

AquaThermica

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

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

- It is 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 the incoming air starting from **-10°C** to **43°C**.
- Heats up water to 65°C with the heat pump 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 75% lower electricity consumption³.**
- Can be connected to **other renewable energy sources** like PV and solar systems or boilers.
- Programmable with an user friendly control panel.**
- Automatic anti-legionella cycle.**
- Self-diagnostic system.**

¹According to the European Market and Statistical Report on the European Heat Pump Association 2018.

² AquaThermica is in energy efficiency class A+.

³ Compared to a TESI product of the MaxEau family GCV 200 56 20 D06 SRC in energy class C.



Renewable
Energy



Energy efficiency
class A+



Low CO₂
emissions



Electronic step motor
for precisely balanced
refrigerant cycle



Operational
temperature range
-10 to +43°C



65°C DHW with the
heat pump only



Up to 75% reduced
electricity
consumption



Connectivity to Solar
and PV panels

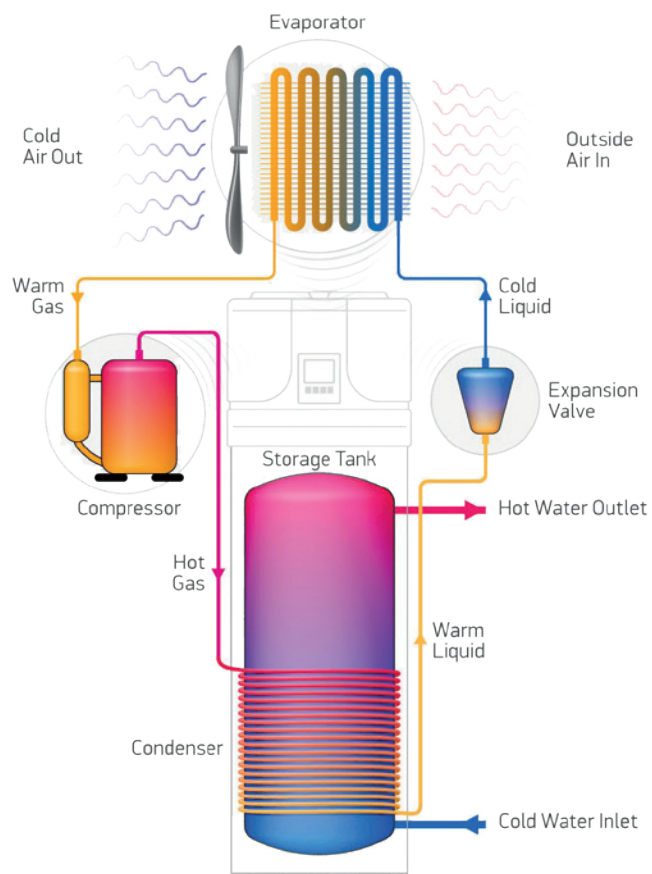


User-friendly LED
Display

WORKING PRINCIPLE

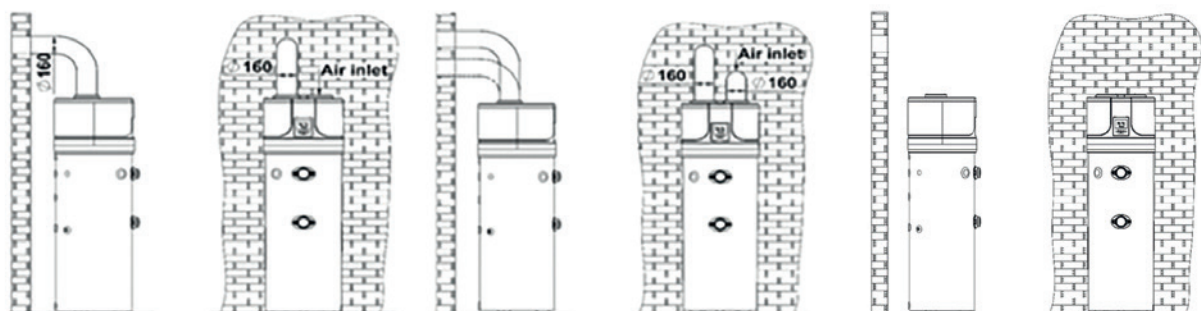


Programmable
user-friendly LED
display



AIR-DUCT SYSTEM INSTALLATION

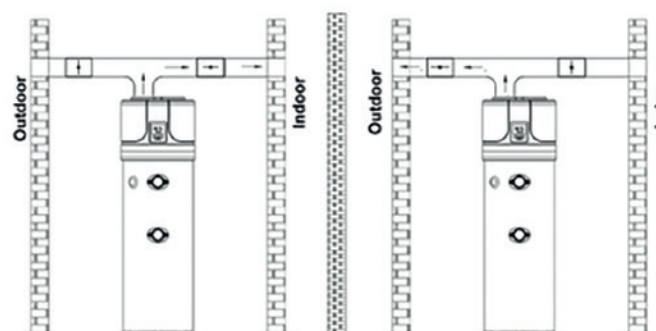
Applications for cooling and drying premises



Air outlet duct only

Dual duct connection

For cooling and drying premises



Installation in summer

Installation in winter

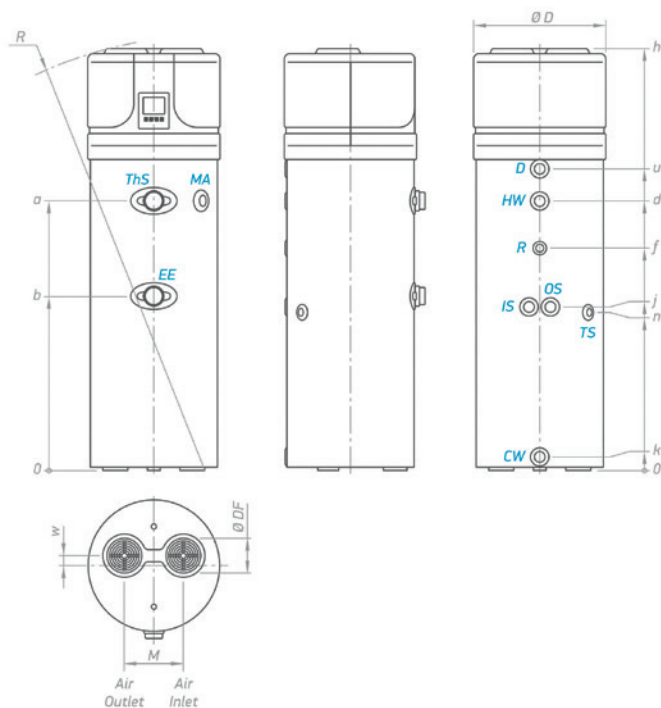
