



R300 Series – Technical Specification

Type	Heat Input (Net C.V.)		Heat Output (Net C.V.)		Max. gas rate		RECOVERY			
	kW	Btu	kW	Btu	m ³ /h	ft ³ /h	80°F (44°C) Temp. rise l/hr	gph	100°F (56°C) Temp. rise l/hr	gph
301	74	252500	70	238800	6.79	240	1360	299	1070	235
302	91	310500	88	293400	8.35	295	1750	385	1370	300
303	121	412900	114	388900	11.10	392	2240	492	1760	387
304	147	501600	139	474200	13.49	476	2720	598	2140	470
305	194	661900	185	631200	17.80	628	3600	792	2830	622
306	243	829100	230	784700	22.29	787	4480	985	3520	774
307	289	986000	274	934800	26.51	936	5350	1177	4200	924

R2000 Series – Technical Specification

Type	Heat Input (Net C.V.)		Heat Output (Net C.V.)		Max. gas rate		RECOVERY			
	kW	Btu	kW	Btu	m ³ /h	ft ³ /h	80°F (44°C) Temp. rise l/hr	gph	100°F (56°C) Temp. rise l/hr	gph
2017	65.5	224000	57.7	197000	6.0	212.1	1117	246	894	197
2022	84.8	290000	74.6	255000	7.9	279.3	1444	318	1156	255
2028	107.7	368000	95.8	327000	9.9	349.9	1855	409	1484	327
2034	131.6	450000	116.7	398000	12.2	431.3	2260	498	1808	398
2041	158.6	541000	139.1	475000	14.7	519.6	2693	593	2155	476
2048	185.5	633000	162.7	555000	17.2	608.0	3150	694	2520	555
2056	217.4	742000	190.7	651000	20.2	714.0	3693	813	2954	651
2066	253.3	865000	222.1	758000	23.5	830.7	4301	947	3440	758
2077	296.2	1011000	261.1	891000	27.5	972.1	5056	1114	4044	891
2090	348.0	1188000	309.0	1054000	32.3	1141.8	5983	1318	4786	1054
2105	403.9	1379000	361.0	1232000	37.4	1322.0	6990	1540	5592	1232
2122	470.7	1607000	425.0	1450000	43.6	1514.3	8229	1813	6583	1450

R18 Series – Technical Specification

Type	Heat Input (Net C.V.)		Heat Output (Net C.V.)		Max. gas rate		RECOVERY			
	kW	Btu	kW	Btu	m ³ /h	ft ³ /h	80°F (44°C) Temp. rise l/hr	gph	100°F (56°C) Temp. rise l/hr	gph
132	538	1834000	481	1641000	49.3	1762	9314	2052	7451	1641
154	625	1905000	558	1904000	57.9	2069	10805	2380	8643	1904
180	727	2482000	649	2214000	67.4	2409	12567	2768	10052	2214
210	846	2888000	756	2579000	78.4	2802	14638	3224	11710	2579
244	980	3346000	875	2985000	90.8	3245	16943	3732	13553	2985
280	1122	3830000	1002	3419000	104.0	3717	19402	4274	15521	3419

Supa-Flo water heaters and Supa-Heat boilers are installed in a variety of projects in the Hotel, Leisure, Healthcare, Public Building and Industrial sectors.



