



EXCELLENCE  
IN HOT WATER

A BRAND OF GROUPE ATLANTIC

# SMART

SUPERIOR COMFORT  
FROM LESS VOLUME



# TANKS

HIGH PERFORMANCE EXACTLY WHEN YOU NEED IT



## Avoids lime scale build-up, legionellae and gives years of reliable service

The "Tank-in-Tank" concept is an indirect hot water storage tank totally immersed inside an external tank which forms the primary circuit. The inner tank (always in stainless steel at ACV) is itself a heat exchanger: thanks to the large surface hot water it is quickly heated up and storage volume can be kept to a minimum. What is more, "Tank-in-Tank" systems can be placed in any position and temperature is uniform through-out the tank, avoiding any risk for cold zone and legionellae. Finally, the internal tank is free to move, with its walls expanding and contracting under pressure variations during operation.

This impedes scaling on the surface of the heat exchanger: ensuring that efficiency and performance remain constant throughout the lifetime of the tank.

## SOLAR CONNECTABLE

Hybrid tank for efficient storage of hot water, central to renewable energy systems. The perfect partner for solar, heat pumps, pellet burners and more.

## A MULTITUDE OF POSSIBILITIES

The Smart Multi-Energy tank is the centre piece of any future oriented hot water and system. Install it today, and make decisions later about incorporating new energy sources. The SLME can be used as a low loss header for heating circuit, and can be installed in a wide variety of heating and hot water applications. ACV Multi-Energy Tank-in-Tanks are the perfect hot water storage partners for the energy sources of the future, while proven as a core component in systems that perform today.



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## SMART MULTI ENERGY

### HOW DOES IT WORK?

- Multi-Energy cylinder with the advantages of Tank-in-Tank design, incorporates a steel coil located at the bottom of the primary circuit
- Can be used as a low loss header for heating circuit, eliminating the need for additional tanks
- Optional installation of an electric element from 3 to 6 kW (inserted into the primary circuit, in order to avoid the lime scaling)
- High quality polyurethane foam insulation (50 mm)
- Double connections for heating and return flow
- 5 models with a total capacity of 200, 300, 400, 600 or 800 L



B

C



Together with Smart Multi Energy tanks, thermic panels are an efficient way to improve the energy performance of your dwelling considerably, without losing out on comfort.



## SMART GREEN

### HOW DOES IT WORK?

The range of Smart Green tanks is equipped with the latest ACV innovations for maximum efficiency. You can now offer your clients a system far ahead of its time.

- Class "A" tank, according to EU 812/2013
- Practically no loss of heat thanks to innovative insulation. The combination of a vacuum insulated panel (VIP) and polyurethane guarantees excellent energy performances.



## SMART EW

### HOW DOES IT WORK?

- **BI-ENERGY:** fitted with a 2,2 kW electrical element in the primary circuit to avoid scalding
- 50 mm polyurethane foam insulation
- Thick polypropylene jacket
- 5 sizes: from 100 to 240 litres



## SMART E & E PLUS

### HOW DOES IT WORK?

- Floor standing
- Optional 3 or 6 kW immersion heater with independent control and safety thermostat located in the bottom of the tank in primary water
- High quality insulation
- 5 models from 130 to 300 litres (E) and 3 models from 210 to 300 litres (E Plus)
- Heat input up to 68 kW

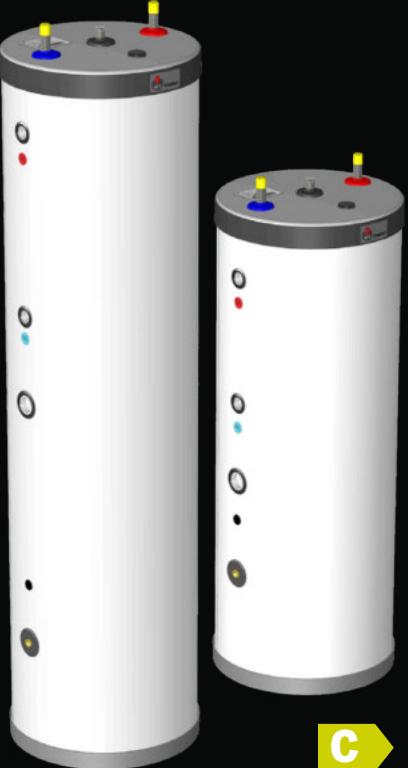


## COMFORT ME 200-300

### HOW DOES IT WORK?

Floor standing high efficiency multi-energy storage tank

- Multi-Energy cylinder with the advantages of Tank-in-Tank design
- Incorporates a steel coil located at the bottom of the primary circuit
- Optional installation of an electric element from 3 to 6 kW (inserted into the primary circuit, in order to avoid the lime scaling)
- High quality polyurethane foam insulation (30 mm)
- Primary connections for heating and return flow
- 2 models with a total capacity of 200 and 300 litres



## COMFORT

### HOW DOES IT WORK?

- Domestic stainless steel cylinder with tank-in-Tank technology
- Multiposition tank. Can be placed on the floor or on the wall vertically or horizontally (except CF100)
- Polyurethane insulation foam
- 5 sizes: from 100 to 240 litres



## COMFORT E

### HOW DOES IT WORK?

- **BI-ENERGY:** fitted with a 2,2 kW electrical element in the primary circuit to avoid scalding
- 30 mm polyurethane foam insulation
- Thick polypropylene jacket
- 5 sizes: from 100 to 240 litres



## HRI & HRS

### HOW DOES IT WORK?

#### HRI

- Floor standing
- M2 fire Protection
- Inverted construction with handhole at the bottom for inspection
- 3 models: 320, 600 & 800 L
- Heat input up to 88 kW
- Insulation : Soft Jacket

#### HRs

- Floor standing
- Insulation HRs: Soft Jacket 100 mm
- 4 models 320, 600, 800 & 1000 L
- Heat input up to 112 kW



## JUMBO

### HOW DOES IT WORK?

- Floor standing
- M0 fire protection
- 2 models of 800 and 1000 litres
- Heat input up to 112 kW
- Outer steel jacket supplied separately to enable the tank to pass through standard 800 mm doorways
- All Tanks Can be Placed in Cascading



## COMFORT 100 - 240

Multiposition tank. Can be placed on the floor or on the wall preferably vertically.

- Domestic stainless steel cylinder with Tank-in-Tank technology
- Polyurethane foam insulation offers optimal energy performance
- Thick polypropylene jacket. Hard wearing and shock resistant
- 5 sizes: from 100 to 240 litres
- Optional accessories: thermostat and wall-mounting bracket
- Anti-Legionella : Storage temperature > 60 °C
- Optional accessories: thermostat and wall-mounting bracket

### TANK-IN-TANK TECHNOLOGY



Reference	Name
06631201	Comfort 100
06631301	Comfort 130
06631401	Comfort 160
06631501	Comfort 210
06631601	Comfort 240

### ACCESSORIES

Reference	Description
10800102	Domestic unvented kit for residential boilers including pressure reducing valve, thermostatic mixing valve and 3/4" connection for the Domestic Hot Water expansion vessel.
5476G003	NTC sensor 12 kΩ. Needed to control a DHW tank or a balanced header - lg : 3,2 m
39554067	Wall mounting brackets
A1002275	Water thermostat Comfort kit
55212000	Thermostatic Mixing Valve 3/4"

The Comfort needs the wall mounting kit 39554067 to be hung on a wall, preferably vertically.



1. Cold water inlet
2. Domestic hot water outlet
3. Manual air vent valve
4. Primary fluid inlet
5. Primary fluid outlet
6. 30 mm polyurethane insulation
7. Carbon steel primary tank
8. Stainless steel DHW tank
9. Rigid polypropylene cover
10. External polypropylene casing
11. Rigid polypropylene base
12. Stainless steel drywell



## TECHNICAL CHARACTERISTICS AND DIMENSIONS

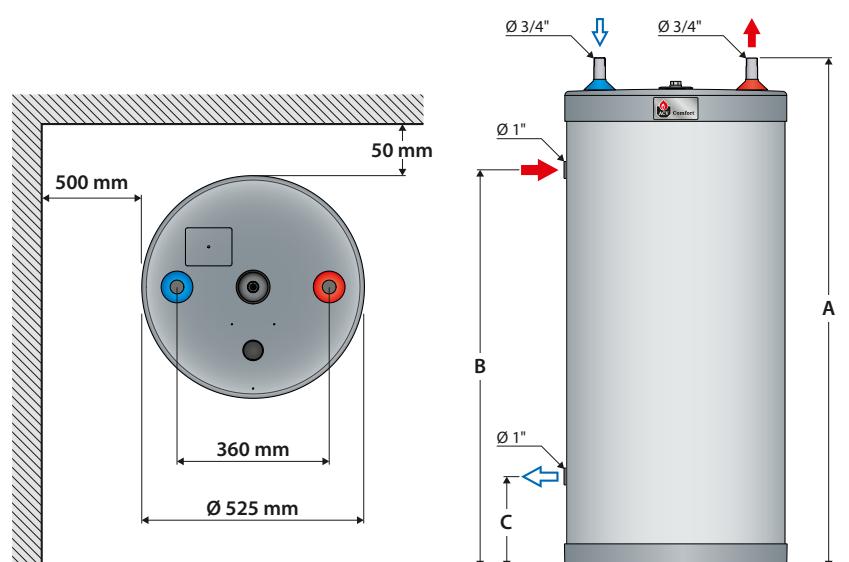
Type	Comfort 100	Comfort 130	Comfort 160	Comfort 210	Comfort 240
Reference	06631201	06631301	06631401	06631501	06631601
Capacity (total)	L	105	130	161	203
Connection - primary	Ø"	1F	1F	1F	1F
Connection - DHW	Ø"	3/4 M	3/4 M	3/4 M	3/4 M
Max operating temperature	°C	90	90	90	90
Max operating pressure (DHW)	bar	8,6	8,6	8,6	8,6
Max operating pressure heating (primary)	bar	3	3	3	3
Primary heater pressure drop (EN12897:2016)	mbar	19,6	22,4	23,5	40,6
Dimensions A	mm	845	1005	1205	1475
Dimensions B	mm	580	740	940	1210
Dimensions C	mm	215	215	215	210
Weight (empty)	kg	37	40	47	58
Energy efficiency storage class	C	C	C	C	C

## DOMESTIC HOT WATER PERFORMANCE

Type	Comfort 100	Comfort 130	Comfort 160	Comfort 210	Comfort 240
Primary flow (EN 12897:2016)	L/s	0,70	0,70	0,70	1,25
Peak flow at 40°C	L/10'	212	236	321	406
Peak flow 1st hour at 40°C	L/60'	705	784	1063	1349
Continuous flow at 40°C	L/h	592	658	890	1132
Peak flow at 45°C	L/10'	182	202	275	348
Peak flow 1st hour at 45°C	L/60'	604	672	911	1156
Continuous flow at 45°C	L/h	507	564	763	970
Peak flow at 60°C	L/10'	105	117	161	209
Peak flow 1st hour at 60°C	L/60'	345	384	549	689
Continuous flow at 60°C	L/h	288	320	465	576
Reheat performance (EN 12897:2016)	kW	18,4	18,4	24,7	32,2
Reheat time (EN 12897)	min	10	10	10	9

## WORKING TEMPERATURE

Performance data assumes :  
 Primary flow temperature : 85 °C  
 Domestic cold water supply : 10 °C

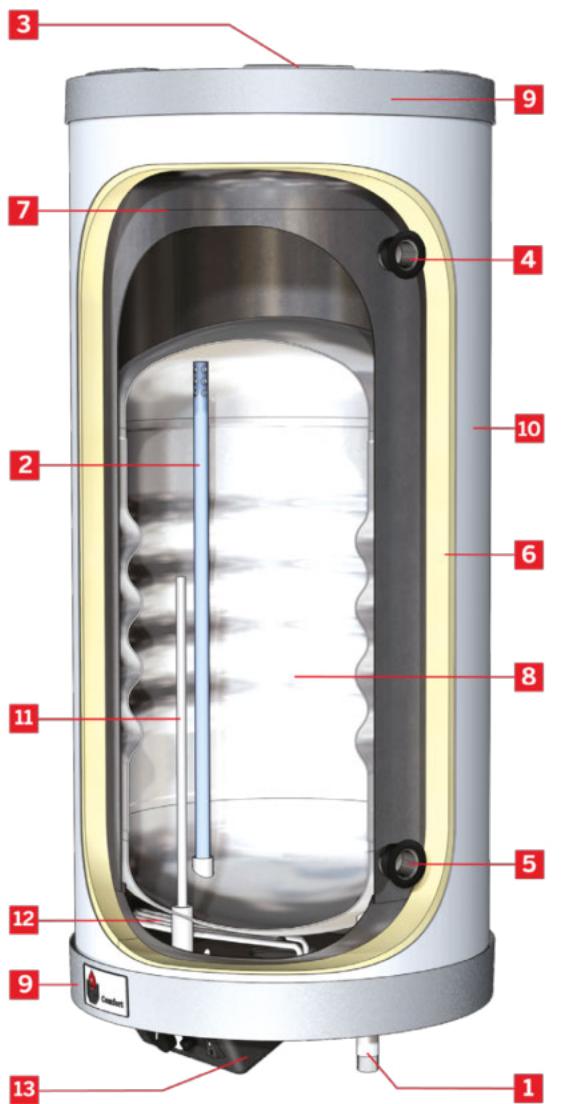


## COMFORT E 100 - 240

BI-ENERGY tank to be installed vertically with sanitary connections down.

