

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 for easy installation
- 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 7-10 bar depending on the model
 - Analogue temperature gauge (0-120°C)
 - 3.75 to 7.5 flange mounted back-up element

SAMPLE SPECIFICATION

The tanks shall be A. O. Smith IT series industrial Indirect hot water storage calorifier, model number _IT_ xxxx (300-3000L) or an approved equal. The tank shall be for vertical installation. Vessel shall be constructed to European Pressure Directive for minimum 7 bar working pressure. Vessel shall be glass-lined, have 1 up to 3 sacrificial magnesium anodes for additional corrosion protection. Entire vessel shall be insulated with 70-100 mm insulation with ABS cladding. Heat loss will meet ErP standards. The tank will have the option to install a back-up electric element. A combined temperature and pressure relieve valve will be factory supplied. A factory installed boiler water/solar heat exchanger will meet the heating requirement.

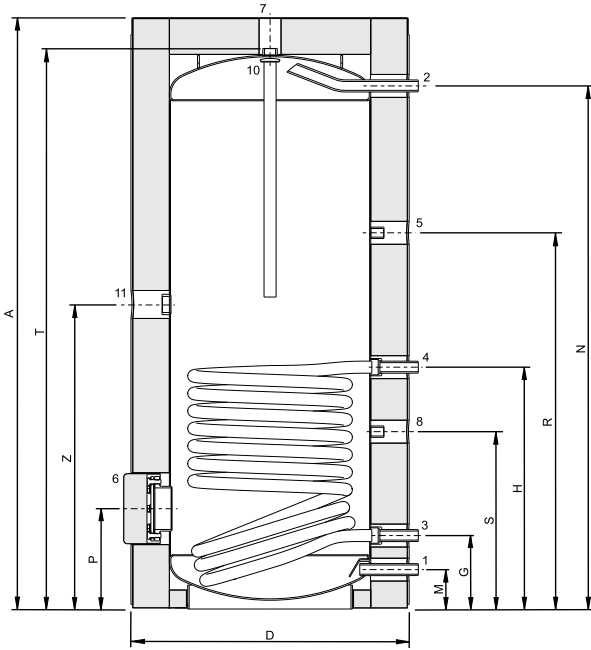


		IT 300	IT 400	IT 500	IT 600	IT 750	IT 1000	IT 1500	IT 2000	IT 2500	IT 3000
General											
Output coil	kW	46	78	100	104	112	145	147	147	156	156
Surface area coil	m ²	1.40	2.45	3.11	3.45	3.72	4.82	5.20	5.20	6.00	6.00
Water capacity coil	l	8.8	14.8	18.8	29.3	31.6	40.9	40.0	40.0	45.0	45.0
Flow rate coil (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)				700 (7)	
Maximum working pressure coil	kPa (bar)	2500(25)				1600 (16)				600 (6)	
Maximum operating temperature tank	°C	95			95					85	
Maximum operating temperature coil	°C	160			110					90	
Draw-off capacity T _{cold} = 10°C/T _{set} = 80°C											
Storage capacity	l	300	385	473	643	725	1007	1550	1800	2550	2800
30 min. ΔT=28°C	l	1236	1848	328	2723	2998	4018	5132	5632	7256	7756
60 min. ΔT=28°C	l	1942	3046	3864	4321	4718	6245	7389	7889	9652	10152
90 min. ΔT=28°C	l	2649	4244	5400	5918	6438	8472	9647	10147	12048	12548
120 min. ΔT=28°C	l	3355	5442	6935	7515	8158	10699	11904	12404	14443	14943
Continuous ΔT=28°C	l/h	1413	2396	3071	3194	3440	4454	4515	4515	4791	4791
Heating-up time ΔT=28°C	min.	13	10	9	12	13	14	21	24	32	35
30 min. ΔT=50°C	l	692	1035	1304	1525	1679	2250	2874	3154	4063	4343
60 min. ΔT=50°C	l	1088	1706	2164	2420	2642	3497	4138	4418	5405	5685
90 min. ΔT=50°C	l	1483	2377	3024	3314	3605	4744	5402	5682	6747	7027
120 min. ΔT=50°C	l	1879	3047	384	4208	4569	5991	6666	6946	8088	8368
Continuous ΔT=50°C	l/h	791	1342	1720	1789	1926	2494	2528	2528	2683	2683
Heating-up time ΔT=50°C	min.	23	17	16	22	23	24	37	43	57	63
30 min. ΔT=70°C	l	494	739	931	1089	1199	1607	2053	2253	2902	3102
60 min. ΔT=70°C	l	777	1218	1546	1728	1887	2498	2956	3156	3861	4061
90 min. ΔT=70°C	l	1059	1698	2160	2367	2575	3389	3859	4059	4819	5019
120 min. ΔT=70°C	l	1342	2177	2774	3006	3263	4279	4762	4962	5777	5977
Continuous ΔT=70°C	l/h	565	958	1229	1278	1376	1781	1806	1806	1917	1917
Heating-up time ΔT=70°C	min.	32	24	23	30	32	34	51	60	80	88
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	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	224	2120	2195
Depth packaging	mm	800	780	780	870	870	1010	1426	1426	1680	1680

