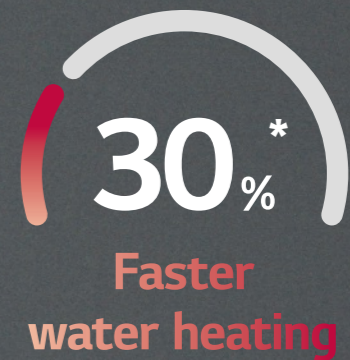
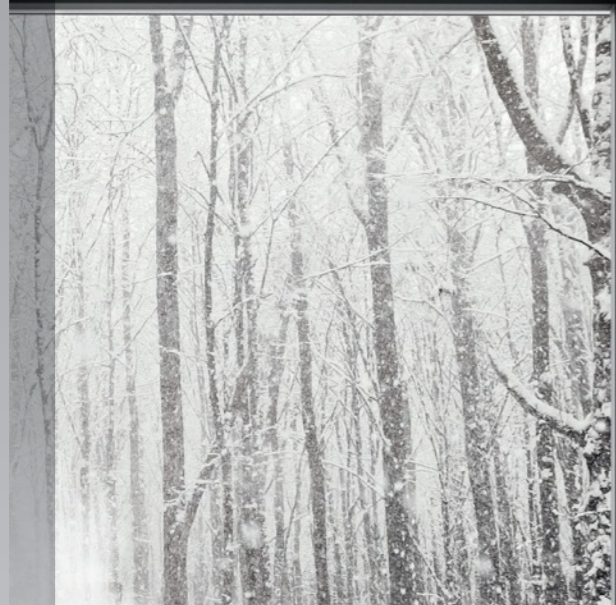
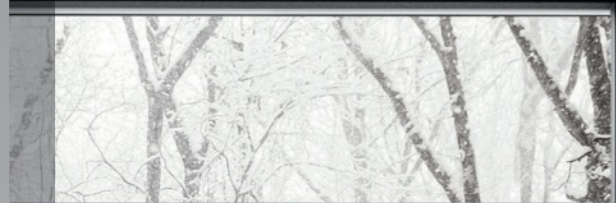




THEIRMA V™ HEAT PUMP WATER HEATER



* This figure is the result of LG internal test compared to the electric heater, so it may differ from actual operation.



THERMA V™ HEAT PUMP WATER HEATER

Stylish Design

LG unit's exclusive square shape and luxury silver color make it an excellent fit for any interior design.



