

# smartline

SLE *Plus* 210 / 240 / 300

## Installation, Operating and Servicing Instructions

**ADDENDUM**



# INTRODUCTION

## DESCRIPTION OF FUNCTION

### "Tank-in-Tank" system

"Tank-in-Tank" is a heat exchanger with a built-in accumulator, made up of two concentric tanks: the inner tank contains domestic water to be reheated (secondary) and the outer tank contains the heating fluid (primary) which circulates between the two tanks and transfers its heat to the domestic water.

### Domestic Hot Water cylinder

The inner tank is the heart of the tank: it is subject to the aggressiveness of the supply water, to high pressures and to variations in temperature. This tank is made of solid chrome-nickel stainless steel (*stainless steel 304*), fully welded under argon protection using the Tungsten Inert Gas (T.I.G.) technique.

Before assembly, the convex bottoms are pickled and passivated in order to improve the tank's lifespan and in particular its resistance to corrosion. The shell is corrugated all the way up using an exclusive manufacturing process. This design gives considerable resistance to pressure and limits the adherence of lime scale by allowing the tank to expand and contract.

### Outer tank

The outer tank containing water from the primary circuit arriving from the boiler, is made of carbon steel STW 22.

### Thermal Insulation

This is carried out using high density injected polyurethane foam, 50 mm containing no CFCs.

### Lining

The tank is covered using polypropylene, a plastic material which offers a high resistance to shocks and which is also very pleasing to the eye.

### Optional heating element for SLE Plus

The **SLE** tanks can be installed with a self-controlled heating element with built-in control and safety thermostats.

The control thermostat of the tank can not control the heating element.

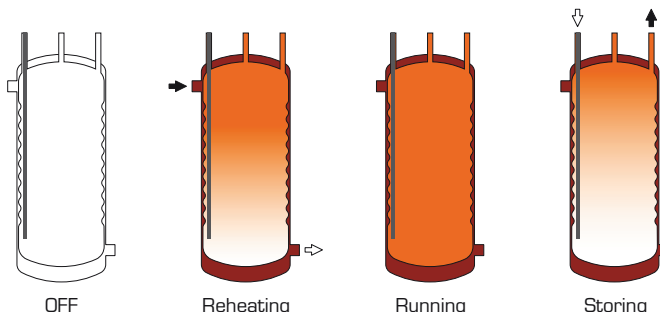
Volt	Amp	Power	Code
1 x 230 V	13	3 kW	10800081
3 x 400 V + N	4.4	3 kW	10800082
1 x 230 V	26	6 kW	10800083
3 x 400 V + N	8.8	6 kW	10800084

1. Auxiliary connection DHW
2. Cold water inlet connection + PVCC plunger
3. Flow primary circuit (tank loading)
4. Auxiliary heating return
5. Polyurethane foam insulation
6. Auxiliary heating return
7. Flow primary of heat pump
8. Return primary of heat pump
9. Electric heating element (in option)
10. Manual air purge
11. Hot water connection
12. Polypropylene top lid
13. Stainless steel dry well
14. Stainless steel tank (DHW)
15. Flow heating circuit
16. Return heating circuit
17. Outer steel tank (primary circuit)
18. Polypropylene shell
19. Polypropylene bottom lid

## DESCRIPTION OF OPERATION

### Operating cycle

The thermostat is triggered and starts up the pump which circulates the heating water. This water circulates around the inside tank and heats up the domestic water. When the required temperature is reached, the thermostat stops the primary circulating pump.

