

# EBS Range of Domestic Hot Water Tanks



The Geminox EBS high performance hot water tanks come in single coil or twin coil application. Both versions have very large internal primary coils, designed to provide vast supplies of hot water to meet every demand, whilst significantly contributing to system efficiency.

**GEMINOX**  
B O I L E R S

# EBS single coil hot water tanks

The EBS tanks outperform virtually every other kind of hot water system due to the vast surface area of our coils. Designed specifically for our condensing boilers, the over-sized coils ensure a low return temperature at the boiler, maximising the performance of our condensing boilers.

## The EBS single coil range provides:

- **Choice:** 100, 150, 200 and 300-litre single coil versions .
- **A high level of domestic performance :** high input coil heat exchanger ensuring very fast recovery rates and excellent continuous output performance.
- **Durability:** tank and built-in coil made entirely from 316L austenitic stainless steel.
- **Quality insulation:** heat losses reduced to a minimum.
- **Simple fitting and maintenance:** easy-to-reach connections, wiring and inspection trap.
- **Full WRC and WRAS approval.**
- **Electrical Immersion Heater 3kW.**

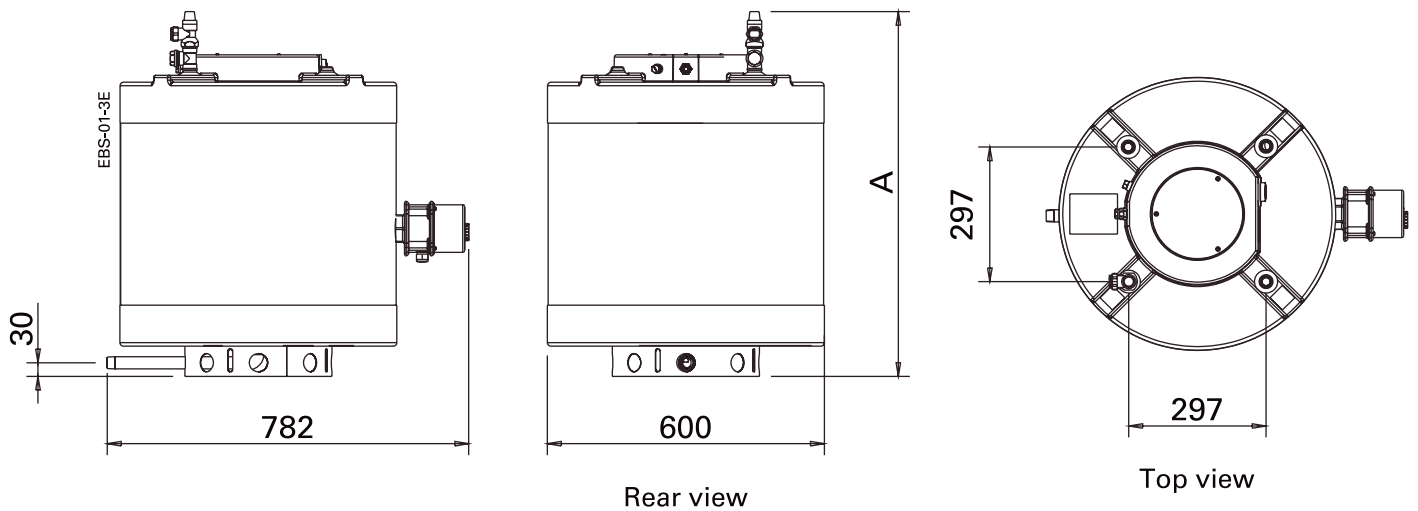
## Options:

- **Unvented or vented models**
- **Tank stand for apartment use allowing easy installation of washing machine underneath.** See [www.evinox.co.uk](http://www.evinox.co.uk) hot water tank section for details.



