

# Heating & Hot Water Solutions



**HIGH EFFICIENCY BOILERS  
LOW CARBON SOLUTIONS**

# Make Alpha your first choice

Today, Alpha is recognised throughout the UK as one of the heating industry's leading lights – a company, with over 50 years' experience, that successfully combines traditional business values with a highly innovative approach to all aspects of its operation.

## COMPREHENSIVE HEATING AND HOT WATER OPTIONS

Manufacturing a range of boilers to meet the heating and hot water needs of practically every property type or household size, Alpha also offers energy-saving products that work alongside its boilers; allowing low carbon technologies like solar thermal and flue gas heat recovery to be incorporated easily and affordably.

## ADVANCED MANUFACTURING, INNOVATIVE ENGINEERING

Part of the Italian-owned Immergas Group, one of Europe's leading heating appliance manufacturers, Alpha benefits from some of the most advanced production facilities in the world - continually refining its product range and making the most of new and existing technologies to create genuinely innovative heating solutions.

## CHOOSE ALPHA FOR QUALITY

Choosing an Alpha appliance is your assurance of quality. Put simply, it means you can enjoy the very best heating technology money can buy.

Using only the best components and exceptionally high manufacturing standards, our appliances deliver truly outstanding performance and reliability.

Choosing an Alpha appliance  
is your assurance of quality.  
Put simply, it means you can  
enjoy the very best heating  
technology money can buy.



## CONTENTS

INTRODUCTION	2-7
PRODUCT OVERVIEW	8-9
E-TEC BOILERS	10-11
INTEC <sup>2</sup> XE BOILERS	12-13
INTEC <sup>2</sup> CE BOILERS	14-15
INTEC C BOILERS	16-17
INTEC <sup>2</sup> SE BOILERS	18-19
CDR BOILERS	20-21
PREMIERPACK & CYCLONE PLUS	22-23
CONTROLS	24-25
FLUEING	26-27
GASSAVER	28-29
INTEC GS BOILERS	30-31
FLOWSMART	32-35
SOLARSMART	36-39

# Leading the way

Alpha is part of the Immergas Group, which operates in 30 countries including eight in Europe. Market leader in its home country of Italy, Immergas has produced over 4 million boilers alone and is arguably Europe's leading heating appliance manufacturer.

Covering 50,000 square metres, the Immergas headquarters houses some of the most advanced manufacturing, research and development facilities to be found anywhere in the world.

With all this at our disposal, we are able to indulge our passion for product innovation. Evident across all our ranges, this approach enables us to develop truly unique solutions to the supply, cost and environmental issues associated with traditional energy resources such as gas.

## QUALITY ASSURED

Immergas is certified ISO 9001:2000, issued by the prestigious German organisation TÜV, in recognition of the extreme reliability of company quality management processes.

All aspects of the company's operation are covered – including design and product development, incoming materials acceptance, manufacturing processes, and after-sales service.

Checks are carried out daily on random samples of finished products, repeating the checks that were previously performed on every single boiler during the assembly stage. In a specific laboratory, specialist personnel test boilers every day with nothing left to chance – even down to the technical documentation and packaging.



## MAKING A DIFFERENCE

While sustainable energy resources like the sun and geothermal have an increasing prominent part to play in our lives, we are not yet at a stage in the UK where we can rely solely upon them.

Here at Alpha, we marry new and traditional technologies, drawing on the best elements of each to deliver unique heating solutions.

Wherever possible we encourage a holistic approach to each project, utilising the familiar high efficiency gas boiler with advanced 'bolt-on' products such as GasSaver and SolarSmart in tailor-made systems.

Such solutions are practical to install and extremely cost effective, enabling people to make an impact on their energy bills and carbon footprint sooner rather than later.



We're here to help  
**0344 871 8764**

Whether you need help choosing the right heating appliance, or you experience difficulty during or after installation, we are here to assist.

### **CUSTOMER SERVICE**

Before, during or after installation, you can rely on our Customer Service team to provide you with expert advice. Whether it's a simple query or a more complicated problem, help is only a phone call away.

### **SERVICE ENGINEERS**

In the unlikely event that you experience a problem with one of our products that can't be resolved over the phone or by visiting our website, we'll send out one of our nationwide service engineers. They are equipped with the latest communication technology to keep response times to a minimum.

### **ANNUAL SERVICE**

It is important to ensure that your boiler is properly maintained from the date of installation. An annual service will provide peace of mind that your boiler is working safely and efficiently, which in the long term will save you money on your fuel bills. It will also help prevent any potential problems so you can enjoy heating and hot water all year round without any unnecessary disruption.

