

ITS DUAL COIL INDIRECT CALORIFIER

ITS - 400/500/600/750/1000



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 (10 bar) 1000 kPa
 - Analogue temperature gauge (0-120°C)
 - Electric back-up heating up to 7.5 kW



SAMPLE SPECIFICATION

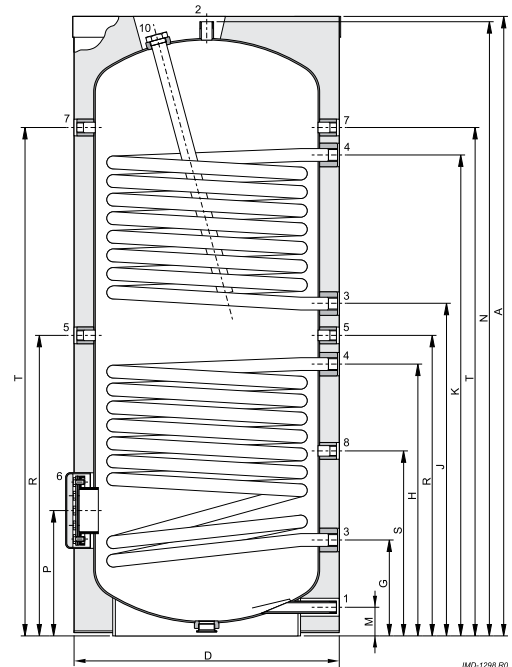
The tanks shall be A.O. Smith ITS series industrial Indirect hot water storage calorifier, model number ITS_xxxx (400-1000L) or an approved equal. The tank shall be for vertical installation. Vessel shall be constructed to European Pressure Directive for minimum 7 bar working pressure. Vessel shall be 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. A combined temperature and pressure relieve valve will be factory supplied. Two factory installed boiler water/solar heat exchanger will meet the heating requirement as specified for this project. The tank will have the option to install a back-up electric element up to 7.5 kW

		ITS 400		ITS 500		ITS 600		ITS 750		ITS 1000	
General		solar	primary	solar	primary	solar	primary	solar	primary	solar	primary
Output coil	kW	52	37	68	42	72	40	80	56	87	58
Surface area coil	m ²	1.64	1.15	2.13	1.31	2.39	1.33	2.66	1.86	2.89	1.93
Water capacity coil	l	9.9	6.9	12.8	7.9	20.3	11.3	22.6	15.8	24.6	16.4
Flow rate coil (80-60°C)	l/h	2236	1591	2924	1806	3096	1720	3440	2408	3741	2494
Pressure drop coil	mbar	78	30	166	43	37	7	50	18	61	20
Maximum working pressure tank	kPa (bar)							1000 (10)			
Maximum working pressure coil	kPa (bar)							1600 (16)			
Maximum operating temperature tank	°C							95			
Maximum operating temperature coil	°C							110			
Standby loss	kWh/24h	1.60		1.88		1.85		2.03		2.19	
Draw-off capacity T _{cold} = 10°C/T _{set} = 80°C											
Storage capacity	l	382		470		641		718		1007	
		primary coil	both coils*	primary coil	both coils*	primary coil	both coils*	primary coil	both coils*	primary coil	both coils*
30 min. ΔT=28°C	l	878	1994	1032	2460	1168	2830	1463	3316	1768	4018
60 min. ΔT=28°C	l	1446	3361	1677	4150	1783	4550	2323	5404	2659	6245
90 min. ΔT=28°C	l	2015	4728	2322	5839	2397	6270	3183	7493	3550	8472
120 min. ΔT=28°C	l	2583	6095	2967	7528	3011	7990	4043	9582	4441	10699
Continuous ΔT=28°C	l/h	1136	2734	1290	3379	1229	3440	1720	4177	1781	4454
Heating-up time ΔT=28°C	min.	20	8	22	8	31	11	25	10	35	14
30 min. ΔT=50°C	l	492	1117	578	1378	654	1585	819	1857	990	2250
60 min. ΔT=50°C	l	810	1882	939	2324	998	2548	1301	3026	1489	3497
90 min. ΔT=50°C	l	1128	2648	1300	3270	1342	3511	1783	4196	1988	4744
120 min. ΔT=50°C	l	1446	3413	1661	4216	1686	4474	2264	5366	2487	5991
Continuous ΔT=50°C	l/h	636	1531	722	1892	688	1926	963	2339	998	2494
Heating-up time ΔT=50°C	min.	36	15	39	15	56	20	45	18	63	24
30 min. ΔT=70°C	l	351	798	413	984	467	1132	585	1326	707	1607
60 min. ΔT=70°C	l	579	1344	671	1660	713	1820	929	2162	1064	2498
90 min. ΔT=70°C	l	806	1891	929	2336	959	2505	1273	2997	1420	3389
120 min. ΔT=70°C	l	1033	2438	1187	3011	1204	3196	1617	3833	1776	4279
Continuous ΔT=70°C	l/h	455	1093	516	1351	491	1376	688	1671	713	1781
Heating-up time ΔT=70°C	min.	50	21	55	21	78	28	63	26	88	34
Shipping data											
Weight empty	kg	145		196		246		262		340	
Maximum weight	kg	527		666		887		980		1347	
Weight incl. packaging	kg	156		207		257		273		352	
Width packaging	mm	780		780		870		870		1010	
Height packaging	mm	1850		2150		1930		2150		2100	
Depth packaging	mm	780		780		870		870		1010	

*Draw-off capacities mentioned on both coils are not always feasible

	ITS 400	ITS 500	ITS 600	ITS 750	ITS 1000
A Total height	1710	2045	1840	2035	2005
D Diameter (without insulation)	600	600	750	750	900
Diameter (with insulation)	740	760	910	930	1100
G Height heat exchanger outlet	260	260	310	310	350
H Height heat exchanger inlet	775	920	910	970	950
J Height heat exchanger outlet (on top)	945	1090	1090	1150	1130
K Height heat exchanger inlet (on top)	1280	1470	390	1570	1490
M Height cold water inlet	70	70	85	85	85
N Height hot water outlet	1655	1995	1805	2000	1965
P Height inspection opening	330	330	420	420	420
R Height circulation connection	860	1000	1000	1080	1040
S Height immersion well	500	500	655	655	705
T Height T&P connection	1365	1700	1480	1875	1605
1 Cold water inlet	R 2"	R 2"	R 2½"	R 2½"	R 2½"
2 Hot water outlet	R 2"	R 2"	R 2½"	R 2½"	R 2½"
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 Circulation connection	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"
6 Diameter inspection opening	115	115	180	180	180
7 T&P connection	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"
8 Immerison well	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"
10 Anode connection	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"
All dimensions are in mm					

ITS 400 - 1000



- 1 Pressure reducing valve
- 3 T&P valve
- 4 Stop valve
- 5 Non-return valve
- 6 Circulation pump

- 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

