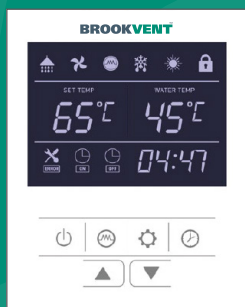
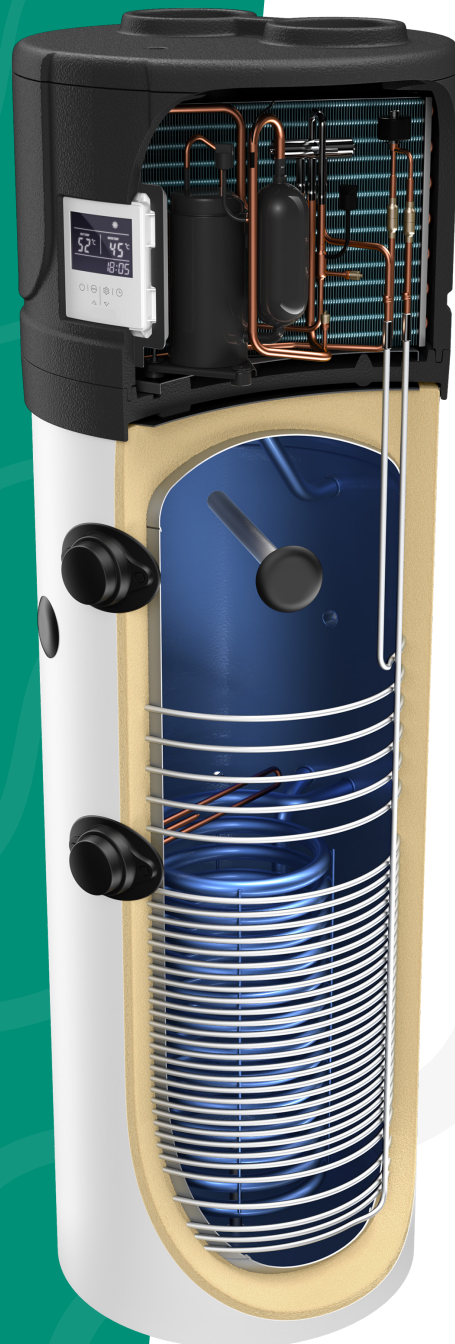


# AIR-TO-WATER

# HEAT PUMP

Water heater for domestic hot water

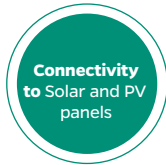
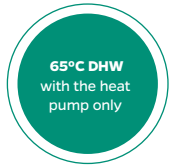
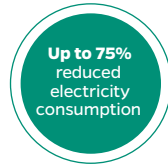
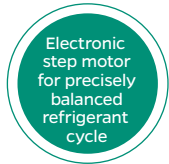
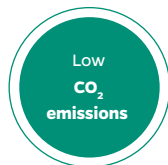
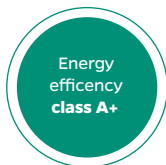
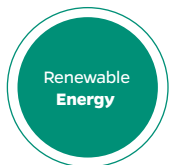


**airtherm**<sup>'''</sup>  
AQUA 1.1

range includes models with  
**volumes of 200 and 260 liters**  
**with and without solar coil.**

# Benefits

- It is an environmentally friendly product, operating with renewable energy sources resulting in lower CO<sup>2</sup> emissions
- The highest energy efficiency class A+ in its category, according to ErP regulations
- Has an operating range of between -10°C and 43°C outdoor air temperature
- **Heats up water to 65°C with the heat pump only**
- Electric heating element for faster heating times, providing temperatures up to 75°C
- **Highly efficient** and precisely balanced refrigerant cycle with an electronically commutated (EC) motor and an electronic expansion valve (EEV)
- **Up to 75% lower electricity consumption**
- 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**
- **COP up to 3.6**



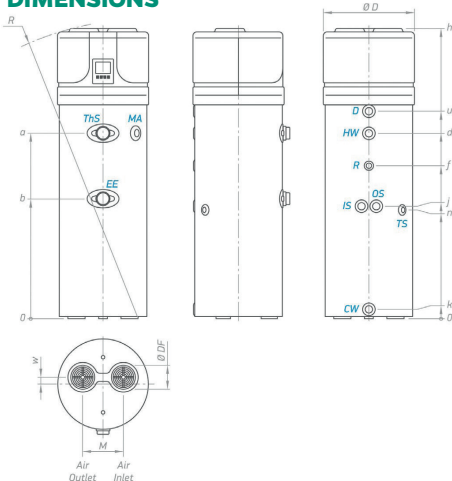
<sup>1</sup>According to the European Market and Statistical Report on the European Heat Pump Association 2018.

