



**ACV**

**SMART / JUMBO**  
**TANK IN TANK STORAGE CYLINDERS**

**SMART ME**  
**MULTI ENERGY CYLINDERS**

- **TANK IN TANK HIGH OUTPUT RAPID RECOVERY CYLINDERS**
- **SMART ME MULTI ENERGY HIGH OUTPUT WATER HEATERS**  
**Suitable for Multi heat Sources**

Capacity from 130-1000 Litres

Capacity from 400-800 Litres

**Why ACV?**

- **High Performance, Quick Recovery**  
Due to the Large heat exchanger surface.  
The hot water tank is made of stainless steel. It constitutes the inner tank of the Tank in Tank water heater, completely immersed in the primary water of the heating circuit.  
The large heat exchange surface (1.5 to 2.5 times more than that of a traditional coil) enables the tank to heat a large quantity of domestic hot water in a very short time, which reduces the volume of water stored and limits energy losses
- **Stainless steel**  
Stainless steel construction, an area in which ACV specialises, renders the hot water tank exceptionally resistant to corrosion.  
The Smartline & Jumbo Cylinders are also available in stainless steel Duplex resistant to corrosive water containing up to 2,000 mg of chlorides per litre.
- **Self-descaling**  
The corrugated walls vibrate in response to pressure variations and prevent lime scale deposits from sticking which ensures consistent efficiency over time.
- **Optimal insulation**  
The Smart is thermally insulated along its entire surface by 50 mm of injected polyurethane Insulation.  
Static heat losses are limited to less than 0.35°C per hour (at a storage temperature of 85°C).
- **Anti-legionella**  
The large heat exchange surface of the tank, which is completely immersed in the primary water, makes it possible to maintain the hot water at a uniform temperature of at least 60°C, thereby preventing the formation of legionellae.



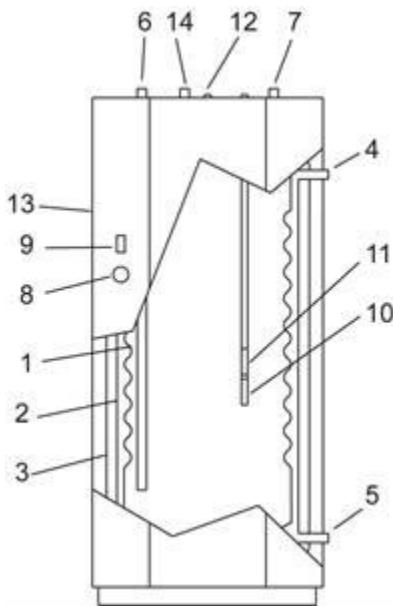
## ACV JUMBO 800 / 1000 Calorifiers



- High performance, Due to the large heat surface transfer area; Large Output, Rapid Recovery Tank-In-Tank indirect water heater for floor installation, a guarantee of high hot water comfort
- Stainless Steel DHW Tank
- Mineral wool insulation
- Control panel with thermometer and thermostat
- Elegant oven lacquered steel covering
- Casing delivered separately to allow the unit to pass through standard doorways (800 mm)

### Main characteristics

	<b>Jumbo 800</b>	<b>1000</b>
» Capacity (total) (L) :	<b>800</b>	<b>1000</b>
» Peak flow at 40 °C (L/10') :	<b>1881</b>	<b>2265</b>
» Max. absorbed heat (Heat source: boiler 85°C) (kW) :	<b>100</b>	<b>112</b>
» Dim. - Width or Diameter (w/o conn.) (mm) :	<b>1020</b>	<b>1020</b>
» Dim. - Depth (w/o conn.) (mm) :	<b>1020</b>	<b>1020</b>
» Dim. - Height (w/o conn.) (mm) :	<b>1915</b>	<b>2315</b>



1. Stainless steel inner tank
2. Steel outer tank
3. 120 mm thick mineral wool insulation
4. Heating fluid inlet (primary)
5. Heating fluid outlet (primary)
6. Domestic cold water inlet (secondary)
7. Domestic hot water outlet (secondary)
8. Control thermostat
9. Control thermometer
10. Control thermostat bulb
11. Bulb for control thermometer
12. Air vent
13. Metal casing
14. DHW recirculation loop

### PERFORMANCE

#### Output data (\*) – Jumbo 800 / 1000

Characteristics	<b>Jumbo 800</b>	<b>Jumbo 1000</b>
<b>Peak flow at 40 °C</b>	1881 L/10'	2265 L/10'
<b>Peak flow 1st hour at 40 °C</b>	4270 L/60'	4940 L/60'
<b>Continuous flow at 40°C</b>	2868 L/h	3210 L/h
<b>Peak flow at 45 °C</b>	1612 L/10'	1941 L/10'
<b>Peak flow 1st hour at 45 °C</b>	3660 L/60'	4234 L/60'
<b>Continuous flow at 45 °C</b>	2458 L/h	2751 L/h
<b>Peak flow at 60 °C</b>	961 L/10'	1145 L/10'
<b>Peak flow 1st hour at 60 °C</b>	2124 L/60'	2438 L/60'
<b>Continuous flow at 60 °C</b>	1395 L/h	1562 L/h
<b>Coefficient (NL)</b>	67	87
<b>Max. absorbed heat (Heat source: boiler 85°C)</b>	100 kW	112 kW

## ACV Smart E Plus

Stainless steel indirect water heater with ACV's tank-in-tank design, can accommodate the connection of a heat pump in addition to as gas boiler.

