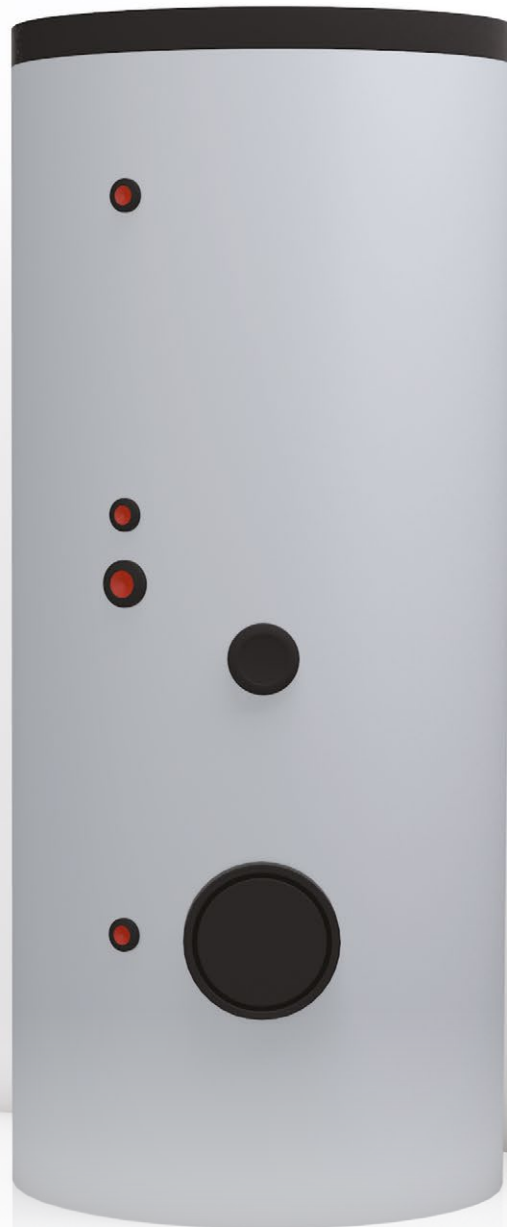


Inox-Maxi SSC2 Calorifiers



- Stainless steel calorifiers
- Extremely low standby heat losses
- 2 large coil surface areas

- Large connections
- Large inspection hatch
- Up to 2000 litres storage capacity

- Continuous delivery at 50°C rise from both coils up to 2398 l/h

Inox-Maxi SSC2 Calorifiers – Stainless steel, twin coil

Durable construction providing peace of mind

Constructed from 316L grade stainless steel providing excellent resistance to attack from corrosion.

Specially designed coil

Unique coil design to reduce cold spots and to assist with annual maintenance.

Extremely low standby heat losses

Increasing system efficiency due to the extremely low standby heat loss as low as 2.3 kW/24hr.

Large coil surface area

The specially designed coil has a larger surface area providing better and faster heat transfer.

Durability

The Inox-maxi SSC1 calorifiers are manufactured from grade 316L stainless steel and in compliance with ErP Eco-Design requirements for Energy Related Products.

Large connections

Large connections on the cylinder coil which reduces the pressure drop within the unit.

External control

The stored DHW temperature can be monitored and controlled externally.



Future-proof

Suitable to be used with renewable heat sources including solar and heat pumps.

A wide range of sizes

Six models providing storage capacities ranging from 500 to 2000 litres and heat transfer between 21 to 133kW with primary flow temperature at 80°C.

Cost effective

Due to the stainless steel construction of the unit, the cost of the yearly maintenance of the unit is greatly reduced by not requiring sacrificial anodes.

Removable jacket

800L models and above are supplied with removable jackets and insulation.

Immersion heater option

ELCO offers the option of adding an immersion heater to aid in the recovery time of the cylinder. For more information please see the table on the right.

Inspection hatch

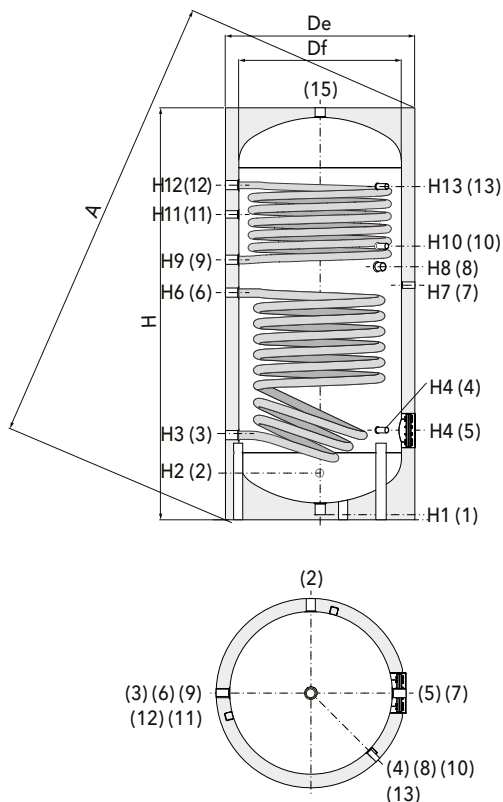
Easy access to the base of the cylinder through the inspection hatch for yearly maintenance.

