TESY

PRO

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 CO_2 emissions[1].
- 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 efficient**[2] with a precisely balanced refrigerant cycle due to an electronically commutated motor and an electronic expansion valve.
- **Up to 75% lower electricity consumption**[3].
- Can be connected to **other renewable energy sources** like PV and solar systems or boilers.
- **Pragammable with an user friendly control panel.**
- **Automatic anti-legionella cycle.**
- **Self-diagnostic system.**

[1] According 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 TESY product of the MaxEau family GCV 200 56 20 D06 SRC in energy class C.

Renewable Energy

Energy efficency class A+

Low CO_2 emissions

Electronic step motor for precisely balanced refrigerant cycle

Operational tempe-rature 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 LCD Display

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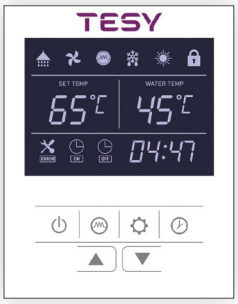
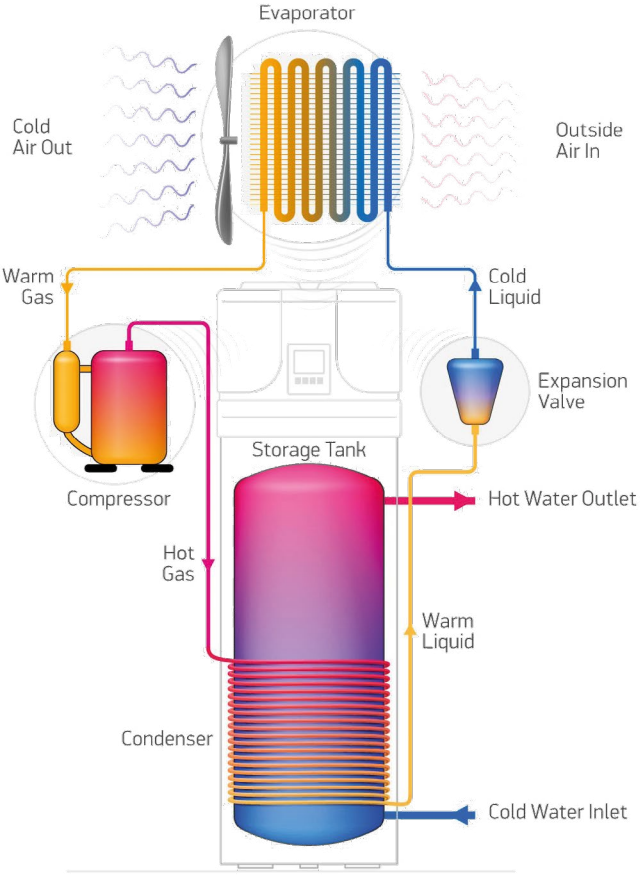
WORKING PRINCIPLE

