

January 2014

NEOflo

High Efficiency Condensing Stainless Steel Storage Water Heaters

Brochure & Specification Sheet



Working towards
a cleaner future



NEOflo

High Efficiency Condensing Stainless Steel Storage Water Heaters

The NEOflo range of high efficiency direct-fired storage water heaters are the latest models to emerge from market leading Andrews Water Heaters. Employing a single upward firing pre-mix burner technology, NEOflo offers high fuel efficiencies and ultra low NOx of around 25ppm satisfying the increasing demands of stringent building regulations. NEOflo water heaters utilise highly durable stainless steel internal storage cylinders with available capacities of 200 litres and 300 litres and an impressive recovery rate of 430 litres per hour. The low internal pressure loss across the stainless steel heat exchanger and internal water way enables NEOflo water heaters to operate in those areas of the country where low water pressure is prominent. Available as a room sealed appliance or for use with a conventional flue, NEOflo offers flexibility with regard to the location of the water heater and discharge of the products of combustion. A digital Human Machine Interface is present on the appliance displaying key parameters with the additional ability to connect to an on-site Building Management System (BMS) for control and supervision.

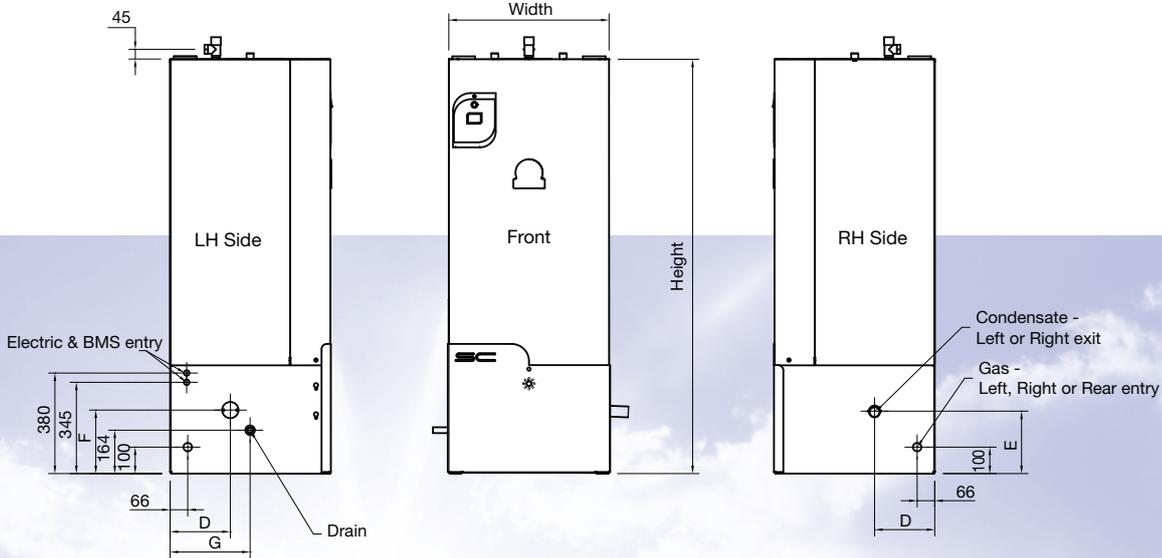
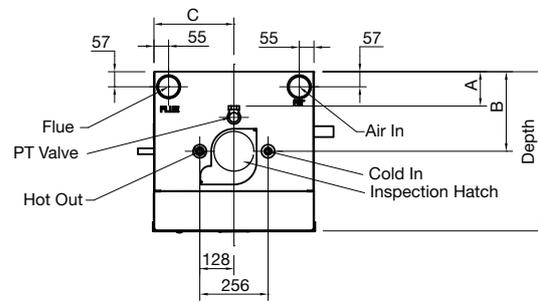
Condensing Stainless Steel Storage Water Heaters

The NEOflo range of water heaters are manufactured in Great Britain and are EC approved via Advantica, certification number EC-87/09/010. They also hold full WRAS approval to operate on either vented or unvented systems, WRAS certificate number 0906320 along with an unvented kit that is available as an optional extra, WRc certification number 0510073. The stainless steel storage vessel is fully insulated with a measured stand-by loss value of 780 MJ/per month. Also the vessel has a factory fitted temperature & pressure relief valve and an inspection hatch. Both controls and storage vessel are housed in a robust steel powder coated casing. The front panels are easily removed for service, maintenance and inspection of the vessel and burner controls. The burner is a condensing, upward firing premix design, offering high efficiency and ultra low emissions. There is a full BMS interface which offers a remote enable, alarm and run signals. The main display and control panel will indicate both operational and fault status with a recorded lockout function. Service engineers can interface the heater via a laptop to view both fan and ignition speeds, hysteresis and recorded lockout history to aid fault finding. A built in anti-Legionella programme or timer can be set and enabled to raise the water temperature automatically over a set number of hours.

