

IT

Indirect calorifier

IT - 300/400/500/600/750/1000

IT - 1500/2000/2500/3000



Indirect water heater (calorifier) for a wide range of applications

- Single-wall spiral heat exchanger • PermaGlas Ultra Coat second-generation glass coating technology prevents corrosion
- Insulated ring base • Insulated access cover for comprehensive waterside maintenance • Replaceable magnesium anode • Options: Flexible magnesium anode for installation in confined areas • Powered anode for reduced maintenance requirements • Temperature and pressure valve with stainless steel spring set to 95°C and a maximum water pressure of (7 bar) 700 kPa • Analogue temperature gauge (0-120°C) • Electric element heat packs (3 - 36 kW) • Optional ancillaries: unvented kits • Destratification pump kit

Technical specifications

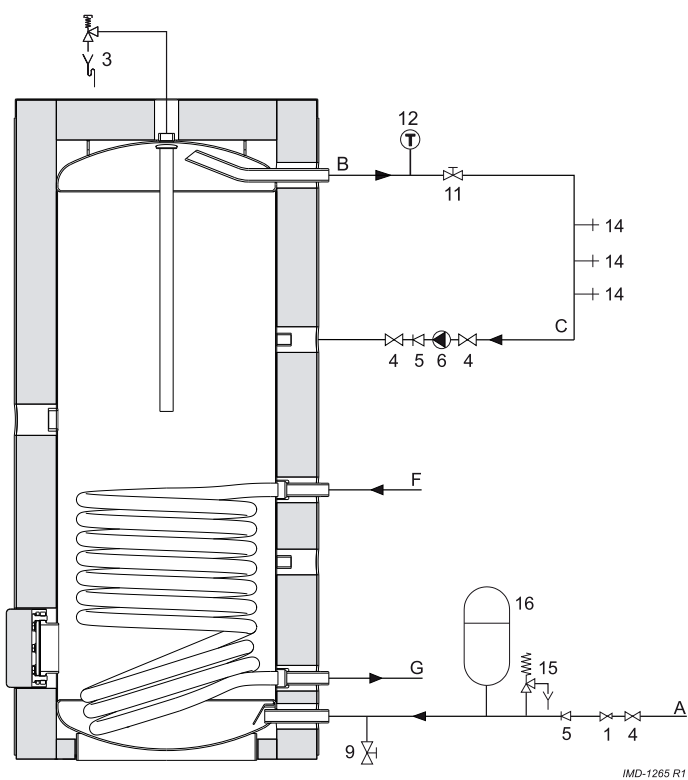
		IT 300	IT 400	IT 500	IT 600	IT 750	IT 1000	IT 1500	IT 2000	IT 2500	IT 3000
Technical data											
Output coil	kW	46	78	100	104	112	145	147	147	156	156
Surface area coil	m²	1,40	2,45	3,11	3,45	3,72	4,82	5,20	5,20	6,00	6,00
Water capacity coil	l	8,8	14,8	18,8	29,3	31,6	40,9	40,0	40,0	45,0	45,0
Flow rate coil (80-60°C)	l/h	1900	3354	4300	4472	4816	6235	6485	6485	6871	6871
Pressure drop coil	mbar	80	244	489	104	128	259	830	830	695	695
Maximum working pressure tank	kPa (bar)	1000 (10)	1000 (10)	1000 (10)	1000 (10)	1000 (10)	1000 (10)	800 (8)	800 (8)	800 (8)	800 (8)
Maximum working pressure coil	kPa (bar)	2500 (25)	1600 (16)	1600 (16)	1600 (16)	1600 (16)	1600 (16)	600 (6)	600 (6)	600 (6)	600 (6)
Maximum operating temperature tank	°C	95	95	95	95	95	95	85	85	85	85
Maximum operating temperature coil	°C	160	110	110	110	110	110	90	90	90	90
Draw-off capacity											