Perfect matching with various spaces



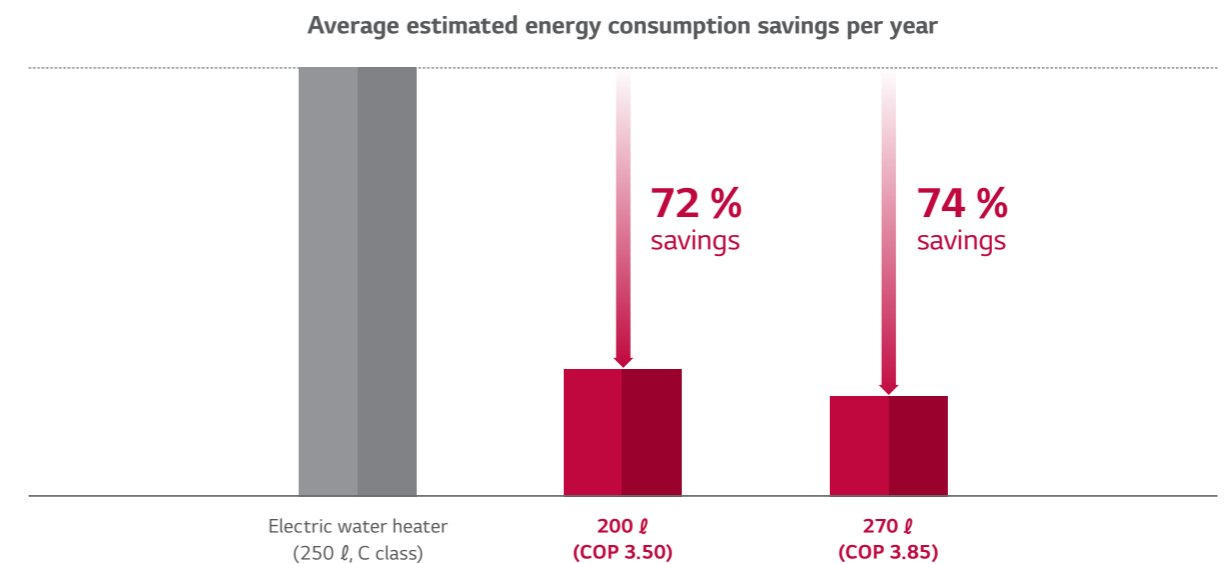
Top Class Energy Efficiency

LG's new Inverter Heat Pump Water Heater with the highly efficient DUAL Inverter Compressor allows for impressive energy savings of over 70 % compared to a conventional electric heater.



Energy saving

Benefiting from the market's first DUAL Inverter Compressor, LG's Heat Pump Water Heater can run at low rotational speed (up to 10 Hz), reducing energy consumption by 70 % more than an electric water heater (250 ℓ, C class).



※ Simulation data on daily electricity consumption, based on EU climate conditions (average, 15°C).
 ※ The data are based on LG internal simulation.
 ※ The data are depending on the experimental conditions and is changeable according to the usage environment

THERMA V™ HEAT PUMP WATER HEATER

Powerful Heating Performance

The DUAL Inverter Compressor maximizes the heat pump's power in turbo mode for a 30 % faster heating time for first-use water than in auto operation mode.



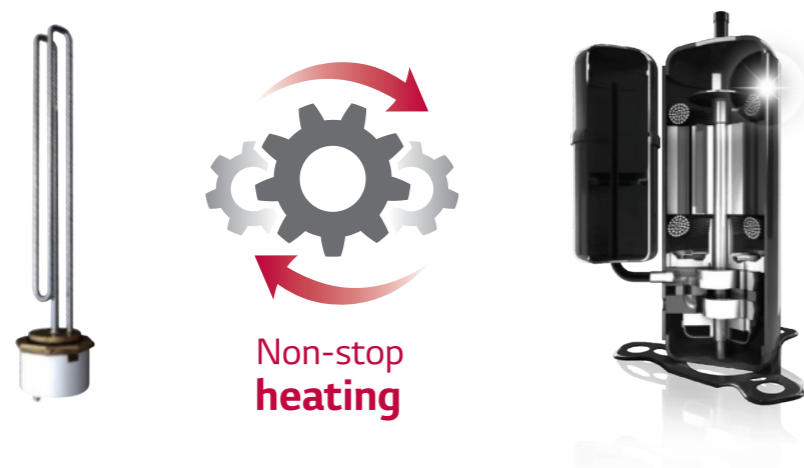
Fast & powerful water heating

Turbo mode can run at high speeds (up to 80 Hz) with simultaneous heating. The target water temperature in the tank will be achieved 30 % faster in turbo mode than in in use auto mode or auto mode in one hour of operation starting from an empty tank. Furthermore, turbo mode can recover the water at 25 % warmer temperatures than in use auto mode or auto mode in one hour of operation starting from an empty tank.

※ The data are based on LG internal tests and simulations.
 ※ The data depend on the experimental conditions and are changeable according to the usage environment.