<sup>2</sup>AquaThermica is in energy efficiency class A+.

## DRAWINGS AND TECHNICAL DATA

Model			airtherm aqua 1.1 + solar coil Air to water heat pump DHW w/ solar 200L	airtherm aqua 1.1 Air to water heat pump DHW 200L	airtherm aqua 1.1 + solar coil Air to water heat pump DHW w/ solar 260L	airtherm aqua 1.1 Air to water heat pump DHW 260L
Art. Number	Measure		AF-90-0101-ATA-200S	AF-90-0101-ATA-200	AF-90-0101-ATA-260S	AF-90-0101-ATA-260
<b>Performance</b>						
Declared load profile	-	-	L	L	XL	XL
Heat pump thermal power yield; P rated?	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
<b>Electrical data</b>						
Power supply (Frequency)	-		1 / N / 230 (50)			
Degree of protection	-	V (Hz)	IPX4			
HP maximum absorption	-		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			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			
<b>Operating conditions</b>						
Min. ÷ max temperature heat pump air intake (90% R.H.)		°C	-10 - 43			
Min. ÷ max temperature installation site		°C	4 - 43			
<b>Working temperature</b>						
HP maximum absorption		°C	75			

## DIMENSIONS

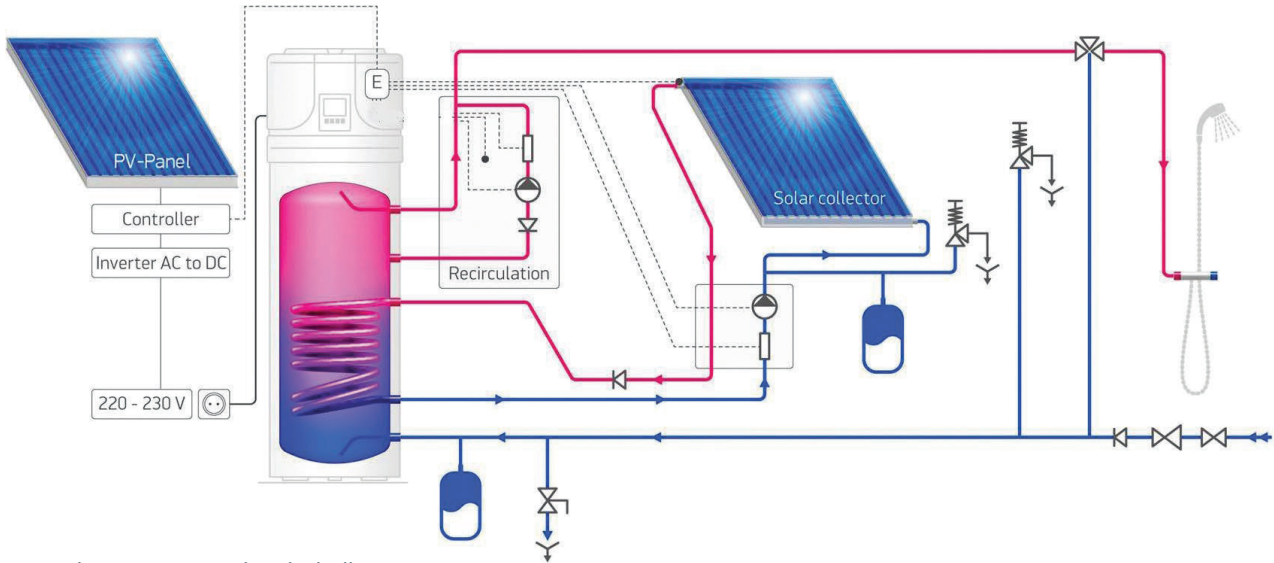


Dimensions ±5		airtherm aqua 1.1 Air to water heat pump DHW w/ solar 200L	airtherm aqua 1.1 Air to water heat pump DHW 200L	airtherm aqua 1.1 Air to water heat pump DHW w/ solar 260L	airtherm aqua 1.1 Air to water heat pump DHW 260L
h	mm	1720	1720	2010	2010
a	mm	994	994	1285	1285
b	mm	724	724	834	834
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