(T _k oud = 10°C / T _{set} = 80°C)											
Storage capacity	l	300	385	473	643	725	1007	1550	1800	2550	2800
30 min. ΔT=44°C	l	831	1176	1482	1733	1908	2557	3266	3584	4618	4936
60 min. ΔT=44°C	l	1281	1938	2459	2749	3002	3974	4702	5020	6142	6460
90 min. ΔT=44°C	l	1730	2701	3436	3766	4097	5391	6139	6457	7667	7985
120 min. ΔT=44°C	l	2180	3463	4413	4782	5192	6808	7575	7894	9191	9509
Continuous ΔT=44°C	l/h	899	1525	1955	2033	2189	2834	2873	2873	3049	3049
Heating-up time ΔT=44°C	min.	20	15	15	19	20	21	32	38	50	55
30 min. ΔT=50°C	l	732	1035	1304	1525	1679	2250	2874	3154	4063	4343
60 min. ΔT=50°C	l	1127	1706	2164	2420	2642	3497	4138	4418	5405	5685
90 min. ΔT=50°C	l	1523	2377	3024	3314	3605	4744	5402	5682	6747	7027
120 min. ΔT=50°C	l	1918	3047	3884	4208	4569	5991	6666	6946	8088	8368
Continuous ΔT=50°C	l/h	791	1342	1720	1789	1926	2494	2538	2528	2683	2683
Heating-up time ΔT=50°C	min.	23	17	16	22	23	24	37	43	57	63
30 min. ΔT=55°C	l	665	941	1185	1386	1526	2046	2613	2867	3694	3949
60 min. ΔT=55°C	l	1025	1551	1967	2200	2402	3179	3762	4016	4914	5168
90 min. ΔT=55°C	l	1384	2160	2749	3013	3278	4313	4911	5166	6133	6388
120 min. ΔT=55°C	l	1744	2770	3531	3826	4153	5447	6060	6315	7353	7608
Continuous ΔT=55°C	l/h	719	1220	1564	1626	1751	2267	2299	2299	2439	2439
Heating-up time ΔT=55°C	min.	25	19	18	24	25	27	40	47	63	69
Shipping data											
Weight empty	kg	125	142	190	240	249	326	398	426	576	600
Maximum weight	kg	436	524	653	884	979	1343	1948	2226	3126	3400
Weight incl. packaging + jacket	kg	133	153	201	251	260	348	488	526	686	720
Width packaging	mm	800	780	780	870	870	1010	1170	1170	1498	1498
Height packaging	mm	1770	1850	2150	1930	2150	2100	2060	2248	2120	2195
Depth packaging	mm	800	780	780	870	870	1010	1426	1426	1680	1680