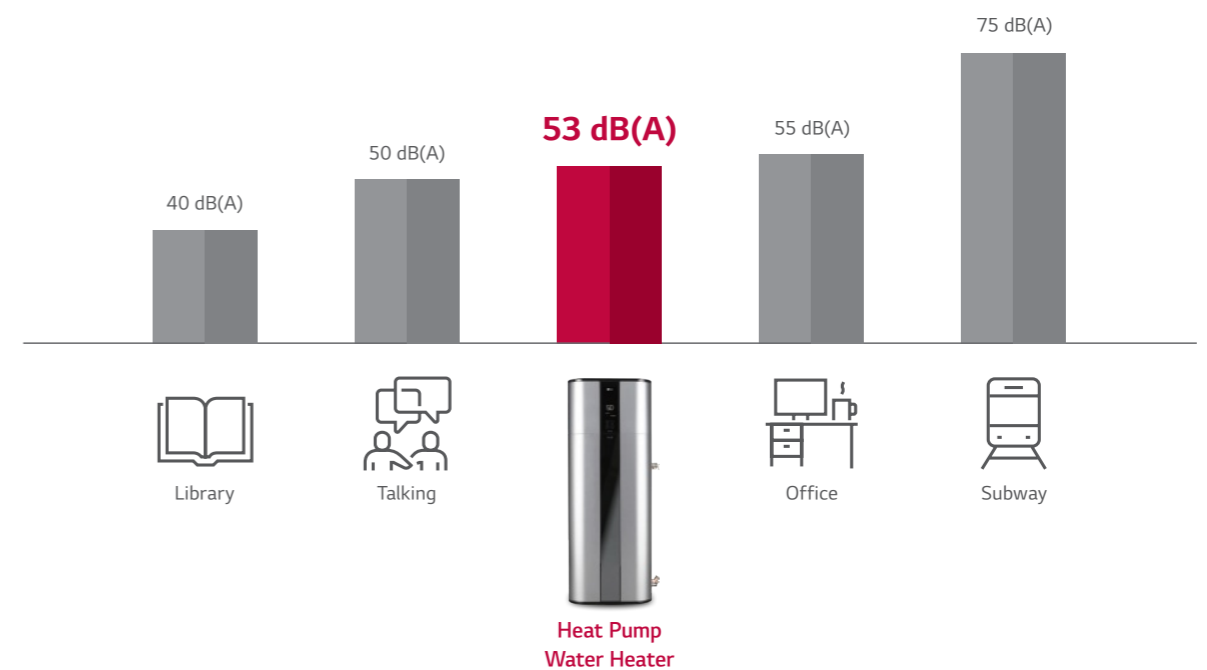
Continuous operation

The two heat sources, two heaters and a heat pump complement each other perfectly. If the heat pump or one of the heaters fails, the other heat source allows alternative operation.



Low Noise Operation

Through BLDC motor and DUAL Inverter Compressor, noise is reduced to 53 dB(A) (sound power) and provides a comfortable environment even in indoor installation scenes.



※ Sound pressure is 38 dB(A) based on LG internal test.
 ※ The data are based on LG internal test (sound power).
 ※ The data are based on LG internal tests and simulations.
 ※ The data are depending on the experimental conditions and is changeable according to the usage environment.

THERMA V™ HEAT PUMP WATER HEATER

Various Operation Mode

LG Inverter Heat Pump Water Heater can be operated in four different modes for different conditions.

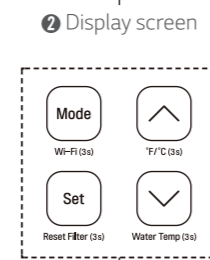
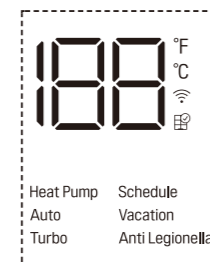