Please speak to your installer about an annual service plan, or contact us and we will be happy to help.

**0344 871 8764**

[Calls are free within inclusive minutes' packages; otherwise standard rates apply.]

**[www.alpha-innovation.co.uk](http://www.alpha-innovation.co.uk)**

**Visit the Alpha website to access our useful Boiler Control Panel Troubleshooter and Frequently Asked Questions pages.**

**Additional sets of appliance user and installation instructions can also be downloaded from here.**



# AlphaOne

Loyalty. Rewarded.

At Alpha we believe in supporting our installers and that's why we launched the all-encompassing loyalty scheme AlphaOne.

By registering your boiler installations with us, you'll not only be awarded points that you can redeem against a choice of hundreds of items, but we'll also help make your life easier with exclusive business-related benefits and marketing support.

## ALPHA INSTALLER APP

The easiest way to notify us of your installations is via the dedicated installer area on our website or by using our mobile app. As well as ensuring your customers' warranty is set up on our system, we'll also submit the details to Gas Safe on your behalf and cover the cost of the notification fee.

## FREE INSTALLER TRAINING

We understand the difficulties of working in an increasingly competitive environment. Improving product knowledge and staying up-to-date with the latest innovations can help and that's why we encourage installers to attend our free High Efficiency and Renewables course.

Available at various locations nationwide, the one-day course gives practical hands-on experience of our latest products and lifts the lid on the latest energy saving products and relevant legislation.

An installer scheme to put a smile on your face

To find out more about how we can support you as an Alpha installer call us on **0344 871 8763** or visit [www.alpha-innovation.co.uk/alphaone](http://www.alpha-innovation.co.uk/alphaone)

# Create your perfect heating system



## BOILERS PAGES 10-21

---

Think of the things that really matter to you and your clients when choosing a boiler.

Build quality, reliability, energy efficiency, ease of operation and last, but by no means least, ease of installation. These are the things that make a difference.

That's why choosing an Alpha boiler makes sense because, whichever model it is, our boilers are guaranteed to deliver on every aspect.

With a selection of boiler types in a variety of outputs, there's an Alpha boiler to suit practically every property type or household size.

All models combine exceptional levels of efficiency with a host of genuinely innovative features.

Whether required as a stand-alone appliance or part of an integrated system, an Alpha boiler represents the ultimate choice.



In September 2015 new ErP (Energy-related Products) legislation came into effect to assist the EU achieve its 2020 energy targets. These regulations affect all products that have an impact on energy use, including boilers and heating systems, as well as the way you work.

All boilers in this brochure are fully ErP compliant.





## ACCESSORIES PAGES 22-27

---

### CONTROLS

Controls help optimise heating system efficiency and, in turn, reduce energy bills. Designed specifically to complement the Alpha boiler range, our controls enable users to precisely programme their heating systems to suit their lifestyles and desired comfort levels.

### PREMIERPACK & CYCLONE PLUS

Fitting the PremierPack wall-mounting jig or Cyclone Plus magnetic filter with our InTec boilers provides built-in protection against debris in the system, and automatically adds either one or two years to the standard boiler guarantee.

### TRACE HEATING KIT

Fit the Trace Heating Kit to eliminate the risk of frozen condensate pipes and subsequent damage to the boiler. The 3m electric trace wire is controlled by the boiler in conjunction with an outside weather probe.

### RELAY PCB

External devices such as pumps and zone valves are controlled using the Relay PCB.

### WEATHER COMPENSATION PROBE

The Weather Compensation Probe improves efficiency by adjusting the boiler's heat output according to outside temperature.

Requires the three-way diverter valve kit when added to an InTec system boiler.

### THREE-WAY DIVERTER VALVE KIT

Operates as a hot water priority valve, meaning if the heating is on and there is a hot water demand, the valve will divert the primary heat to the cylinder until the cylinder sensor is satisfied. Requires quick recovery cylinder. Must be used if adding the weather compensation probe to an S boiler.

### ◀ CONDENSATE PUMP

Required for low level boiler installations where the condensate needs to be pumped upwards for removal.

## ENERGY SAVING PAGES 28-39

---

We've designed a range of energy-saving products capable of operating alongside our boilers. Whether part of the original boiler installation or a future upgrade, this enables environmentally considerate technologies like solar thermal and flue gas heat recovery to be easily and affordably incorporated into homes.

### GASSAVER

GasSaver extracts heat from waste boiler flue gases, using it to pre-heat cold mains water before entering the boiler. This reduces the amount of gas required by the boiler to deliver hot water.

It is available built-in with our InTec GS Plus boiler models or as a compact add-on unit for positioning neatly above our other boilers.