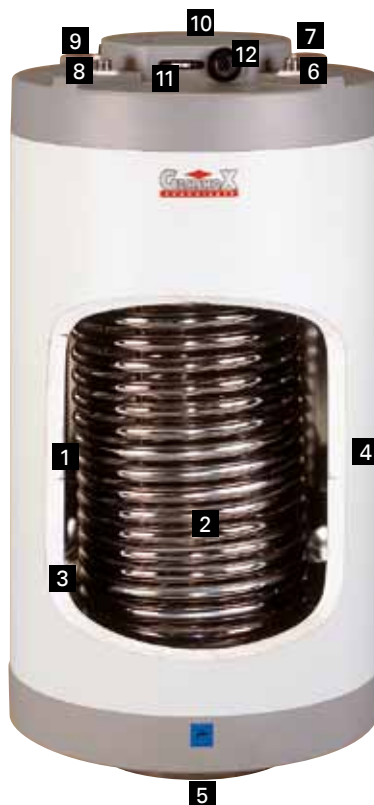
# EBS single coil hot water tanks

The EBS single coil tank dimensions:



Models	EBS-1 100	EBS-1 150	EBS-1 200	EBS-1 300
A	795	1020	1245	1695

- 1 316 L austenitic stainless steel tank
- 2 316 L austenitic stainless steel coil
- 3 Expanded polystyrene insulation
- 4 ABS plastic casing
- 5 Domestic cold water inlet
- 6 Domestic hot water outlet
- 7 Primary circuit inlet
- 8 Primary circuit outlet
- 9 Domestic water recycling circuit
- 10 Inspection trap
- 11 Thermometer
- 12 Water temperature setting aquastat



The EBS twin coil tank is supplied with an immersion heater as standard.



# EBS single coil hot water tanks

## Characteristics

Models		EBS-1			
		100	150	200	300
WRC number		0210132			
Tank water capacity	litre	100	150	200	300
Tank useful volume	litre	98.8	148.6	192.6	292.2
Primary capacity (internal exchanger volume)	litre	4,1	4,3	9,4	9,7
Exchanger surface	dm <sup>2</sup>	78,5	81,7	177,5	184,6
Nominal exchanger power	kW	29	29	55	57
Exchanger load losses	mCE	0.7	0.7	2.8	3.2
Continuous flow rate at 40°C	l/min	13.88	13.88	26.32	27.27
Load losses at continuous flow rate	mCE	0.021	0.021	0.074	0.080
Primary flow rate	l/h	1249	1249	1895	1964
Maximum domestic hot water storage temperature	°C	80			
Domestic hot water temperature safety thermostat	°C	90			
Tank cooling constant according to EN 625	Wh/24h.l.°C	0.31	0.27	0.26	0.24
Static tank heat losses (maintenance consumption)	kWh/24h	1.390	1.852	2.331	3.266
Heat losses (tank at 65°C)	W	58	77	97	136
Max service pressure	bar/MP	10/1			
Thermostat preset	°C	20 to 80			
Thermostat differential	°C	6			
Ø Domestic cold water intake	inch	3/4	3/4	3/4	3/4
Ø Domestic hot water outlet	inch	3/4	3/4	3/4	3/4
Ø Primary inlet	inch	3/4	3/4	3/4	3/4
Ø Primary outlet	inch	3/4	3/4	3/4	3/4
Ø Recycling	inch	3/4	3/4	3/4	3/4
Ø Access flap	mm	100			
Ø Exchanger tube	mm	25 x 1			
Max electrical power with the immersion heater kit*	W	3000			
Empty weight	kg	275	38	49	63.5
Packaged weight	kg	40	51	62.5	79

\* the electrical power may be reduced to 2000 W or 1000 W if necessary. This choice is made by the installer during electrical connection - refer to the immersion heater kit's manual.

# EBS twin coil hot water tanks

The EBS tanks outperform virtually every other kind of hot water system due to the vast surface area of our coils. Designed specifically for our condensing boilers and solar systems, the over-sized coils ensure a low return temperature at the boiler, maximising the performance of our condensing boilers and any solar system.