Energy labeling

		IT 300	IT 400	IT 500	IT 600	IT 750	IT 1000	IT 1500	IT 2000	IT 2500	IT 3000
Load Profil	-	C	C	C	-	-	-	-	-	-	-
Standby loss	W	92	100	104	126	126	146	154	171	232	243

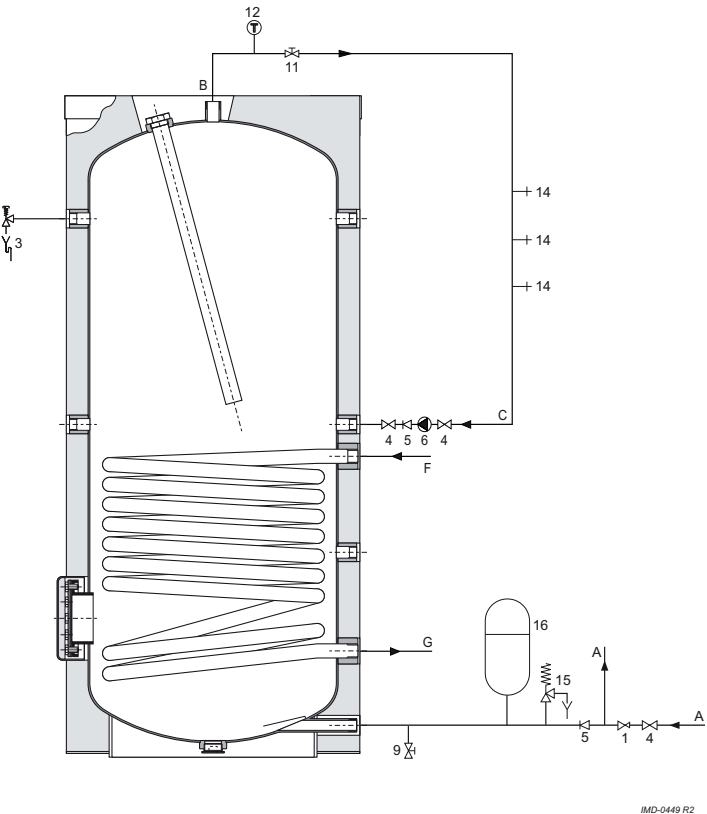
Dimensions

IT 300



IT 300			
A	Total height	mm	1650
D	Diameter (without insulation)	mm	550
	Diameter (with insulation)	mm	750
G	Height heat exchanger outlet	mm	205
H	Height heat exchanger inlet	mm	675
M	Height cold water inlet	mm	110
N	Height warm water outlet	mm	1460
P	Height inspection opening	mm	280
R	Height connection circulation	mm	1050
S	Height immersion well	mm	495
T	Height T&P connection	mm	1545
Z	Height electrical element	mm	850
1	Cold water inlet	-	G 1"
2	Warm water outlet	-	G 1"
3	Heat exchanger outlet	-	G 1"
4	Heat exchanger inlet	-	G 1"
5	Connection circulation	-	Rp ¾"
6	Diameter inspection opening	mm	110
7	T&P connection	-	Rp 1"
8	Immersion well	-	Rp ¾"
10	Anode connection	-	G 1¼"
11	Electrical element connection	-	G 1½"

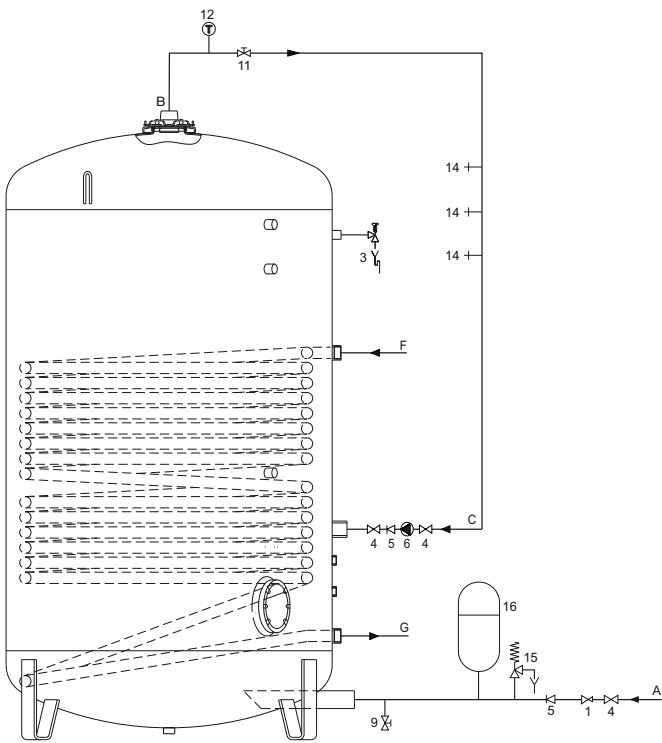
IT 400-1000



			IT 400	IT 500	IT 600	IT 750	IT 1000
A	Total height	mm	1710	2045	1840	2035	2005
D	Diameter (without insulation)	mm	600	600	750	750	900
	Diameter (with insulation)	mm	740	760	910	930	1100
G	Height heat exchanger outlet	mm	260	260	310	310	350
H	Height heat exchanger inlet	mm	1015	1205	1150	1210	1310
M	Height cold water inlet	mm	70	70	85	85	95
N	Height warm water outlet	mm	1655	1995	1805	2000	1965
P	Height inspection opening	mm	330	330	420	420	450
R	Height connection circulation	mm	1100	1290	1240	1300	1400
S	Height immersion well	mm	500	500	655	655	705
T	Height T&P connection	mm	1365	1700	1480	1675	1605
1	Cold water inlet	-	R 1½"	R 1½"	R 1½"	R 1½"	R 1½"
2	Warm water outlet	-	R 1½"	R 1½"	R 1½"	R 1½"	R 1½"
3	Heat exchanger outlet	-	Rp 1"	Rp 1"	Rp 1¼"	Rp 1¼"	Rp 1¼"
4	Heat exchanger inlet	-	Rp 1"	Rp 1"	Rp 1¼"	Rp 1¼"	Rp 1¼"
5	Connection circulation	-	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"
6	Diameter inspection opening	mm	115	115	180	180	180
7	T&P connection	-	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"
8	Immersion well	-	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"
10	Anode connection	-	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"