Operation



Using basic control

Display screen

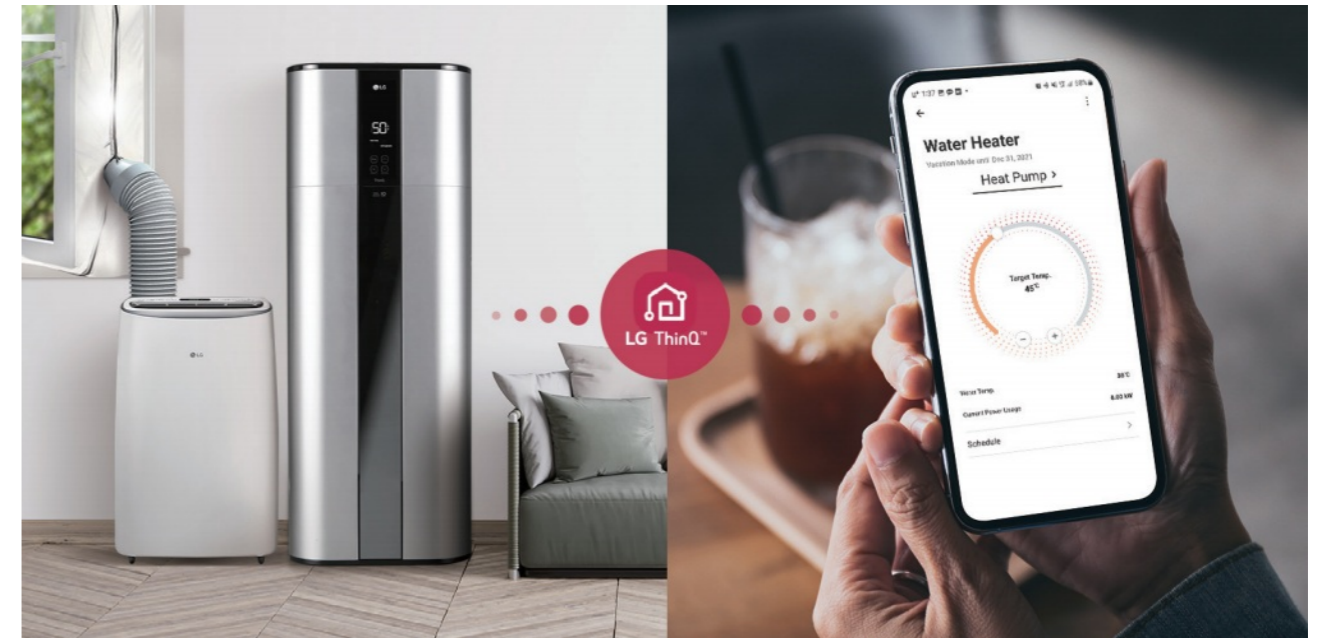


1 Button

Button	Display screen	Description
Mode	Heat pump	To select the heat pump mode
	Auto	To select the auto mode
	Turbo	To select the turbo mode
	Vacation	To select the vacation mode
-	Schedule	Set schedule mode only in LG ThinQ application
-	Anti legionella	To select the anti legionella mode
Set	-	To set the desired water temperature
↑ ↓	188	To adjust the desired water temperature
Wi-Fi (3s)	Wi-Fi icon	To enable the Wi-Fi pairing
Reset Filter (3s)	Filter icon	To reset the filter alarm
°F/°C (3s)	°F / °C	To change unit between °F and °C
Water Temp (3s)	188	To display the current water temperature for 5 seconds

Smart Control

With the LG ThinQ smartphone app, users can easily control and monitor the heat pump, checking for current water temperatures, setting operating schedules and more.



Embedded Wi-Fi

You can control the LG ThinQ app, checking information such as current water temperature, operating mode and more.



Smart diagnosis

Smart diagnosis allows users to conveniently check setup, installation, troubleshooting and other information directly from a smartphone.



Easy check & monitoring

Easily comprehensible error messages make detecting a solution and contacting the service center simple and convenient.



THERMA V™ HEAT PUMP WATER HEATER

powered by
DUAL Inverter Compressor™

LG's DUAL Inverter Compressor™ - exceptional in the market - saves energy with a wide power-saving operating range and produces efficient heating, performing quietly even in max operation mode. This technology allows the inverter compressor to achieve superior energy efficiency, cooling performance and comfort compared to compressors with on-off capabilities which is rare for monobloc heat pump water heaters.



