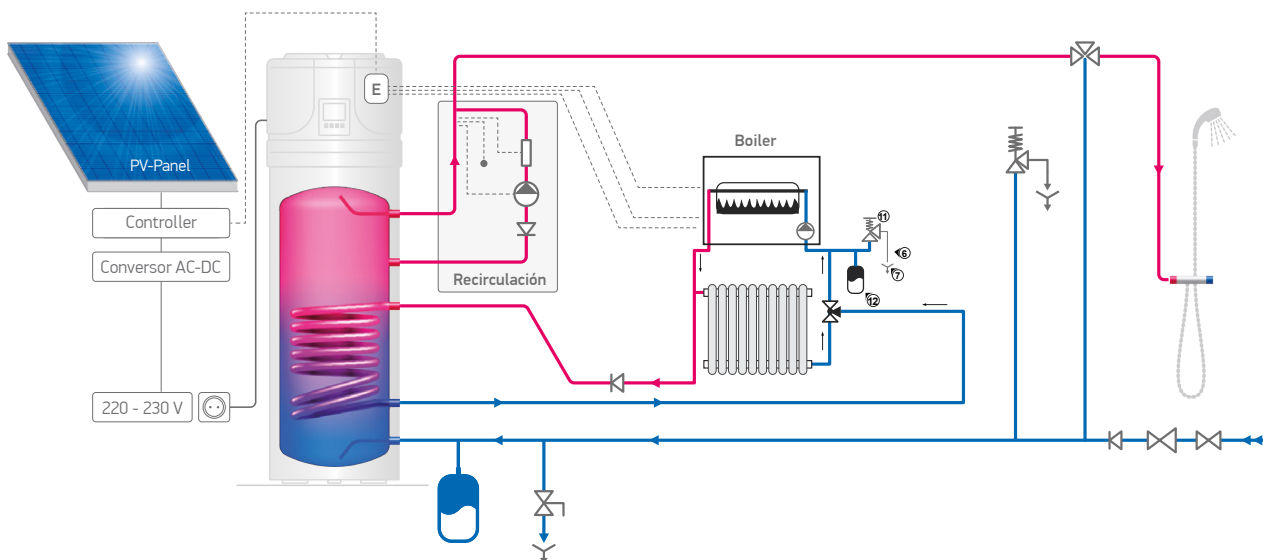
Connection to a PV panel



Connection to a PV and solar panel

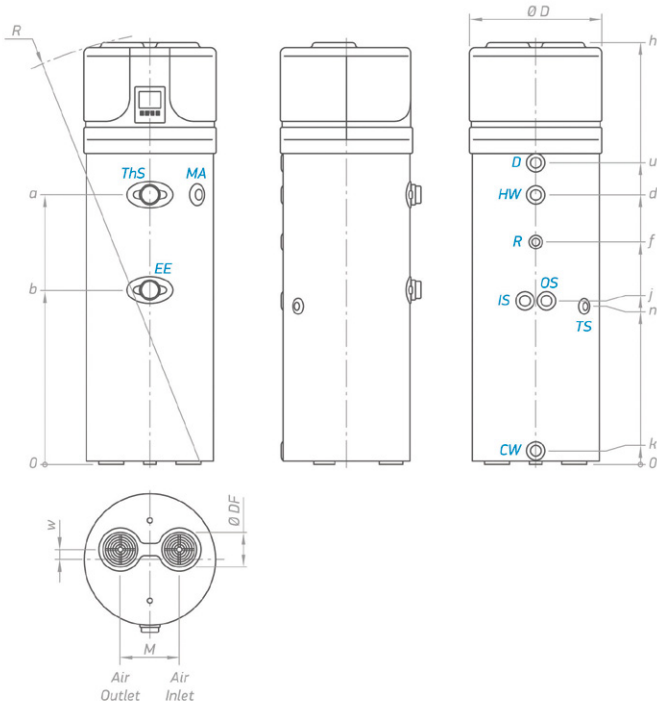


Connection to a PV panel and a boiler



DRAWINGS AND TECHNICAL DATA

Model		AquaThermica Eco 200 with heat exchanger	AquaThermica Eco 200	AquaThermica Eco 260 with heat exchanger	AquaThermica Eco 260	
Art. Number		No	305765	305764	305763	305762
Design characteristic						
Compressor / Compressor protection		Rotary / Thermal circuit breaker with automatic reset				
Thermodynamic circuit protection type		Safety pressure switches with an automatic reset; [high/low pressure 2.5/0.1 Mpa]				
Automatic safety pressure switch (high)		MPa	2.5			
Automatic safety pressure switch (low)		MPa	0.1			
Fan		Centrifugal				
Available external pressure of heat pump		Pa	88			
Ejection outlet diameter		mm	160			
Nominal air capacity		m³/h	360			
Motor protection		Internal thermal circuit breaker with automatic reset				
Condenser		Aluminium; wrapped externally, not in contact with water				
Refrigerant		R513a				
Refrigerant charge		g	1100			
Global warming potential of the refrigerant			631			
CO ² equivalent (CO ² e)		t	0.693			
Sound power Lw(A) indoor		dB(A)	56			
Automatic anti-Legionella cycle		YES				
Water storage tank						
Water storage tank capacity		l	194	202	251	260
Solar heat exchanger surface		m ²	1	N/A	1,2	N/A
Solar heat exchanger volume		l	5,8	N/A	7,5	N/A
Corrosion protection		Mg anode Ø33x400 mm				
Thermal insulation		50 mm rigid PU				
Maximum working pressure – storage tank		bar	8			
Transport weight		kg	121	105	128	110



Dimensions ±5 mm		EVHP 9S 200 60	EVHP 200 60	EVHP 9S 260 60	EVHP 260 60
h	mm	1720	1720	2010	2010
a	mm	994	994	1285	1285
b	mm	724	724	834	834
d	mm	995	995	1285	1285
f	mm	803	803	1064	1064
i	mm	681	-	781	-
k	mm	60	60	60	60
n	mm	681	681	766	766
u	mm	1153	1153	1440	1440
w	mm	58	58	58	58
M	mm	260	260	260	260
ØDF	mm	160	160	160	160
R	mm	1785	1785	2055	2055
ØD	mm	630	630	630	630

MODELS		EVHP 9S 200 60	EVHP 200 60	EVHP 9S 260 60	EVHP 260 60
CW	cold water inlet	G 1"	G 1"	G 1"	G 1"
HW	hot water outlet	G 1"	G 1"	G 1"	G 1"
IS	heat exchanger inlet	G 1"	-	G 1"	-
OS	heat exchanger outlet	G 1"	-	G 1"	-
R	recirculation	G ¾"	G ¾"	G ¾"	G ¾"
TS	thermo pocket level 1 opening for electric element	G ½"	-	G ½"	-
EE	opening for electric element	G 1½"	G 1½"	G 1½"	G 1½"
CD	condense drainage	G ¾"	G ¾"	G ¾"	G ¾"

Thread designations according to EN ISO 228-1