



# Hiflo EVO

## Technical Specification Guide

Andrews. Built to perform.

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For further information on the Hiflo EVO and other Andrews Water Heater products, contact your Area Sales Manager today. Details can be found at [andrewswaterheaters.co.uk](http://andrewswaterheaters.co.uk)

# Welcome to Andrews Water Heaters

Andrews Water Heaters is the market leading manufacturer of commercial gas fired water heaters. Established in 1976, Andrews has a comprehensive range, meaning we have the solution for any commercial and industrial application, however large or small.

Our water heaters are energy efficient and fully compliant with water byelaws and Part L of the Building Regulations.

With a specialist team, and a reputation for quality, reliability and high performance products, Andrews can provide hot water delivery to meet the requirements of the most demanding applications.



Introducing the Hiflo EVO

The Hiflo EVO is a high efficiency, floor-standing storage water heater suitable for applications that require larger quantities of hot water. Five models are available ranging from 30 to 65kW, with recovery rates between 520 and 1,111 l/hr at 50 degrees temperature rise – all with top or side water connections to offer flexible installation options.

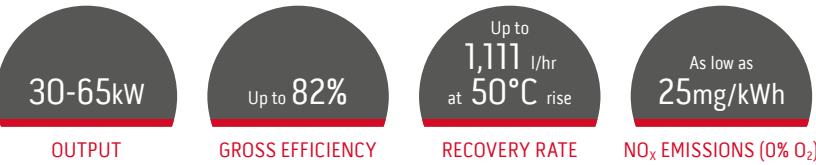
Hiflo EVO is suitable for installation on a conventional flue.