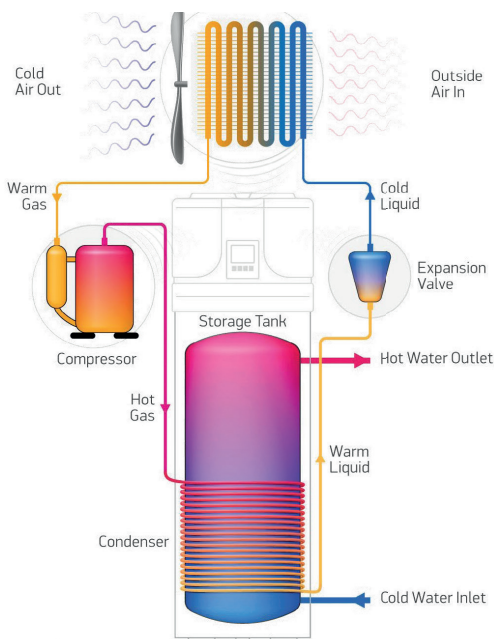
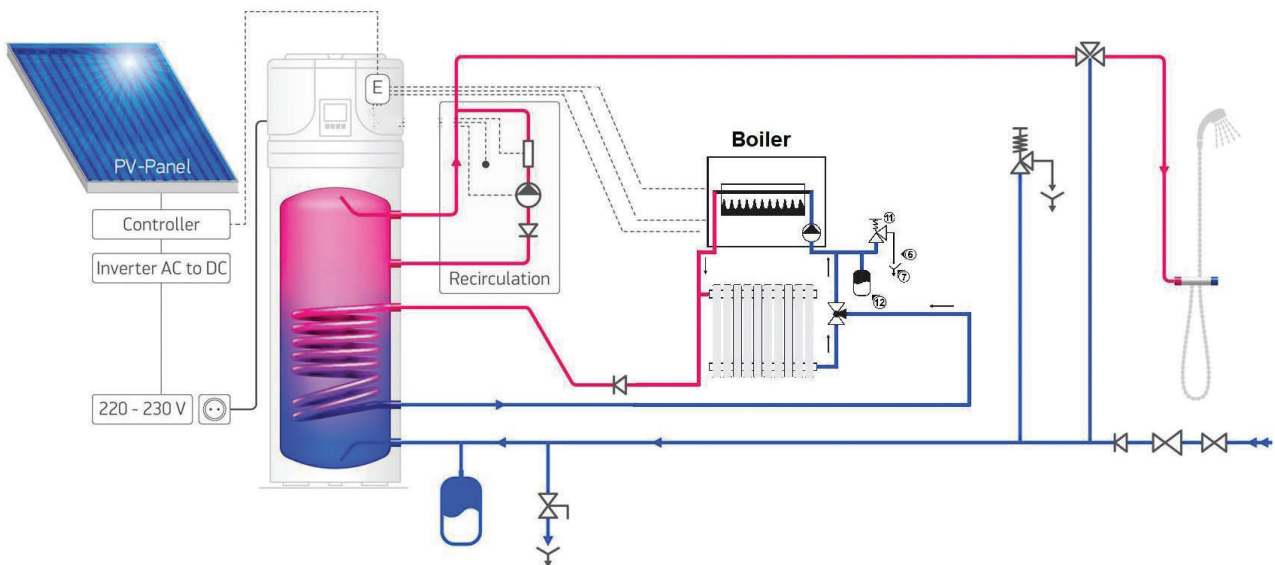
Models		airtherm aqua 1.1 Air to water heat pump DHW w/ solar 200L	airtherm aqua 1.1 Air to water heat pump DHW 200L	airtherm aqua 1.1 DHW w/ solar 260L Air to water heat pump DHW 260L	airtherm aqua 1.1 Air to water heat pump DHW 260L
CW	cold water inlet	G 1"	G 1"	G 1"	G 1"
HW	hot water outlet	G 1"	G 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 el.	G ½"	G 1½"	G 1½"	G 1½"
CD	condense drainage	G ¾"	G ¾"	G ¾"	G ¾"
TsH	condense drainage	-	-	-	-
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