## The EBS twin coil range provides:

- **Choice:** 200 and 300-litre twin coil versions.
- **A high level of domestic performance :** high input coil heat exchanger ensuring very fast recovery rates and excellent continuous output performance.
- **The twin coil versions can be used with any combination of alternative energies,** for example solar power and boiler power or heat pump application and boiler top up.
- **Durability:** tank and built-in coil made entirely from 316L austenitic stainless steel.
- **Quality insulation:** heat losses reduced to a minimum.
- **Simple fitting and maintenance:** easy-to-reach connections, wiring and inspection trap.
- **Full WRC and WRAS approval.**
- **Electrical Immersion Heater 3kW.**

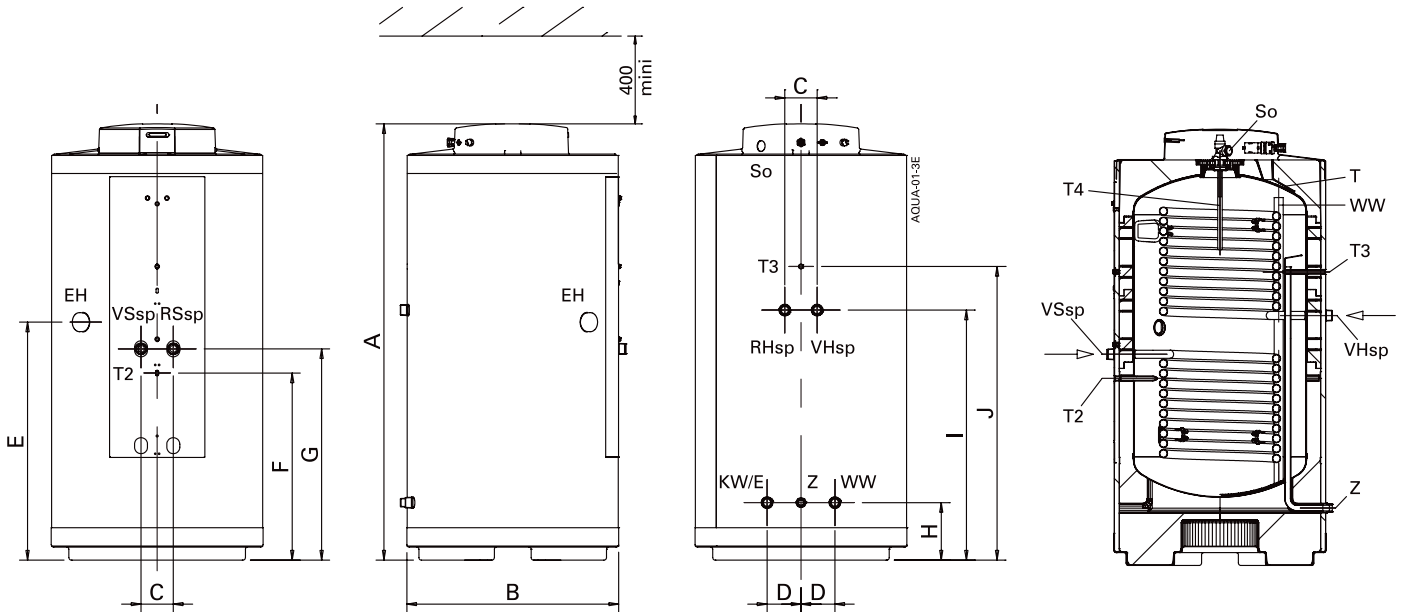
## Options:

- **Unvented or vented models**
- **Tank stand for apartment use allowing easy installation of washing machine underneath.** See [www.evinox.co.uk](http://www.evinox.co.uk) hot water tank section for details.



# EBS twin coil hot water tanks

## The EBS twin coil tank dimensions:



- E** Drain
- EH** Sleeve for electric resistance (Option)
- KW** Domestic cold water intake
- WW** Hot water outlet
- VH<sub>SP</sub>** Primary intake - (boiler to tank (upper exchanger))
- VS<sub>SP</sub>** Primary intake - (solar sensor to tank) (lower exchanger)
- RH<sub>SP</sub>** Primary output - (tank to boiler) (upper exchanger)
- RS<sub>SP</sub>** Primary outlet - (tank to solar sensor) (lower exchanger)
- Z** Domestic hot water recycling
- T** Thermometer pocket
- T<sub>2</sub>** Domestic hot water temperature sensor pocket - solar
- T<sub>3</sub>** Domestic hot water temperature sensor pocket - heating (CTN)
- T<sub>4</sub>** Pocket for a water overheating safety thermostat and for a domestic hot water temperature adjustment thermostat.
- So** Safety valve outlet

