

Glass lined water heater with fixed internal heat exchanger – SMART 1

The Smart 1 gamma consists of water heaters for the production of domestic hot water with a single fixed heat exchanger, available in several capacities, from 200 to 3000 litres. They are equipped with very thick high-density rigid polyurethane insulation, external metal-coloured PVC coating, a magnesium anode for protection against galvanic currents and an inspection flange to make access in the control and maintenance phase easier. The tanks up to 500 litres are supplied with a safety valve and adjustable feet (easier to place and more stable).

Features

✓ **Material:** ST 235 JR carbon steel

✓ **Treatment for internal protection:**

The boilers up to 1000l are treated with food grade inorganic glass lining in accordance with DIN 4753.3. The tanks with a capacity between 1500 and 3000 litres are varnished with Bluetech.

✓ **Insulation:**

The boilers with a capacity between 200 and 1000 litres are insulated with high-density rigid polyurethane with a thickness of 75 mm

The boilers with a capacity between 1500 and 3000 litres are insulated with high-density soft polyurethane with a thickness of 100mm

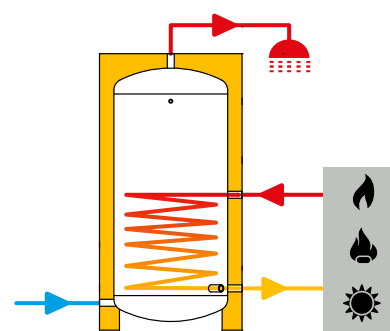
✓ **Optional accessories:**

Thermometer, thermostat, impressed current electronic anode, electrical resistance.

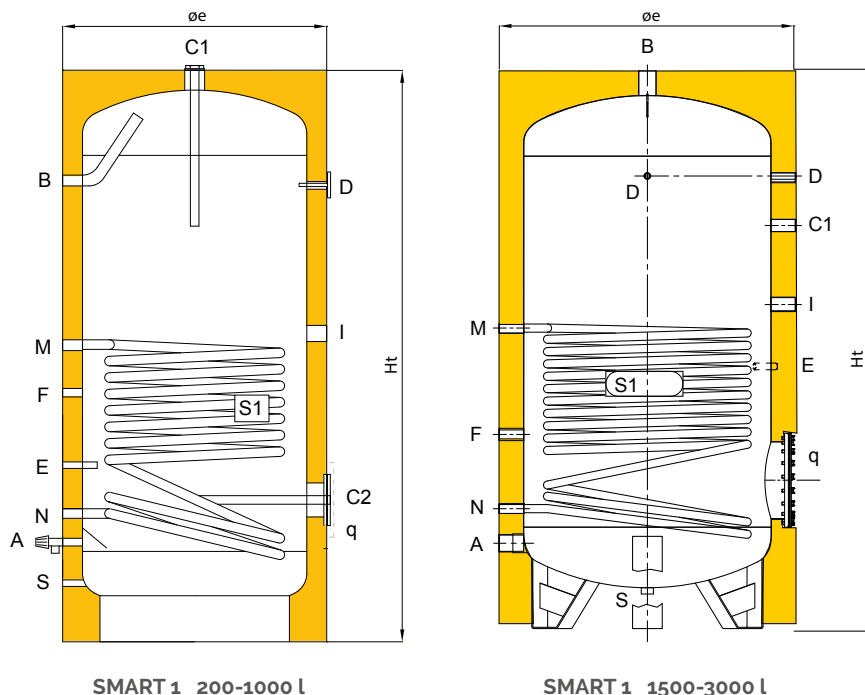


	Storage		Primary circuit	
	temperature max.	pressure max.	temperature max.	pressure max.
V≤1000 l	95°C	10 bar	110°C	12 bar
1500≤V≤5000 l	80°C	6 bar	110°C	12 bar

capacity l	code	price	energy label	packed	
				dimensions cm	weight kg
200	819060107X		C	75x75x120	84
300	819060108X		C	75x75x168	122
400	819060109X		D	75x75x180	147
500	819060110X		D	75x75x204	195
750	819060111X			97x97x229	260
1000	819060112X			115x115x215	415
1500	819080001X			123x123x237,5	255
2000	819080002X			132x132x269,5	325
3000	819080005X			147x147x299	411