Dimensions

IT 1500-3000



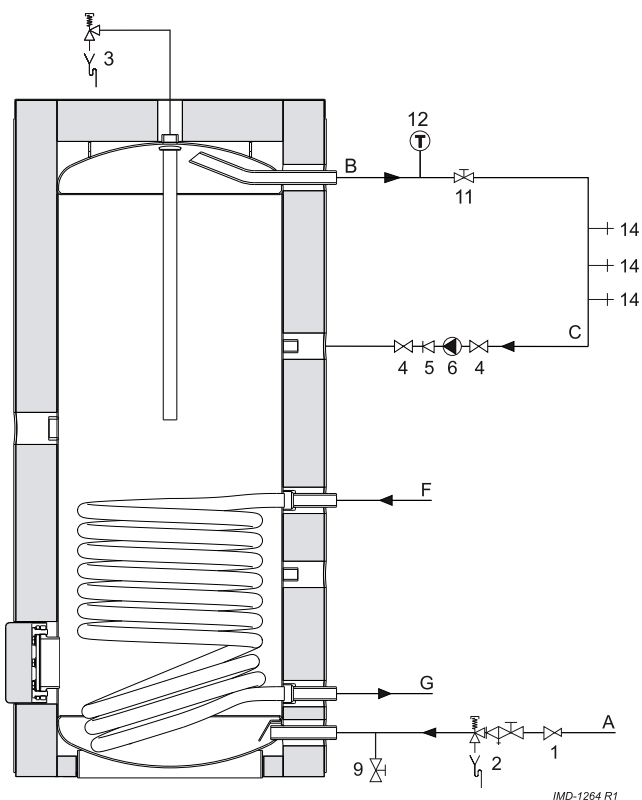
IMD-0641 R2

		IT 1500	IT 2000	IT 2500	IT 3000
A	Total height	mm 1985	2175	2045	2070
D	Diameter (without insulation)	mm 1100	1100	1400	1400
	Diameter (with insulation)	mm 1300	1300	1600	1600
G	Height heat exchanger outlet	mm 350	350	430	430
H	Height heat exchanger inlet	mm 1305	1305	1285	1285
M	Height cold water inlet	mm 135	135	185	185
N	Height warm water outlet	mm 1985	2175	2045	2070
P	Height inspection opening	mm 450	450	530	530
R	Height connection circulation	mm 710	710	790	790
S	Height immersion well	mm 605	605	685	685
T	Height T&P connection	mm 1515	1705	1530	1625
U	Height connection top tank temp. sensor	mm 1550	1740	1530	1660
1	Cold water inlet	-	R 2"	R 2"	R 2"
2	Warm water outlet	-	R 2"	R 2"	R 2"
3	Heat exchanger outlet	-	Rp 1¼"	Rp 1¼"	Rp 1¼"
4	Heat exchanger inlet	-	Rp 1¼"	Rp 1¼"	Rp 1¼"
5	Connection circulation	-	Rp 1¼"	Rp 1¼"	Rp 1¼"
6	Diameter inspection opening	mm 110	110	110	110
7	T&P connection	-	Rp 2"	Rp 2"	Rp 2"
8	Immersion well	-	Rp ¾"	Rp ¾"	Rp ¾"
9	Connection top tank temp. sensor	-	Rp ¾"	Rp ¾"	Rp ¾"
10	Anode connection	-	Rp ¾"	Rp ¾"	Rp ¾"



Installation diagrams

IT 300



- 1 pressure relief valve
(mandatory if mains water pressure is too high)
- 2 inlet combination
- 3 T&P-valve
- 4 stop valve (recommended)
- 5 non-return valve (mandatory)
- 6 circulation pump (optional)
- 9 drain valve
- 11 service stop valve
- 12 temperature gauge (optional)
- 14 draw-off points
- 15 expansion valve (mandatory)
- 16 expansion vessel (mandatory)

- A cold water supply
- B hot water supply
- C circulation pipe
- F inlet heat exchanger
- G outlet heat exchanger