- Domestic stainless steel cylinder with Tank-in-Tank technology
- BI-ENERGY : fitted with a 2,2 kW electrical element in the primary circuit to avoid scalding
- Polyurethane foam insulation offers optimal energy performance
- Thick polypropylene jacket. Hard wearing and shock resistant
- 5 sizes: from 100 to 240 litres
- Anti-Legionella : Storage temperature > 60 °C

## TANK-IN-TANK TECHNOLOGY

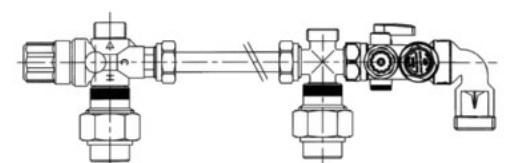


Reference	Name
06642701	Comfort E 100
06642801	Comfort E 130
06642901	Comfort E 160
06643001	Comfort E 210
06643101	Comfort E 240

## ACCESSORIES

Reference	Description
10800102	Domestic unvented kit for residential boilers including pressure reducing valve, thermostatic mixing valve and 3/4" connection for the Domestic Hot Water expansion vessel.
5476G003	NTC sensor 12 kΩ. Needed to control a DHW tank or a balanced header - lg : 3,2 m
55212000	Thermostatic Mixing Valve 3/4"

10800102



1. Cold water inlet
2. Domestic hot water outlet
3. Manual air bleed valve
4. Primary fluid inlet
5. Primary fluid outlet
6. 30 mm of insulation in polyurethane (without CFCs)
7. Primary carbon steel tank
8. DHW stainless steel tank
9. Rigid polypropylene cover
10. External polypropylene casing
11. Stainless steel drywell
12. Electric heating element 2200 W
13. Control panel

To be installed vertically with sanitary connections down.  
 The primary has always to be filled with water.

## TECHNICAL CHARACTERISTICS AND DIMENSIONS

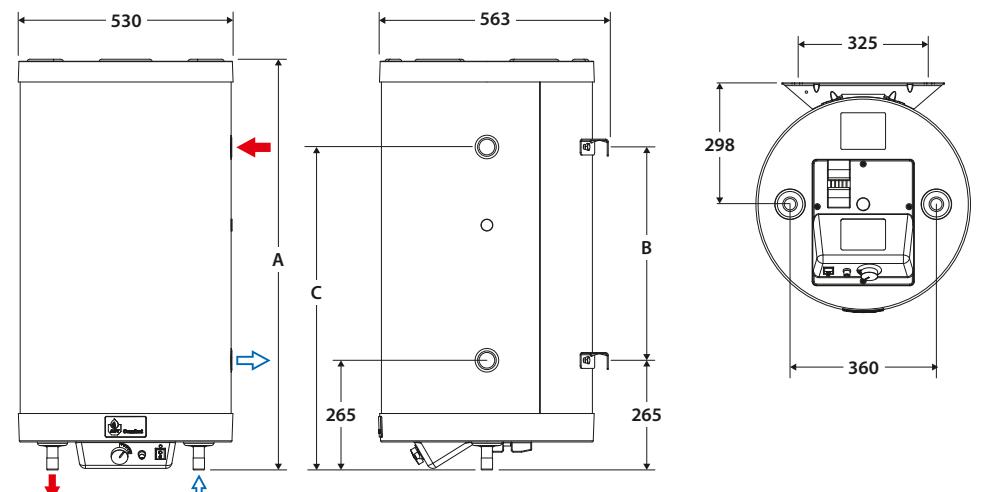
Type	Comfort E 100	Comfort E 130	Comfort E 160	Comfort E 210	Comfort E 240
Reference	06642701	06642801	06642901	06643001	06643001
Electrical resistance	W	2200	2200	2200	2200
Capacity (total)	L	105	130	161	203
Connection - primary	Ø"	1F	1F	1F	1F
Connection - DHW	Ø"	3/4 M	3/4 M	3/4 M	3/4 M
Max operating temperature	°C	90	90	90	90
Max operating pressure (DHW)	bar	8,6	8,6	8,6	8,6
Max operating pressure heating (primary)	bar	3	3	3	3
Primary heater pressure drop (EN12897:2016)	mbar	19,6	22,4	23,5	40,6
Dimensions A	mm	845	1005	1205	1480
Dimensions B	mm	365	525	725	1000
Dimensions C	mm	630	790	990	1260
Weight (empty)	kg	37	40	47	58
Energy efficiency storage class		C	C	C	C

## DOMESTIC HOT WATER PERFORMANCE

Type	Comfort E 100	Comfort E 130	Comfort E 160	Comfort E 210	Comfort E 240
Primary flow (EN 12897:2016)	L/s	0,70	0,70	0,70	1,25
Peak flow at 40°C	L/10'	212	236	321	406
Peak flow 1st hour at 40°C	L/60'	705	784	1063	1349
Continuous flow at 40°C	L/h	592	658	890	1132
Peak flow at 45°C	L/10'	182	202	275	348
Peak flow 1st hour at 45°C	L/60'	604	672	911	1156
Continuous flow at 45°C	L/h	507	564	763	970
Peak flow at 60°C	L/10'	105	117	161	209
Peak flow 1st hour at 60°C	L/60'	345	384	549	689
Continuous flow at 60°C	L/h	288	320	465	576
Reheat performance (EN 12897:2016)	kW	18,4	18,4	24,7	32,2
Reheat time (EN 12897)	min	10	10	10	9

## WORKING TEMPERATURE

Performance data assumes :  
Primary flow temperature : 85 °C  
Domestic cold water supply : 10 °C

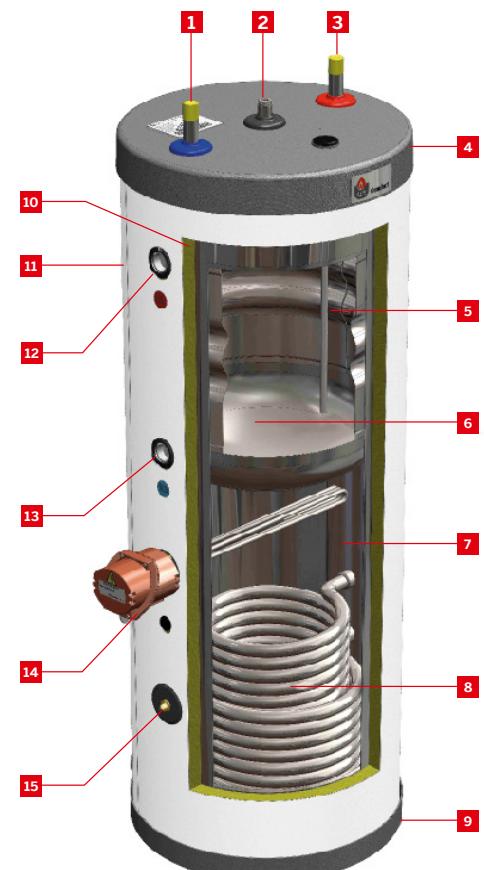


## COMFORT ME 200 - 300

High efficiency storage tank for dual energy source with optional back-up heater.

- Tank-In-Tank technology
- Heating through primary buffer or coil
- Stainless steel DHW tank
- High quality polyurethane insulation
- Two sizes for combination with single or double solar collector
- Anti-legionella
- Floor standing

### TANK-IN-TANK TECHNOLOGY



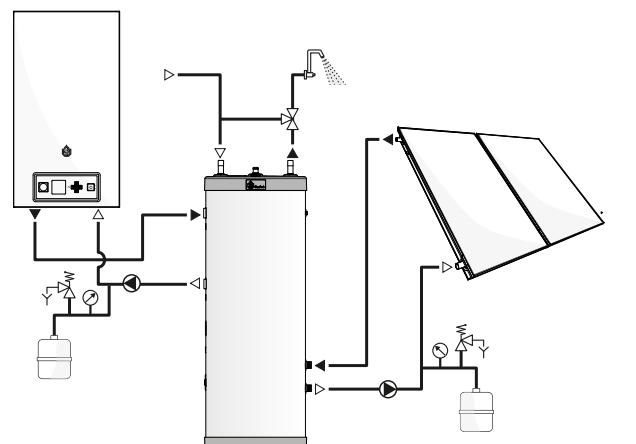
Reference	Name
A1004153	Comfort ME 200
A1004152	Comfort ME 300

### ACCESSORIES

Reference	Description
10800102	Domestic unvented kit for residential boilers including pressure reducing valve, thermostatic mixing valve and 3/4" connection for the Domestic Hot Water expansion vessel.
A1002275	Water thermostat Comfort kit
5476G003	NTC sensor 12 kΩ. Needed to control a DHW tank or a balanced header - lg : 3,2 m
55212000	Thermostatic Mixing Valve 3/4"
10800081	3 kW single phase immersion heater (1 x 230V)
10800082	3 kW three phase immersion heater (3 x 400V+N)
10800083	6 kW single phase immersion heater (1 x 230V)
10800084	6 kW Three phase immersion heater (3 x 400V+N)

- |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1. Cold water inlet</p> <p>2. Manual air bleed valve</p> <p>3. DHW hot water outlet</p> <p>4. Polypropylene top lid</p> <p>5. Drywell (DHW)</p> <p>6. Stainless steel tank (DHW)</p> <p>7. Outer steel tank (primary circuit)</p> <p>8. Steel coil</p> | <p>9. Polypropylene bottom lid</p> <p>10. Polyurethane foam insulation</p> <p>11. Polypropylene shell</p> <p>12. Primary flow connection</p> <p>13. Primary return connection</p> <p>14. Electrical heating element</p> <p>15. Drywell (primary/solar circuit)</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

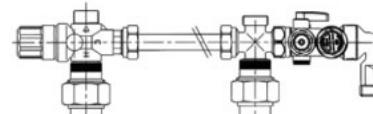
Installation on the floor only.



A1002275



10800102



10800081



## TECHNICAL CHARACTERISTICS AND DIMENSIONS

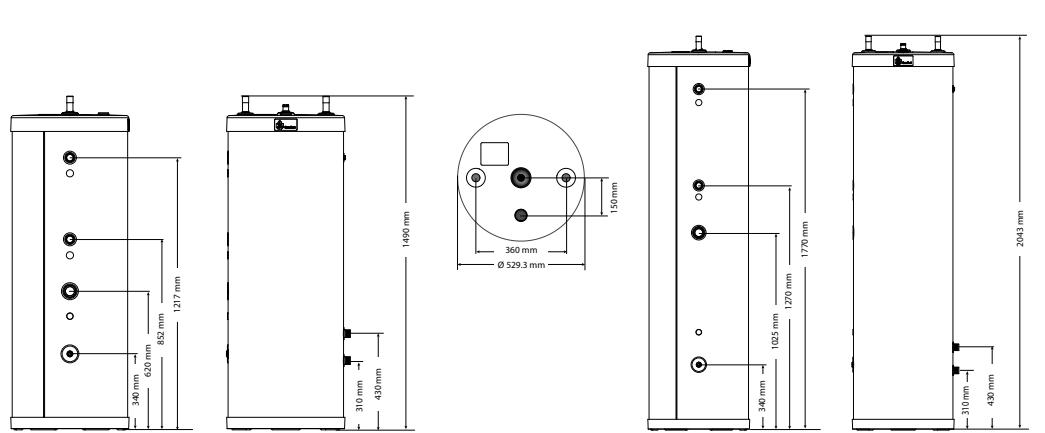
Type		Comfort ME 200	Comfort ME 300
Reference		A1004153	A1004152
Capacity (total)	L	203	303
Capacity (domestic hot water)	L	75	99
Heating surface coil	m <sup>2</sup>	1,42	1,42
Coil capacity	L	8,3	8,3
Connection - primary	Ø"	1F	1F
Connection - DHW	Ø"	3/4M	3/4M
Connection - coil	Ø"	1M	1M
Connection - heating element	Ø"	6/4F	6/4F
Primary heater pressure drop (EN12897:2016)	mbar	22,4	23,5
Corresponding flow in coil	L/h	3000	3000
Pressure drop coil	mbar	460	460
Max absorbed heat (Heat source: coil)	kW	16	16
Max operating temperature	°C	90	90
Max operating pressure (DHW)	bar	8,6	8,6
Max operating pressure heating (primary)	bar	3	3
Max operating pressure (coil)	bar	10	10
Weight (empty)	kg	67,5	77,5
Energy efficiency storage class		C	C

## DOMESTIC HOT WATER PERFORMANCE

Type		Comfort ME 200	Comfort ME 300
Peak flow at 45°C	L/10'	202	275
Peak flow 1st hour at 40°C	L/60'	672	911
Continuous flow at 45°C	L/h	564	763
Peak flow at 60°C	L/10'	117	161
Peak flow 1st hour at 60°C	L/60'	384	549
Continuous flow at 45°C	L/h	320	465
Reheat performance (EN 12897:2016)	kW	18,4	24,7
Reheat time (EN 12897)	min	10	10

## WORKING TEMPERATURE

Performance data assumes :  
 Primary flow temperature : 85 °C  
 Domestic cold water supply : 10 °C