### FLOWSMART

Ideal for homes with above average hot water demands, FlowSmart negates the need for a large, permanent store of hot water.

The thermal store draws heat from the boiler's primary circuit and, along with heat from the GasSaver unit, is used to pre-heat cold mains water prior to it entering the boiler.

FlowSmart is available in three different set-up options.

### SOLARSMART

SolarSmart is a solar thermal system designed to work with an Alpha combination boiler.

Unlike conventional solar thermal systems, SolarSmart does not use any gas to maintain the temperature of the stored water.

Instead, the boiler only fires to raise the temperature of the solar heated water as necessary, when there is an immediate demand for hot water, giving it an additional energy-saving advantage.

# E-Tec



The newest addition to our combi boilers, the E-Tec range features a brand new stainless steel heat exchanger and is our smallest yet. Being compact allows an easy fit in a standard kitchen cupboard and servicing is made easy with front access.

With two outputs available and the capability to deliver 14.1 litres of water per minute, this combi provides an ideal solution for small to medium sized homes.

**2 YEAR  
WARRANTY**

Model	Part number	DHW output (kW)	CH output (kW)	Flow rate @ 35°C rise l/min	Boiler dimensions H x W x D (mm)	Lift weight (kg)	Standard guarantee	Modulation range	Max. horizontal flue length (m)	Max. vertical flue length (m)
E-Tec 28	3.027374	28.3	26.1	12.1	712x440x255	35	2 yr	1:6	12	14
E-Tec 33	3.027375	32.0	29.7	14.1	712x440x255	35	2 yr	1:6	12	14



## ◀ FEATURES OVERVIEW

- Compact size and layout
- Stainless steel heat exchanger
- Backlit LCD with push button controls and detailed operational information
- High efficiency Grundfos pump and hydroblock assembly
- Single electrode
- Easy-access NTCs on front of pipes
- One-piece cartridge diverter valve
- Clip-on DHW temperature sensor
- Dry-change NTCs
- Combined condensate and pressure relief valve connection
- Frost protection and daily pump kick
- Easy access for servicing
- IPX4D protection
- Low electrical consumption



# InTec<sup>2</sup> XE



The XE range benefits from advanced combustion management and continually controls and adjusts the gas flow to deliver improved energy efficiency.

With their compact dimensions each of the two available models will sit perfectly in a standard kitchen cupboard or is ideal where space is limited.

**4 YEAR  
WARRANTY**

Model	Part number	DHW output (kW)	CH output (kW)	Flow rate @ 35°C rise l/min	Boiler dimensions H x W x D (mm)	Lift weight (kg)	Standard guarantee	Guarantee with PP2 <sup>1</sup>	Modulation range	Max. horizontal flue length (m)	Max. vertical flue length (m)
InTec <sup>2</sup> 25XE	3.025634	24	21.3	10.3	712x440x276	33.4	4 yr	6 yr	1:8	12	14
InTec <sup>2</sup> 28XE	3.025635	28	25.5	11.7	712x440x276	33.4	4 yr	6 yr	1:8	12	14

<sup>1</sup>PremierPack<sup>2</sup>

**Please note:** The same boiler works on both Natural Gas and LPG so there is no need for a conversion kit or to order a separate model.



## ◀ FEATURES OVERVIEW

- Compact size and layout
- Easy access for servicing
- Gas adaptive valve - works with Natural Gas and LPG
- PCB memory chip
- High efficiency Grundfos pump and hydroblock assembly
- Single electrode
- Clip-on DHW temperature sensor
- Dry-change NTCs
- One-piece cartridge diverter valve
- Combined condensate and pressure relief valve connection
- Backlit LCD with push button controls and detailed operational information
- Frost protection and daily pump kick



# InTec<sup>2</sup> CE



The CE range offers customers an exceptional combination of premium features, energy efficiency and ease of use.

Like the InTec<sup>2</sup> XE range, CE boilers use advanced combustion management and their compact dimensions allow each of the three available models to sit perfectly in a standard kitchen cupboard.

**7 YEAR  
WARRANTY**

Model	Part number	DHW output (kW)	CH output (kW)	Flow rate @ 35°C rise l/min	Boiler dimensions H x W x D (mm)	Lift weight (kg)	Standard guarantee	Guarantee with PP2 <sup>1</sup>	Modulation range	Max. horizontal flue length (m)	Max. vertical flue length (m)
InTec <sup>2</sup> 26CE	3.024885	26.0	21.3	10.7	712x440x276	33.4	7 yr	9 yr	1:10	12	14
InTec <sup>2</sup> 30CE	3.024886	28.0	25.5	11.7	712x440x276	33.4	7 yr	9 yr	1:10	12	14
InTec <sup>2</sup> 35CE	3.024887	34.0	29.8	14.4	712x440x276	33.4	7 yr	9 yr	1:10	12	14

<sup>1</sup>PremierPack<sup>2</sup>

**Please note:** The same boiler works on both Natural Gas and LPG so there is no need for a conversion kit or to order a separate model.