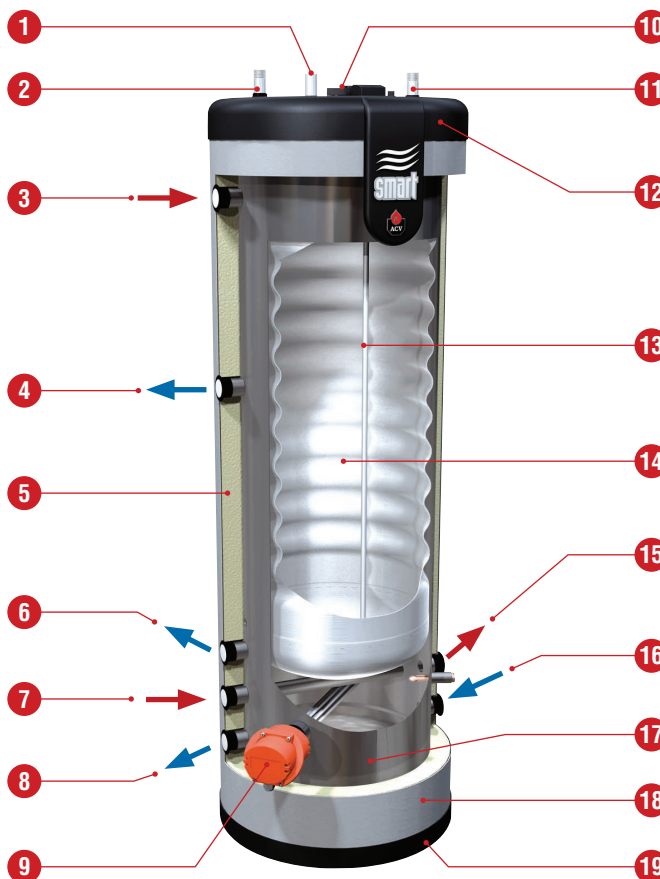


- Cold Water
- Domestic hot water
- Heating fluid

### Losses when shut down in Watt

Models		Losses when shut down [Watt]
SLE Plus 210	$\Delta T = 50^{\circ}\text{C}$	85,6
SLE Plus 240	$\Delta T = 50^{\circ}\text{C}$	88,8
SLE Plus 300	$\Delta T = 50^{\circ}\text{C}$	93,2

*Temperature losses with ambient T° of 20°C*



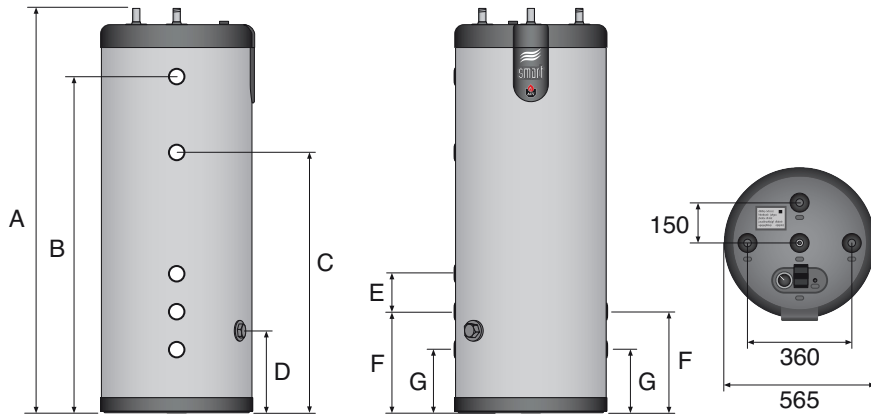
# INSTALLATION

DIMENSIONS	SLE Plus 210	SLE Plus 240	SLE Plus 300
A mm	1493	1741	2046
B mm	1230	1477	1783
C mm	937	1068	1278
D mm	312	303	338
E mm	120	110	145
F mm	352	343	378
G mm	233	233	233
Weight empty [kg]	66	76	87

## INSTALLATION

This hot water tank should not be installed where it will be exposed to outside weather conditions. Choose the most appropriate location according to the position of the boiler and the proximity of the domestic hot water distribution system, in order to reduce heat losses and minimise the pressure drops.

 Floor standing installation only.