## SMART 130 - 210 GREEN

Fast recovery Class 'A' Tank-in-Tank DHW cylinder

- Class "A" according to EU 812/2013
- Very low standing heat loss : the combination of a vacuum insulation panel (VIP) and the polyurethane foam offers optimal energy performance
- Thick polypropylene jacket. Hard wearing and shock resistant
- 3 sizes: 130, 161, and 203 litres
- Integral thermostat control included (replaceable by a probe for use with an electronically controlled boiler)
- Stainless Steel domestic cylinder
- Anti-Legionella : Storage temperature > 60 °C

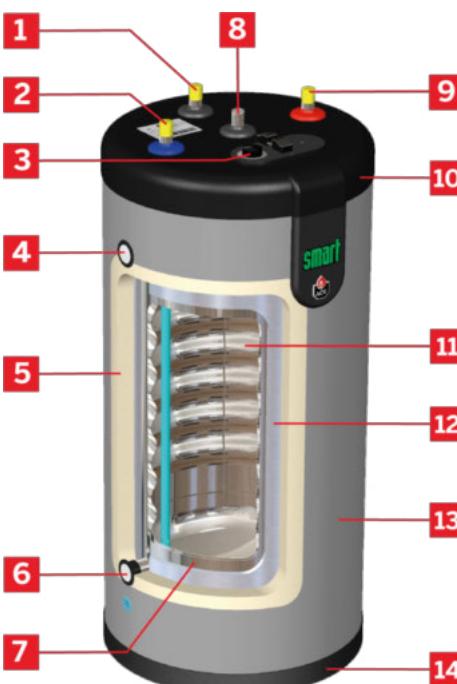
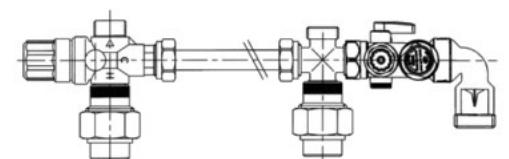
### TANK-IN-TANK TECHNOLOGY ENERGY EFFICIENCY STORAGE CLASS 'A'

Reference	Name
A1002046	Smart 130 Green
A1002047	Smart 160 Green
A1002048	Smart 210 Green

## ACCESSORIES

Reference	Description
10800102	Domestic unvented kit for residential boilers including pressure reducing valve, thermostatic mixing valve and 3/4" connection for the Domestic Hot Water expansion vessel.
5476G003	NTC sensor 12 kΩ. Needed to control a DHW tank or a balanced header - lg : 3,2 m
55212000	Thermostatic Mixing Valve 3/4"

10800102



1. Auxiliary connection DHW
2. Cold water inlet connection
3. Control thermostat
4. Flow connection (primary circuit)
5. Polyurethane foam insulation
6. Return connection (primary circuit)
7. Outer steel tank (primary circuit)
8. Manual air bleed valve
9. Hot water outlet connection
10. Polypropylene top lid
11. Stainless steel tank (DHW)
12. Vacuum insulation panel
13. Polypropylene shell
14. Polypropylene base

Floor standing only.

ACV advise the installation of a domestic hot water mixing valve on the hot flow immediately after the appliance.

## TECHNICAL CHARACTERISTICS AND DIMENSIONS

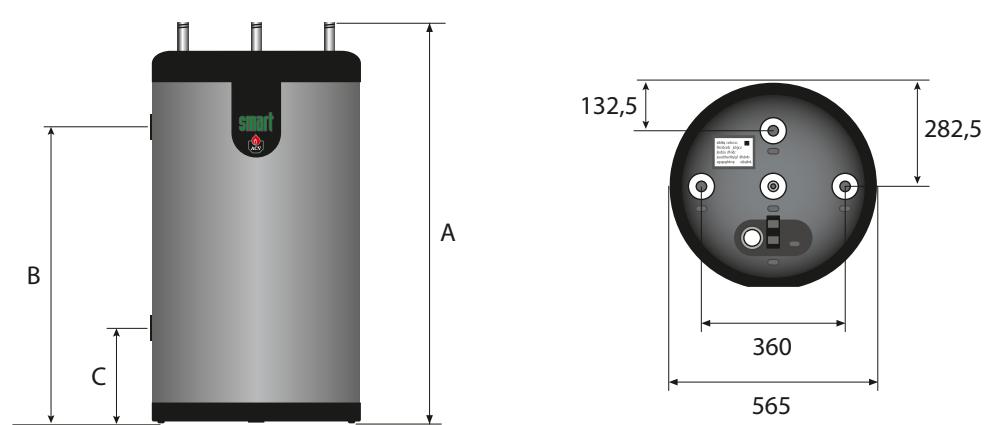
Type		Smart 130 Green	Smart 160 Green	Smart 210 Green
Reference		A1002046	A1002047	A1002048
Capacity (total)	L	130	161	203
Connection - primary	Ø"	1F	1F	1F
Connection - DHW	Ø"	3/4 M	3/4 M	3/4 M
Connection - re-circulation / safety valve	Ø"	3/4 M	3/4 M	3/4 M
Primary heater pressure drop (EN12897:2016)	mbar	26,8	26,8	41,6
Max operating temperature	°C	90	90	90
Max operating pressure (DHW)	bar	8,6	8,6	8,6
Max operating pressure heating (primary)	bar	3	3	3
Weight (empty)	kg	55	65	75
Dimensions A	mm	1025	1225	1497
Dimensions B	mm	750	960	1232
Dimensions C	mm	235	235	235
Energy efficiency storage class		A	A	A

## DOMESTIC HOT WATER PERFORMANCE

Type		Smart 130 Green	Smart 160 Green	Smart 210 Green
Primary flow (EN 12897:2016)	L/s	0,70	0,70	1,25
Peak flow at 40°C	L/10'	321	406	547
Peak flow 1st hour at 40°C	L/60'	1063	1349	1820
Continuous flow at 40°C	L/h	890	1132	1527
Peak flow at 45°C	L/10'	275	348	469
Peak flow 1st hour at 45°C	L/60'	911	1156	1560
Continuous flow at 45°C	L/h	763	970	1309
Peak flow at 60°C	L/10'	161	209	272
Peak flow 1st hour at 60°C	L/60'	549	689	913
Continuous flow at 60°C	L/h	465	576	769
Reheat time (EN 12897)	min	10	10	9
Reheat performance (EN 12897:2016)	kW	24,7	32,2	39,2

## WORKING TEMPERATURE

Performance data assumes :  
 Primary flow temperature : 85 °C  
 Domestic cold water supply : 10 °C



## SMART 100 - 240

Multiposition tank. Can be placed on the floor or vertically on the wall.

- Domestic stainless steel cylinder with Tank-in-Tank technology
- Polyurethane foam insulation offers optimal energy performance
- Thick polypropylene jacket. Hard wearing and shock resistant
- 5 sizes: from 100 to 240 litres
- Integral thermostat control included (replaceable by a probe for use with an electronically controlled boiler)
- Anti-Legionella : Storage temperature > 60 °C
- Wall mounting kit included

## TANK-IN-TANK TECHNOLOGY

**YOU WILL FIND THE SMART CALORIFIERS TO 600 LITRES IN ORDER.**

**SMART FOR LIFE LIFETIME WARRANTY!**  
(see conditions [www.acv.com](http://www.acv.com))

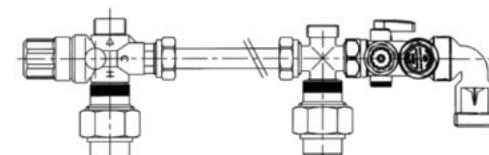


Reference	Name
06602401	Smart 100
06602501	Smart 130
06602601	Smart 160
06602701	Smart 210
06602801	Smart 240

## ACCESSORIES

Reference	Description
10800102	Domestic unvented kit for residential boilers including pressure reducing valve, thermostatic mixing valve and 3/4" connection for the Domestic Hot Water expansion vessel.
5476G003	NTC sensor 12 kΩ. Needed to control a DHW tank or a balanced header - lg : 3,2 m
55212000	Thermostatic Mixing Valve 3/4"

10800102



1. Auxiliary connection DHW
2. Cold water inlet connection
3. Control thermostat
4. Flow connection (primary circuit)
5. Polyurethane foam insulation
6. Return connection (primary circuit)
7. Outer steel tank (primary circuit)
8. Manual air bleed valve (x 2 - SL Models)
9. Hot water outlet connection
10. Polypropylene top lid
11. Stainless steel tank (DHW)
12. Polypropylene shell
13. Polypropylene bottom lid
14. DHW thermometer
15. Drywell

## TECHNICAL CHARACTERISTICS AND DIMENSIONS

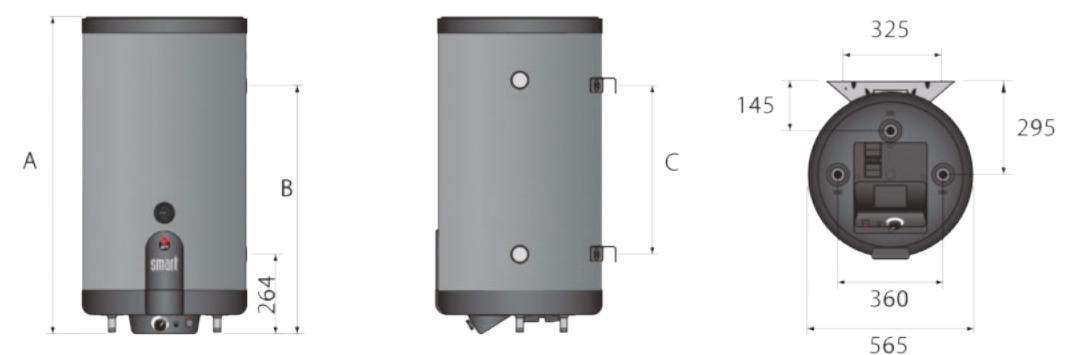
Type		Smart 100	Smart 130	Smart 160	Smart 210	Smart 240
Reference		06602401	06602501	06602601	06602701	06602801
Capacity (total)	L	105	130	161	203	242
Connection - primary	Ø"	1F	1F	1F	1F	1F
Connection - DHW	Ø"	3/4 M				
Connection - re-circulation / safety valve	Ø"	3/4 M				
Primary heater pressure drop (EN12897:2016)	mbar	22,6	26,8	26,8	41,6	47,3
Max operating temperature	°C	90	90	90	90	90
Max operating pressure (DHW)	bar	8,6	8,6	8,6	8,6	8,6
Max operating pressure heating (primary)	bar	3	3	3	3	3
Dimensions A	mm	865	1025	1225	1497	1744
Dimensions B	mm	629	789	989	1261	1508
Dimensions C	mm	365	525	725	997	1244
Weight (empty)	kg	49	55	65	75	87
Energy efficiency storage class		B	B	B	B	B

## **DOMESTIC HOT WATER PERFORMANCE**

Type		Smart 100	Smart 130	Smart 160	Smart 210	Smart 240
Primary flow (EN 12897:2016)	L/s	0,70	0,70	0,70	1,25	1,25
Peak flow at 40°C	L/10'	236	321	406	547	700
Peak flow 1st hour at 40°C	L/60'	784	1063	1349	1820	2319
Continuous flow at 40°C	L/h	658	890	1132	1527	1943
Peak flow at 45°C	L/10'	202	275	348	469	600
Peak flow 1st hour at 45°C	L/60'	672	911	1156	1560	1988
Continuous flow at 45°C	L/h	564	763	970	1309	1665
Peak flow at 60°C	L/10'	117	161	209	272	337
Peak flow 1st hour at 60°C	L/60'	384	549	689	913	1165
Continuous flow at 60°C	L/h	320	465	576	769	994
Reheat time (EN 12897)	min	10	10	10	9	9
Reheat performance (EN 12897:2016)	kW	18,4	24,7	32,2	39,2	44,6

## WORKING TEMPERATURE

Performance data assumes :  
Primary flow temperature : 85 °C  
Domestic cold water supply : 10 °C



## **SMART 320 - 600/420 DUPLEX**

Fast recovery Tank-in-Tank Cylinder - perfect partner to a condensing boiler

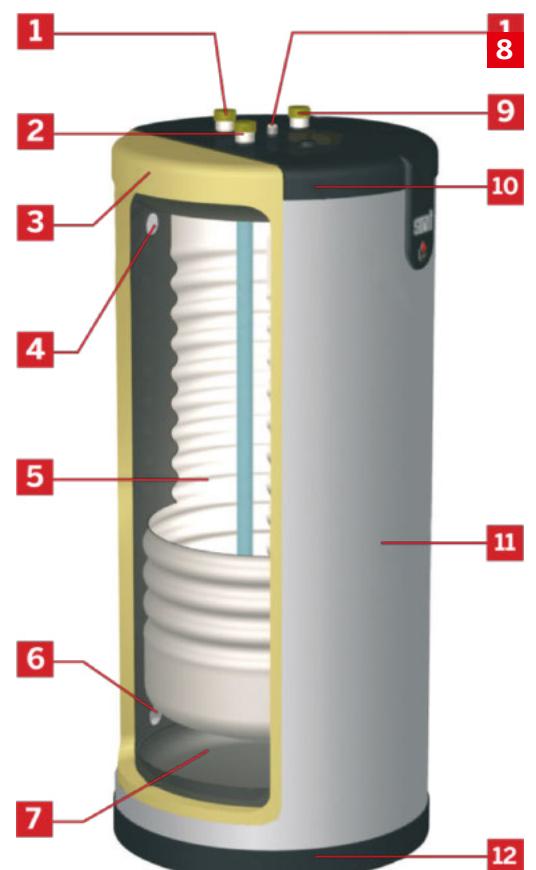
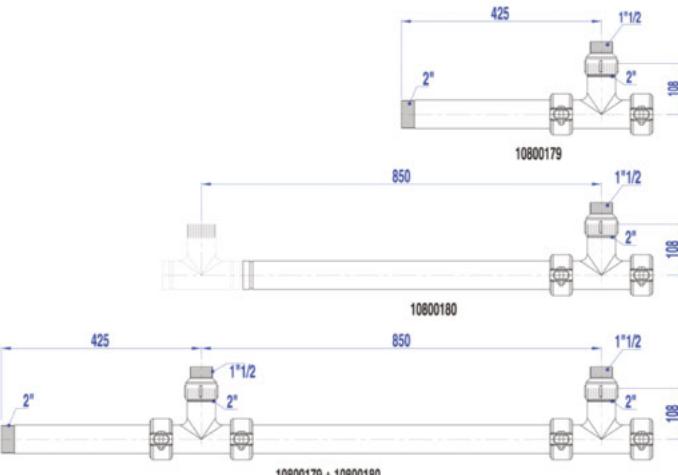
- Stainless steel construction - no anode protection required
  - High quality insulation: 50 mm rigid polyurethane
  - Easy access control pod with thermostats and six pin plug for simple electrical connection
  - Hard wearing polypropylene finish
  - Residential or commercial use
  - Can be used in battery formation for higher hot water output