EBS Solar	200	300
<b>A</b>	1346 mm	1796 mm
<b>B</b>	656 mm	656 mm
<b>C</b>	100 mm	100 mm
<b>D</b>	105 mm	105 mm
<b>E</b>	736 mm	961 mm
<b>F</b>	578 mm	578 mm
<b>G</b>	653 mm	773 mm
<b>H</b>	177 mm	177 mm
<b>I</b>	773 mm	1103 mm
<b>J</b>	908 mm	1253 mm
$\varnothing$ VH <sub>SP</sub> /RH <sub>SP</sub>	1"	1"
$\varnothing$ VS <sub>SP</sub> /RS <sub>SP</sub>	1"	1"
$\varnothing$ KW/WW	1"	1"
$\varnothing$ Z	3/4"	3/4"
$\varnothing$ EH	1 1/2"	1 1/2"
$\varnothing$ So	22 mm	22 mm



# EBS twin coil hot water tanks

## Characteristics

Model		SOLAR 200	SOLAR 300
WRC number		0210132	
Total water capacity	litre	200	300
Maximum storage temperature in boiler or solar mode	°C	80	
Tank cooling constant (Cr) according to EN 625	Wh/24h.l.°C	0,189	0,146
Maintenance consumption	kWh/24h	1,705	1,99
Tank heat loss (ΔT 45K)	W	71,1	82,8
Domestic hot water service pressure	bar	6	
Max boiler and solar exchanger service pressure	bar	10	
Empty weight (without packaging)	kg	50	64,5
Packaged weight	kg	64	82
<b>Upper exchanger - boiler side :</b>			
Total capacity domestic hot water heated by the upper exchanger	litre	85	111
Primary capacity	litre	5,2	5,2
Exchange surface	dm <sup>2</sup>	98,5	98,5
Exchanger power for:			
- t <sub>dep</sub> = 90°C and t <sub>ecs</sub> = 45°C	kW	43,0	43,0
- t <sub>dep</sub> = 85°C and t <sub>ecs</sub> = 60°C	kW	26,7	26,7
Continuous flow rate for :			
- t <sub>dep</sub> = 90°C and t <sub>ecs</sub> = 45°C	l/h	1059	1059
- t <sub>dep</sub> = 85°C and t <sub>ecs</sub> = 60°C	l/h	460	460
Primary flow rate	l/h	1853	1853
Loss of exchanger load at max power	Mbar	130	130
<b>Lower exchanger - solar side :</b>			
Total capacity domestic hot water heated by the lower exchanger	litre	189	288
Primary capacity	litre	5,2	7,5
Exchange surface	dm <sup>2</sup>	98,5	141,7
Exchanger power for - t <sub>dep</sub> = 90°C and t <sub>ecs</sub> = 45°C	kW	37,8	51,0
Primary flow rate	l/h	950	1040
Loss of exchanger load at max power	Mbar	38	76
<b>Electrical resistance :</b>			
Electrical power maxi*	W	3000	
Volume heated by electrical resistance	litre	95	145
Time for temperature to rise to 65°C	hour	3	4,6
Electrical power supply / frequency		230 V - 50 Hz	
Intensity absorbed	A	8,7	8,7
Protection index		IP 44	

t<sub>sto</sub> = Storage temperature

t<sub>dep</sub> = Primary start temperature

t<sub>aef</sub> = Cold water intake temperature (10°C)