Varied-speed dual rotary

A compressor motor has a wider energy efficient rotational frequency and a higher volumetric quick cooling capacity compared to a conventional non-inverter compressor.

Product reliability improvement

As twin rotaries balance each other while they are rotating with high speed, it reduces noise dramatically compared to a shaking single rotary compressor. The reduction in vibration reduces the possibility of fractures occurring in the surrounding pipework.

※ The data are based on LG internal test and simulation.
※ The data depend on the experimental conditions and are changeable according to the usage environment

Benefit & verification

Reliable air conditioner

The product safety is guaranteed with a 10-year warranty offered to customers.



Verification

TUV Rheinland, long term accelerated-reliability test & high marginal test



Twin rotary type

※ Long term accelerated-reliability test
LG's unique testing method with reinforced operating condition for a product life assurance to test and determine the product life cycle in a short period of time by accelerating the life cycle.
※ High marginal test
Test method to secure durability in various adverse conditions that may occur in the field by performing compressor reliability test against higher pressure and temperature than the designed range of pressure and temperature which the compressor operates in.
※ Verification obtained from TUV Rheinland for 10-year product life cycle.

Quick & Easy Installation

The machine's one-direction inlet and outlet piping and easy-to-connect wires in the junction box allow for quick and easy installation. Furthermore, the LG ThinQ app provides service alarm and self diagnosis programs for convenient maintenance.



10-year warranty

The core parts of heat pump water heaters such as water tank and compressor are certified for 10-year durability by TUV Rheinland. ceramic coating inside the water tank meets Germany ceramic standard DIN 4753 and guarantees 10 years of corrosion resistance.



※ Other parts warranty may vary according to after sales service condition

THERMA V™ HEAT PUMP WATER HEATER



Product specification

Sales model			WH20S
Factory model			R5TT20F-SA1
Capacity	Volume (nominal)	ℓ	200
Energy efficiency ¹⁾	COP (7°C / 15°C)		3.30 / 3.50
Energy consumption	Annual energy consumption (7°C / 15°C)	kWh	756 / 709
Load profile			Large
Power input	Upper element wattage (230 V)	kW	2
	Lower element wattage (230 V)	kW	2
Energy efficiency class (7°C / 15°C)			A+ / A+
Power supply	V, Ø, Hz		230 / 1 / 50
Available voltage range	V		195 - 265
Operating mode			Turbo / Auto / Heat pump / Vacation / Anti legionella
Air flow rate	H / M	m ³ /min	6.7 / 4.4
	H / M	CFM	236.6 / 155.4
Sound pressure level	Auto	dB(A)+3	38
Sound power level		dB(A)	55
Dimensions	Net (W x H x D)	mm	580 x 1,625 x 582
Weight	Net	kg	100
Nominal insulation thickness	Min. / Max.	mm	40 / 80
Heat pump operation range	Min. / Max.	°C DB	-5 / 48
Exterior color code			Luxury silver
Compressor	Type		Inverter twin rotary
	Warranty	Year	10
	Manufacturer		LG Electronics
	Motor output	W	510
Design pressure (system)	High side		2.0 MPa / 290 PSI
	Low side		0.9 MPa / 130.5 PSI
Max. working pressure (water tank)			150 PSI (1,034 kPa)
Circuit breaker		A	15
Condensate water connection	I.D	mm	19, 12.7
V40 (Mixed water at 40°C)		ℓ	260
Refrigerant	Type		R134a
	Pre charge	kg	0.650
	GWP		1,430
	t-CO ₂ eq		0.930
Defrost method			Reverse cycle
Anode			Impressed current cathodic protection
T&P relief valve			Yes
Water connection location			side
Water connection size		inch	G ¾ M
Digital display			Yes
Wi-Fi (LG ThinQ) ²⁾			Yes
Tank warranty		Year	10

- 1) Water heater energy efficiency (at auto mode)
 2) ThinQ main function
 - Operation mode (auto, heatpump, turbo, vacation, schedule), temperature setting
 - Monitoring hot water temperature
 - Maintenance point alarm (filter, anode rod, etc.)
 ※ This product contains fluorinated greenhouse gases (R134a).
 ※ GWP: Global Warming Potential
 ※ t-CO₂eq: F-gas (kg)*GWP/1000
 ※ Specification, design and feature are subject to change without prior notice.