## TANK-IN-TANK TECHNOLOGY

Reference	Name		
06618501	Smart 320	C	
06618601	Smart 420	C	
06508101	Smart 420 Duplex	C	
06619301	Smart 600		

## ACCESSORIES

Reference	Description
10800179	Basic coupling kit for tanks < 800 L
10800180	Additional coupling kit for tanks < 800 L
5476G003	NTC sensor 12 kΩ. Needed to control a DHW tank or a balanced header - lg : 3,2 m



1. Auxiliary connection DHW
  2. Cold water inlet connection
  3. 50mm rigid polyurethane insulation
  4. Primary fluid inlet
  5. Internal stainless steel tank
  6. Return connection (primary circuit)
  7. Outer steel tank containing the primary fluid
  8. Manual air vent
  9. Domestic hot water outlet
  10. Polypropylene lid
  11. Outer jacket, thick polypropylene shell
  12. Polypropylene reinforced base

## TECHNICAL CHARACTERISTICS AND DIMENSIONS

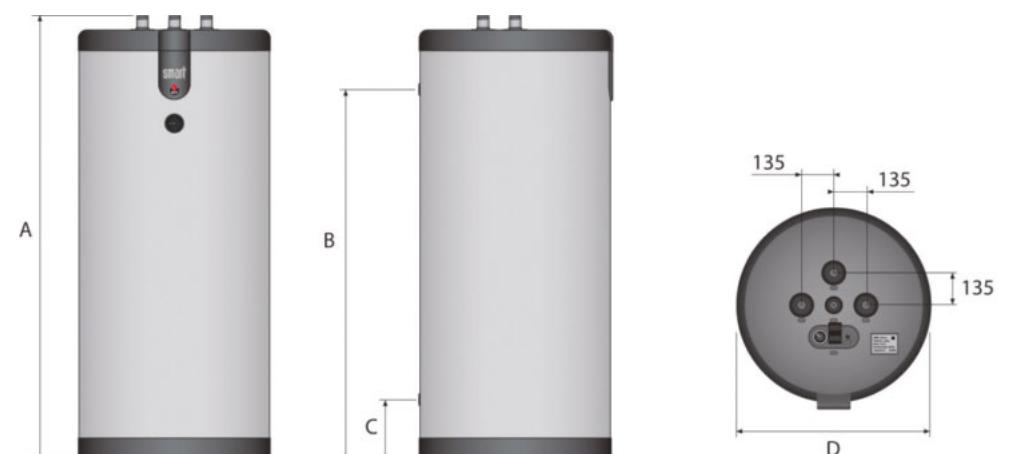
Type	Smart 320	Smart 420	Smart 420 Duplex	Smart 600
Reference	06618501	06618601	06508101	06619301
Capacity (total)	L	318	413	413
Capacity (primary)	L	55	55	55
Connection - primary	Ø"	6/4 F	6/4 F	2 F
Connection - DHW	Ø"	6/4 M	6/4 M	6/4 M
Connection - re-circulation / safety valve	Ø"	6/4 M	6/4 M	6/4 M
Max operating temperature	°C	90	90	90
Max operating pressure (DHW)	bar	8,6	8,6	8,6
Max operating pressure heating (primary)	bar	4	4	4
Dimensions A	mm	1602	2024	2024
Dimensions B	mm	1280	1705	1705
Dimensions C	mm	250	250	250
Dimensions D	mm	660	660	660
Weight (empty)	kg	141	167	167
Energy efficiency storage class	C	C	C	-

## DOMESTIC HOT WATER PERFORMANCE

Type	Smart 32n	Smart 420	Smart 420 Duplex	Smart 600
Primary flow (EN 12897:2016)	L/s	1,81	1,81	1,81
Peak flow at 40°C	L/10'	922	1195	1195
Peak flow 1st hour at 40°C	L/60'	2666	3151	3151
Continuous flow at 40°C	L/h	2093	2536	2536
Peak flow at 45°C	L/10'	790	1012	1012
Peak flow 1st hour at 45°C	L/60'	2285	2608	2608
Continuous flow at 45°C	L/h	1794	2058	2058
Peak flow at 60°C	L/10'	504	620	620
Peak flow 1st hour at 60°C	L/60'	1368	1513	1513
Continuous flow at 60°C	L/h	1037	1153	1153
Reheat performance (EN 12897:2016)	kW	60	65	65
				71

## WORKING TEMPERATURE

Performance data assumes :  
 Primary flow temperature : 85 °C  
 Domestic cold water supply : 10 °C



## SMART E 130 - 300

Fast recovery floor standing Tank-in-Tank Cylinder.  
 Connection for an optional electrical resistance in the primary circuit.

- 3 kW or 6 kW Immersion heater as option available
- Low Heat Loss - 50mm Polyurethane insulation
- Deluxe, thick - shock resistant - polypropylene jacket.
- Stainless steel domestic cylinder
- Anti-Legionella : Storage temperature > 60°C.

## TANK-IN-TANK TECHNOLOGY

10800081



Reference	Name
06618801	Smart E 130
06618901	Smart E 160
06619001	Smart E 210
06619101	Smart E 240
06605201	Smart E 300

## ACCESSORIES

Reference	Description
10800102	Domestic unvented kit for residential boilers including pressure reducing valve, thermostatic mixing valve and 3/4" connection for the Domestic Hot Water expansion vessel.
5476G003	NTC sensor 12 kΩ. Needed to control a DHW tank or a balanced header - lg:3,2 m
10800081	3 kW single phase immersion heater (1 x 230V)
10800082	3 kW three phase immersion heater (3 x 400V+N)
10800083	6 kW single phase immersion heater (1 x 230V)
10800084	6 kW Three phase immersion heater (3 x 400V+N)
55212000	Thermostatic Mixing Valve 3/4"



1. Auxiliary connection DHW
2. Domestic cold water inlet connection
3. Flow connection (primary circuit)
4. Polypropylene shell
5. Internal stainless steel tank
6. Return connection (primary circuit)
7. Immersion heater connection
8. Primary air vent
9. Hot water outlet connection
10. Rigid polypropylene top cover
11. Thermostat pocket
12. Polyurethane foam insulation
13. Outer steel tank (primary circuit)
14. Polypropylene base

Floor standing only.

ACV advise the installation of a domestic hot water mixing valve on the hot flow immediately after the appliance.

## TECHNICAL CHARACTERISTICS AND DIMENSIONS

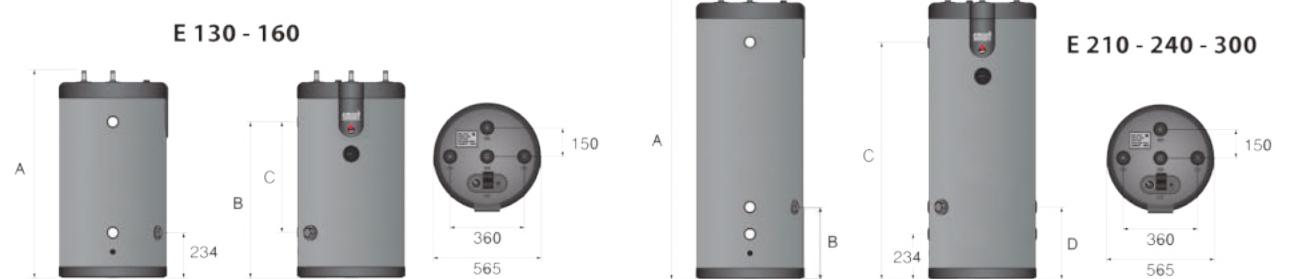
Type	Smart E130	Smart E160	Smart E210	Smart E240	Smart E300
Reference	06618801	06618901	06619001	06619101	06605201
Capacity (total)	L	130	161	203	242
Connection - primary	Ø"	1F	1F	1F	1F
Connection - DHW	Ø"	3/4 M	3/4 M	3/4 M	3/4 M
Connection - re-circulation / safety valve	Ø"	3/4 M	3/4 M	3/4 M	3/4 M
Primary heater pressure drop (EN12897:2016)	mbar	26,8	26,8	41,6	47,3
Max operating temperature	°C	90	90	90	90
Max operating pressure (DHW)	bar	8,6	8,6	8,6	8,6
Max operating pressure heating (primary)	bar	3	3	3	3
Dimensions A	mm	1024	1225	1493	1741
Dimensions B	mm	759	959	332	337
Dimensions C	mm	525	725	1229	1477
Dimensions D	mm	-	-	374	374
Weight (empty)	kg	45	54	66	76
Energy efficiency storage class		B	B	B	B

## DOMESTIC HOT WATER PERFORMANCE

Type	Smart E130	Smart E160	Smart E210	Smart E240	Smart E300
Primary flow (EN 12897:2016)	L/s	0,70	0,70	1,25	1,25
Peak flow at 40°C	L/10'	236	321	406	547
Peak flow 1st hour at 40°C	L/60'	784	1063	1349	1820
Continuous flow at 40°C	L/h	658	890	1132	1527
Peak flow at 45°C	L/10'	202	275	348	469
Peak flow 1st hour at 45°C	L/60'	672	911	1156	1560
Continuous flow at 45°C	L/h	564	763	970	1309
Peak flow at 60°C	L/10'	117	161	209	272
Peak flow 1st hour at 60°C	L/60'	384	549	689	913
Continuous flow at 60°C	L/h	320	465	576	769
Reheat performance (EN 12897:2016)	kW	18,4	24,7	32,2	39,2
Reheat time (EN 12897)	min	10	10	9	9

## WORKING TEMPERATURE

Performance data assumes :  
 Primary flow temperature : 85 °C  
 Domestic cold water supply : 10 °C

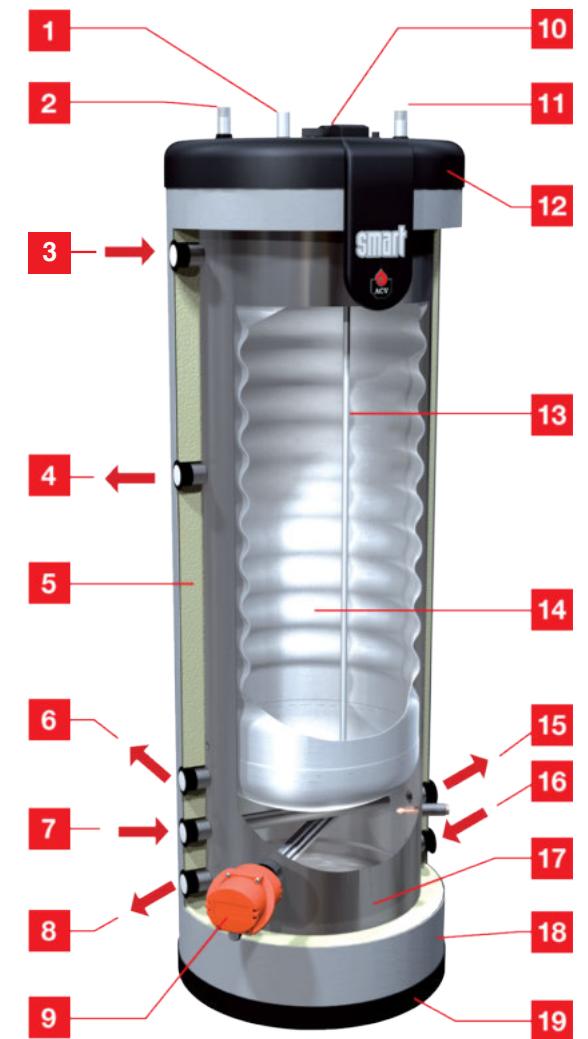


## SMART E PLUS 210 - 300

Fast recovery Tank-in-Tank cylinder with the addition of multiple ports allowing flexible installation options. Connection for an optional electrical resistance in the primary circuit. Ideal partner to condensing boilers and heat pumps.