Model shown HF65/300



Technical specification

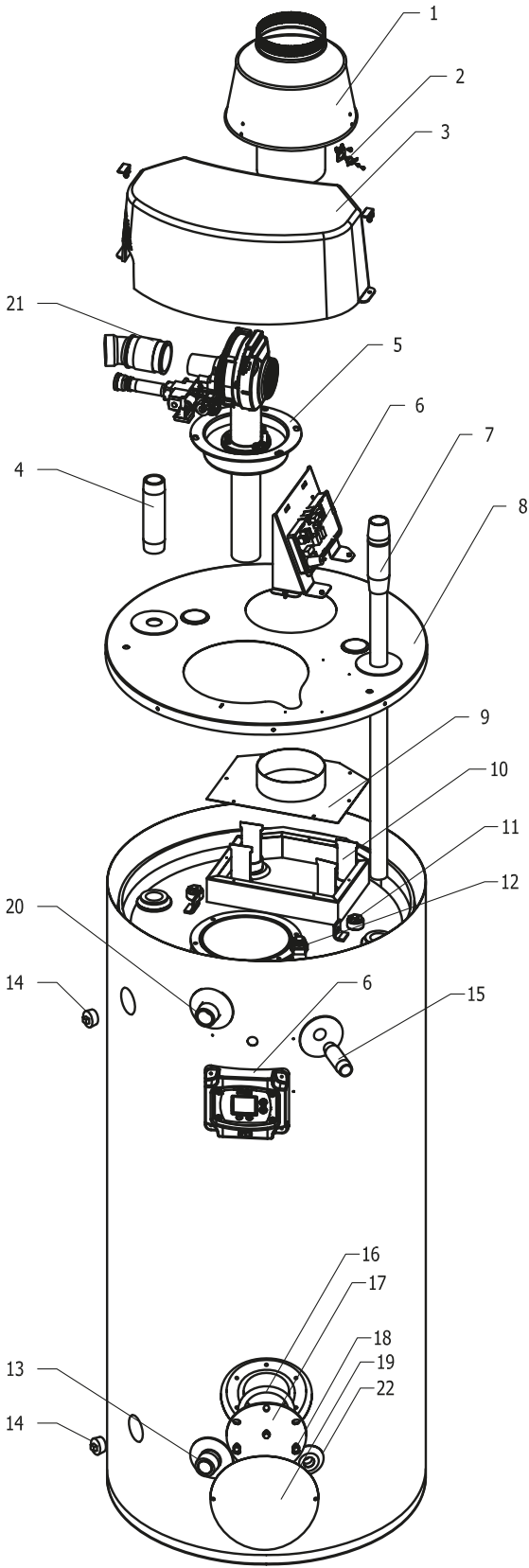


Features

Five models from 30-65kW	Wide range to suit many applications
Top or side mounted water connections	Flexible installation options for the installer
A recovery rate of up to 1,111 litres per hour	Excellent hot water performance
Factory installed Hydrojet® sediment reduction system	Gives a longer and more efficient working life
Inspection door fitted to all models	Assists access for maintenance and service
Low NO <sub>x</sub> 25-39mg	Environmental savings and compliant with latest legislation
Natural gas or LPG	Available for off mains gas areas
Digital HMI display	Fault indication and operational status offers a user-friendly interface

Benefits

Water Heater Construction



1	Draft Divert
2	Assembly Blocked Vent Switch
3	Surround with Latches
4	Nipple Hot Water Outlet (Top Connection)
5	Combustion System Assembly
6	Control Panel Assembly
7	Inlet Tube Hydrojet (Top Connection)
8	Jacket Head
9	Exhaust Collector cover
10	Flue Baffle 2"
11	Correx Anode
12	Temperature Sensor
13	Inlet Tube Hydrojet
14	Plug
15	Nipple (T&P Valve Location)
16	Cleanout Gasket
17	Cleanout Cover
18	Screw 5/16 – 18 x 1/2
19	Clean Out Cover Access Panel and Insulation
20	Nipple Hot Water Outlet (Front Connection)
21	Air Replace Terminal
22	Drain Port and Secondary Return

Technical Information

			Model				
Product code			HF30/300	HF48/300	HF65/300	HF48/380	HF65/380
Energy	Heat input net (gross)	kW	33.3 (37)	53.2 (59)	71.2 (79)	53.2 (59)	71.2 (79)
	Heat output	kW	30	48	65	48	65
	Thermal efficiency net (gross)	%	91 (82)	91 (82)	91 (82)	91 (82)	91 (82)
	Standby heat loss	kWh/day	8.02	8.66	9.29	9.43	10.03
ErP	NO <sub>x</sub> emissions (0% O <sub>2</sub> )	mg/kWh	30	25	29	39	36