DRAWINGS AND TECHNICAL DATA

Model			AquaThermica 200 + heat exchanger HPWH 2.1 200 U 02 S	AquaThermica 200 HPWH 2.1 200 U 02	AquaThermica 260 + heat exchanger HPWH 2.1 260 U 02 S	AquaThermica 260 HPWH 2.1 260 U 02
Art. Number		No	305277	305276	305278	305275
Performance						
Declared load profile			L	L	XL	XL
Heat pump thermal power yield; prated	Condition EN16147:2017 A7/W55	kW	1,1	1,1	1,2	1,2
Heating time ;	Condition EN16147:2017 A7/W55	h:m	8:59	8:59	10:15	10:15
COP DHW	Condition EN16147:2017 A7/W55		2.8	2.8	3,0	3,0
COP DHW	Condition EN16147:2017 A14/W55		3.1	3.1	3.4	3.4
Water heating energy efficiency class	Climate condition EN16147:2017 average		A+	A+	A+	A+
Annual electricity consumption	Climate condition EN16147:2017 average	kWh	867	867	1355	1355
Sound power Lw(A)	EN12102-2:2019	dB(A)	53	53	53	53
Electrical data						
Power supply (Frequency)		V (Hz)	1 / N / 230 (50)			
Degree of protection			IPX4			
HP maximum absorption		kW	0.663 + 1.5 (e-heater) = 2.163			
Average heat pump consumption	Condition EN16147:2017 A7/W55	kW	0,43	0,43	0,466	0,466
Electric heating element power		kW	1,5			
Maximum current in HP		A	3.1 + 6.5 (e-heater) = 9.6			
Required overload protections		A	16A T fuse/ 16A automatic switch, characteristic C (to be expected during connection to a power supply systems)			
Internal protection			Safety thermostat with a manual reset on a resistive element			
Operating conditions						
Min. ÷ max temperature heat pump air intake (90% R.H.)		°C	-10÷43			
Min. ÷ max temperature installation site		°C	4÷43			
Working temperature						
HP Maximum settable temperature		°C	75			