Standard NEOflo Features

- Fully condensing water heater
- Two sizes of stainless steel storage vessel
- Full insulated storage vessel
- Five year limited tank warranty
- Suitable for vented or unvented system
- Suitable for low water pressure (0.2 bar) operation
- Factory fitted T/P valve
- Room sealed or conventional flue options
- Full BMS interface
- Digital temperature display
- Integrated diagnostic history
- Robust powder coated casing
- Auto Ignition system
- Tank inspection hatch
- Heat transfer within the vessel
- Ultra low NOx & CO₂ emissions
- Low noise level (50 d BA)
- Compact design to fit standard door-way
- Energy Technology Listed (ECA)
- WRAS approved

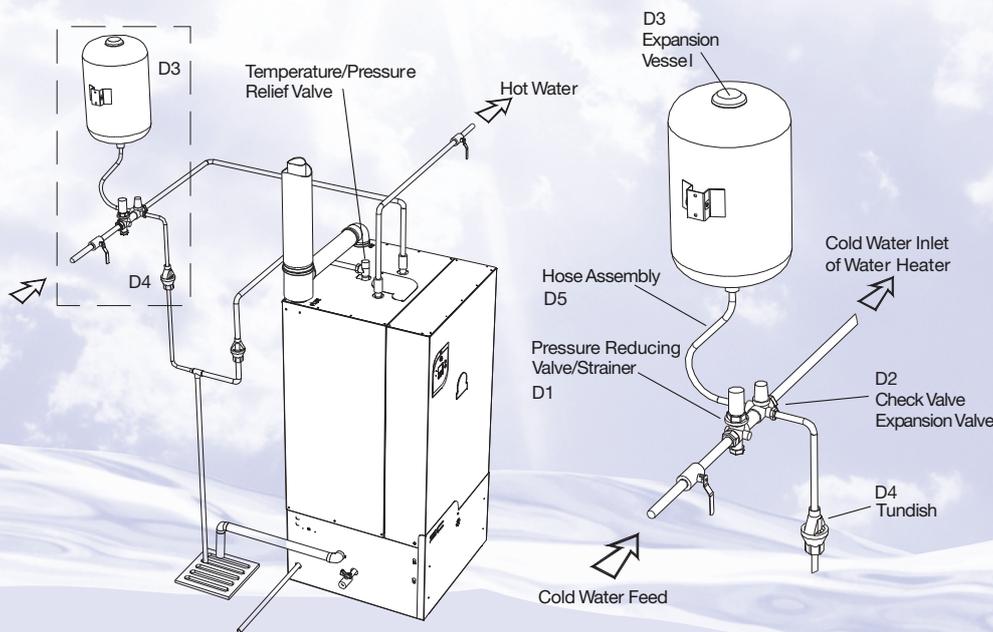
Dimensions



Model	Width	Depth	Height	a	b	c	d	e	f	g
25/200	600	600	1570	130	300	300	226	236	240	226
25/300	730	730	1545	194	365	365	290	233	237	290

Service Clearance all models mm

Left & Right	100
Above	300
In Front	800



Complete Unvented Systems Kit. Part No B314 (Comprising D1–D5)

Components	Andrews part number	Size
D1 Combined pressure reducing valve/strainer	C780	¾" BSP
D2 Combined check valve expansion valve	C781	¾" BSP
D3 Expansion vessel (35 litre)	G099	¾" BSP
D4 Tundish	C783	¾" BSP
D5 Hose assembly	C788	¾" BSP

Andrews NEOflo Range Water Heaters are listed under the United Kingdom Water Fittings Byelaws Scheme for use on unvented systems.
Certificate number: 0510073.