	ErP efficiency rating		B	B	B	B	B
	Water heater efficiency	%	75	72	70	67	67
	Noise level	dBa	51	51	51	51	51
Gas data	Gas flow rate (natural gas)	m³/hr	3.41	5.44	7.38	5.44	7.38
	Flue gas connection size	mm	127	152	152	152	152
	Flue gas volume	m³/hr @ STP	40.5	65.1	87.3	65	87.3
	CO <sub>2</sub> content	%	7.6	8.6	8.7	8.3	8.7
	Flue draught requirement	mmwg	-1 to -4	-1 to -4	-1 to -4	-1 to -4	-1 to -4
	Max flue gas temp	°C	230	230	230	230	230
Water	Storage capacity	litre	303	303	303	380	380
	Recovery rate through 50°C Δt	litre/hr	520	829	1,111	829	1,111
	Recovery rate through 56°C Δt	litre/hr	464	741	992	741	992
	Operating pressure (unvented)	bar	3.5	3.5	3.5	3.5	3.5
	Minimum working pressure	bar	1	1	1	1	1
	Maximum pressure	bar	10.3	10.3	10.3	10.3	10.3
Electrical	Fuse rating	amp	5	5	5	5	5
	Electrical power consumption	W	120	210	210	210	210
	Electrical requirements	V	230	230	230	230	230
Misc	Weight full	kg	510	510	515	628	628
	Weight empty	kg	210	210	214	250	250
	Maximum outlet temperature	°C	82	82	82	82	82
	Maximum flue gas temperature	°C	230	230	230	230	230
Service clearance	Front	mm	300	300	300	300	300
	Sides	mm	300	300	300	300	300
	Above	mm	762	762	762	762	762
Shipping	Shipping width	mm	864	864	864	864	864
	Shipping depth	mm	768	768	768	768	768
	Shipping height	mm	2,120	2,120	2,120	2,120	2,120
	Shipping weight	kg	243	243	247	287	287

Hiflo EVO Suggested Engineer Specification

Construction

The water heater shall be an Andrews Hiflo EVO, a high efficiency low NO<sub>x</sub> floor standing storage water heater. It shall be complete with an integral steel storage vessel lined with a Vitraglass® silica enamel protective coating, a clean out access opening and a pre-mix downward firing mesh burner with fully automatic ignition.

