

AquaThermica Compact

New range of air-to-water heat pump for domestic hot water production. The AquaThermica Compact range includes models with 100 and 150 liters of capacity for wall-hung installation.

AquaThermica Compact is an environmentally friendly product, operating with renewable energy sources resulting in minimum CO₂ emissions. It operates within a wide temperature range of incoming air, from -5°C to 43°C.

A+ energy class product for up to 75% lower power consumption*



Renewable Energy



Energy efficiency class A+



Low CO₂ emissions



Electronic step motor for precisely balanced refrigerant cycle



Operational temperature range -5°C to +43°C



60°C DHW with the heat pump only



Up to 75% lower power consumption



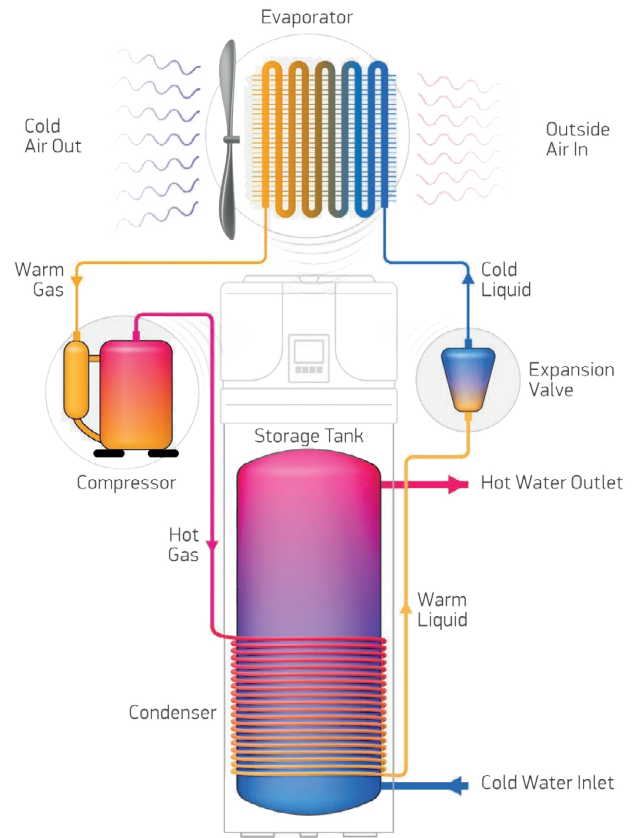
User-friendly LED display



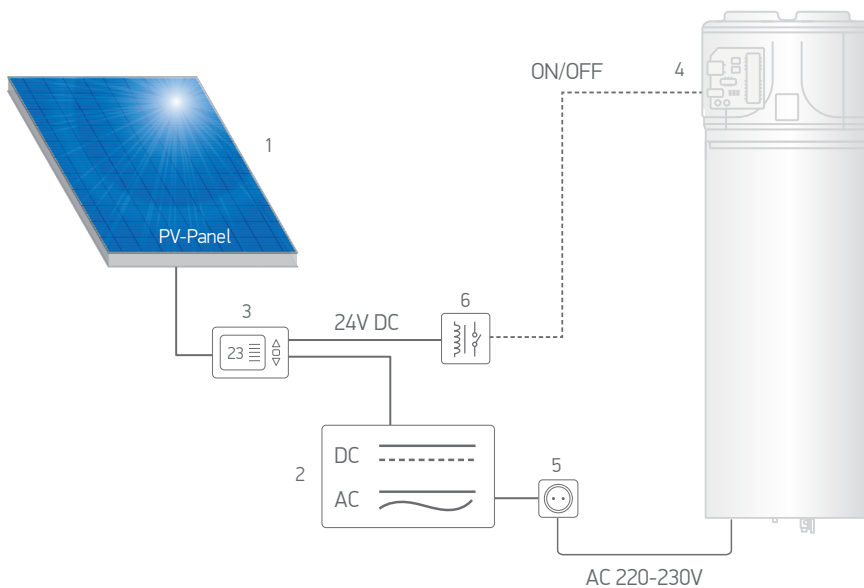
Ecological refrigerant

*Compared to a 100l electric water heater with load profile M.

OPERATING PRINCIPLE



CONNECTIVITY TO PV PANEL

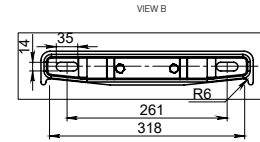
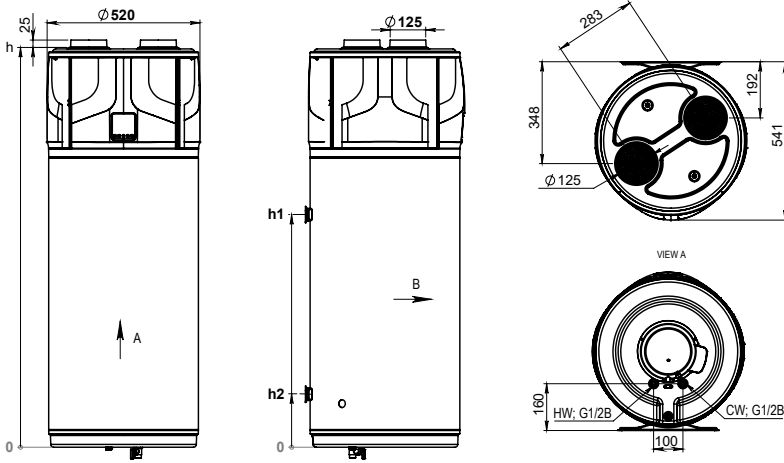