## ◀ FEATURES OVERVIEW

- Compact size and layout
- Easy access for servicing
- Gas adaptive valve - works with Natural Gas or LPG
- PCB memory chip
- High efficiency Grundfos pump and hydroblock assembly
- Single electrode
- Clip-on DHW temperature sensor
- Dry-change NTCs
- One-piece cartridge diverter valve
- Combined condensate and pressure relief valve connection
- Backlit LCD with push button controls and detailed operational information
- Frost protection and daily pump kick
- Electronic seasonality valve
- Pipework cover tray
- Wide 1:10 modulation range
- Integrated filling loop
- Constant hot water temperature control

## ◀ ELECTRONIC SEASONALITY VALVE

The Electronic Seasonality Valve continually measures the inlet and outlet temperatures and automatically adjusts the DHW flow accordingly to maintain a constant temperature at the hot water outlet. It reduces waste water by controlling the flow rate to give a set outlet temperature.



# InTec C



Our flagship InTec C combi boilers have been updated with a modulating high efficiency pump and are fully ErP compliant.

In addition, they come with a host of premium features that deliver numerous benefits for users and installers alike.

Available in two outputs, they are an ideal choice for small to medium-sized homes.

**7 YEAR  
WARRANTY**

Model	Part number	DHW output (kW)	CH output (kW)	Flow rate @ 35°C rise l/min	Boiler dimensions H x W x D (mm)	Lift weight (kg)	Standard guarantee	Guarantee with PP <sup>1</sup>	Modulation range	Max. horizontal flue length (m)	Max. vertical flue length (m)
InTec 30C	3.025814	29.0	26.3	12.6	720x440x300	39	7 yr	9 yr	1:6	12	14ww
InTec 34C	3.025815	33.7	30.7	14.5	720x440x300	41	7 yr	9 yr	1:5	12	14

<sup>1</sup>PremierPack Plus



## ◀ FEATURES OVERVIEW

- Seasonality Valve
- Valves and tails factory fitted
- Isothermic stainless steel heat exchanger
- Frost protection and daily pump kick
- Backlit LCD with push button controls and detailed operational information
- High efficiency Grundfos pump and hydroblock assembly
- Easy-access NTCs on front of pipes
- One-piece cartridge diverter valve
- Clip-on DHW temperature sensor
- Designed-in filling loop
- IPX4D protection
- Low electrical consumption



## ◀ SEASONALITY VALVE

The Seasonality Valve automatically adjusts the DHW flow based on the temperature of the incoming main, preventing any adverse effect on hot water temperature in colder weather and reducing water wastage.



# InTec<sup>2</sup> SE



These sophisticated system boilers represent the ultimate in boiler design, perfectly illustrating the ethos behind our InTec<sup>2</sup> range.

Like the other InTec<sup>2</sup> boilers, SE models are small and light, fitting perfectly in a standard kitchen cupboard.

With two outputs to choose from, the InTec<sup>2</sup> SE range is ideal for any home when a system boiler is the preferred option.

**5 YEAR  
WARRANTY**

Model	Part number	CH output (kW)	Boiler dimensions H x W x D (mm)	Lift weight (kg)	Standard guarantee	Guarantee with PP <sup>1</sup>	Modulation range	Max. horizontal flue length (m)	Max. vertical flue length (m)
InTec <sup>2</sup> 20SE	3.024846	19.2	712x440x276	32	5 yr	7 yr	1.7	12	14
InTec <sup>2</sup> 30SE	3.024847	29.7	712x440x276	32	5 yr	7 yr	1.8	12	14

<sup>1</sup>PremierPack<sup>2</sup>

**Please note:** The same boiler works on both Natural Gas and LPG so there is no need for a conversion kit or to order a separate model.



## ◀ FEATURES OVERVIEW

- Advanced combustion management
- One-piece casting heat exchanger
- Quicker warm-up and improved circulation
- Gas adaptive valve - works with Natural Gas or LPG
- Single electrode
- Compact size and layout
- PCB memory chip
- High efficiency Grundfos pump and hydroblock assembly
- Combined condensate and PRV connection
- Dry change NTCs
- Backlit LCD with push button controls and detailed operational information
- Frost protection and daily pump kick
- Pipework cover tray



## THREE-WAY DIVERTER VALVE KIT\*

Operates as a hot water priority valve, meaning if the heating is on and there is a hot water demand, the valve will divert the primary heat to the cylinder until the cylinder sensor is satisfied. Requires quick recovery cylinder. Must be used if adding the weather compensation probe to an S boiler.