The Smart Line E Plus cylinders incorporate all of the elements of ACV's other hot water tanks:

- Large heat exchanger surface
- Stainless steel construction
- Self-descaling
- Optimal insulation
- Anti-legionellae
- Low maintenance



- Indirect stainless steel tank-in-tank cylinder
- With additional primary connections for heat pump and heating circuit, 7 primary connections total
- Connection for a 3 or 6 kW (optional) electric heating element in the primary circuit
- Independent control and safety thermostat, incorporated in the heating element
- High quality insulation: 50 mm polyurethane. Static loss less than 3°C in 8 hours!
- Deluxe finish: Elegant casing made of shock-proof, thick polypropylene.
- Control thermostat (replaceable by a NTC probe for use with an electronically controlled boiler)
- Safety thermostat
- SMART for LIFE - Life long guarantee on all the hot water cylinder in the Smart range from 100 to 400 litres



### Domestic Hot Water Performances

		SLE 130	SLE 160	SLE 210	SLE 240	SL 320	SL 420
Peak flow 40°C	L/10'	236	321	406	547	922	1195
Peak flow 45°C	L/10'	202	275	348	469	790	1012
Peak flow 60°C	L/10'	117	161	209	272	504	620
Peak flow 1st hour 40°C	L/60'	784	1063	1349	1820	2666	3151
Peak flow 1st hour 45°C	L/60'	672	911	1156	1560	2285	2608
Peak flow 1st hour 60°C	L/60'	384	549	689	913	1368	1513
Continuous flow 40°C	L/h	658	890	1132	1527	2093	2536
Continuous flow 45°C	L/h	564	763	970	1309	1794	2058
Continuous flow 60°C	L/h	320	465	576	769	1037	1153
Initial heat up time from 10 to 85°C	min	22	22	20	20	23	24

Note: The above performances are based on a primary flow temperature of 85°C and a domestic cold water inlet of 10°C, without the use of a thermostatic mixing valve on the domestic hot water outlet.

# ACV Smart ME

## The SmartLine Multi Energy tanks are your best investment for a future of sustainable energy sources.

Multiple connections and ACV's engineering of the tank to take advantage of heat stratification at different levels ensure that the Multi-Energy tanks has unparalleled flexibility.

Due to the unique design of the Multi-Energy tank and the large primary thermal store, it is the perfect partner for Solar, Heat Pumps, Pellet Burners, Heat Recovery Systems, District Heating applications and more.

The Multi-Energy cylinders incorporate all of the elements of ACV's other hot water tanks:

- Large heat exchanger surface.
- Stainless steel construction
- Self-descaling
- Optimal insulation
- Anti-legionellae
- Low maintenance



### When to install a Smart Line Multi Energy

#### Solar applications



#### Wood/pellet boiler applications



#### Heat pump applications



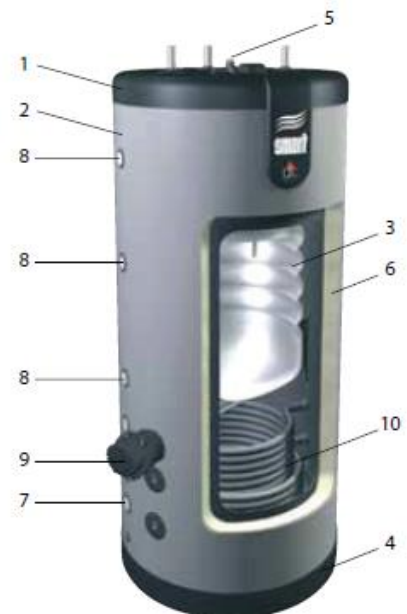
#### District/centralised heating applications



### Advantages Over Twin Coil Tank

- Increased heating surface for rapid domestic hot water recovery
- Large primary volume allows for greater thermal store
- Can be used as a low loss header for heating circuit
- Smaller compact tank with increased performance
- Immersion heater in primary circuit
- More heat sources absorbed into the tank
- Flexible design options for specifiers and installer
- Extra primary connections for connecting to heating circuit

1. Polypropylene top lid
2. Polypropylene shell
3. Stainless steel tank (DHW)
4. Polypropylene bottom lid
5. Manual air purge
6. Polyurethane foam insulation
7. Dry well for sensors
8. Outer steel tank (primary circuits) see diagrams page 9
9. Electric heating element (not on SLME 800 model)
10. Carbon steel coil



### Performance Data

		Heating Source - external boiler connected to tank					
		SLME120	SLME200	SLME300	SLME400	SLME600	SLME800
Litres in first 10 minutes	40°C	300	321	418	558	686	922
Litres in first 10 minutes	45°C	242	275	348	464	582	790
Litres in first 10 minutes	60°C	146	161	206	274	358	504
Litres in first hour	40°C	938	1063	1225	1633	1872	2666
Litres in first hour	45°C	751	911	1003	1338	1559	2285
Litres in first hour	60°C	426	536	590	786	935	1368
Continuous flow at 40°C	L/h	827	890	967	1289	1423	2093
Continuous flow at 45°C	L/h	673	763	786	1048	1172	1794
Continuous flow at 60°C	L/h	378	450	461	614	693	1037
Initial heat up time 10°C to 85°C	Min	27	29	45	45	60	53

**Please Note:** Performance data assumes a primary flow temperature of 85°C and a domestic cold water supply of 10°C