The water heater shall have a vertical, dual pass, multiple tube heat exchanger system comprising a single 200mm diameter primary heat exchanger tube and four 51mm diameter secondary heat exchanger tubes. Each of the secondary heat exchanger tubes shall incorporate a stainless steel baffle to further transfer energy from the combustion gases into the water.

One Correx anode shall be fitted within the water storage vessel, providing protection against the effects of electrolytic action within water systems. Heat loss shall be minimised by a 51mm thick non CFC foam insulation and will be protected by a painted steel outer jacket.

The water heater shall be CE Certified and ErP compliant.

Hydraulic, Gas and Connections

The water heater shall be suitable for operating on boosted, direct mains and open vented water systems and for operating up to a maximum pressure of 10.3 bar.

1 ½" hot water outlet and cold water inlet connections shall be located on the top or sides of the water heater with the cold water inlet connections incorporating a factory installed Hydrojet® sediment reduction device.

The water heater shall be suitable for use with Natural Gas and LPG. LPG conversion kits available.

The water heater shall have a flue outlet connection mounted on the top of the unit and be suitable for use with conventional and flue systems.

Controls

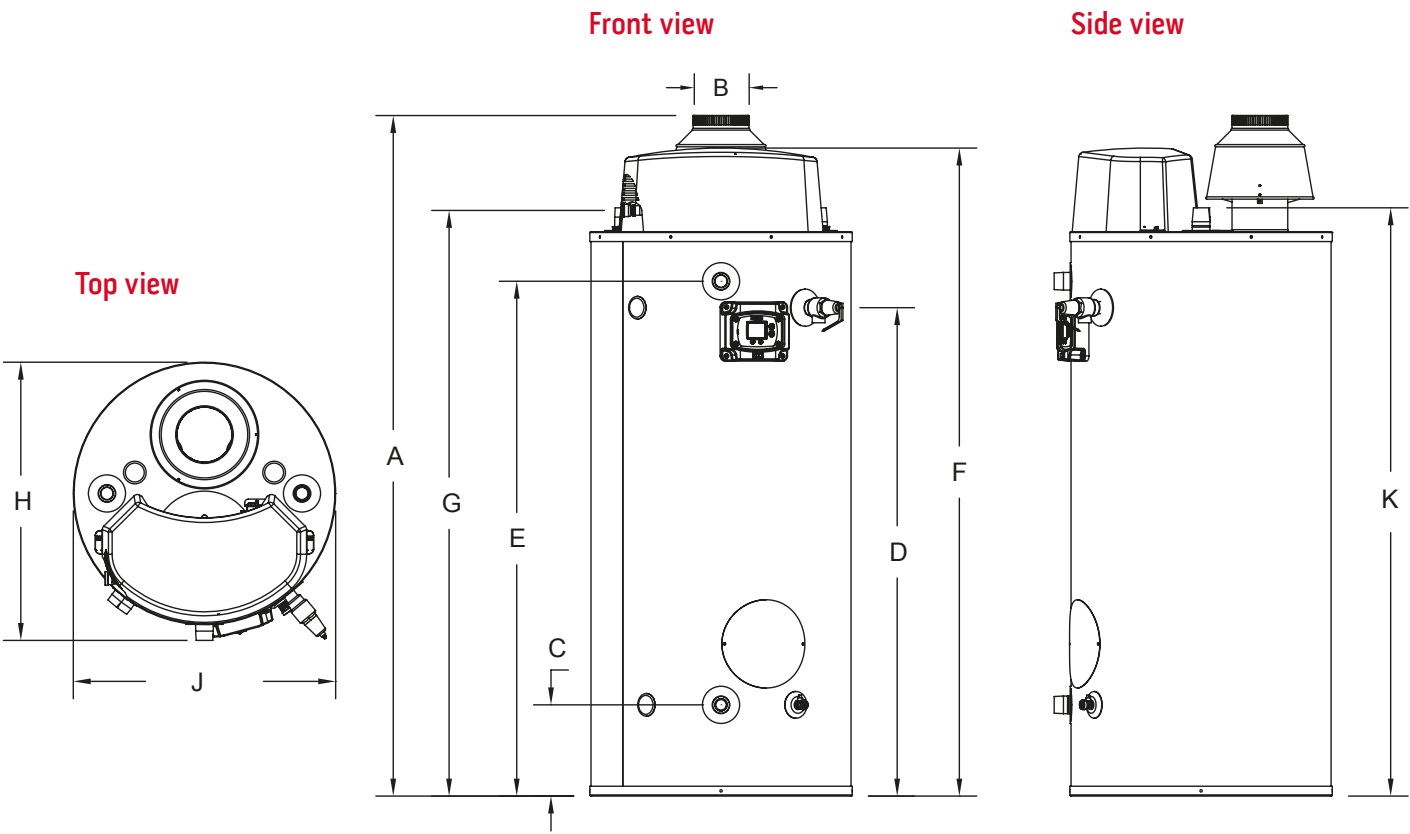
A digital LCD display shall be integrated into the front and be an adjustable electronic thermostat to any temperature up to 82°. A recycling Energy Cut Off (ECO) shuts off all gas in the event of an overheat condition.