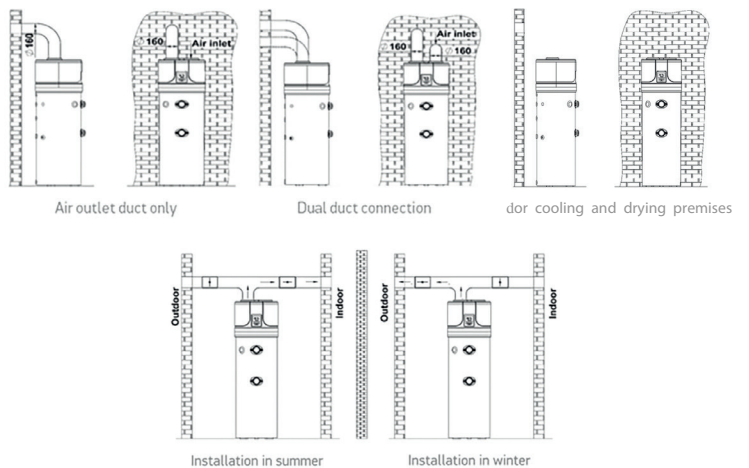
Conection to a PV and solar panel



Conection to a PV panel and a boiler

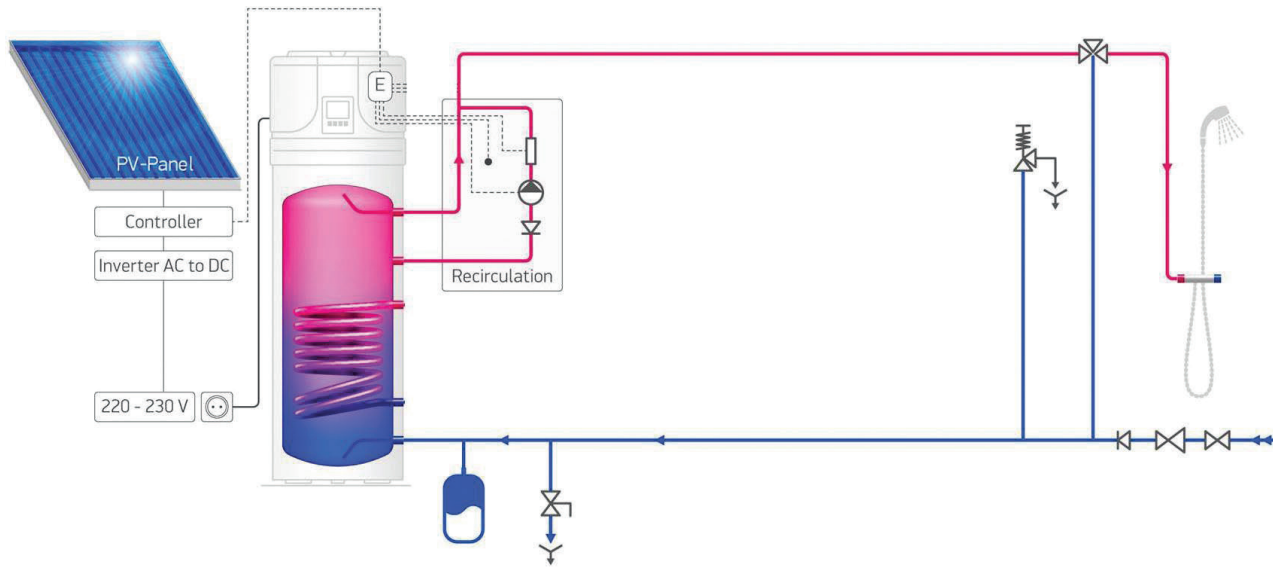


## AIR-DUCT SYSTEM INSTALLATION



## CONNECTIVITY AND INSTALLATION OPTIONS

### Conection to a PV panel



Model		airtherm aqua 1.1 Air to water heat pump DHW w/ solar 200L	airtherm aqua 1.1 Air to water heat pump DHW 200L	airtherm aqua 1.1 + solar coil Air to water heat pump DHW w/ solar 260L	airtherm aqua 1.1 Air to water heat pump DHW 260L
Art. Number	Measure	AF-90-0101-ATA-200S	AF-90-0101-ATA-200	AF-90-0101-ATA-260S	AF-90-0101-ATA-260
<b>Design characteristic</b>					
Compressor /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 <sup>3</sup> /h	314		
-	Max. pressure head available	Pa	98		
-	Motor protection	-	Internal thermal circuit breaker with an automatic reset		
Condenser	-	kWh	Wound externally, not in contact with the water		
Automatic anti-Legionella cycle	-	dB(A)	Yes		
Defrosting	-	-	4-way valve		
Refrigerant	-	kWh	R134a		
Refrigerant charge	-	g	880		
Global warming potential	Condition EN16147:2017 A7/W55	-	1430		
CO <sub>2</sub> equivalent		t	1287		
<b>Water storage tank</b>					
Water storage tank capacity	l	194	202	251	260
V40* EN16147:2017	l	262	272	339	351
Internal heat exchanger for auxiliary source	m <sup>2</sup>	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.

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