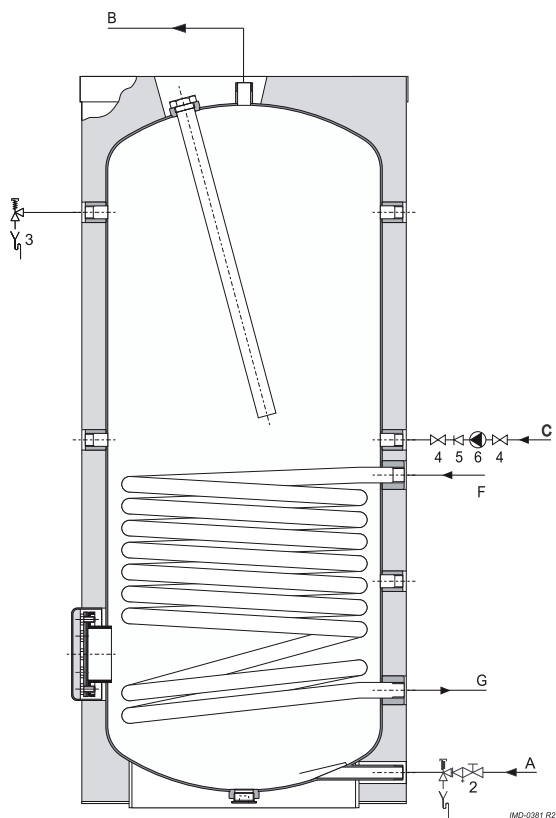
The IT 300 and 400-1000 is also available in vented version.

A.O. Smith unvented system kits utilise combination valves.

In the instruction manual you will find all the necessary information regarding connection, installation and maintenance of the product; including information on the electrical connections.

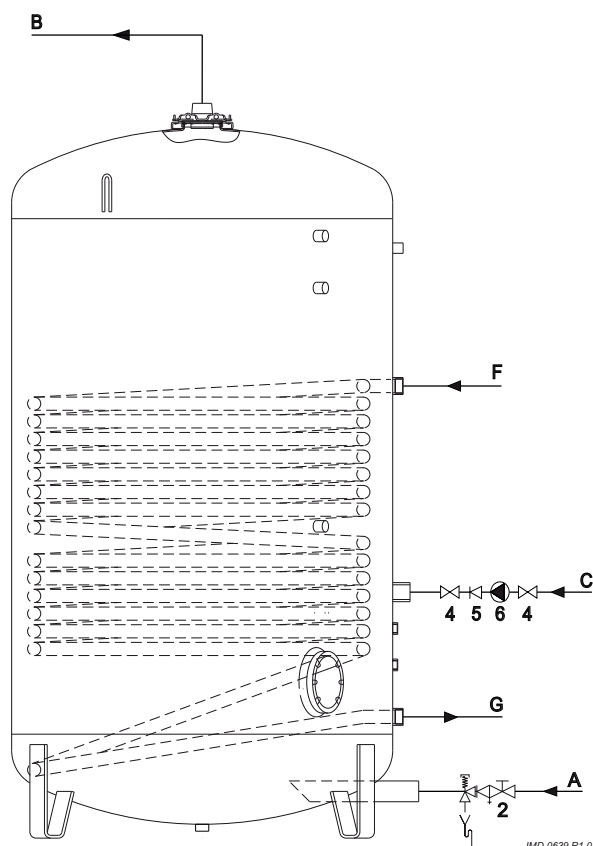
Information regarding the recycling or disposal of the product can also be found in the manual. This manual is delivered with the appliance and can also be found on our website; www.aosmith.co.uk.

IT 400-1000



Installation diagrams

IT 1500-3000



- 2 inlet combination
- 3 T&P valve
- 4 Stop valve
- 5 Non-return valve
- 6 Potable water circulation pump (not modulating)
- 9 Drain valve
- 11 Service stop valve
- 12 Temperature gauge
- 14 Hot water draw-off points
- 15 Expansion valve
- 16 Expansion vessel

- A Cold water supply
- B Hot water
- C Circulation pipe
- F Heat exchanger supply
- G Heat exchanger return

The IT 1500-3000 is also available in vented version.

A.O. Smith unvented system kits utilise combination valves.

In the instruction manual you will find all the necessary information regarding connection, installation and maintenance of the product; including information on the electrical connections.

Information regarding the recycling or disposal of the product can also be found in the manual. This manual is delivered with the appliance and can also be found on our website; www.aosmith.co.uk.