The water heater shall include a fan assisted pre mix stainless steel mesh burner with a direct spark ignition system incorporating an automatic gas shut-off (ECO) within the sensor and control board, isolating the gas supply to the burner if the water temperature exceeds 93°C.

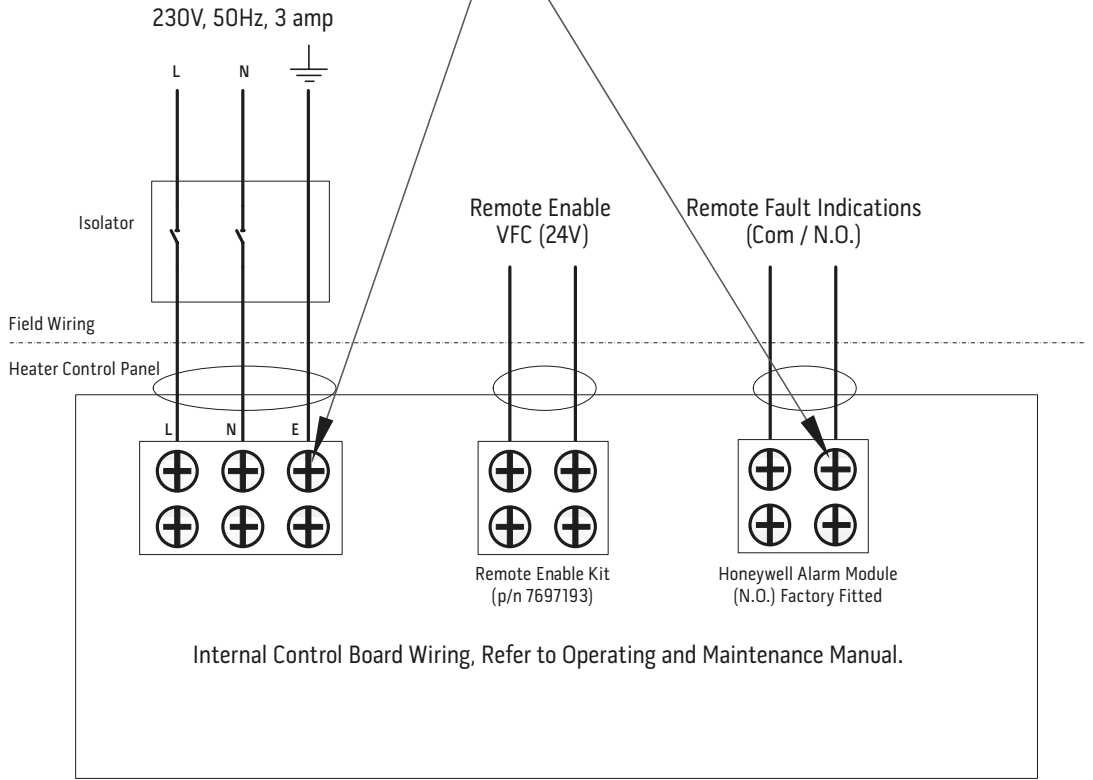
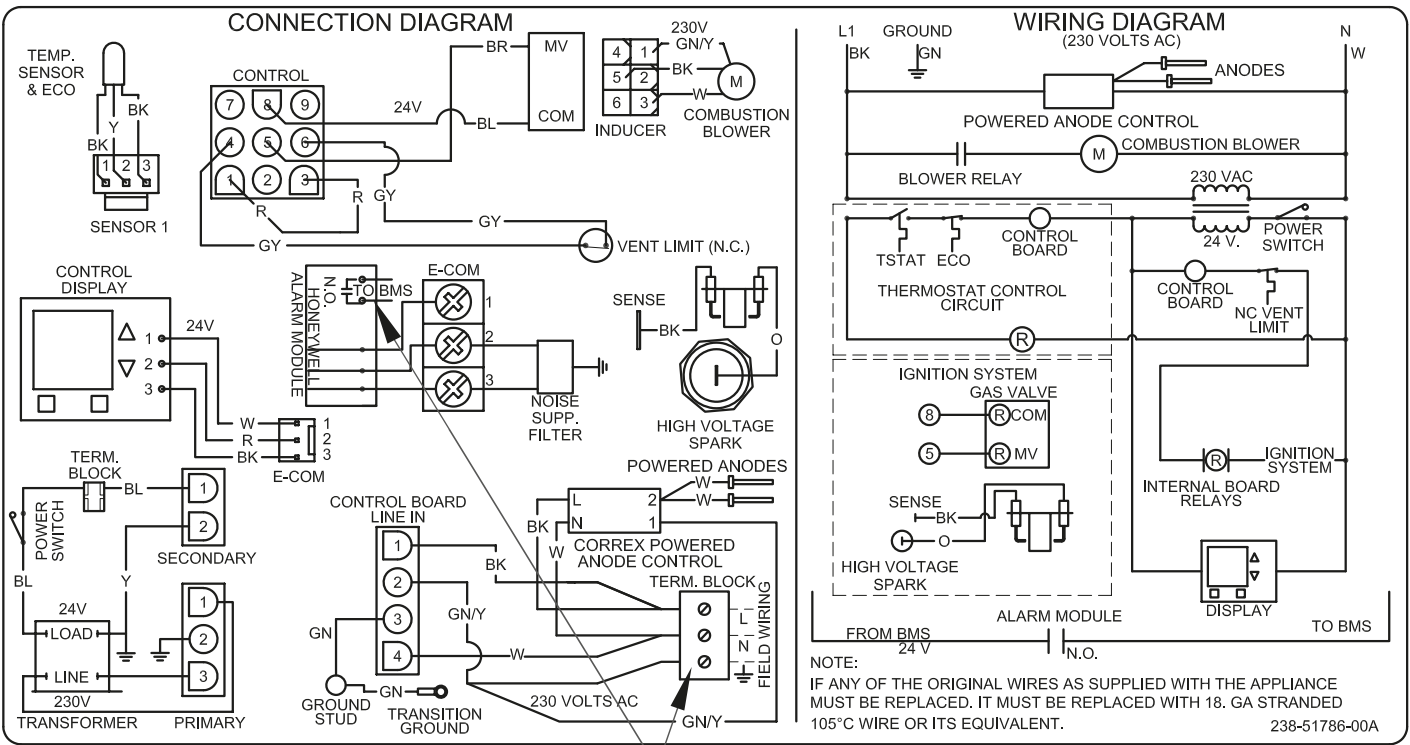
The water heater shall have NO<sub>x</sub> emissions of 39 mg/kWh or lower at 0% O<sub>2</sub>, a noise rating of 51dbA or less and an efficiency (Gross CV) of 82%.