DRAWINGS AND TECHNICAL DATA

Model			AquaThermica 200 + heat exchanger	AquaThermica 200	AquaThermica 260 + heat exchanger	AquaThermica 260
			HPWH 2.1 200 U 02 S	HPWH 2.1 200 U 02	HPWH 2.1 260 U 02 S	HPWH 2.1 260 U 02
Art. Number		No	305277	305276	305278	305275
Design characteristic						
Compressor / compressore protection			Rotary / thermal circuit breaker with an automatic reset			
Thermodynamic circuit protection type			Safety pressure switches with an automatic reset; [high/low pressure 2.5/0.1 Mpa]			
Fan			Centrifugal			
	Nominal air capacity	m³/h	314			
	Max. pressure head available	Pa	98			
	Motor protection		Internal thermal circuit breaker with an automatic reset			
Condenser			Wound externally, not in contact with the water			
Automatic anti-Legionella cycle			Yes			
Defrosting			4-way valve			
Refrigerant			R134a			
Refrigerant charge		g	880			
Global warming potential			1430			
CO2 equivalent		t	1287			
Water storage tank						
Water storage tank capacity		l	194	202	251	260
V40*	EN16147:2017	l	262	272	339	351
Internal heat exchanger for auxiliary source		m2	1	N/A	1,2	N/A
Cathodic protection			Mg anode Ø32x400 mm			
Insulation - rigid PU		mm	50			
Transport weight		kg	112	96	128	110
Maximum working pressure		bar	8			

*Max. quantity of hot water at 40°C.



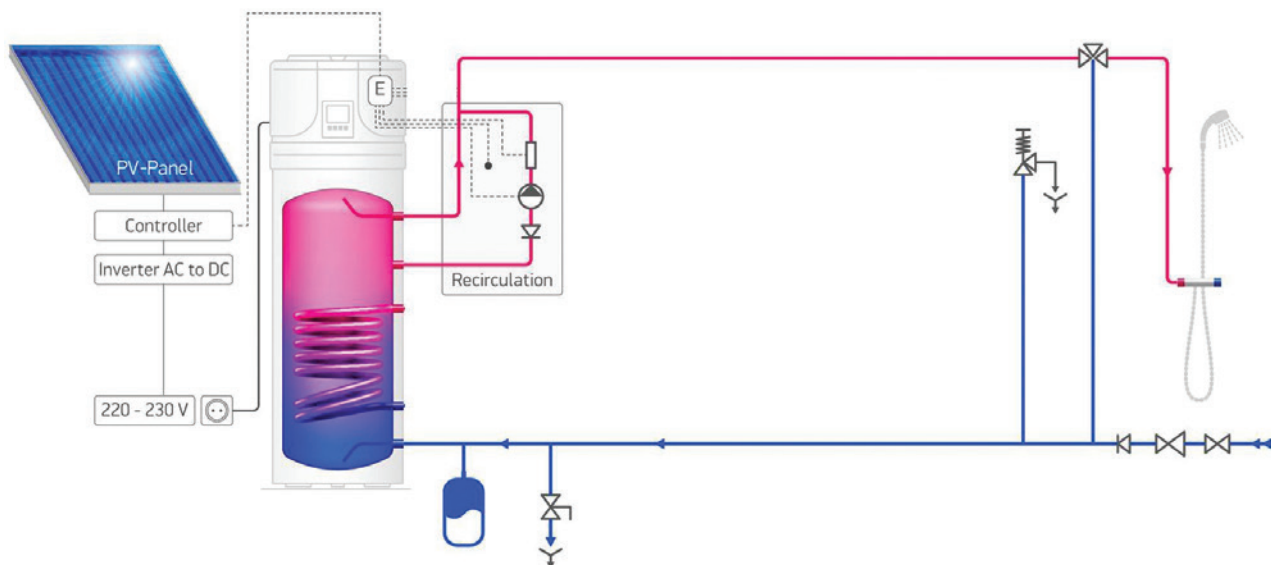
Dimensions ±5mm		HPWH 200	HPWH 200 S	HPWH 260	HPWH 260 S
h	mm	1720	1720	2010	2010
a	mm	994	994	1285	1285
b	mm	724	724	834	834
d	mm	995	995	1285	1285
f	mm	803	803	1064	1064
i	mm	681	-	781	-
k	mm	60	60	60	60
n	mm	681	681	766	766
u	mm	1153	1153	1440	1440
w	mm	58	58	58	58
M	mm	260	260	260	260
ØDF	mm	160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