1. Photovoltaic panel
2. Invertor DC to AC
3. Control unit of PV system
4. Main PCB of the appliance
5. Main electric supply
6. Relay (normally open)

TECHNICAL DATA

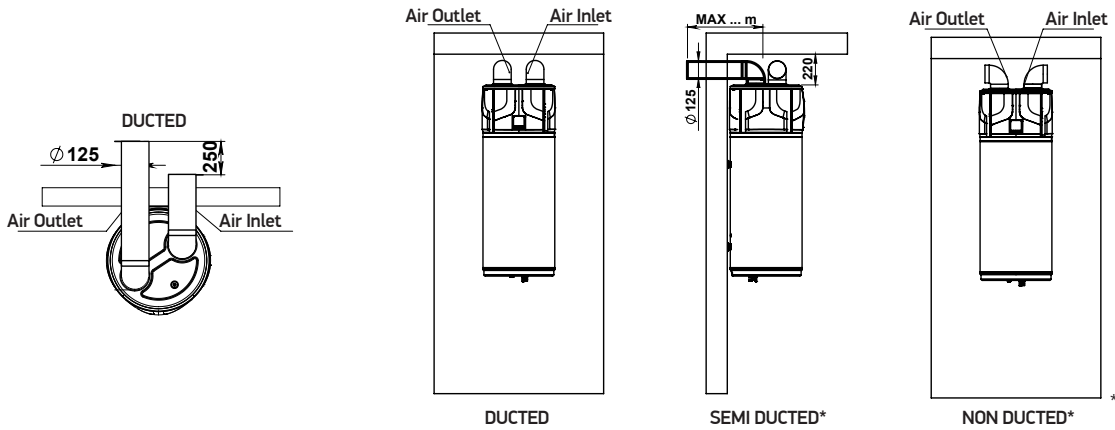
Model		HPWH 3.2 100	HPWH 3.2 150
SAP number	No	305766	305969
Performance data		Unit	
Load profile		M	L
Hot water temperature set point	°C	55	55
Heating up time in BOOST mode (A7/W10-55)	h:m	2:37	4:20
COP _{DHW}			
	(EN 16147:2017 - A20/W55)	3.7	3.9
	(EN 16147:2017 - A14/W55)	3.4	3.4
	(EN 16147:2017 - A7/W55)	2.8	2.8
Water heating energy efficiency / ErP class			
	(EN 16147:2017 - A20/W55)	A++	A++
	(EN 16147:2017 - A14/W55)	A++	A++
	(EN 16147:2017 - A7/W55)	A+	A+
Annual power consumption AEC (EN 16147:2017 - A7/W55)	kWh/a	429.3	884.2
Volume of mixed water at 40° / V40 (EN 16147:2017 - A7/W55)	l	135	178
Rated heat output; P _{rated}			
	(EN 16147:2017 - A20/W55)	0.93	0.92
	(EN 16147:2017 - A14/W55)	0.79	0.80
	(EN 16147:2017 - A7/W55)	0.67	0.68
Electrical data			
Power supply	V	1/N/220-240	
Frequency	Hz	50	
Degree of protection		IPX4	
HP maximum power consumption	kW	0.330+1,500 (e-heater) = 1.83	
Electric heating element power	kW	1.5	
Maximum current of appliance	A	1.4+6.5 (e-heater) = 7.9	
Required overload protections	A	16A T fuse/ 16A automatic switch, characteristic C (to be expected during installation on power supply systems)	
Internal thermal protection		Safety thermostat with manual reset 85°C	
Operating conditions			
Min.÷ max temperature heat pump air intake (90% R.H.)	°C	-5 ÷ 43	
Min. ÷ max temperature installation site	°C	4 ÷ 40	
Working temperature			
Reference DHW temperature (EN 16147:2017)	°C	55	
Max. settable water temperature [with E-heater] (EN 16147:2017)	°C	60 [70]	
Design characteristics			
Compressor / Compressor protection		Rotary / Thermal circuit breaker with automatic reset	
Fan		Centrifugal	
	Available external pressure of heat pump	Pa	60
	Ejection outlet diameter	mm	125
	Nominal air capacity	m³/h	235 (60 Pa)
Motor protection		Internal thermal circuit breaker with automatic reset	
Condenser		Aluminium; wrapped externally, not in contact with water	
Refrigerant		R513a	
Refrigerant charge	g	760	
Global warming potential		631	
CO ₂ equivalent (CO2e)	t	0.480	
Defrosting		Active hot gas defrost with "2-way valve"	
Automatic anti-Legionella cycle		YES	
Water storage capacity	l	98	143
Corrosion protection		Mg anode Ø32x270 mm; 360g	
Thermal insulation		50 mm rigid PU	
Maximum working pressure – storage tank	Bar	8	
Sound power level for outdoor; L _{wdo}	dB(A)	58	
Sound power level for indoor; L _{wi}	dB(A)	50	

TECHNICAL DRAWINGS AND DIMENSIONS



Dimensions		AquaThermica Compact 100	AquaThermica Compact 150
h	mm	1351	1682
h1	mm	772	1120
h2	mm	162	209

AIR DUCT SYSTEM INSTALLATION



* Required space of 20 m³

Accessories available in the package kit	Units	Codes
Plastic sleeve spacer	2	108936
Washer M10 DIN440 Zn	4	100751
Dowel 14x80 Hook L 10x95 set	2	108096
Dielectric fitting set PA66GF30 R1/2"M-G1/2"F	1	103081
Safety valve 1/2" 8.3b	1	104292

Additional accessories	Codes
Tripod wall-hung HPWH TESY*	109275

* For 150l model, it is strongly recommended to use a floor support structure.