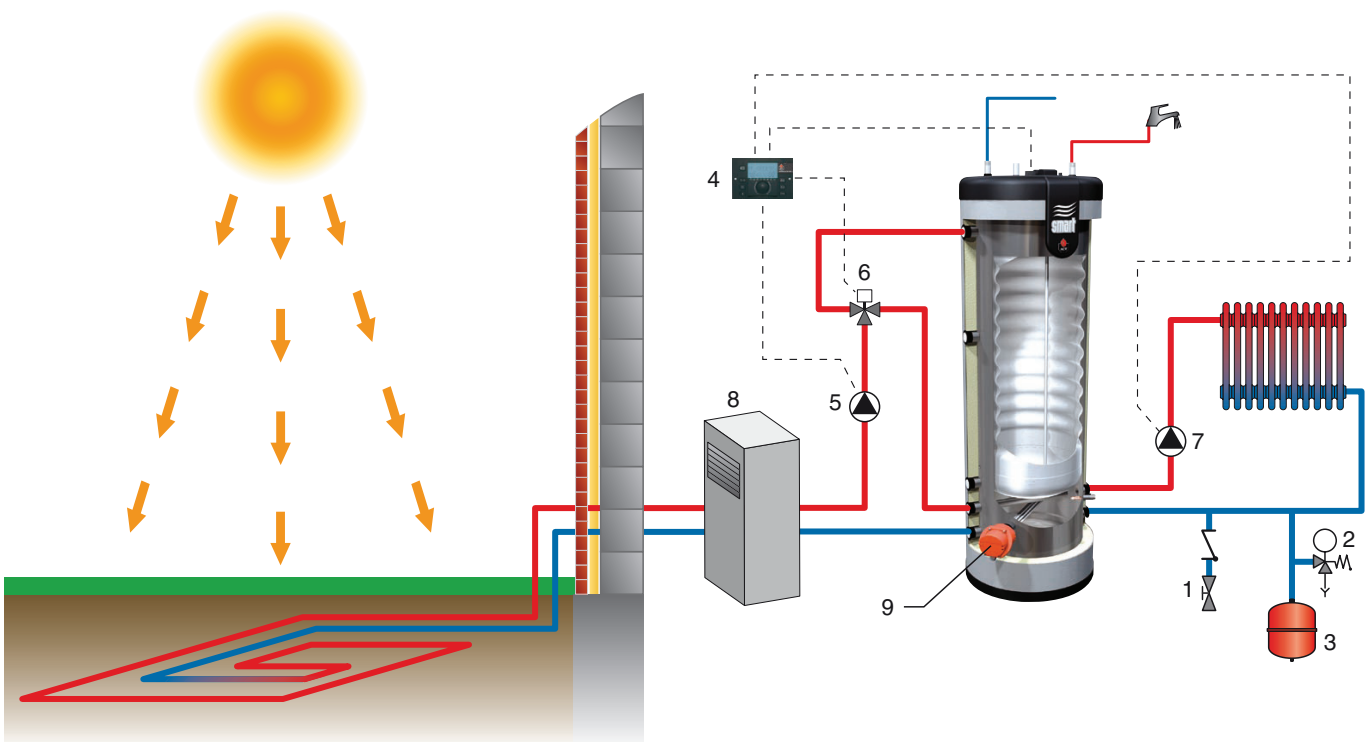


## CENTRAL HEATING CONNECTIONS

### PIPE DIMENSIONS

Models	Heating connection	Optional electrical heating element connection
SLE Plus 210	Ø 1" [F]	Ø 1" 1/2 [F]
SLE Plus 240	Ø 1" [F]	Ø 1" 1/2 [F]
SLE Plus 300	Ø 1" [F]	Ø 1" 1/2 [F]






1. System filling valve
2. Safety unit calibrated to 3 bar
3. Expansion vessel
4. Optional Control Unit
5. Boiler pump
6. 3-ways motorized mixing valve
7. Heating pump
8. Heat Pump
9. Electric heating element (in option)





# SLE Plus



	55445006
	24614152
	54442045
	54764021
	54764020

N°	SLE Plus 210	SLE Plus 240	SLE Plus 300
A01	497B5010	497B5010	497B5010
A02	39438046	39438047	39438047
A03	497B5002	497B5002	497B5002