Dimensions and Connections

		Model				
		HF30/300	HF48/300	HF65/300	HF48/380	HF65/380
A: Height	mm	1,600	1,645	1,645	1,861	1,861
B: Flue diameter	mm	127	152	152	152	152
C: Inlet	mm	254	254	254	254	254
D: T&P valve	mm	1,118	1,118	1,118	1,334	1,334
E: Hot water outlet side connection	mm	1,194	1,194	1,194	1,410	1,410
F: Top of casing	mm	1,556	1,556	1,556	1,772	1,772
G: Height of gas pipe	mm	1,416	1,416	1,416	1,607	1,607
H: Unit depth	mm	762	762	762	762	762
J: Unit width	mm	718	718	718	718	718
K: Hot water outlet top connection	mm	1,391	1,391	1,391	1,607	1,607

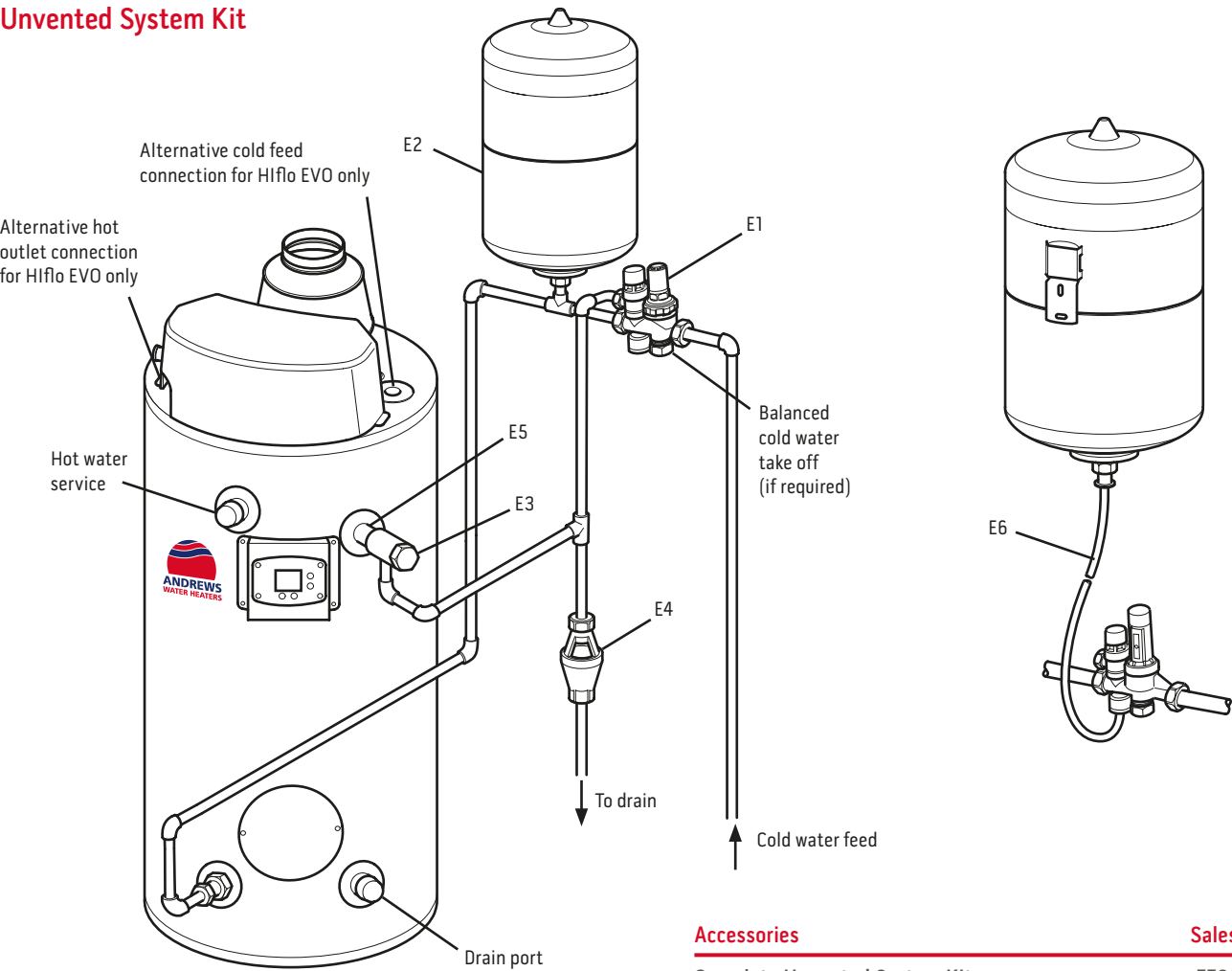


Wiring Information



# Complete Unvented System Kit and Accessories

## Unvented System Kit



Accessories	Sales code
Complete Unvented System Kit	7703930
E1: Pressure Reducing/Check/Expansion Valve 1"	
E2: Expansion Vessel 24L	
E3: T/P Relief Valve 95°C/7 bar x 1"	
E4: Tundish 1"	
E5: T/P Brass Valve Adaptor 1"	
E6: Hose Assembly	

LPG Conversion Kits	Sales code
LPG Conversion Kit for HF30/300	7697168
LPG Conversion Kit for HF48/300	7697169
LPG Conversion Kit for HF65/300	7697170
LPG Conversion Kit for HF48/380	7697171
LPG Conversion Kit for HF65/380	7697172

Controls	Sales code
Remote Enable Kit	7697193

# Technical Support and Declaration of Compliance

From brochures to CAD drawings and BIM files, you can access all the information you need at [andrewwaterheaters.co.uk](http://andrewwaterheaters.co.uk). Or call our sales or technical departments on 0345 070 1057.

We can provide you with:

- Brochures
- Technical sheets
- Case studies
- Installation manuals
- CAD and BIM files
- Size-it – [sizeit.co.uk](http://sizeit.co.uk)
- Energy-related Products directive data
- Commissioning
- Technical Information
- Free training courses and CPDs, available at [andrewwaterheaters.co.uk/training](http://andrewwaterheaters.co.uk/training)
- 24/7 Out of Hours Engineer Support

**24/7 OUT-OF-HOURS  
ENGINEER SUPPORT**

In an emergency, we offer  
technical advice

**0345 070 1058**

The water heater must be installed in accordance with the following regulations:

- BS 5440:** Installation of flues and ventilation for gas appliances of rated output not exceeding 60kW.
- Part 1:** Specification for installation of flues.
- Part 2:** Specification for installation of ventilation for gas appliances.
- BS 5546:** Installation of gas hot water supplies for domestic purposes.
- BS 6891:** Installation of low pressure gas pipework of up to 35mm in domestic premises.
- BS EN 806 (Parts 1 – 5):** Specifications for installations inside buildings conveying water for human consumption.
- BS 6644:** Installation of gas fired water boilers of rated inputs between 70kW and 1.8MW.
- BS EN 12897 Water Supply:** Specification for indirectly heated unvented (closed) storage water heaters.
- IGE/UP/1A,1B:** Strength/tightness testing and direct purging.
- IGE/UP/2:** Installation pipework.
- IGE/UP/10 – 1 (Edition 4):** Installation of gas appliances in industrial and commercial premises.
- BS 8558:** Guide to the design, installation, testing and maintenance of services supplying water for domestic use within buildings and their curtilages. Complementary guidance to BS EN 806.
- HSE L8:** Control of legionella bacteria in water systems.
- HSG247 – Part 2:** The control of legionella bacteria in hot and cold water systems.
- Building Regulations Part G:** Sanitation, hot water safety and water efficiency.

# Andrews Water Heaters Range Overview

## Condensing



### MAXXflo EVO

Delivers superior flow outputs and low NO<sub>x</sub> for a class-leading performance, and is future-proofed with advanced BMS connectivity.

Available in 30-120kW outputs.



### SUPAflo EVO

Produces a continuous supply of hot water and is designed for high demand environments that need high volumes of instant hot water.

Available in 142-539kW outputs.



### ECOflo

Fully-condensing direct-fired efficient water heater suitable for large commercial properties where there's a high demand for hot water.

Available in 35-96kW outputs.



### ECOflo COMPACT

High efficiency condensing floor-standing storage water heater designed to meet your toughest installation challenges and hot water demands.