We recommend complementing this system set-up with the Alpha Climatic Control in order to maximise energy efficiency.

\*Must also use Relay PCB kit.



# CDR regular



These heating-only boilers provide an extremely versatile and flexible solution for the majority of scenarios involving a conventional heating system set-up.

They can operate in open-vented systems, making them ideal as replacements for traditional cast iron boilers. They are also suitable for sealed systems and, when fitted with a storage cylinder, are capable of supplying plenty of hot water.

CDR boilers, which are remarkably compact and lightweight, come in a selection of three outputs to suit all heat requirements.

**3 YEAR  
WARRANTY**

Model	Part number	CH output (kW)	Boiler dimensions H x W x D (mm)	Lift weight (kg)	Standard guarantee	Max. horizontal flue length (m)	Max. vertical flue length (m)
CD13R	3.016297	13.1	600x390x305	27	3 yr	12	14
CD18R	3.016298	19.6	600x390x305	27	3 yr	12	14
CD24R	3.016299	25.6	600x390x305	28	3 yr	12	14

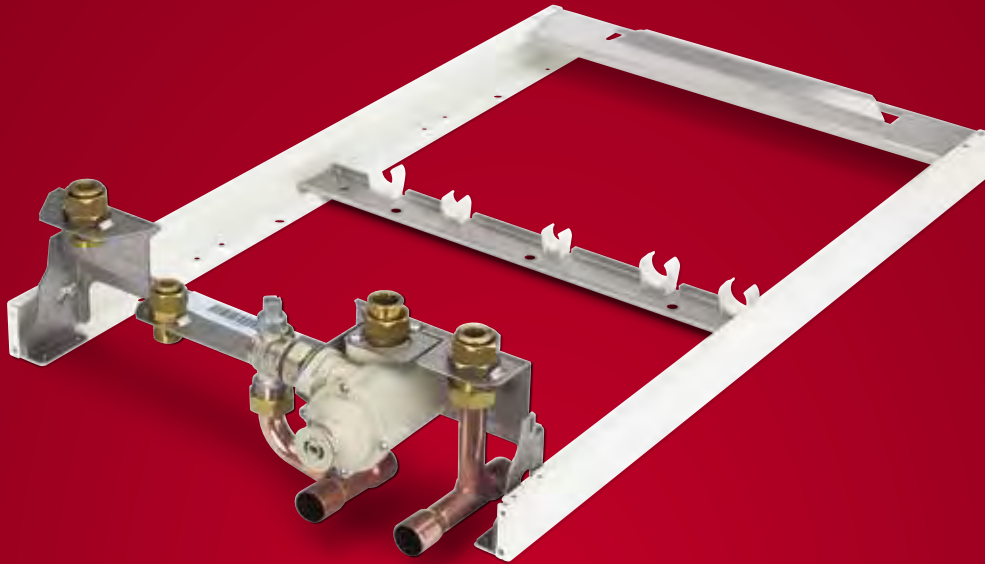


## ◀ FEATURES OVERVIEW

- 2m flying mains lead
- Stainless steel heat exchanger
- Daily pump kick
- Frost thermostat
- Pump overrun feature
- Anticycling device
- Simple clock wiring



# PremierPack



Fitting any of our InTec boilers\* with the ingenious PremierPack wall-mounting jig automatically gives them an extra 2 year guarantee.

Depending on the boiler model, this means up to 9 years parts and labour cover.

PremierPack incorporates the new and improved Alpha Cyclone device which uses centrifugal and magnetic force to remove debris from the heating system. This technology is proven to reduce system debris entering the boiler.

It also comes with a host of premium features that make the boiler installation quicker and easier. These include an integral pipe clip plate with variable fixing points.

Once PremierPack is in place, piping-up can be completed prior to the boiler being hung. The boiler simply fits on to the jig's shelf bracket and is easily connected using integral brass swivel fixings.

\*Excluding InTec GS boiler.