- The addition of multiple connections on the Smart E Plus not only gives the installer flexible installation options, but also provides a cylinder built with the future in mind!
- Low heat loss: 50 mm rigid polyurethane insulation.
- Deluxe finish: thick, shock resistant polypropylene jacket.
- Stainless Steel domestic cylinder
- DHW temperature gauge.
- Anti-Legionella : Storage temperature above 60 °C.

## TANK-IN-TANK TECHNOLOGY



Reference	Name
06627301	Smart E Plus 210
06627401	Smart E Plus 240
06627501	Smart E Plus 300

## ACCESSORIES

Reference	Description
10800102	Domestic unvented kit for residential boilers including pressure reducing valve, thermostatic mixing valve and 3/4" connection for the Domestic Hot Water expansion vessel.
5476G003	NTC sensor 12 kΩ. Needed to control a DHW tank or a balanced header - lg:3,2 m
10800081	3 kW single phase immersion heater (1 x 230V)
10800082	3 kW three phase immersion heater (3 x 400V+N)
10800083	6 kW single phase immersion heater (1 x 230V)
10800084	6 kW Three phase immersion heater (3 x 400V+N)
55212000	Thermostatic Mixing Valve 3/4"

1. Auxiliary connection DHW  
 2. Domestic cold water inlet  
 3. Flow connection (Primary Circuit)  
 4. Auxiliary heating return  
 5. 50 mm insulation rigid polyurethane  
 6. Auxiliary heating return  
 7. Flow primary for heat pump connection  
 8. Return primary for heat pump connection  
 9. Immersion Heater  
 10. Manual air vent  
 11. Domestic Hot Water outlet  
 12. Rigid polypropylene cover  
 13. Stainless steel drywell  
 14. Stainless steel (DHW) inner tank  
 15. Heating circuit flow  
 16. Heating circuit return  
 17. Outer steel tank containing the primary fluid  
 18. Polypropylene shell  
 19. Polypropylene base cover

Floor standing only.

ACV advise the installation of a domestic hot water mixing valve on the hot flow immediately after the appliance.



## TECHNICAL CHARACTERISTICS AND DIMENSIONS

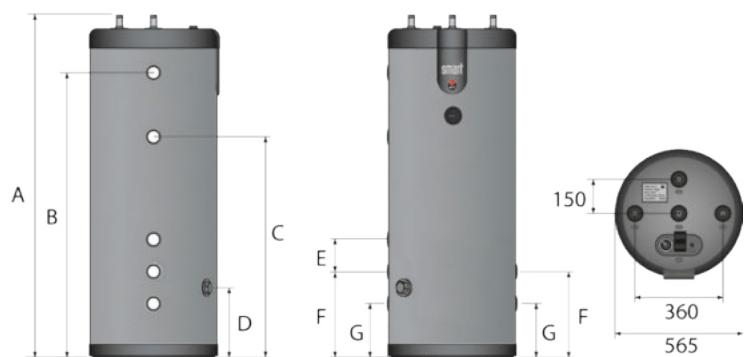
Type		Smart E Plus 210	Smart E Plus 240	Smart E Plus 300
Reference		06627301	06627401	06627501
Capacity (total)	L	203	242	293
Connection - primary	Ø"	1F	1F	1F
Connection - DHW	Ø"	3/4 M	3/4 M	3/4 M
Connection - re-circulation / safety valve	Ø"	3/4 M	3/4 M	3/4 M
Primary heater pressure drop (EN12897:2016)	mbar	41,6	47,3	52,4
Max operating temperature	°C	90	90	90
Max operating pressure (DHW)	bar	8,6	8,6	8,6
Max operating pressure heating (primary)	bar	3	3	3
Dimensions A	mm	1489	1738	2050
Dimensions B	mm	1225	1473	1783
Dimensions C	mm	933	1064	1278
Dimensions D	mm	288	264	329
Dimensions E	mm	130	135	145
Dimensions F	mm	338	314	375
Dimensions G	mm	228	229	233
Weight (empty)	kg	66	76	87
Energy efficiency storage class		B	B	B

## DOMESTIC HOT WATER PERFORMANCE

Type		Smart E Plus 210	Smart E Plus 240	Smart E Plus 300
Primary flow (EN 12897:2016)	L/s	1,25	1,25	1,25
Peak flow at 40°C	L/10'	406	547	800
Peak flow 1st hour at 40°C	L/60'	1349	1820	2360
Continuous flow at 40°C	L/h	1132	1527	2100
Peak flow at 45°C	L/10'	348	469	640
Peak flow 1st hour at 45°C	L/60'	1156	1560	1920
Continuous flow at 45°C	L/h	970	1309	1710
Peak flow at 60°C	L/10'	209	272	370
Peak flow 1st hour at 60°C	L/60'	689	913	1100
Continuous flow at 60°C	L/h	576	769	970
Reheat performance (EN 12897:2016)	kW	32,2	39,2	44,6
Reheat time (EN 12897)	min	9	9	9

## WORKING TEMPERATURE

Performance data assumes :  
 Primary flow temperature : 85 °C  
 Domestic cold water supply : 10 °C



## SMART EW 100 - 240

Bi-energy cylinder to install vertically on the wall, equipped with a resistance of 2,2 kW placed in the primary to avoid scalding.

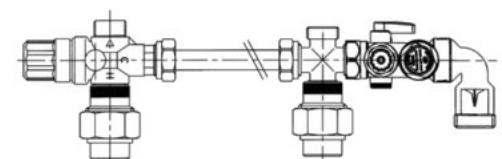
- Domestic stainless steel cylinder with Tank-in-Tank technology
- BI-ENERGY : fitted with a 2,2 kW electrical element in the primary circuit to avoid scalding
- 50 mm polyurethane foam insulation offers optimal energy performance
- Thick polypropylene jacket. Hard wearing and shock resistant
- 5 sizes: from 100 to 240 litres
- Wall mounting kit included
- Integral thermostat control included (replaceable by a probe for use with an electronically controlled boiler)
- Thermometer
- Anti-Legionella : Storage temperature > 60 °C

Reference	Name
06623501	Smart EW 100
06623601	Smart EW 130
06623701	Smart EW 160
06623801	Smart EW 210
06623901	Smart EW 240

## ACCESSORIES

Reference	Description
10800102	Domestic unvented kit for residential boilers including pressure reducing valve, thermostatic mixing valve and 3/4" connection for the Domestic Hot Water expansion vessel.
5476G003	NTC sensor 12 kΩ. Needed to control a DHW tank or a balanced header - lg : 3,2 m
55212000	Thermostatic Mixing Valve 3/4"

10800102



1. Auxiliary connection DHW
2. Cold water inlet connection
3. Control thermostat
4. Flow connection (primary circuit)
5. Polyurethane foam insulation
6. Return connection (primary circuit)
7. Outer steel tank (primary circuit)
8. Manual air bleed valve
9. Hot water outlet connection
10. Polypropylene top lid
11. Stainless steel tank (DHW)
12. Polypropylene shell
13. Polypropylene bottom lid
14. DHW thermometer
15. Drywell
16. Control panel
17. Electric heating element 2200 W

## TECHNICAL CHARACTERISTICS AND DIMENSIONS

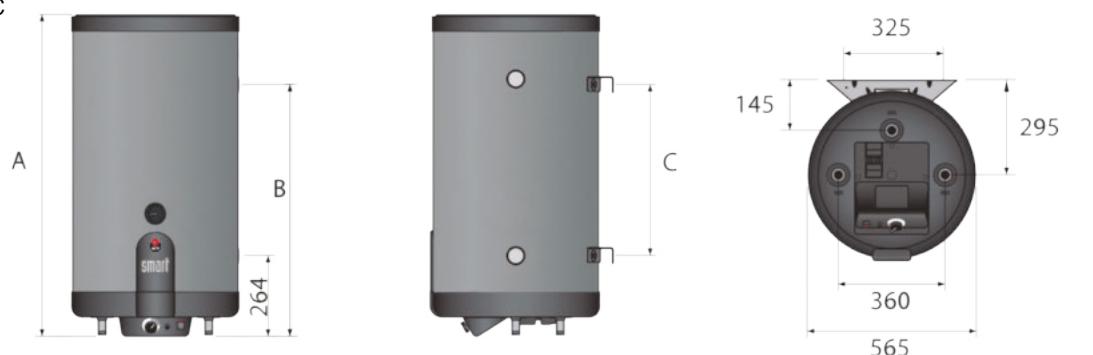
Type	Smart EW 100	Smart EW 130	Smart EW 160	Smart EW 210	Smart EW 240
Reference	06623501	06623601	06623701	06623801	06623901
Electrical resistance	W	2200	2200	2200	2200
Capacity (total)	L	105	130	161	203
Connection - primary	Ø"	1F	1F	1F	1F
Connection - DHW	Ø"	3/4 M	3/4 M	3/4 M	3/4 M
Connection - re-circulation / safety valve	Ø"	3/4 M	3/4 M	3/4 M	3/4 M
Primary heater pressure drop (EN12897:2016)	mbar	22,6	26,8	26,8	41,5
Max operating temperature	°C	90	90	90	90
Max operating pressure (DHW)	bar	8,6	8,6	8,6	8,6
Max operating pressure heating (primary)	bar	3	3	3	3
Dimensions A	mm	965	1025	1225	1467
Dimensions B	mm	629	789	989	1261
Dimensions C	mm	365	525	725	997
Weight (empty)	kg	49	55	65	75
Energy efficiency storage class		B	B	B	B

## DOMESTIC HOT WATER PERFORMANCE

Type	Smart EW 100	Smart EW 130	Smart EW 160	Smart EW 210	Smart EW 240
Primary flow (EN 12897:2016)	L/s	0,70	0,70	0,70	1,25
Peak flow at 40°C	L/10'	236	321	406	547
Peak flow 1st hour at 40°C	L/60'	784	1063	1349	1820
Continuous flow at 40°C	L/h	658	890	1132	1527
Peak flow at 45°C	L/10'	202	275	348	469
Peak flow 1st hour at 45°C	L/60'	672	911	1156	1560
Continuous flow at 45°C	L/h	564	763	970	1309
Peak flow at 60°C	L/10'	117	161	209	272
Peak flow 1st hour at 60°C	L/60'	384	549	689	913
Continuous flow at 60°C	L/h	320	465	576	769
Reheat performance (EN 12897:2016)	kW	18,4	24,7	32,2	39,2
Reheat time (EN 12897)	min	10	10	10	9

## WORKING TEMPERATURE

Performance data assumes :  
 Primary flow temperature : 85 °C  
 Domestic cold water supply : 10 °C



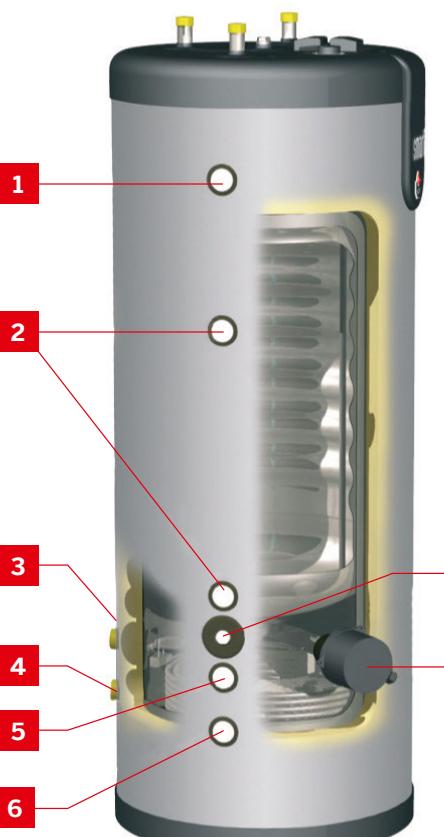
## SMART ME 200 - 800

Multi-Energy floor standing tank. Designed for a range of applications and a multiple choice of energy sources.

- Flexible design options for specifiers and installers.
- Increased heating surface for rapid domestic hot water recovery.
- Large primary volume allows for greater thermal storage.
- Can be used as a low loss header for heating circuit.
- Immersion heater in primary circuit (except Smart ME800).
- 3kW or 6kW immersion heater options (except Smart ME800).
- Stainless steel domestic hot water cylinder.
- Carbon steel coil.
- High quality insulation 50mm rigid polyurethane. (100mm Polyurethane insulation for models Smart ME600 and ME800).
- Additional primary connections available for an underfloor heating circuit.
- Anti-Legionella : Storage temperature > 60°C.

### TANK-IN-TANK TECHNOLOGY

The unique design of our Multi energy cylinder with it's large primary storage makes the Smart ME the perfect partner for solar, heat pumps, pellet burners, heat recovery systems, district heating applications and much more.



Reference	Name
06625101	Smart ME 200
06625201	Smart ME 300
06624601	Smart ME 400
06651301	Smart ME 600
06625301	Smart ME 800

## ACCESSORIES

Reference	Description
10800102	Domestic unvented kit for residential boilers including pressure reducing valve, thermostatic mixing valve and 3/4" connection for the Domestic Hot Water expansion vessel.
5476G003	NTC sensor 12 kΩ. Needed to control a DHW tank or a balanced header - lg : 3,2 m
10800081	3 kW single phase immersion heater (1 x 230V)
10800082	3 kW three phase immersion heater (3 x 400V+N)
10800083	6 kW single phase immersion heater (1 x 230V)
10800084	6 kW Three phase immersion heater (3 x 400V+N)
55212000	Thermostatic Mixing Valve 3/4"

1. Primary hot water flow
2. Primary return
3. Coil flow
4. Coil return
5. Heating circuit flow
6. Heating circuit return
7. Drywell pocket for sensors
8. Immersion heater connection (not available on SLME800)

Floor standing only.