t<sub>ecs</sub> = Domestic hot water outlet temperature

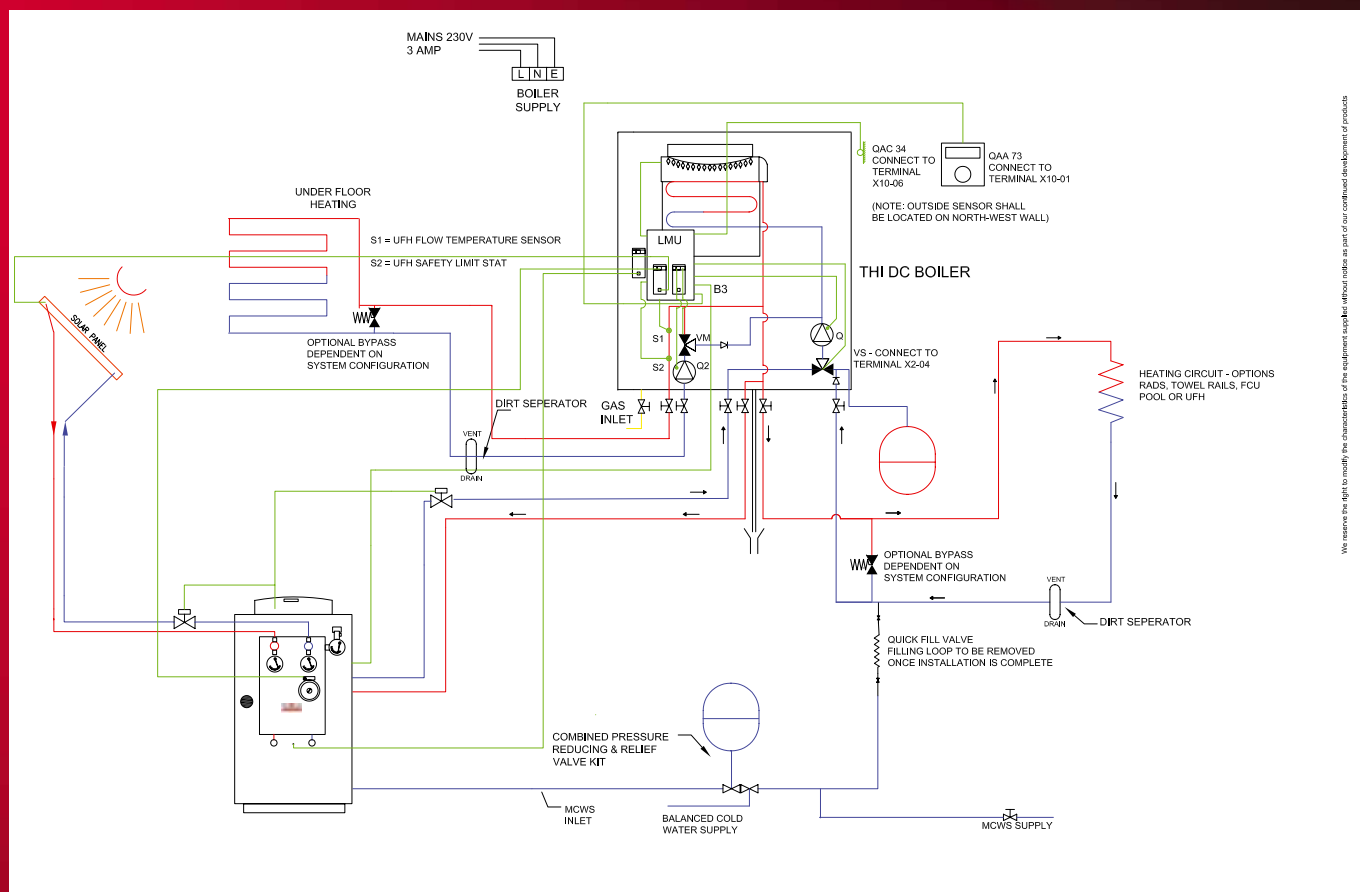
**Please see technical installation manual for recovery times with different boiler combinations, this can be downloaded at [www.evinox.co.uk](http://www.evinox.co.uk).**



The heat loss stated concerns the tank alone without its connection pipes. You must insulate these thermally with care to maintain as little heat loss as possible on the heating system

\* The electrical power may be reduced to 2000 W or 1000 W if necessary. This choice is made by the installer during electrical connection - refer to the immersion heater kit's manual.

The installation example below shows the ease of installation of a complete Geminox solar and boiler system when using the EBS twin coil tank. The room controller for the heating is also the solar controller and the solar sensors and pump wire back to the Geminox TH1 boiler for simple installation. This provides a totally integrated system from one manufacturer.



### Operating principle

EBS domestic water heaters comprise an austenitic stainless steel tank containing a high-performance exchanger with a large heat exchange area.

They also have removable, recyclable insulating shells and are equipped as standard with a thermometer and an aquastat to allow the domestic hot water temperature to be adjusted.

### Packaging:

Comes in one box on a pallet. Immersion heater packaged inside box.

### Warranty:

10-years for the tank.