**+2 YEAR WARRANTY**

PREMIERPACK MODEL	Part Number	COMBINATION								SYSTEM		
		InTec <sup>2</sup> 25XE	InTec <sup>2</sup> 28XE	InTec <sup>2</sup> 26CE	InTec <sup>2</sup> 30CE	InTec <sup>2</sup> 35CE	InTec 30C	InTec 34C	InTec 30GS Plus	InTec 40GS Plus	InTec <sup>2</sup> 20SE	InTec <sup>2</sup> 30SE
PremierPack Plus	3.017230						•	•	N/A	N/A		
PremierPack <sup>2</sup>	3.024288	•	•	•	•	•			N/A	N/A	•	•



## ◀ FEATURES OVERVIEW

- Increases boiler guarantee by an additional 2 years
- Cyclone protection
- PRV pipe terminal
- Fitted pipe clips
- Pipe cover tray
- Pipes at clip distance from wall
- Split flow tails
- Variable fixing point plate

# Cyclone Plus

This innovative device removes debris from the heating system, using both magnetic and centrifugal force, reducing the risk of damage to the boiler.

## FEATURES OVERVIEW

- Increases boiler guarantee by additional 1 year
- Uses centrifugal and magnetic force to remove debris from the heating system
- Fits directly to the boiler connections
- Easy to install
- Sits neatly under the boiler

Part Number: 3.024172



# Controls



## STAY IN CONTROL

From a simple plug-in mechanical clock to versatile remote timers, we provide a selection of controls to go with our high efficiency boilers.

They enable users to programme their heating systems to suit their lifestyle and desired comfort level – not to mention control energy bills by optimising efficiency.

CONTROLS	Part Number	COMBINATION										SYSTEM		OPEN-VENT			
		E-Tec 28	E-Tec 33	InTec <sup>2</sup> 25XE	InTec <sup>2</sup> 28XE	InTec <sup>2</sup> 26CE	InTec <sup>2</sup> 30CE	InTec <sup>2</sup> 35CE	InTec 30C	InTec 34C	InTec30 GS Plus	InTec40 GS Plus	InTec <sup>2</sup> 20SE	InTec <sup>2</sup> 30SE	CD13R	CD18R	CD24R
Climatic RF	3.022143	•	•	•	•	•	•	•	•	•	•	•	•*	•*			
Climatic hard wired	3.022144	•	•	•	•	•	•	•	•	•	•	•	•*	•*			
Comfort 2CH RF	3.022142												•	•	•	•	•
Digital EasyStat	7.2000050	•	•	•	•	•	•	•	•	•	•	•					
Mechanical EasyStat	6.1000240	•	•	•	•	•	•	•	•	•	•	•					
7 day 2CH digital clock	6.1000220												•	•	•	•	•
24hr mechanical clock	6.1000201	•	•	•	•	•	•	•	•	•	•	•					

\*Alpha diverter valve kit must be used.



## ALPHA CLIMATIC

The Alpha Climatic modulating remote control has been specifically designed to work with our InTec range of boilers to maximise boiler and system efficiency. It is a multi-channel time and temperature programmer with integrated thermostat and BUS system to transfer data between the boiler and controller.

Within SAP, Alpha Climatic is classed as an Enhanced Load Compensator capable of measuring and maintaining the temperature inside the building by modulating and limiting the boiler flow temperature depending on the measured room temperature.

Available in wired and wireless versions.

SAVE  
an additional  
**£50**  
A YEAR

## COMFORT 2-CHANNEL

The Alpha Comfort 2-channel radio frequency controller is a digital, wireless programmable room thermostat and timer for use with all InTec system boilers. Battery operated, no hard wiring is required and the transmitter can be sited anywhere up to 30 metres away from the boiler.



## DIGITAL EASYSTAT

The Alpha digital EasyStat provides wireless time and temperature control with 7 day programming and settings in one hour increments. The compact and simplistic button design ensures easy set-up and operation for all users.



## MECHANICAL EASYSTAT

The 24-hour Mechanical EasyStat is a time and temperature controller that can provide maximum and minimum room temperature control.



# Flueing

The telescopic EasyFlue can save up to an hour's installation time and provides a really neat and stylish finish.

Available in 500mm and 1000mm lengths for simple horizontal flueing, extension kits can also be purchased to allow a maximum of up to 12m horizontal flue or 14m vertical flue.

With inner and outer ducts that simply slide together to make the required length, no measuring or cutting is required.

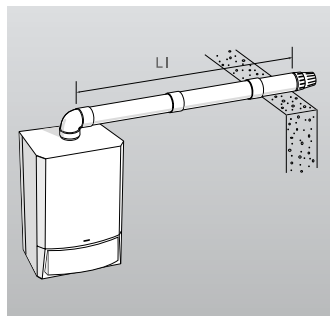
Installation is further enhanced by a factory-fitted terminal and two sealing collars.