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Legend couplings

A	domestic water inlet
B	domestic water outlet
C	anode
D	thermometer
E	probe
F	recirculation
I	electrical resistor
M	primary circuit inlet
N	primary circuit outlet
S	discharge
q	inspection hole

Coupling chart

capacity l	A inch	B inch	C1 inch	C2	D mm	E mm	F inch	I inch	M inch	N inch	S inch	q mm
200	1"	1"	2"	M8	1/2"	Ø 16 mm	3/4"	1 1/2"	1"	1"	1"	Ø 115/180
300	1"	1"	2"	M8	1/2"	Ø 16 mm	3/4"	1 1/2"	1"	1"	1"	Ø 115/180
400	1"	1"	2"	M8	1/2"	Ø 16 mm	3/4"	1 1/2"	1"	1"	1"	Ø 115/180
500	1"	1"	2"	M8	1/2"	Ø 16 mm	3/4"	1 1/2"	1"	1"	1"	Ø 115/180
750	1"	1"	2"	M8	1/2"	Ø 16 mm	3/4"	1 1/2"	1"	1"	1"	Ø 115/180
1000	1"	1"	2"	M8	1/2"	Ø 16 mm	3/4"	1 1/2"	1"	1"	1"	Ø 115/180
1500	2"	2"	1 1/4"	-	1/2"	1/2"	1 1/4"	1 1/2"	1"	1"	1 1/4"	Ø 300/380
2000	2"	2"	1 1/4"	-	1/2"	1/2"	1 1/4"	1 1/2"	1"	1"	1 1/4"	Ø 300/380
3000	3"	3"	1 1/4"	-	1/2"	1/2"	1 1/4"	1 1/2"	1"	1"	1 1/4"	Ø 300/380

Height chart

capacity l	øe mm	Ht mm	R* mm	A mm	B mm	E mm	F mm	M mm	N mm
200	670	1100	1288	210	860	435	680	790	290
300	670	1360	1517	210	1135	435	650	750	290
400	700	1660	1802	240	1420	570	770	870	320
500	700	1890	2016	240	1650	530	850	970	320
750	855	2050	2222	350	1770	650	910	1030	430
1000	1055	1960	2226	370	1590	600	750	1000	450
1500	1200	2255	2555	345	2255	1060	785	1215	485
2000	1300	2575	2885	345	2575	1165	815	1325	490
3000	1450	2870	3216	400	2870	1375	875	1540	550