PRODUCT SPECIFICATION



Product specification

Sales model			WH27S
Factory model			R5TT27F-SA0
Capacity	Volume (nominal)	ℓ	270
Energy efficiency ¹⁾	COP (7°C / 15°C)		3.45 / 3.85
Energy consumption	Annual energy consumption (7°C / 15°C)	kWh	712 / 646
Load profile			Large
Power input	Upper element wattage (230 V)	kW	2
	Lower element wattage (230 V)	kW	2
Energy efficiency class (7°C / 15°C)			A+ / A++ ²⁾
Power supply	V, Ø, Hz		230 / 1 / 50
Available voltage range	V		195 - 265
Operating mode			Turbo / Auto / Heat pump / Vacation / Anti legionella
Air flow rate	H / M	m ³ /min	6.7 / 4.4
	H / M	CFM	236.6 / 155.4
Sound pressure level	Auto	dB(A)+3	38
Sound power level		dB(A)	55
Dimensions	Net (W x H x D)	mm	580 x 2,008 x 582
Weight	Net	kg	119
Nominal insulation thickness	Min. / Max.	mm	40 / 80
Heat pump operation range	Min. / Max.	°C DB	-5 / 48
Exterior color code			Luxury silver
Compressor	Type		Inverter twin rotary
	Warranty	Year	10
	Manufacturer		LG Electronics
	Motor output	W	510
Design pressure (system)	High side		2.0 MPa / 290 PSI
	Low side		0.9 MPa / 130.5 PSI
Max. working pressure (water tank)			150 PSI (1,034 kPa)
Circuit breaker		A	15
Condensate water connection	I.D	mm	19, 12.7
V40 (Mixed water at 40°C)		ℓ	360
Refrigerant	Type		R134a
	Pre charge	kg	0.750
	GWP		1,430
	t-CO ₂ eq		1.073
Defrost method			Reverse cycle
Anode			Impressed current cathodic protection
T&P relief valve			Yes
Water connection location			side
Water connection size		inch	G ¾ M
Digital display			Yes
Wi-Fi (LG ThinQ) ²⁾			Yes
Tank warranty		Year	10