NB: Tees, elbows, stop valve and pipework not supplied

Specification

Model Reference		SC25/200	SC25/300
Input gross Hs	kW	26.3	26.3
Input net Hi	kW	23.7	23.7
Nominal output	kW	25	25
Natural Gas, G20			
Gas consumption	m ³ /h	2.4	2.4
Min. Dynamic Gas supply pressure	mbar	20	20
Efficiency (gross)	%	94	94
Efficiency (net)	%	105	105
Maximum flue gas temperature	°C	75	75
Nominal flue temperature	°C	45	45
Max flue static pressure	Pa	120	120
Flue Gas volume	m ³ /h	37	37
CO ₂	%	9.2	9.2
NO _x level @ 0% O ₂	ppm	25	25
NO _x level @ 0% O ₂	mg/kWh	44	44
NO _x class		5	5
Noise level	dBA	50	500
Standby heat loss	MJ per month	780	780
Ionisation current – max	µA	30	30
Ionisation current – min	µA	5	5
Max water temperature	°C	70	70
Max recovery thru 50°C	l/h	430	430
Max. recovery thru 56°C rise	l/h	380	380
Time to recover tank through 50°C rise			
– 200 litre capacity		29	–
– 300 litre capacity		–	44
– 400 litre capacity		–	–
Flue size (concentric)	mm	80/125	80/125
Flue size (conventional)	mm	80	80
Permitted flue system		B23, C13 & C33	B23, C13 & C33
Air intake size	mm	80	80
Max flue run (concentric)	m	20	20
Max flue run (conventional)	m	40	40
Inlet/outlet water connections		G ¾" M	G ¾" M
Secondary return & drain connection	mm	22	22
Gas connection	mm	22	22
Condensate connection	mm	40	40
Condense rate	l/h	2	2
Temperature & pressure valve size		¾"	¾"
Temperature & pressure relief valve rating		7 bar/95°C	7 bar/95°C
Nominal operating water pressure	bar	3.5	3.5
Maximum water pressure	bar	6	6
Nominal operating water pressure on a U/V system	bar	3.5	3.5
Minimum water pressure	bar	0.2	0.2
Electrical supply	V	230	230
Power consumption	W	130	130
Fuse rate	A	3	3
Protection rating		IP20	IP20
Weight empty	kg	105	137
Weight full	kg	305	437
Shipping weight	kg	125	157
Shipping depth	mm	1040	1040
Shipping width	mm	880	88
Shipping height	mm	2220	2220
Heater depth	mm	600	730
Heater width	mm	600	730
Heater height	mm	1570	1590
Service clearance front	mm	800	800
Service clearance side	mm	100	100
Service clearance above	mm	300	300

Water treatment is normally recommended when the hardness reaches 100-150ppm (7-10 degrees Clark) and above. This can be minimised by reducing the water temperature in the heater and by fitting suitable water pre-treatment equipment. It is for this reason we strongly recommend water pre-treatment is fitted. A base-exchange type of softener is strongly recommended for a reliable solution to hard water.

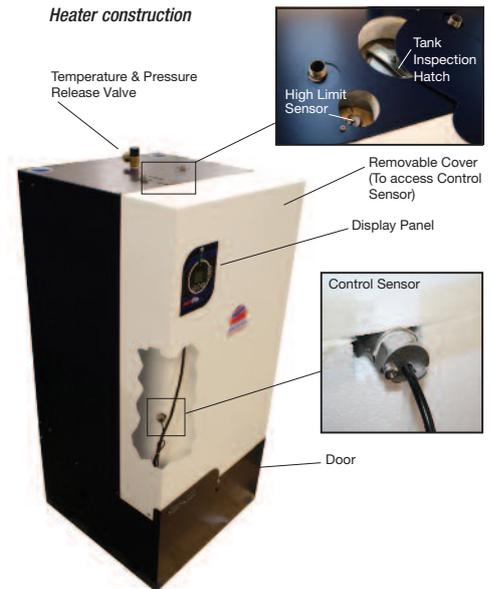


Control panel



Terminal rail

Heater construction



Internal view of vessel



RS 33961



0087

Baxi Commercial
Wood Lane, Erdington,
Birmingham B24 9QP

Sales: **0845 070 1056** Technical: **0845 070 1057**



Email: andrews@baxicommercialdivision.com
www.andrewswaterheaters.co.uk