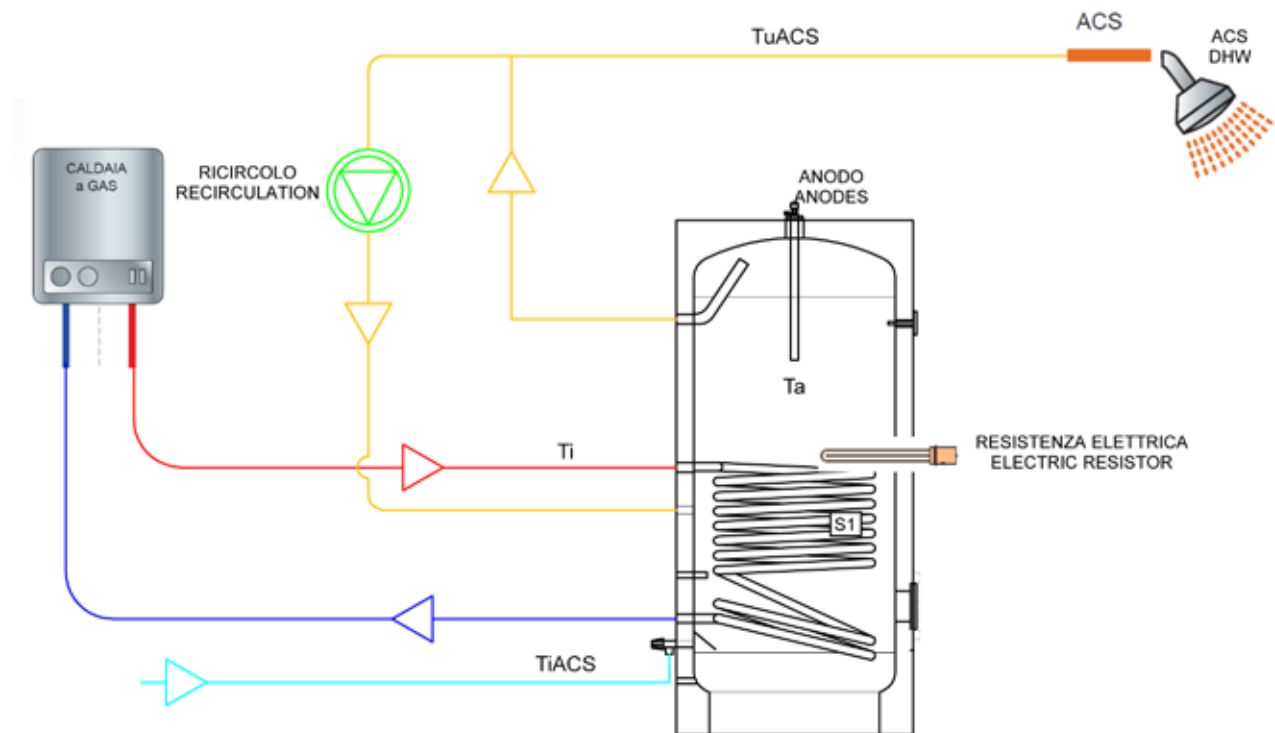
R*: reversal quote

Technical information for SMART 1 series

capacity	Ti	DHW production TiACS = 10°C						Exchanger	
		TuACS= 45°C		TuACS = 60°C		Ta = 50°C TuACS = 45°C	Ta = 60°C TuACS = 45°C	Surface area	Nominal flow
		L/h (a)	kW (b)	L/h (c)	kW (d)	L/10 min. (e)	L/10 min. (f)		
l	°C						m ²	mc/h	
200	70	810	33	395	23	347	390	1.4	3
	80	1081	44	602	35	392	435		
	90	1253	51	739	43	421	464		
300	70	810	33	395	23	454	517	1.4	3
	80	1081	44	602	35	499	563		
	90	1253	51	739	43	527	591		
400	70	1056	43	516	30	601	686	1.8	3
	80	1400	57	774	45	658	743		
	90	1646	67	963	56	699	784		
500	70	1179	48	584	34	728	834	2	3
	80	1572	64	877	51	793	900		
	90	1842	75	1083	63	838	945		
750	70	1400	57	688	40	1031	1190	2.4	3
	80	1867	76	1032	60	1109	1268		
	90	2186	89	1290	75	1162	1321		
1000	70	1572	64	774	45	1325	1538	2.7	3
	80	2113	86	1169	68	1415	1628		
	90	2481	101	1462	85	1477	1690		
1500	70	2137	87	1049	61	1951	2271	3.7	4
	80	2874	117	1599	93	2074	2393		
	90	3390	138	1995	116	2160	2479		
2000	70	2506	102	1221	71	2545	2970	4.3	4
	80	3341	136	1840	107	2684	3110		
	90	3931	160	2287	133	2782	3208		
3000	70	3022	123	1479	86	3695	4333	5.2	4
	80	4029	164	2236	130	3862	4501		
	90	4717	192	2786	162	3977	4615		

- a continuous DHW flow with TuACS= 45°C
- b power of the exchanger with TuACS=45°C
- c continuous DHW flow with TuACS= 60°C
- d power of the exchanger with TuACS=60°C
- e amount of DHW at 45°C in the first 20 min. with a storage temperature of 50°C
- f amount of DHW at 45°C in the first 10 min. with a storage temperature of 60°C
- Exchanger capacity: 7.10 Lt/mq

Technical information for SMART 1 series



SMART 1

Pressure loss fixed heat exchanger