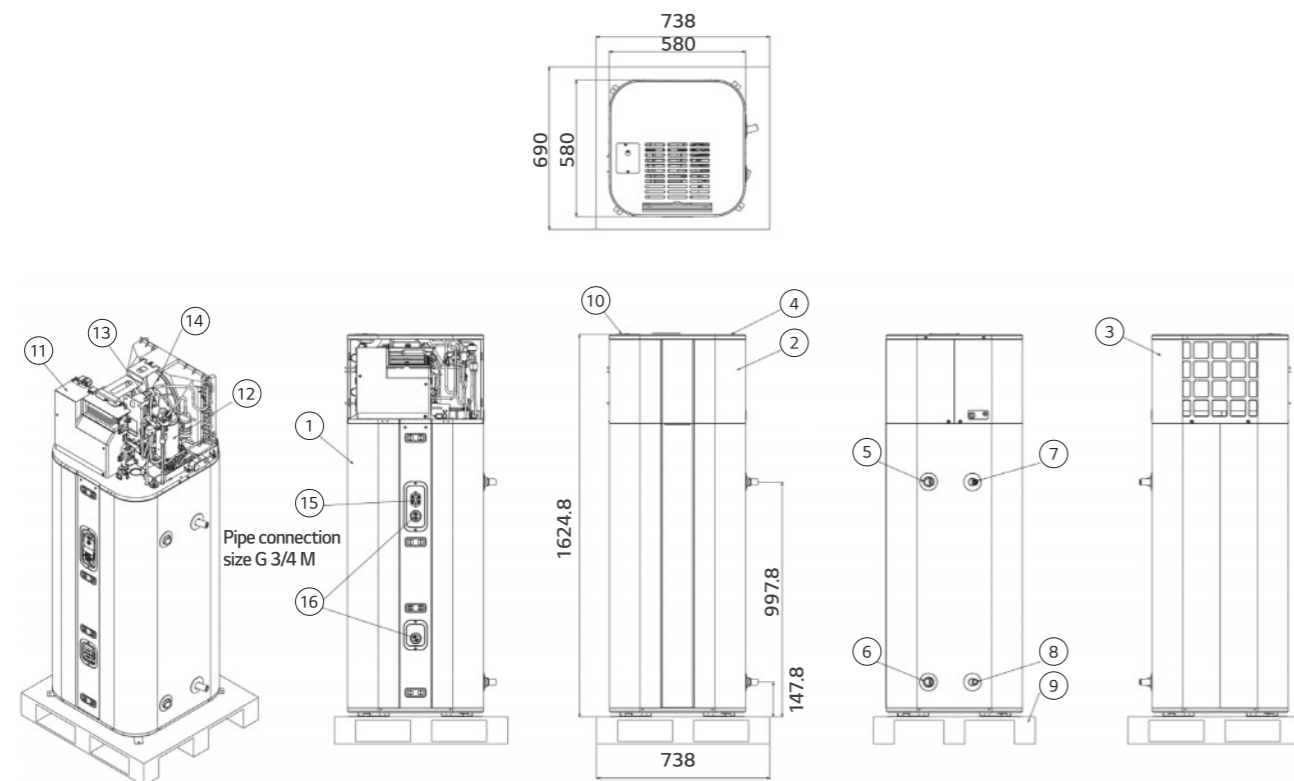
- 1) Water heater energy efficiency (at auto mode)
 2) Energy label marked A+ and more than COP 3.75 in EU standard is A++
 3) ThinQ main function
 - Operation mode (auto, heatpump, turbo, vacation, schedule), temperature setting
 - Monitoring hot water temperature
 - Maintenance point alarm (filter, anode rod, etc.)
 ※ This product contains fluorinated greenhouse gases (R134a).
 ※ GWP: Global Warming Potential
 ※ t-CO₂eq: F-gas (kg)*GWP/1000
 ※ Specification, design and feature are subject to change without prior notice.

Drawings

Category	Model name	
	Capacity (DWH tank volume)	
	200 ℓ	270 ℓ
1 Phase model 230 V, 1 Ø, 50 Hz	WH20S	WH27S

WH20S

[Unit: mm]