Liverpool Football Club Academy



'Fantasy' Hotel, Alton Towers



Cribbs Causeway Shopping Centre, Bristol



Toyota Headquarters, Epsom, Surrey



Arora International Hotel, Heathrow

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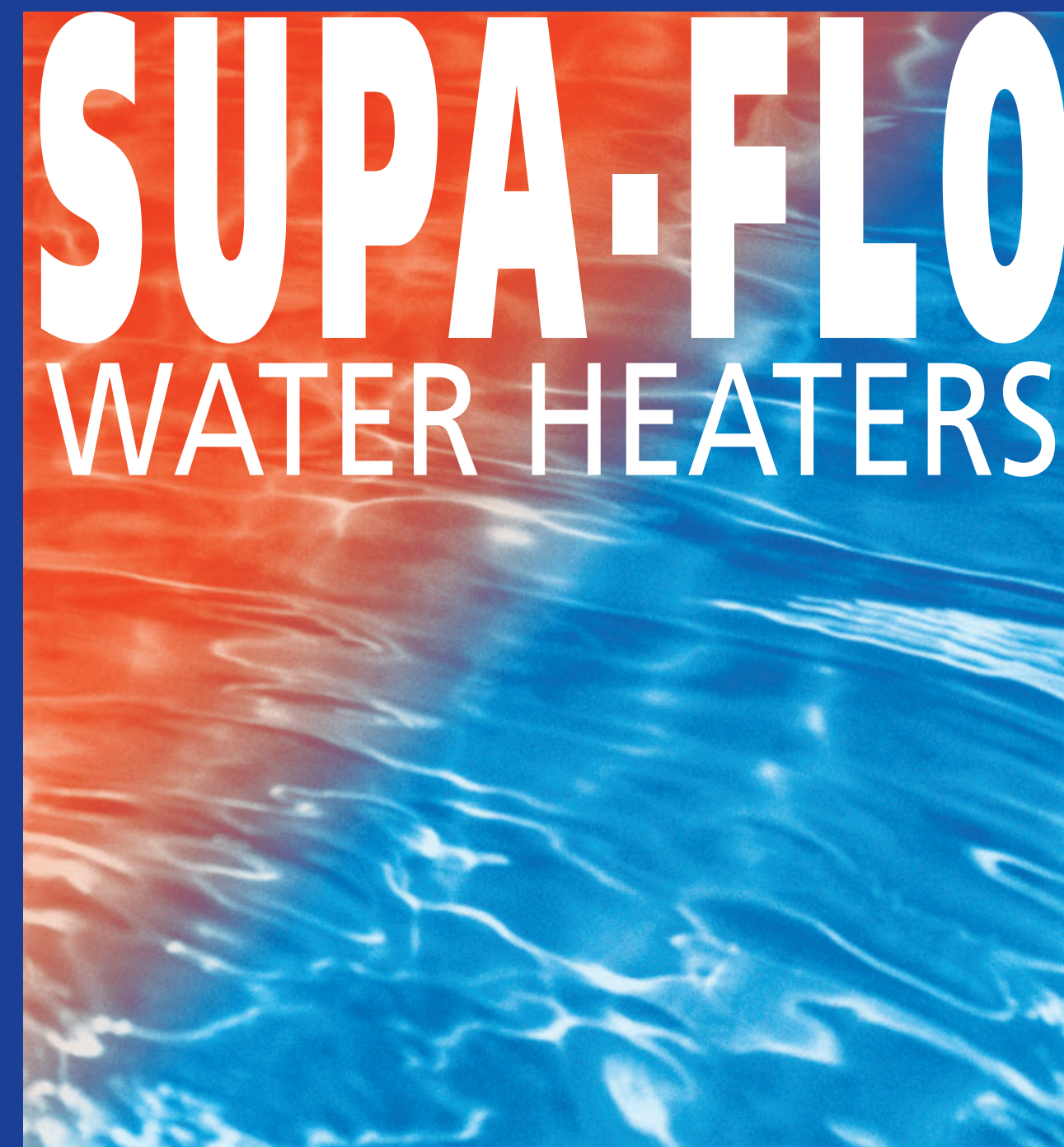
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R300 Series - R2000 Series - R18 Series



A CONSTANT SUPPLY OF
HOT WATER FROM A
SINGLE SOURCE



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Supa-Flo

A constant supply of hot water from a single source

Andrews Supa-Flo Water Heaters are a range of gas-fired high efficiency water heaters capable of supplying large volumes of hot water for a variety of commercial and industrial applications.

The Supa-Flo water heater is a low water content unit with a copper or stainless steel finned tube heat exchanger and stainless steel headers and manifold. The unit can operate 'instantaneously' providing hot water on demand or with a buffer storage vessel and is suitable for either vented or unvented systems.

Three family types available totalling some 25 models with outputs that range from 57 to 1,002 kW providing hot water recovery rates from 1,117 to 19,402 litres per hour at a temperature rise of 44°C from a single unit.

Andrews Supa-Flo water heaters are constructed from high quality materials such as copper, stainless steel and aluminium and are manufactured under a quality system approved by ISO. 90001. All Supa-Flo units also hold the European CE mark and are listed by the Water Research Council (WRc).



Other standard features:

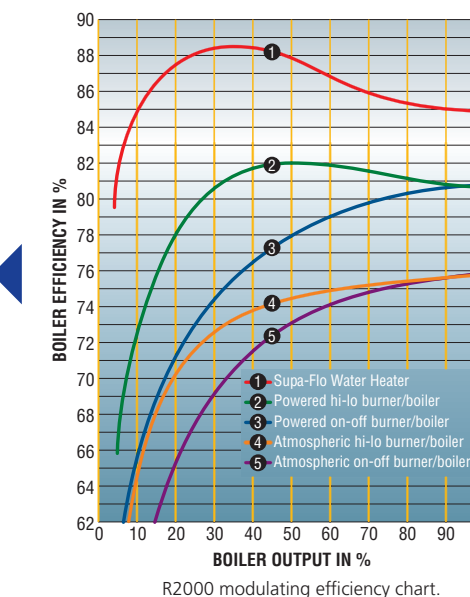
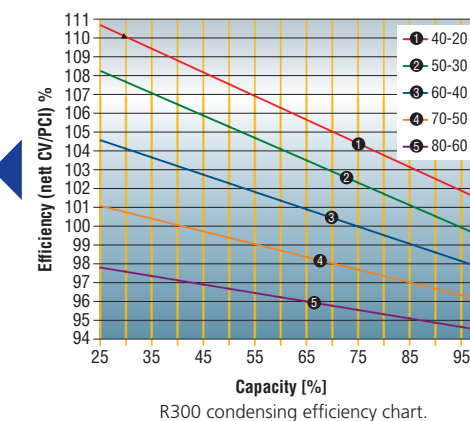
- Stainless steel manifold and headers
- Finned tube heat exchanger
- Stainless steel burners
- Fully modulating burner
- Primary circulator and safety relief valve supplied
- Compact design and small footprint
- Lightweight construction
- Hot water temperature up to 90°C
- Low water content heat exchanger
- Low noise and flue gas emissions
- Low maintenance and down time
- Low standby losses