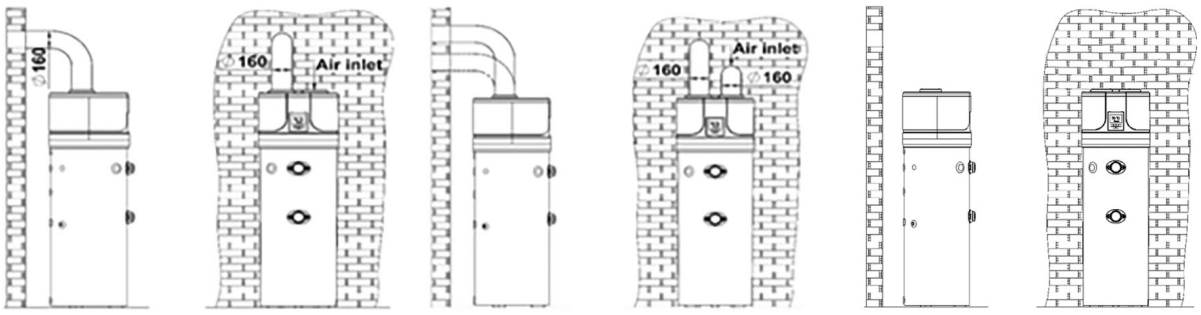
Programmable user-friendly LCD display



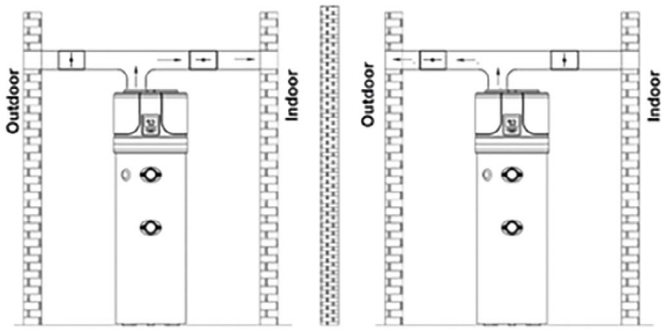


AIR-DUCT SYSTEM INSTALLATION

Applications for cooling and drying premises



Air outlet duct only | Dual duct connection | For cooling and drying premises



Installation in summer | Installation in winter

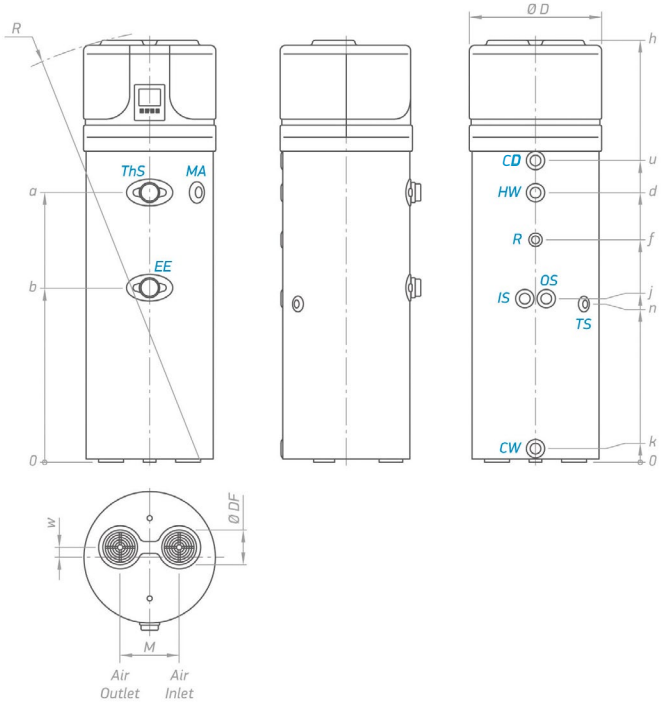
DRAWINGS AND TECHNICAL DATA

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	305061	305005	305062	305004
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 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	305061	305005	305062	305004
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	m^3/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-Legionnella 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 - ridig PU		mm	50			
Transport weight		kg	112	96	128	110
Maximum working pressure		bar	8			

*Max. quantity of hot water at 40°C.