Available in 20kW outputs.



### COMBiflo

A range of condensing stainless-steel water heaters. With space heating capability, it produces both hot water and heating from a single heat generator and storage vessel enclosed in one cabinet.

Available in 100-150kW outputs.



### FASTflo PLUS

Wall-hung condensing instant water heater. It's very easy to install with only three simple connections to fit.

Available in 56kW outputs.

## Non-condensing



### HIflo EVO

High efficiency floor-standing storage water heater designed for bigger applications that require larger quantities of hot water.

Available in 30-65kW outputs.



### CLASSICflo

Standalone gas-fired water heater that can be installed on vented or unvented systems. It's quick and easy to install, particularly as a replacement for existing water heaters.

Available in 10-20kW outputs.



### CLASSICflo FAN FLUED

Has the addition of a fan assisted flue, making them the perfect choice for installations where longer flue runs are required.

Available in 13-18kW outputs.



### CLASSICflo BALANCED

Offers all the advantages of the CLASSICflo but with the additional benefit of a balanced flue. The concentric flue system draws air from outside the building, making it suitable for properties where the air might be contaminated.

Available in 9kW outputs.



### FASTflo

High efficiency, direct gas-fired, wall-hung continuous flow water heater, offering a very flexible, reliable and robust solution for where a continuous flow of hot water is required.

Available in 49kW outputs.



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You can manage a portfolio of projects and tailor the sizing to your exact property requirements. Size-it will match the product and provide all the information and up-to-the-minute legislative guidance you need, any time, anywhere.

- Designed specifically for the UK market
- User-friendly and intuitive
- Accessible online on any device
- Up-to-date UK legislative guidance
- Manage a portfolio of projects



Register today at [sizeit.co.uk](http://sizeit.co.uk)

Size-it

# Six reasons it has to be Andrews



## Britain's No.1

Established in 1976, Andrews is the leading supplier of gas-fired commercial water heaters in the UK.



## Market-leading expertise

As active members of CIBSE, SOPHE and ICOM, we are at the forefront of setting industry standards, keeping our customers one step ahead of changing legislation.



## Reliability you can trust

Our products are built to perform, even in the most demanding environments. We have a focus on innovation and our range is continually evolving to answer customer needs and exceed building regulations.



## Unrivalled design support

Technical data sheets, BIM and CAD files are available online, 24 hours a day, 365 days a year.



## Expert technical advice

You can rely on our dedicated team every step of the way from planning and commissioning to servicing and maintenance. We offer on and off-site assistance, including expert advice on system design and hydraulic schematics.



## Exceptional aftersales service

You can trust in our continued support with commissioning visits and in-warranty service and repairs – and if you need expert engineer support, we're here for you round the clock with our 24/7 hotline.

Andrews is an Investors in People organisation. All of our systems and procedures meet the highest standards, including ISO 9001 (quality management) and ISO 14001 (environmental management).

**Andrews. Built to perform.**





Sales 0345 070 1055

Technical 0345 070 1057

Web [andrewswaterheaters.co.uk](http://andrewswaterheaters.co.uk)



Registered office address: Baxi Heating UK, Brooks House, Coventry Road, Warwick CV34 4LL

December 2020

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## ALL TOGETHER BETTER



BAXI HEATING HAS A PORTFOLIO OF SOME OF THE BEST KNOWN AND MOST RESPECTED COMMERCIAL BRANDS IN THE HEATING INDUSTRY ACROSS THE UK AND IRELAND: ● REMEHA, ● ANDREWS WATER HEATERS, ● POTTERTON COMMERCIAL AND ● PACKAGED PLANT SOLUTIONS.

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Reliably engineering high-performance and high-efficiency heating solutions.
- **ANDREWS WATER HEATERS** - BUILT TO PERFORM  
UK's No. 1 commercial water heaters of choice for quality and reliability.
- **POTTERTON COMMERCIAL** - TOTALLY DEPENDABLE  
Heating solutions that customers can rely on and services they can trust.
- **PACKAGED PLANT SOLUTIONS** - INGENUITY BOXED  
Leading specialists in prefabricated plant rooms from concept to completion.