Accessories

Matched optional/additional un-vented kits are available to assist with installation.

Versatility

Connect coil in series to increase output (not supplied by ELCO)



Item No.	Description
1	Drain
2	Domestic cold water inlet
3	Primary circuit return
4	1/2" BSP tapping for instrumentation
5	Blind inspection flange
6	Primary circuit flow
7	1/2" BSP tapping for instrumentation
8	Connection for immersion heater
9	Upper coil return
10	1/2" BSP tapping for instrumentation
11	Re-circulation
12	Upper coil flow
13	T&P valve
15	Domestic hot water outlet

Technical data – Inox-Maxi SSC2 Calorifiers

INOX-MAXI SSC2		500	800	1000	1300	1500	2000	
Water	Cylinder capacity (Total)	litres	503	759	902	1272	1398	2018
	Upper coil heated volume	litres	162	297	329	465	528	793
	Performance data Upper Coil when Primary flow 80°C and return 60°C							
	Upper Coil Output at primary temp 80/60°C	kW	21	25	28	36	36	40
	Upper Coil nominal primary flow rate at primary temp 80/60°C	litres/sec	0.3	0.3	0.4	0.4	0.4	0.5
	Pressure loss via Upper coil at the nominal primary flow rate	Kpa	1.0	0.3	0.5	0.9	0.9	1.2
	Peak 10 minute DHW delivery at ΔT 50°C with primary temp 80/60°C	litres	222	367	411	569	632	908
	Continuous DHW delivery ΔT 50°C with primary temp 80/60°C	litres/hour	359	423	490	624	624	692
	Cylinder capacity recovery time DHW ΔT 50°C, with primary temp 80°C and nominal flow rate	minutes	34	54	51	56	64	86
	Performance data Lower Coil when Primary flow 80°C and return 60°C							
	Lower Coil Output at primary temp 80/60°C	kW	41	48	62	69	69	76
	Lower Coil nominal primary flow rate at primary temp 80/60°C	litres/sec	0.5	0.6	0.8	0.8	0.8	0.9
	Pressure loss via lower coil at the nominal primary flow rate	Kpa	6.0	1.9	3.6	4.8	4.8	6.2
	Peak 10 minute DHW delivery at ΔT 50°C with primary temp 80/60°C	litres	620	897	1080	1470	1596	2236
	Continuous DHW delivery ΔT 50°C with primary temp 80/60°C	litres/hour	699	828	1067	1186	1186	1305
	Cylinder capacity recovery time DHW ΔT 50°C, with primary temp 80°C and nominal flow rate	minutes	54	69	63	81	88	116
	Performance data Both Coils connected in series when Primary flow 80°C and return 60°C							
	Both Coils Output at primary temp 80/60°C	kW	65	78	96	111	111	122
	Both Coils nominal primary flow rate at primary temp 80/60°C	litres/sec	0.8	1.0	1.2	1.4	1.4	1.5
	Pressure loss via both coils at the nominal primary flow rate**	Kpa	20.5	6.7	11.5	17.0	17.0	21.9
	Peak 10 minute DHW delivery at ΔT 50°C with primary temp 80/60°C	litres	688	982	1177	1589	1715	2367
	Continuous DHW delivery ΔT 50°C with primary temp 80/60°C	litres/hour	1110	1340	1647	1905	1905	2094
	Cylinder capacity recovery time DHW ΔT 50°C, with primary temp 80°C and nominal flow rate	minutes	34	42	41	50	55	72
	Performance data Both Coils connected in series when Primary flow 80°C and return 70°C							
	Both Coils Output at primary temp 80/70°C	kW	70	86	105	121	121	133
	Both Coils nominal primary flow rate at primary temp 80/70°C	Kpa	1.7	2.1	N/R***	N/R***	N/R***	N/R***
	Pressure loss via both coils at the nominal primary flow rate**	litres	81.2	27.0	46.2	67.4	67.4	86.4
Peak 10 minute DHW delivery at ΔT 50°C with primary temp 80/70°C	litres/hour	705	1005	1203	1619	1745	2398	
Continuous DHW delivery ΔT 50°C with primary temp 80/70°C	minutes	1211	1479	1807	2081	2081	2282	
Cylinder capacity recovery time DHW ΔT 50°C, with primary temp 80°C and nominal flow rate	kW	29	36	35	42	47	61	
Primary/secondary operating pressure (maximum)	bar	12/6						
Primary/secondary operating temperature (maximum)	°C	110/95						
Energy	Standby heat losses (DHW temperature 65°C)	kW/24hr	2.3	2.7	2.8	3.5	3.8	4.3
	Energy class		C	C	C	C	C	C
Electrical	Optional electric elements	kW/phase	3/1	3/1	12/3	12/3	12/3	12/3
Miscellaneous	Upper Coil connections sizes	inches	1"			1 1/4"		
	Upper coil surface area	m ²	1.2	1.5	1.7	2.1	2.1	2.3
	Lower Coil connections sizes	inches	1"			1 1/4"		
	Lower coil surface area	m ²	2.1	2.7	3.4	3.7	3.7	4.1
	Weight empty/full	kg	138/ 641	191/ 949	220/ 1122	270/ 1542	285/ 1683	415/ 2433
	Width of cylinder (DE)	mm	750	1010	1020	1170	1220	1470
Height of cylinder (H)	mm	1796	1943	2192	2213	2197	2070	