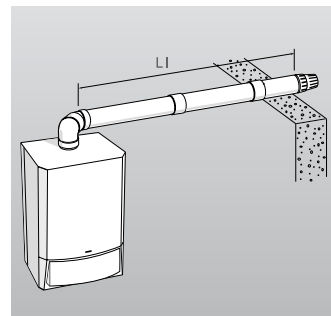
The EasyFlue also comes with a range of plume management options. The standard terminal can be adapted to divert plume at 45° upwards, to the left or right. For applications where there is a need to divert plume further away from the original terminal position, there is a full Plume Management Kit available in black.

## HORIZONTAL FLUES

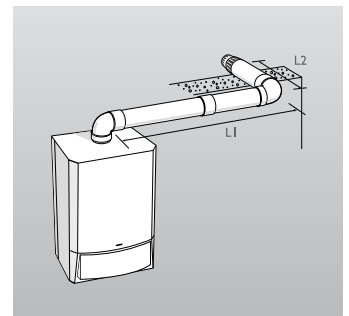
For horizontal flues, purchase telescopic EasyFlue with terminal fitted and the relevant number of extensions/bends.



Maximum horizontal flue length (after the boiler turret) is 12m for InTec models. Allow 1.3m of flue length for each 90° bend, 0.9m of flue length for each 45° bend.



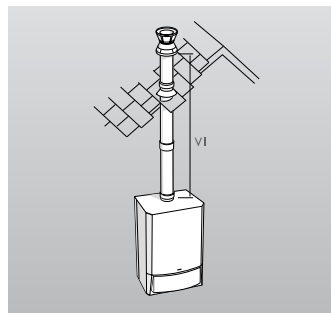
A 90° bend off the top of the boiler angled at 45° to the back wall with a 45° bend attached to it. The maximum flue length [L1] using one 45° bend is 11.1 metres for InTec models.



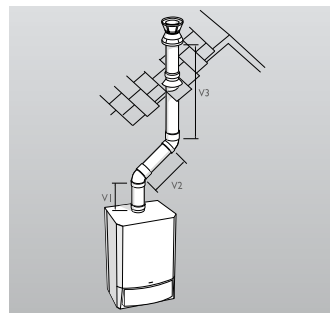
A 90° bend is equivalent to 1.3m of straight flue. Maximum length of flue [L1+L2] with 90° bend is 10.7 metres for InTec models.

## VERTICAL FLUES

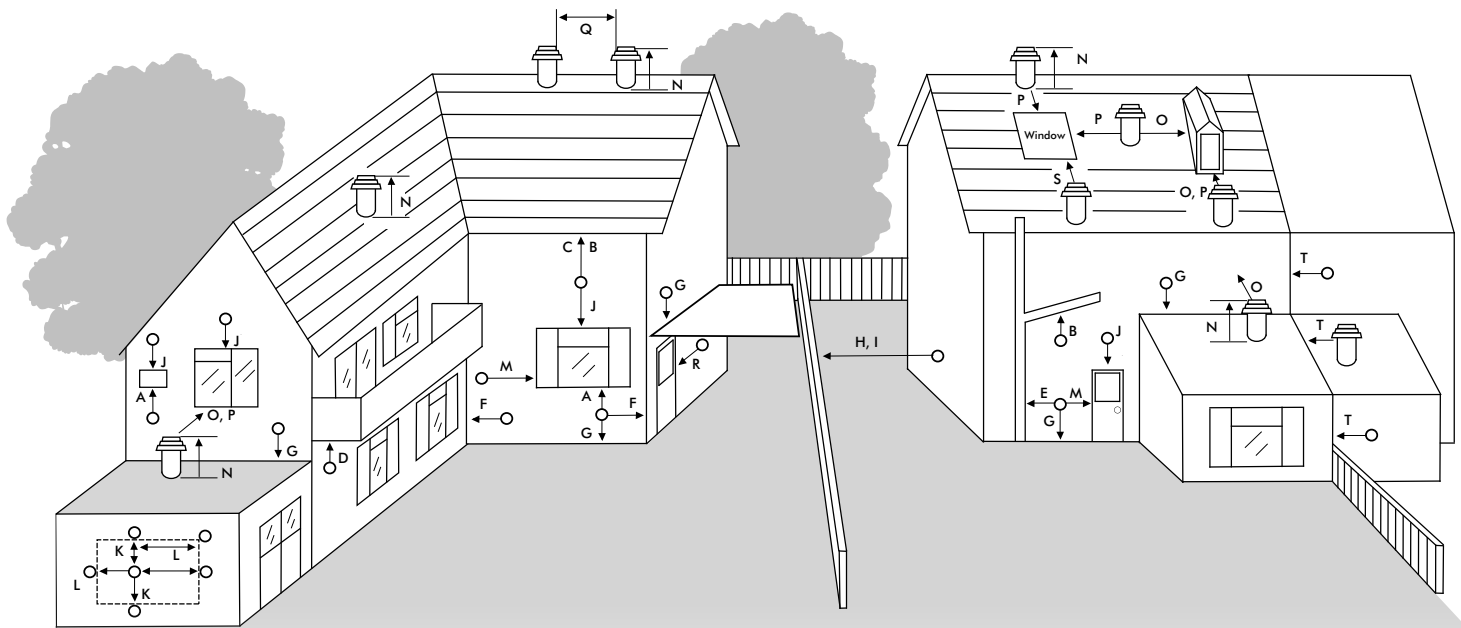
For vertical flues, purchase boiler only and the relevant flue components necessary. Allow 0.9m for each 45° bend.