R300 KM Series

- 7 models
- Outputs range 70 to 274 kW

The R300 is the latest addition to our range that takes water heating technology well into the future. This unit is a 104% (nett) high efficiency condensing heater with a downward firing blown gas pre-mix water cooled burner that modulates between 20% to 100% providing ultra low NOx and CO² emissions. The unit is lightweight and only requires a very small footprint that provides greater siting flexibility. The heat exchange is constructed with stainless steel fin-tubes and has stainless steel headers. All models have a room sealed facility if required. In addition to the standard equipment that is supplied the R300 also comes with a gas filter and condense trap and has the facility to control its own primary circulator. The comprehensive control panel indicates all operational and lockout status with full history.



Two R300 water heaters at Little Sisters, Glasgow.

Ancillary options include:

- BT300 litres stainless steel buffer vessel for R2000 model.
- BT500 litres stainless steel buffer vessel for R2000 and R18 models.
- BT250 and BT450 litres stainless steel buffer vessels for the R300 range.
- ST66, ST100 and ST166 litres glass lined buffer vessels for the R300 and R200 models.
- Andrews Bypass Manifolds for R2000 and R18 models.



An individual fin-copper tube.

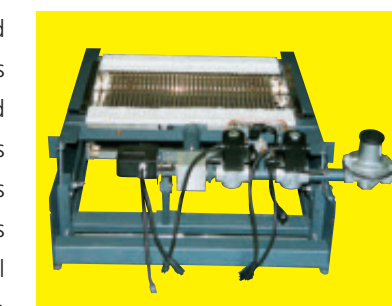
Having a finned copper or stainless steel tube heat exchanger with stainless steel manifold and headers the Supa-Flo is particularly suitable for wash-down and process use in the food industry. Other applications include Hotels, Sports and Leisure Centres, Universities, Colleges and Hospitals, etc.

The Supa-Flo range is purposely designed with high efficiency and low emission in mind whether the unit is at full or part load. This is achieved by the simultaneous ratio modulation of both gas and primary air with optimum efficiency occurring under part-load conditions where the unit will operate most of the time. The primary circulator is essential for reliable operation to provide the units low water content heat exchanger with the optimum water flow-rate and so a suitably matched Grundfos circulator is supplied with each unit. Other standard features include an integral water flow switch, 5-bar safety relief valve, flame safe guard, individual fault signalling and BMS interface connections for remote switching and fault alarms.

Energy Efficient Hot Water

Most of the range either have a trolley-mounted burner assembly with plug-in controls for ease of service and maintenance. If required all components are designed to be replaced quickly and easily, even components such as the heat exchanger, refractory brick work and burner parts. This type of design ensures a longer life span and reduces any down time. The electrical components are all well known manufacturers with a proven track record such as Krom Schroder, Dungs, Berger Lahr, Johnson Controls and Siemens.

System separation and decentralisation is well proven as a method to conserve energy and reduce running costs. Andrews Supa-Flo water heaters offers reliable and economical supplies of hot water and are an ideal solution for many applications in commerce and industry.



R2000 Burner Assembly. Trolley mounted for easy service access.

R2000 EM Series

- 12 models
- Outputs range 57 to 425 kW

The R2000 has an atmospheric burner that simultaneously modulates both gas and primary air via a servomotor that modulates from 20% to 100% load depending on demand. The R2000 is fitted with EM controls that offers a fully electronic modulation with a temperature accuracy of ±1°C. This type of modulation is controlled via a Siemens RWF40 controller, which provides a comprehensive range of functions. The added benefit of this type of modulation is that during standby the primary air damper closes to further reduce heat loss through the flue system. Flexibility of installation is available as a result of the optional standard or alternative handings to provide either left of right burner/controls access to optimise plant room floor space. The units can be easily dismantled and re-assembled if plant room access is restricted.

R18 EM Series

- 6 models
- Outputs range 481 to 1,002 kW

Similar to the R2000 EM the R18 EM provides a fully electronic gas and primary air modulation via a servomotor to ensure that the optimum efficiency is reached at full or part load. All with a temperature accuracy of ±1°C. This range offers a surprisingly small footprint with high outputs up 19,402 litres of hot water per hour at a 44°C temperature rise. As with the R2000 series the burner assembly is 'trolley-mounted' with plug-in controls to keep maintenance cost and down time to an absolute minimum. Left or right handings are available to optimize the plant room floor space and can be broken down in to smaller components for plant room access if required. Similar to the R2000 range the control panel indicates any lockout failures or run status.