ACV advise the installation of a domestic hot water mixing valve on the hot flow immediately after the appliance.



## TECHNICAL CHARACTERISTICS AND DIMENSIONS

Type	Smart ME 200	Smart ME 300	Smart ME 400	Smart ME 600	Smart ME 800
Reference	06625101	06625201	06624601	06651301	06625301
Capacity (total)	L	203	303	395	606
Capacity (domestic hot water)	L	99	126	164	225
Heating surface coil	m <sup>2</sup>	1,4	1,8	1,8	2,5
Coil capacity	L	8,3	12	12	16
Connection - primary	Ø"	1F	1F	1F	1F
Connection - DHW	Ø"	3/4 M	3/4 M	3/4 M	6/4 M
Connection - re-circulation / safety valve	Ø"	3/4 M	3/4 M	3/4 M	6/4 M
Connection - heating element	Ø"	6/4F	6/4F	6/4F	6/4F
Connection - coil	Ø"	1 M	1 M	1 M	1 M
Primary heater pressure drop (EN12897:2016)	mbar	41,6	51,2	53,5	55,6
Corresponding flow in coil	L/h	3000	3000	3000	3000
Pressure drop coil	mbar	460	533	533	186
Max absorbed heat (Heat source: coil)	kW	16,3	19	25	29
Max operating temperature	°C	90	90	90	90
Max operating pressure (DHW)	bar	8,6	8,6	8,6	8,6
Max operating pressure heating (primary)	bar	3	4	4	4
Max operating pressure (coil)	bar	10	10	10	10
Weight (empty)	kg	68	99	120	180
Dim. - Width or Ø (w/o insul. and w/o conn.)	mm	-	-	703	780
Energy efficiency storage class		B	C	C	-

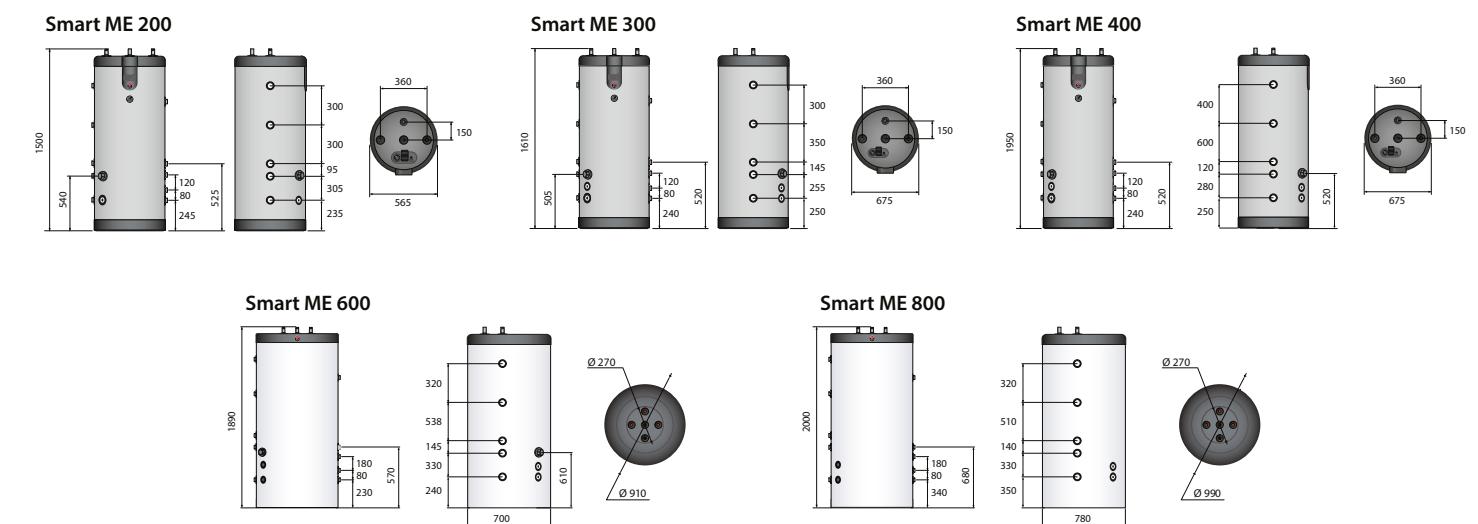
## DOMESTIC HOT WATER PERFORMANCE

Type	Smart ME 200	Smart ME 300	Smart ME 400	Smart ME 600	Smart ME 800
Primary flow (EN 12897:2016)	L/s	0,70	1,25	1,25	1,25
Peak flow at 40°C	L/10'	321	418	558	686
Peak flow 1st hour at 40°C	L/60'	1063	1225	1633	1872
Continuous flow at 40°C	L/h	890	967	1289	1423
Peak flow at 45°C	L/10'	275	348	464	582
Peak flow 1st hour at 45°C	L/60'	911	1003	1338	1559
Continuous flow at 45°C	L/h	763	786	1048	1172
Peak flow at 60°C	L/10'	161	206	274	358
Peak flow 1st hour at 60°C	L/60'	536	590	786	935
Continuous flow at 60°C	L/h	450	461	614	693
Reheat performance (EN 12897:2016)	kW	24,7	29,7	45,6	50,2
Reheat time (EN 12897)	min	10	10	10	10



## WORKING TEMPERATURE

Performance data assumes :  
Primary flow temperature : 85 °C  
Domestic cold water supply : 10 °C



## HR i 320 - 800

Tank in stainless steel with hand hole for installation on the floor.

- 100 mm high performance soft insulation PUR foam with vinyl finish and zipper
- Adjustable feet for fine level adjustment.
- Primary connections available in the back.
- 3 models: 318, 606 and 800 liters.
- Kit with thermostat and thermometer available as an option
- Anti-Legionella: storage temperature > 60°C
- Thermostatic mixing valve recommended.

### TANK-IN-TANK TECHNOLOGY

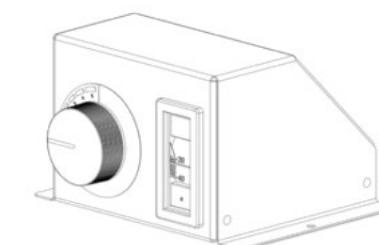
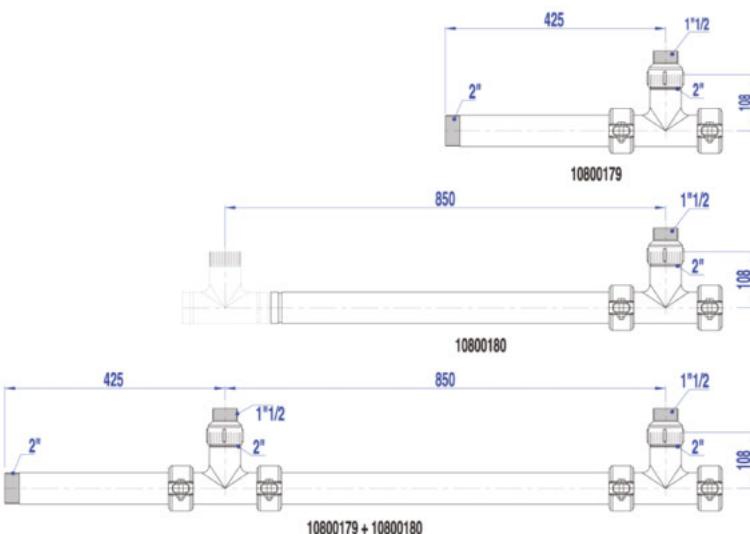


1. Manual air bleed valve
2. Primary circuit inlet
3. 100 mm soft insulation (not shown)
4. Inner stainless steel tank (not shown)
5. Outer steel tank (primary)
6. Primary circuit outlet
7. Cold drink water inlet
8. DHW outlet
9. T-connection with Drain valve and Auxiliary DHW loop
10. Stainless steel drywell (not shown)
11. Hand hole (not shown)
12. Foot (x3) for fine level adjustment

Reference	Name	C	E
A1004573	HR i320		
A1004574	HR i600		
A1004575	HR i800		

### ACCESSORIES

Reference	Description
10800179	Basic coupling kit for tanks < 800 L
10800180	Additional coupling kit for tanks < 800 L
10800178	Basic coupling kit for tanks ≥ 800 L
10800181	Additional coupling kit for tanks ≥ 800 L
A1004714	Kit Thermostat soft insulation consisting of a thermostat and a thermometer



### TECHNICAL CHARACTERISTICS AND DIMENSIONS

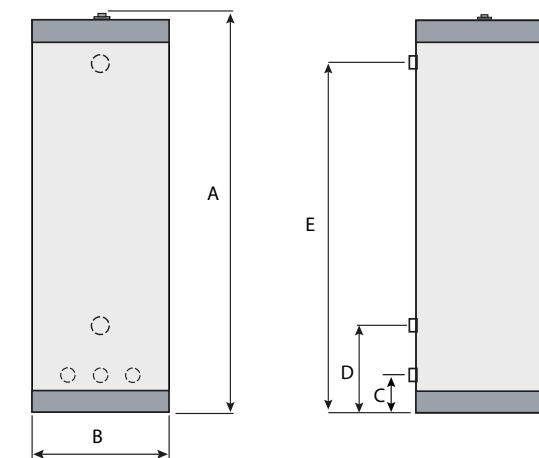
Type	HRi320	HRi600	HRi800	
Reference	A1004573	A1004574	A1004575	
Capacity (total)	L	318	606	800
Capacity (primary)	L	55	161	125
Connection - primary	Ø"	2 F	2 F	2 F
Connection - DHW	Ø"	6/4 M	6/4 M	6/4 M
Connection - re-circulation / safety valve	Ø"	3/4 M	3/4 M	3/4 M
Max operating temperature	°C	90	90	90
Max operating pressure (DHW)	bar	8,6	8,6	8,6
Max operating pressure heating (primary)	bar	4	4	4
Dimensions A	mm	1800	2095	2122
Dimensions B	mm	760	904	982
Dimensions C	mm	142	144	132
Dimensions D	mm	468	458	509
Dimensions E	mm	1498	1786	1759
Weight (empty)	kg	127	220	265
Energy efficiency storage class	C	-	-	-

### DOMESTIC HOT WATER PERFORMANCE

Type	HRi320	HRi600	HRi800	
Primary flow (EN 12897:2016)	L/s	1,81	2,08	2,08
Peak flow at 40°C	L/10'	922	1345	1881
Peak flow 1st hour at 40°C	L/60'	2732	3437	4270
Continuous flow at 40°C	L/h	2172	2511	2868
Peak flow at 45°C	L/10'	790	1153	1612
Peak flow 1st hour at 45°C	L/60'	2342	2946	3660
Continuous flow at 45°C	L/h	1862	2152	2458
Peak flow at 60°C	L/10'	504	706	691
Peak flow 1st hour at 60°C	L/60'	1402	1733	2124
Continuous flow at 60°C	L/h	1077	1232	1395
Reheat performance (EN 12897:2016)	kW	60	71	82

### WORKING TEMPERATURE

Performance data assumes :  
Primary flow temperature : 85 °C  
Domestic cold water supply : 10 °C

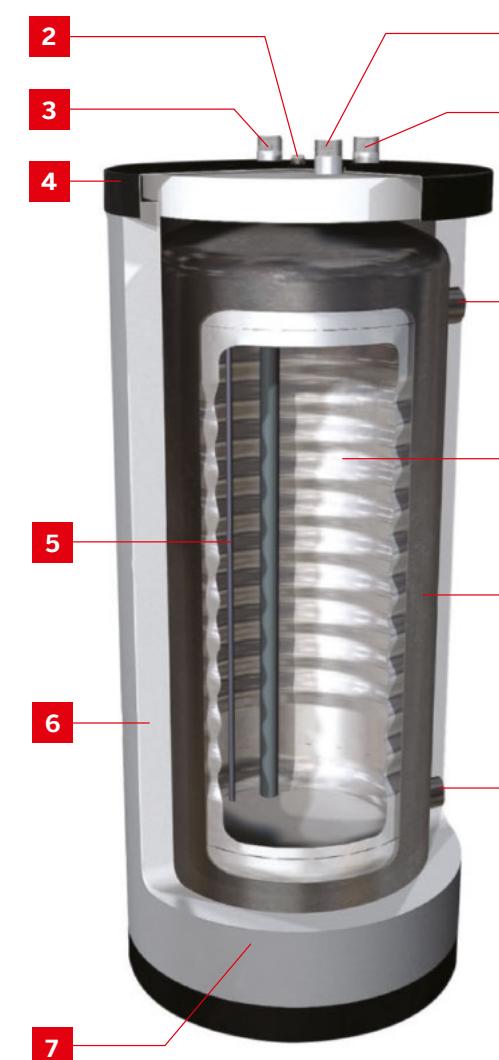


## HR S 320 - 1000 / HR S 320 - 600 DUPLEX

Fast recovery stainless steel tank-in-tank cylinder.