Both coils connected in series by contractor *not recommended due to high primary water velocity

Technical data – Inox-Maxi SSC2 Calorifiers

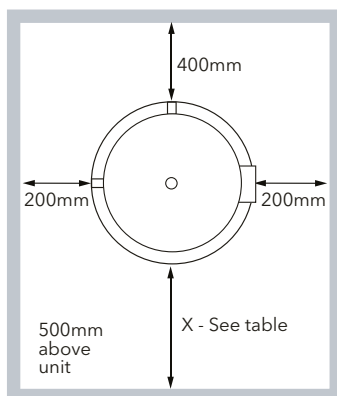
Dimensions

Inox-Maxi SSC2	Df	De	H	A	H1	H2	H3	H4	H6	H7	H8	H9	H10	H11	H12	H13
	(mm)															
500	650	750	1796	1946	71	271	356	411	1046	1086	1154	1196	1274	1341	1485	1496
800	790	1010	1943	2008	114	323	423	478	998	1533	1113	1163	1260	1331	1475	1533
1000	800	1020	2192	2251	112	337	412	477	1256	1792	1337	1372	1432	1557	1792	1792
1300	950	1170	2213	2289	118	313	438	483	1213	1798	1368	1368	1427	1578	1788	1798
1500	1000	1220	2197	2280	94	327	452	497	1227	1762	1302	1332	1462	1542	1752	1762
2000	1250	1470	2070	2197	85	350	475	520	1035	1575	1160	1215	1345	1390	1565	1575

Connections

Inox-Maxi SSC2	1	2	3 & 6	5	8	9 & 12	11	13	15
	Gas F								
500	1/2"	1"	1"	Øi 120mm	1 1/4"	1"	1"	3/4"	1"
800	3/4"	1"	1 1/4"	Øi 120mm	2"	1 1/4"	1"	1 1/4"	1 1/4"
1000	3/4"	1"	1 1/4"	Øi 120mm	2"	1 1/4"	1"	1 1/4"	1 1/4"
1300	1"	1 1/4"	1 1/4"	Øi 160mm	2"	1 1/4"	2"	1 1/4"	2"
1500	1"	2"	1 1/4"	Øi 160mm	2"	1 1/4"	2"	1 1/4"	2"
2000	1"	2"	1 1/4"	Øi 160mm	2"	1 1/4"	2"	1 1/4"	2"