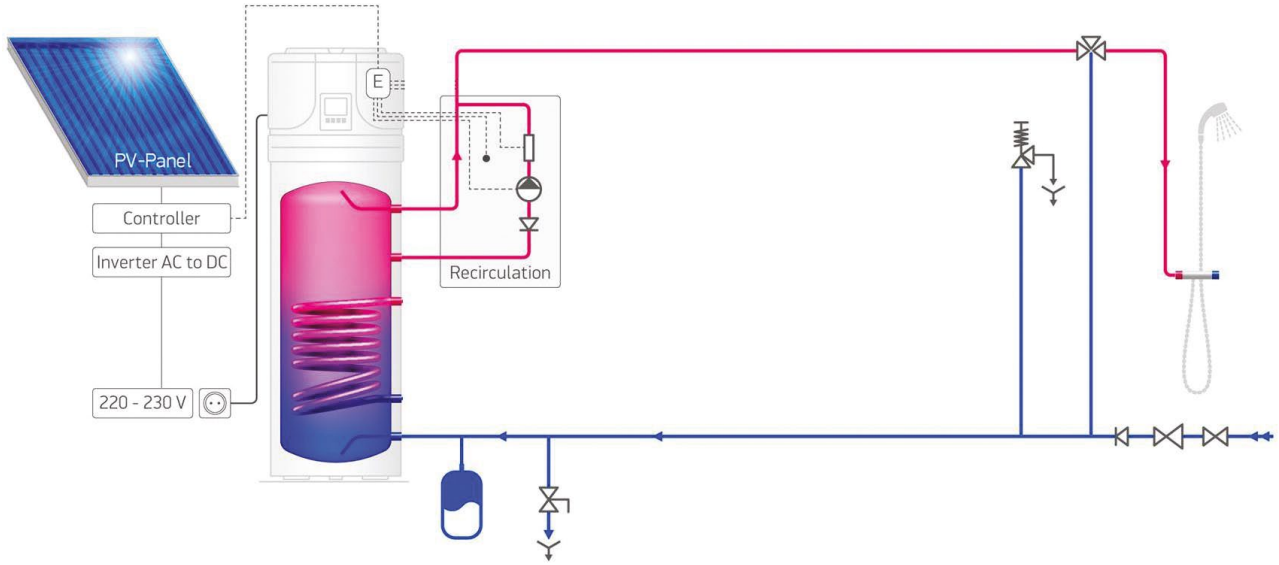


Dimensions ±5mm		EVHP 9S 200 60	EVHP 200 60	EVHP 9S 260 60	EVHP 260 60
h	mm	1720	1720	2010	2010
a	mm	994	994	1285	1285
b	mm	724	724	834	834
d	mm	995	995	1285	1285
f	mm	803	803	1064	1064
i	mm	681	-	781	-
k	mm	60	60	60	60
n	mm	681	681	766	766
u	mm	1153	1153	1440	1440
w	mm	58	58	58	58
M	mm	260	260	260	260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

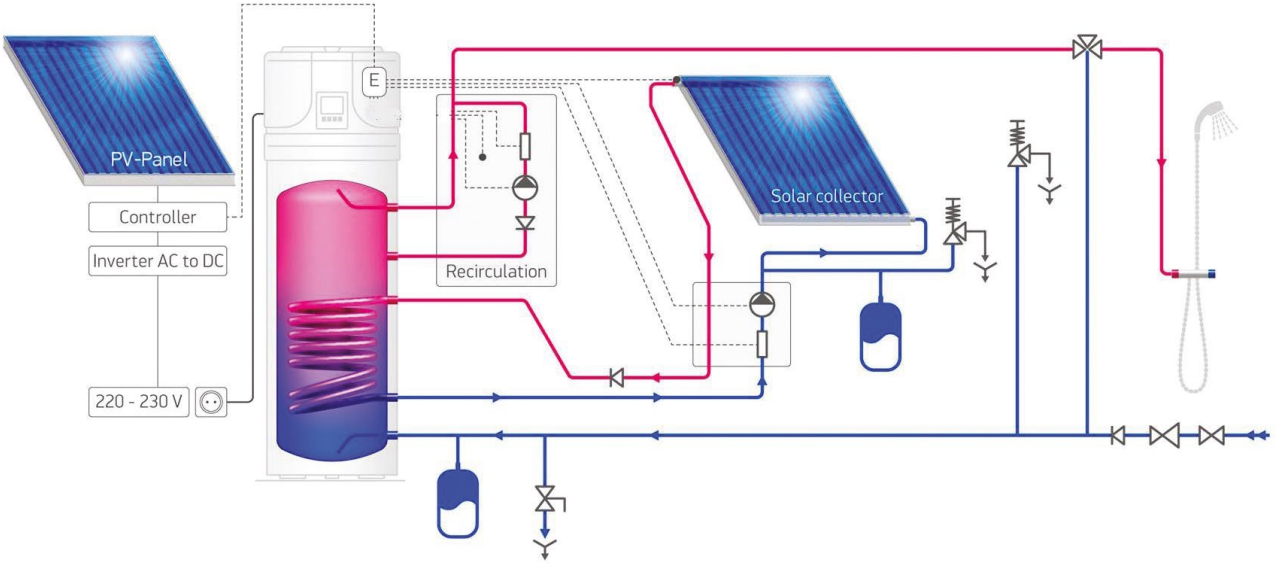
MODELS		EVHP 9S 200 60	EVHP 200 60	EVHP 9S 260 60	EVHP 260 60
CW	cold water inlet	G 1"	G 1"	G 1"	G 1"
HW	hot water outlet	G 1"	G 1"	G 1"	G 1"
IS	heat exchanger inlet	G 1"	-	G 1"	-
OS	heat exchanger outlet	G 1"	-	G 1"	-
R	recirculation	G ¾"	G ¾"	G ¾"	G ¾"
TS	thermo pocket level 1	G ½"	-	G ½"	-
EE	opening for electric element	G 1½"	G 1½"	G 1½"	G 1½"
CD	condense drainage	G ¾"	G ¾"	G ¾"	G ¾"
TsH	Thermal safety thermostat				
MA	Mg anode	G 1 ¼"	G 1 ¼"	G 1 ¼"	G 1 ¼"
	Thread designations according to EN ISO 228-1!				