- Tank-in-Tank floor standing indirect hot water storage tank.
- Stainless steel construction - no need for sacrificial anodes.
- High performance - fast heat up and rapid recovery.
- Low heat loss - 100mm polyurethane insulation foam
- Can be used in battery formation for high output installations.
- Large heating surface area means reduced boiler cycling.
- Anti-Legionella : Storage temperature > 60 °C

### TANK-IN-TANK TECHNOLOGY

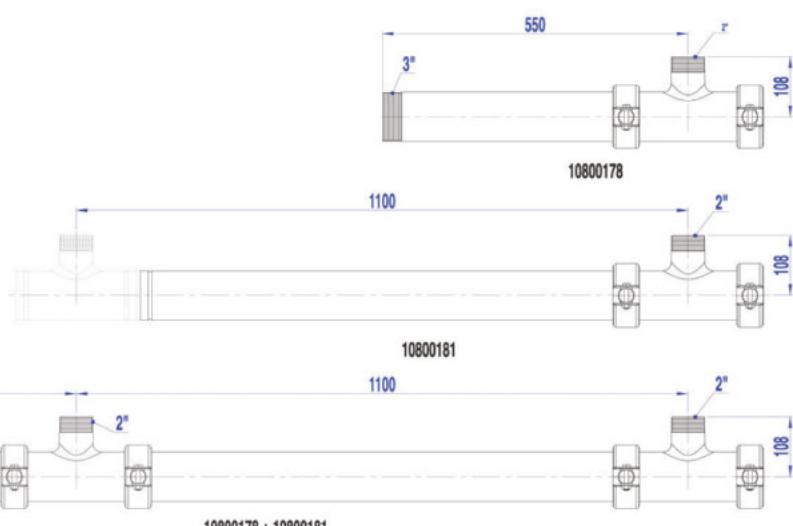


Reference	Name
06632801	HR s 320
06510701	HR s 320 Duplex
06632901	HR s 600
06510801	HR s 600 Duplex
06633001	HR s 800
06633101	HR s 1000

### ACCESSORIES

Reference	Description
10800179	Basic coupling kit for tanks < 800 L
10800180	Additional coupling kit for tanks < 800 L
10800178	Basic coupling kit for tanks ≥ 800 L
10800181	Additional coupling kit for tanks ≥ 800 L
A1004714	Kit Thermostat soft insulation consisting of a thermostat and a thermometer

1. DHW return or temp/pressure relief valve connection
2. Manual air vent
3. Cold water inlet connection
4. Rigid top case
5. Stainless steel thermostat pocket
6. 100mm flexible polyurethane foam insulation
7. Outer shell vinyl jacket
8. DHW return connection
9. Primary inlet connection
10. Internal stainless steel DHW tank
11. External Tank (primary) steel
12. Primary return connection



### TECHNICAL CHARACTERISTICS AND DIMENSIONS

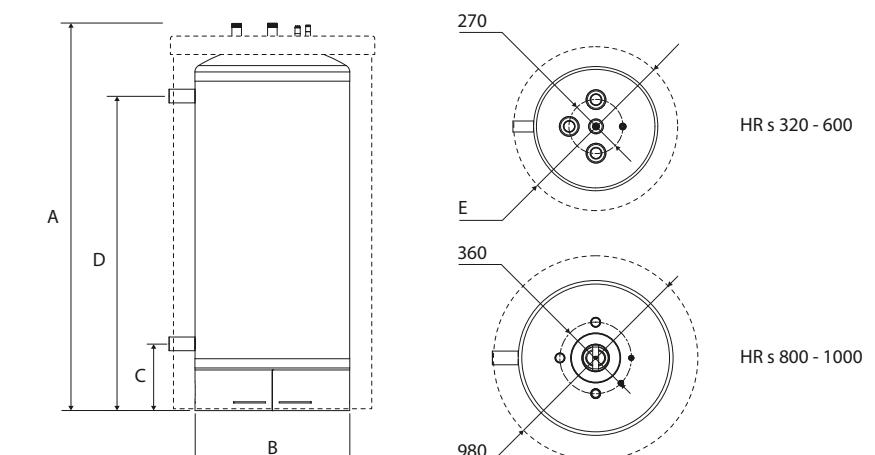
Type	HR s 320	HR s 320 Duplex	HR s 600	HR s 600 Duplex	HR s 800	HR s 1000
Reference	06632801	06510701	06632901	06510801	06633001	06633101
Capacity (total)	L	318	318	606	606	800
Capacity (primary)	L	55	55	161	161	125
Connection - primary	Ø"	2 F	2 F	2 F	2 F	2 F
Connection - DHW	Ø"	6/4 M	6/4 M	6/4 M	6/4 M	6/4 M
Connection - re-circulation / safety valve	Ø"	6/4 M	6/4 M	6/4 M	6/4 M	6/4 M
Max operating temperature	°C	85	85	85	85	85
Max operating pressure (DHW)	bar	8,6	8,6	8,6	8,6	8,6
Max operating pressure heating (primary)	bar	4	4	4	4	4
Dimensions A	mm	1600	1600	1895	1895	1955
Dimensions B	mm	559	559	703	703	780
Dimensions C	mm	255	255	255	255	335
Dimensions D	mm	1285	1285	1585	1585	1985
Dimensions E	mm	700	700	845	845	-
Weight (empty)	kg	106	106	201	201	261
Energy efficiency storage class	C	C	-	-	-	-

### DOMESTIC HOT WATER PERFORMANCE

Type	HR s 320	HR s 320 Duplex	HR s 600	HR s 600 Duplex	HR s 800	HR s 1000
Primary flow (EN 12897:2016)	L/s	1,81	1,81	2,08	2,08	2,08
Peak flow at 40°C	L/10'	922	922	1345	1345	1881
Peak flow 1st hour at 40°C	L/60'	2732	2732	3437	3437	4270
Continuous flow at 40°C	L/h	2172	2172	2511	2511	2868
Peak flow at 45°C	L/10'	790	790	1153	1153	1612
Peak flow 1st hour at 45°C	L/60'	2342	2342	2946	2946	3660
Continuous flow at 45°C	L/h	1862	1862	2152	2152	2458
Peak flow at 60°C	L/10'	504	504	706	706	961
Peak flow 1st hour at 60°C	L/60'	1402	1402	1733	1733	2124
Continuous flow at 60°C	L/h	1077	1077	1232	1232	1395
Reheat performance (EN 12897:2016)	kW	60	60	71	71	97

### WORKING TEMPERATURE

Performance data assumes :  
Primary flow temperature : 85 °C  
Domestic cold water supply : 10 °C

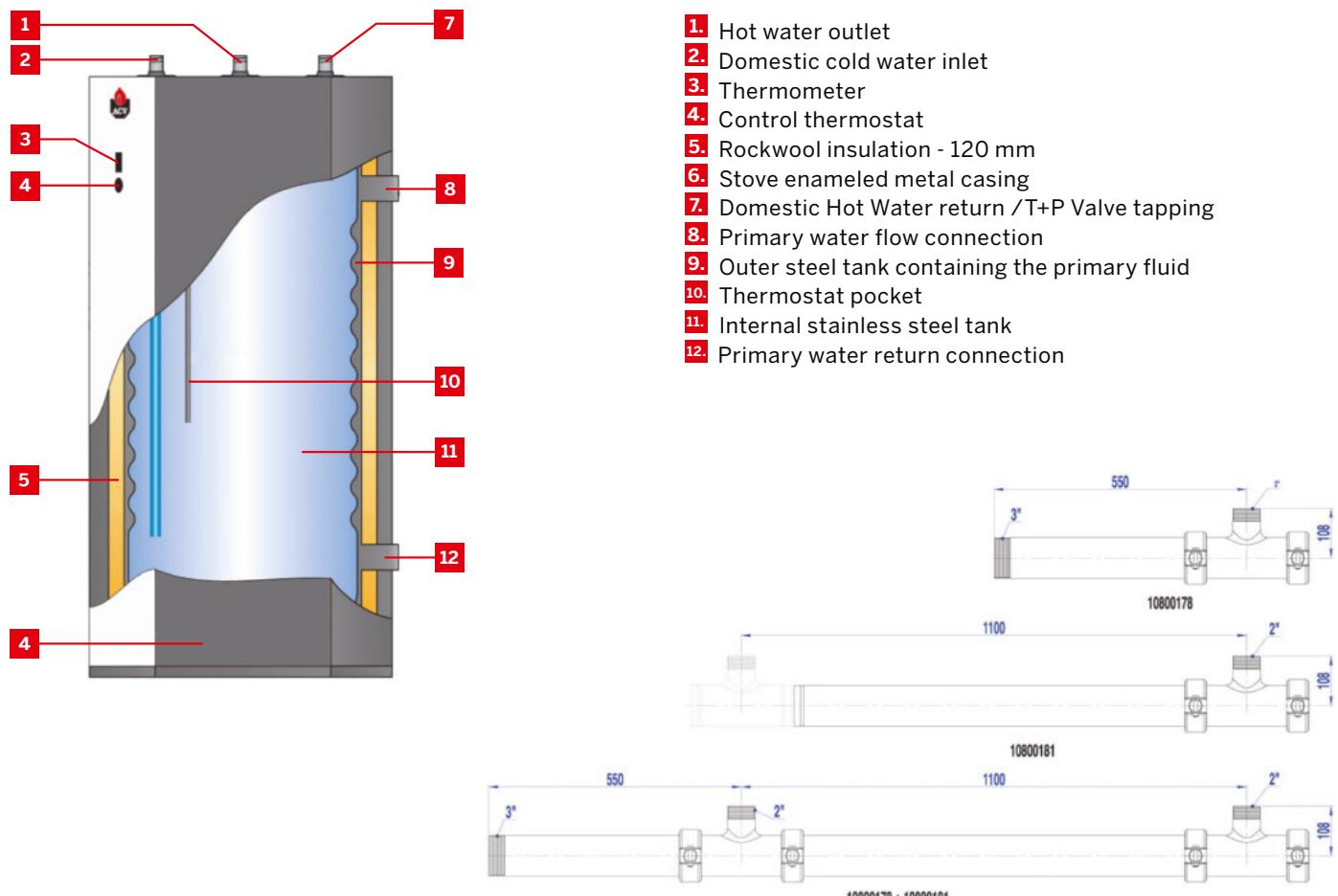


## JUMBO 800 - 1000

Fast recovery, high volume Tank-in-Tank hot water storage.

- Tank-in-Tank floor standing indirect hot water storage tank.
- Stainless steel construction - no need for sacrificial anodes.
- High performance - fast heat up and rapid recovery.
- Fully insulated - 120mm Rock wool insulation.
- Stove enameled steel casing, supplied separately to enable the tank to pass through standard 800mm doorways.
- Two sizes - 800 and 1000 litres.
- Can be used in battery formation for high output installations.
- Large heating surface area means reduced boiler cycling.
- Anti-Legionella : Storage temperature > 60 °C.

### TANK-IN-TANK TECHNOLOGY FOR INDUSTRIAL APPLICATIONS



Reference	Name
06648501	Jumbo 800
06648601	Jumbo 1000

### ACCESSORIES

Reference	Description
10800178	Basic coupling kit for tanks ≥ 800 L
10800181	Additional coupling kit for tanks ≥ 800 L

ACV advise the installation of a domestic hot water mixing valve on the hot flow immediately after the appliance.

### TECHNICAL CHARACTERISTICS AND DIMENSIONS

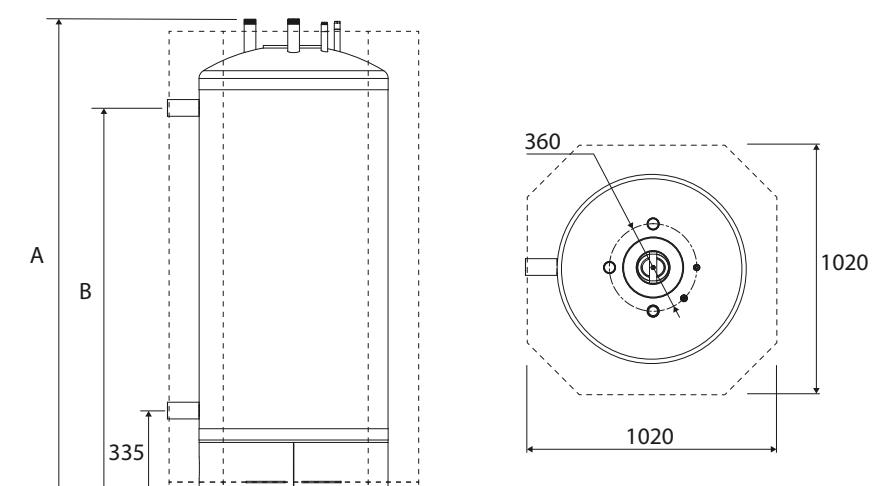
Type	JB 800	JB 1000
Reference	06648501	06648601
Capacity (total)	L	800
Capacity (primary)	L	125
Connection - primary	Ø"	2 F
Connection - DHW	Ø"	6/4 M
Connection - re-circulation / safety valve	Ø"	6/4 M
Max operating temperature	°C	85
Max operating pressure (DHW)	bar	8,6
Max operating pressure heating (primary)	bar	4
Dimensions A	mm	1955
Dimensions B	mm	1585
Weight (empty)	kg	360
		380

### DOMESTIC HOT WATER PERFORMANCE

Type	JB 800	JB 1000
Primary flow (EN 12897:2016)	L/s	2,08
Peak flow at 40°C	L/10'	1881
Peak flow 1st hour at 40°C	L/60'	4270
Continuous flow at 40°C	L/h	2868
Peak flow at 45°C	L/10'	1612
Peak flow 1st hour at 45°C	L/60'	3660
Continuous flow at 45°C	L/h	2458
Peak flow at 60°C	L/10'	961
Peak flow 1st hour at 60°C	L/60'	2124
Continuous flow at 60°C	L/h	1395
Reheat performance (EN 12897:2016)	kW	82
		97

### WORKING TEMPERATURE

Performance data assumes :  
Primary flow temperature : 85 °C  
Domestic cold water supply : 10 °C



## LCA 500 - 3000

Glass lined carbon steel tank for domestic hot water storage.