Clearances



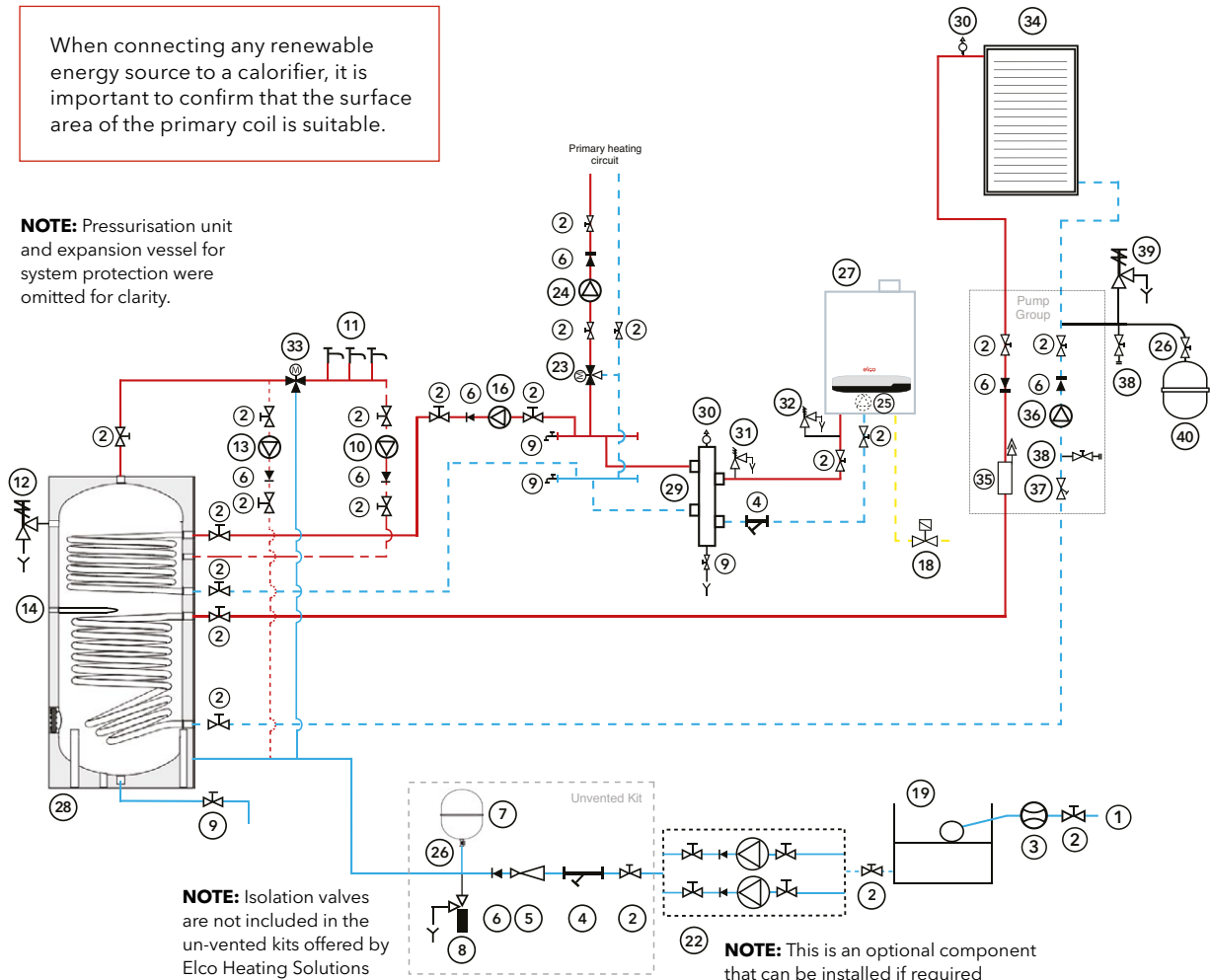
Inox-Maxi SSC2	500	800	1000	1300	1500	2000
X (mm)	750	1010	1020	1210	1260	1510

Example of Hydraulic Scheme - Twin Coil Calorifiers an Inox-Maxi SSC2 or Polywarm PWC2

Typical DHW schematic with a twin coil calorifier SSC2 or PWC2, 2 heating sources - THISION® L ECO gas fired boiler and solar panels and 1 heating circuit with 3 way mixing valve

When connecting any renewable energy source to a calorifier, it is important to confirm that the surface area of the primary coil is suitable.

NOTE: Pressurisation unit and expansion vessel for system protection were omitted for clarity.



- | | | |
|---|---------------------------------------|--|
| 1. Cold water supply | 13. De-stratification pump | 29. Low loss header |
| 2. Isolation valve | 14. Immersion heater | 30. Automatic air vent |
| 3. Water meter | 16. Loading pump | 31. System safety valve |
| 4. Strainer | 18. Gas shut-off valve | 32. Boiler safety valve |
| 5. Pressure limiting valve | 19. Cold water storage tank | 34. Solar panel |
| 6. Non-return valve | 22. Cold water booster pump set | 35. Vent pipe |
| 7. Expansion vessel | 23. 3 Way motorised valve | 36. Solar pump |
| 8. Expansion relief valve | 24. Heating circuit pump | 37. Flowcon valve |
| 9. Drain | 25. Boiler circulating pump | 38. Flush and fill valve with end caps |
| 10. DHW secondary re-circulation pump | 26. Lockshield valve | 39. Solar safety valve |
| 11. Hot water outlets | 27. THISION® L ECO boiler | 40. Solar expansion vessel |
| 12. Temperature and pressure relief valve | 28. SSC2 or PWC2 twin coil calorifier | |

For more schematics please refer to the Installation and Operation manual or contact ELCO Heating Solutions