CONNECTIVITY AND INSTALLATION OPTIONS

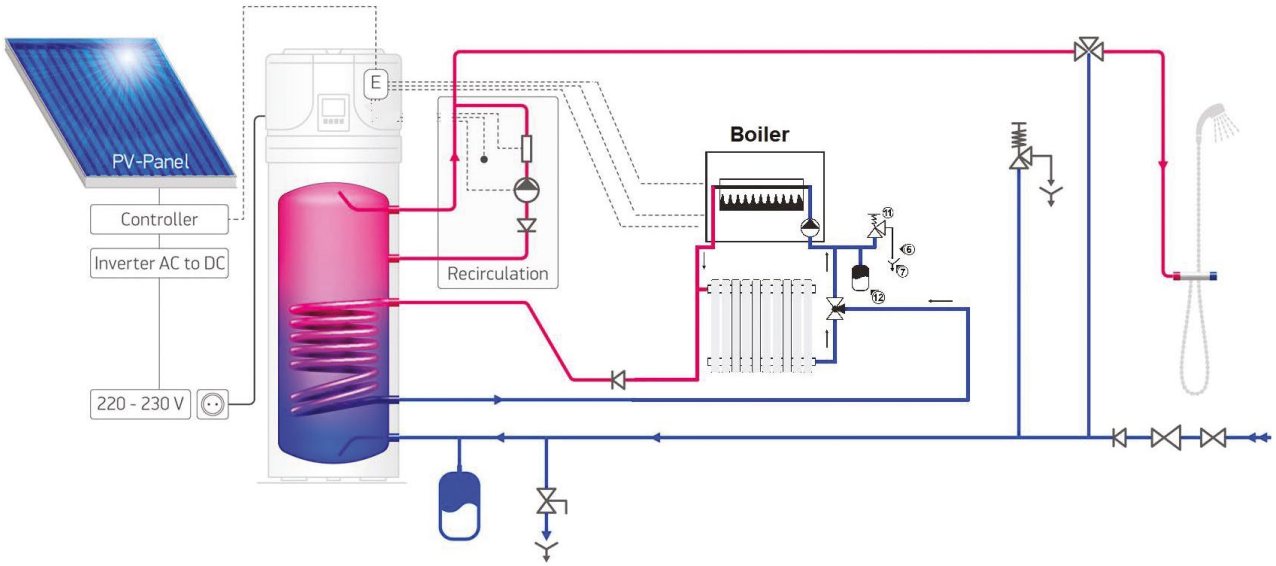
Conection to a PV panel



Conection to a PV and solar panel



Conection to a PV panel and a boiler

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