MODELS		HPWH 200	HPWH 200 S	HPWH 260	HPWH 260 S
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	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"

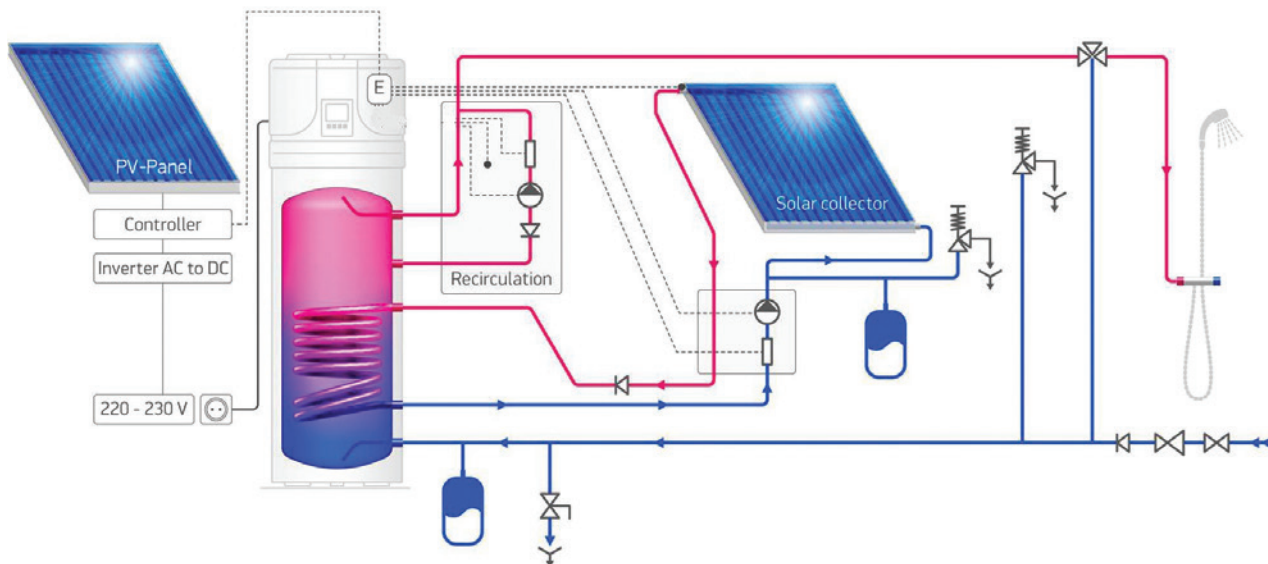
*Thread designations according to EN ISO 228-1

CONNECTIVITY AND INSTALLATION OPTIONS

Connection to a PV panel



Connection to a PV and solar panel



Connection to a PV panel and a boiler