	IT 300	IT 400	IT 500	IT 600	IT 750	IT 1000	IT 1500	IT 2000	IT 2500	IT 3000
A Total height	1650	1710	2045	1840	2035	2005	1985	2175	2045	2070
D Diameter (without insulation)	550	600	600	750	750	900	1100	1100	1400	1400
Diameter (with insulation)	750	740	760	910	930	1100	1300	1300	1600	1600
G Height heat exchanger outlet	205	260	260	310	310	350	350	350	430	430
H Height heat exchanger inlet	675	775	920	910	970	950	1305	1305	1285	1285
M Height cold water inlet	110	70	70	85	85	85	135	135	185	185
N Height hot water outlet	1460	1655	1995	1805	2000	1965	1985	2175	2045	2070
P Height inspection opening	280	330	330	420	420	420	450	450	530	530
R Height circulation connection	1050	860	1000	1000	1080	1040	710	710	790	790
S Height immersion well	495	500	500	655	655	705	605	605	685	685
T Height T&P connection	1545	1365	1700	1480	1875	1605	1515	1705	1530	1625
U Height connection top tank temp. sensor	-	-	-	-	-	-	1550	1740	1530	1660
1 Cold water inlet	G 1"	R 2"	R 2"	R 2½"	R 2½"	R 2½"	R 2"	R 2"	R 2"	R 2"
2 Hot water outlet	G 1"	R 2"	R 2"	R 2½"	R 2½"	R 2½"	R 2"	R 2"	R 2"	R 2"
3 Heat exchanger outlet	G 1"	Rp 1"	Rp 1"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"
4 Heat exchanger inlet	G 1"	Rp 1"	Rp 1"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"
5 Circulation connection	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"
6 Diameter inspection opening	110	115	115	180	180	180	110	110	110	110
7 T&P connection	Rp 1	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp 1"	Rp 1"	Rp 1"	Rp 1"
8 Immerison well	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"
9 Connection top tank temp. sensor	-	-	-	-	-	-	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"
10 Anode connection	G 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"

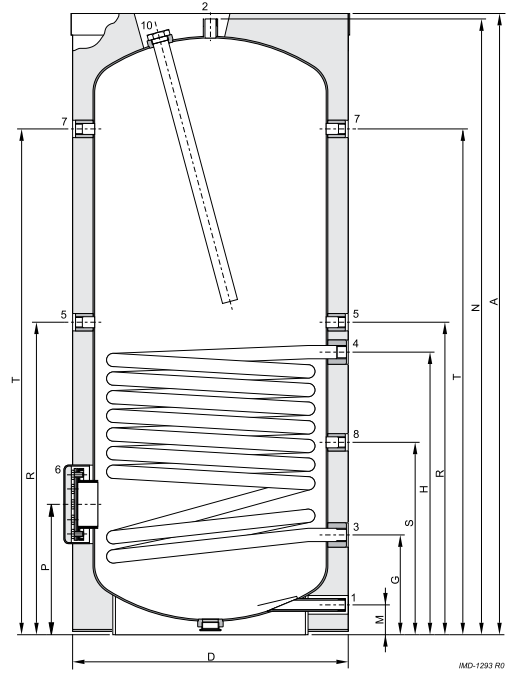
All dimensions are in mm

IT 300



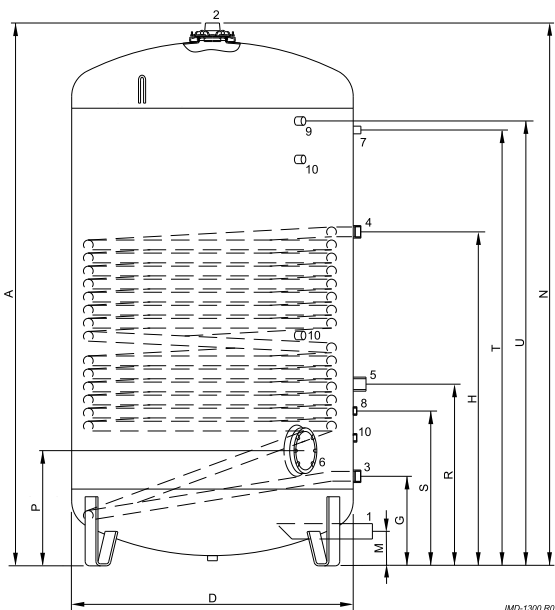
IMD-1263 R1

IT 400 - 1000



IMD-1293 R0

IT 1500 - 3000



IMD-1300 R0

- 1 Pressure reducing valve
- 2 Inlet combination
- 3 T&P valve
- 4 Stop valve
- 5 Non-return valve
- 6 Circulation pump
- 9 Drain valve
- 11 Service valve
- 12 Temperature meter
- 14 Hot water tap

- A Cold water supply
- B Hot water outlet
- C Circulation pipe
- F Primary flow
- G Primary return

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.aosmithme.com