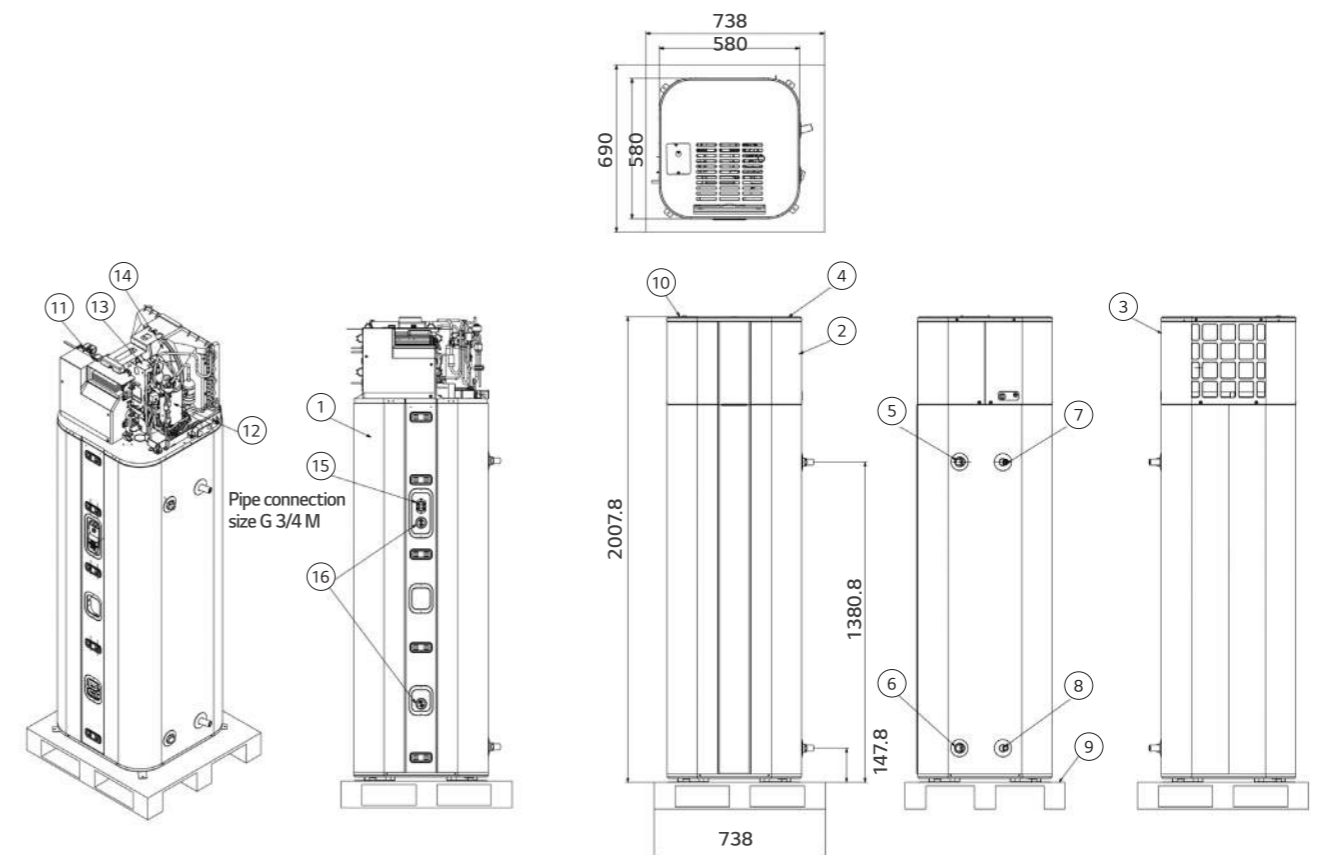


No.	Part name	Description
1	Water tank	200 ℓ
2	Front panel	-
3	Rear panel	-
4	Top cover	-
5	T/P valve	210 °F / 99 °C 3/4 NPT
6	Drain valve	3/4 NPT
7	Outlet pipe	Water out, 3/4 NPT
8	Inlet pipe	Water in, 3/4 NPT

No.	Part name	Description
9	Wooden pallet	-
10	Junction cover	Power input
11	C/B case	-
12	Compressor	EST092MBA
13	Motor	43 W
14	Fan propeller	290 Ø
15	ECO	Emergency cut off (77°C)
16	Heater	2 EA, 2000 W+2000 W, 220 ~ 240 V

WH27S

[Unit: mm]



No.	Part name	Description
1	Water tank	270 ℓ
2	Front panel	-
3	Rear panel	-
4	Top cover	-
5	T/P valve	210 °F / 99 °C 3/4 NPT
6	Drain valve	3/4 NPT
7	Outlet pipe	Water out, 3/4 NPT
8	Inlet pipe	Water in, 3/4 NPT

No.	Part name	Description
9	Wooden pallet	-
10	Junction cover	Power input
11	C/B case	-
12	Compressor	EST092MBA
13	Motor	43 W
14	Fan propeller	290 Ø
15	ECO	Emergency cut off (77°C)
16	Heater	2 EA, 2000 W+2000 W, 220 ~ 240 V