- Enamelled tank with high quality resistance to thermal shock and high temperatures.
- Two 1/2" pockets provided for the installation of temperature sensors.
- Five 2" side tappings
- Anode protection is required
- Access hole Ø 110 or Ø 400 (from 750 L) for internal inspection or the installation of electrical elements (optional)
- Drain centered at the lowest possible discharge point.
- Glass wool insulation 100mm classified M1 (non-flammable) with gray flame retardant flexible PVC jacket.
- Removable legs for transportation purposes.
- Transportation lugs.

Reference	Name	Diameter access hatch
06634401	LCA 500 hh	110 C 
06634501	LCA 750 hh	110
06637901	LCA 750 mh	400
06638001	LCA 1000 mh	400
06638101	LCA 1500 mh	400
06638201	LCA 2000 mh	400
06638301	LCA 2500 mh	400
06638401	LCA 3000 mh	400

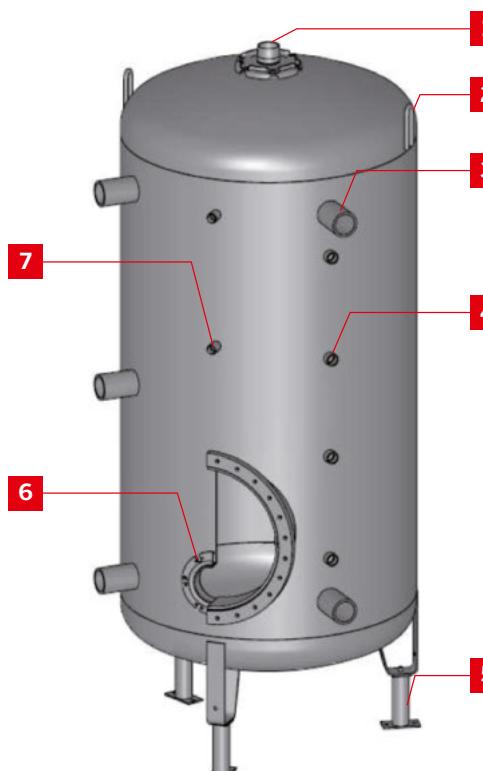


## TECHNICAL CHARACTERISTICS AND DIMENSIONS

Type	LCA 500 hh	LCA 750 hh	LCA 750 mh	LCA 1000 mh	LCA 1500 mh	LCA 2000 mh	LCA 2500 mh	LCA 3000 mh
Reference	06634401	06634501	06637901	06638001	06638101	06638201	06638301	06638401
Capacity (total)	L	500	750	750	1000	1500	2000	2500
Diameter access hatch	Ømm	110	110	400	400	400	400	400
Connection - DHW	Ø"	2 F	2 F	2 F	2 F	2 F	2 F	2 F
Max operating temperature	°C	95	95	95	95	95	95	95
Max operating pressure (DHW)	bar	8	8	8	8	7	7	7
Dim. - Height (with conn.)	mm	2019	1925	1925	2278	2105	2293	2167
Dim. - Width or Diameter (w/o conn.)	mm	630	790	790	790	1100	1100	1400
Dimensions A	mm	330	425	465	465	620	620	730
Dimensions B	mm	1983	1891	1891	2244	2073	2261	2136
Dimensions C	mm	1752	1601	1601	1956	1700	1888	1680
Dimensions D	mm	1108	1051	1051	1246	1140	1244	1180
Dimensions E	mm	150	150	150	150	200	200	200
Dimensions F	mm	525	551	704	704	803	803	883
Height when tilted	mm	2084	2059	2059	2388	2350	2518	2559
Weight (empty)	kg	124	195	231	283	406	430	559
Energy efficiency storage class	C	-	-	-	-	-	-	-

## ACCESSORIES

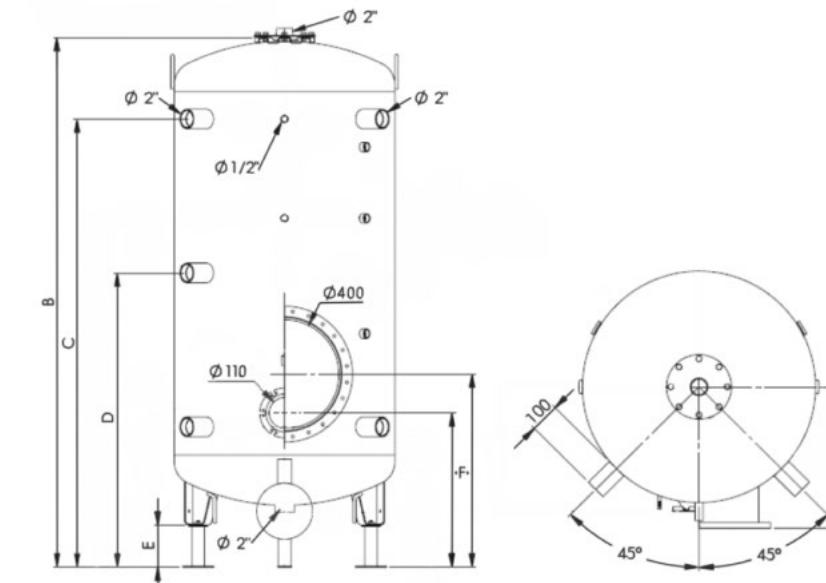
Reference	Description
10800273	9 kW electrical immersion heater kit for TP110
10800274	15 kW electrical immersion heater kit for TP110 (LCA ≥ 750)
10800275	30 kW electrical immersion heater kit for TP110 (LCA ≥ 750)



1. DHW connection
2. Transportation lug
3. Primary connections
4. Anode
5. Removable legs for transport
6. Ø110/Ø400 side flange
7. Thermostat pocket for sensor installation

## OPTIONS

Rock wool insulation 100 mm classified M0. Hydraulic kit including 7 bar sanitary valve, drain valve and connection elbows.



## LCA 1CO 500 - 3000

Glass lined carbon steel tank with single coil for DHW.

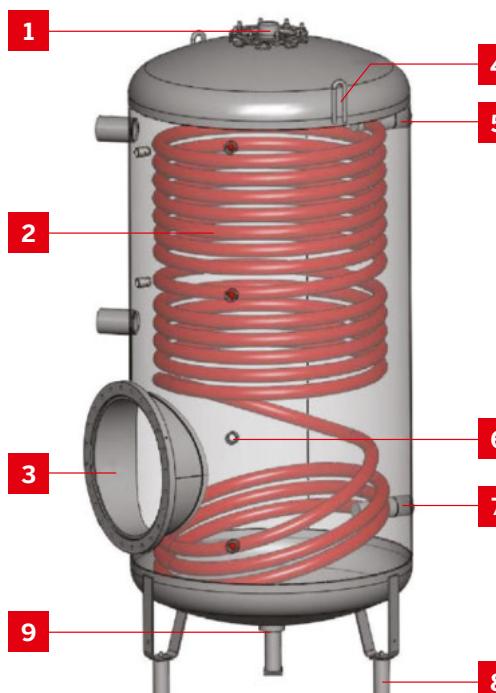
- 1 coil with inclined towards the bottom of the tank.
- Enamelled tank high quality resistant to thermal shock and high temperature.
- Exterior paint corrosion resistant.
- DHW output at the highest point of the tank.
- Two 1/2" connections provided for the installation of temperature sensors.
- Three side 2" connections for magnesium anodes.
- Lateral flange Ø 110 or Ø 400 (from 750 L) for the inspection of the interior of the tank and the installation of Immersion heater (optional).
- Drain centered at the lowest possible discharge point.
- Glass wool insulation 100mm classified M1 (non-flammable) with gray envelope flame retardant flexible PVC.
- Handling lugs.

Reference	Name	Diameter access hatch	
06633701	LCA 1CO 500 hh	110	C
06633801	LCA 1CO 750 hh	110	
06637101	LCA 1CO 750 mh	400	
06637201	LCA 1CO 1000 mh	400	
06637301	LCA 1CO 1500 mh	400	
06637401	LCA 1CO 2000 mh	400	
06637501	LCA 1CO 2500 mh	400	
06637601	LCA 1CO 3000 mh	400	



### ACCESSORIES

Reference	Description
10800273	9 kW electrical immersion heater kit for TP110
10800274	15 kW electrical immersion heater kit for TP110 (LCA ≥ 750)
10800275	30 kW electrical immersion heater kit for TP110 (LCA ≥ 750)



1. Hot water return
2. Coil
3. Manhole Ø400
4. Handling lug
5. Coil connection
6. Connection for magnesium anode protection
7. Coil connection
8. Removable legs for transport
9. Cold water inlet

### OPTIONS

Rock wool insulation 100 mm classified M0. Hydraulic kit including 7 bar sanitary valve, drain valve and connection elbows.

### TECHNICAL CHARACTERISTICS AND DIMENSIONS

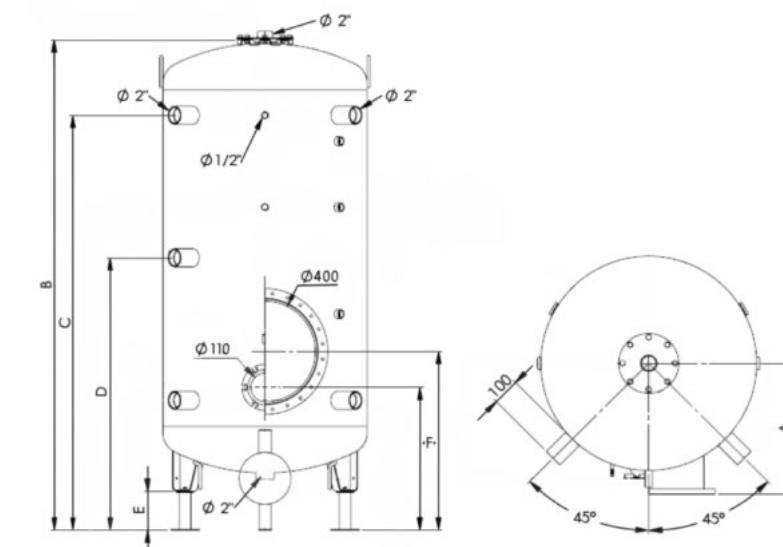
Type	LCA 1CO 500 hh	LCA 1CO 750 hh	LCA 1CO 750 mh	LCA 1CO 1000 mh	LCA 1CO 1500 mh	LCA 1CO 2000 mh	LCA 1CO 2500 mh	LCA 1CO 3000 mh
Reference	06633701	06633801	06637101	06637201	06637301	06637401	06637501	06637601
Capacity (total)	L	500	750	750	1000	1500	2000	2500
Diameter access hatch	Ømm	110	110	400	400	400	400	400
Coil capacity	L	23,0	30,0	30,0	39,5	42,5	42,5	53,0
Heating surface coil	m <sup>2</sup>	3,0	4,0	4,0	5,2	5,6	5,6	7,0
Pressure drop coil	mbar	234	310	310	405	445	445	565
Connection - coil	Ø"	6/4 F	6/4 F	6/4 F	6/4 F	6/4 F	6/4 F	6/4 F
Connection - DHW	Ø"	2 F	2 F	2 F	2 F	2 F	2 F	2 F
Max operating temperature	°C	95	95	95	95	95	95	95
Max operating pressure (DHW)	bar	8	8	8	8	7	7	7
Dim. - Height (with conn.)	mm	2019	1925	1925	2278	2105	2293	2167
Dim. - Width or Diameter (w/o conn.)	mm	630	790	790	790	1100	1100	1400
Dimensions A	mm	330	425	465	465	620	620	730
Dimensions B	mm	1983	1891	1891	2244	2073	2261	2136
Dimensions C	mm	1752	1601	1601	1956	1700	1885	1680
Dimensions D	mm	1108	1051	1051	1246	1150	1244	1180
Dimensions E	mm	463	501	501	501	600	600	680
Dimensions F	mm	150	150	150	150	200	200	200
Dimensions G	mm	525	551	704	704	803	803	883
Dimensions H	mm	1615	1623	1623	1929	1722	1722	1587
Dimensions J	mm	495	501	501	501	600	600	650
Height when tilted	mm	2084	2059	2059	2388	2350	2518	2559
Weight (empty)	kg	177	256	295	362	494	531	678
Energy efficiency storage class	C	-	-	-	-	-	-	-

### DOMESTIC HOT WATER PERFORMANCE

Type	LCA 1CO 500 hh	LCA 1CO 750 hh	LCA 1CO 750 mh	LCA 1CO 1000 mh	LCA 1CO 1500 mh	LCA 1CO 2000 mh	LCA 1CO 2500 mh	LCA 1CO 3000 mh
Continuous flow at 60°C	L/h	597	773	773	1004	1082	1082	1352

### WORKING TEMPERATURE

Performance data assumes :  
Primary flow temperature : 80 °C  
Drawing water : 60 °C  
Domestic cold water supply : 10 °C



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