Maximum vertical flue length is 14m for InTec models. Allow 0.9m of flue for each 45° bend.



Two 45° bends are equivalent to 1.8m of straight flue. The maximum flue length [V1+ V2+V3] with two 45° bends is 12.2m for InTec models.



TERMINAL POSITION	MIN. DISTANCE (mm)
A Directly below an opening, air brick, windows, etc.	300 [See Note 1]
B Below gutters, soil pipes or drain pipes	75 [See Note 3]
C Below eaves	200 [See Note 3]
D Below balconies	200 [See Note 3]
E From a vertical drain pipe or soil pipe	150 [See Note 3]
F From an internal or external corner	300 [See Note 2]
G Above ground, roof or balcony level	300
H From a surface or boundary facing the terminal	600 [See Note 9]
I From a terminal facing the terminal	1200
J Above an opening, air brick, window etc.	300 [See Note 1]
K Vertically from a terminal on the same wall	1500
L Horizontally from a terminal on the same wall	300
M Horizontally from an opening, air brick, window etc.	300 [See Note 1]
N Minimum protrusion through a roof	300
O From a vertical obstruction	300
P From an openable window	600
Q From an adjacent vertical terminal	600
R From an opening in the car port (e.g. door, window) into the dwelling	1200
S Below a Velux window	2000
T Terminal parallel to a boundary	300

#### Notes:

- In addition, the terminal should not be nearer than 150 mm to the framework of an opening into the building, i.e. a window surround or door surround.
- This clearance may be reduced to 25 mm without effecting the performance of the boiler. However, to ensure the condensate plume does not affect adjacent surfaces a clearance of 300 mm is preferable.
- These clearances may be reduced to 25 mm without effecting the performance of the boiler. However, to ensure the condensate plume does not affect adjacent surfaces the terminal can be extended beyond gutters, pipes, eaves, balconies etc. by up to 500 mm. If the flue is extended more than 500 mm outside, it should be boxed and insulated.
- To reduce the possibility of nuisance to neighbouring buildings etc. it is recommended the terminal should not be less than 2500 mm from car parking spaces, building boundary walls, fences etc.
- A terminal must not be sited under a car port roof.
- In certain weather conditions the terminal will emit a plume of steam. If possible avoid positioning the terminal where this may cause a nuisance, i.e. positions A, D, G, H, J or M.
- The flue terminal must be exposed to the external air and the position must allow the free passage of air across it at all times.
- The flue terminal must be positioned where products of combustion will freely disperse and not cause a nuisance.
- Where a terminal is sited below 2 m from the ground or floor level, the terminal must be protected by a terminal guard. In these situations, consideration should also be given to prevent nuisance plume and fumes in areas such as access routes, passageways, patios, balconies etc.

# GasSaver

Positioned neatly above the boiler, this compact unit extracts heat from waste gases that are normally expelled into the atmosphere through the boiler flue. This is then used to pre-heat cold mains water before entering the boiler.

As the boiler is heating warmed water rather than cold, an average 35% less gas is used to produce hot water, reducing your energy bills and saving up to half a ton of carbon per year.

In addition, less water is wasted due to a quicker heat time.

GasSaver operates without any controls, settings or electricity.

## FEATURES OVERVIEW

- Uses 35% less gas\*
- Easy to install
- Maintenance free
- Silent in operation
- Increases boiler efficiency
- Reduces carbon emissions
- Reduces nuisance plumbing
- SAP Building Regulations approved GS-2-ALPCD

Part Number: 6.2002000



SAVE  
**£377**  
A YEAR\*



## HOW IT WORKS

---

### 01

First it stores the condensate normally expelled into the atmosphere through the boiler flue.

### 02

Then, heat from this condensate is recycled to pre-heat water coming into the boiler from the cold mains supply.

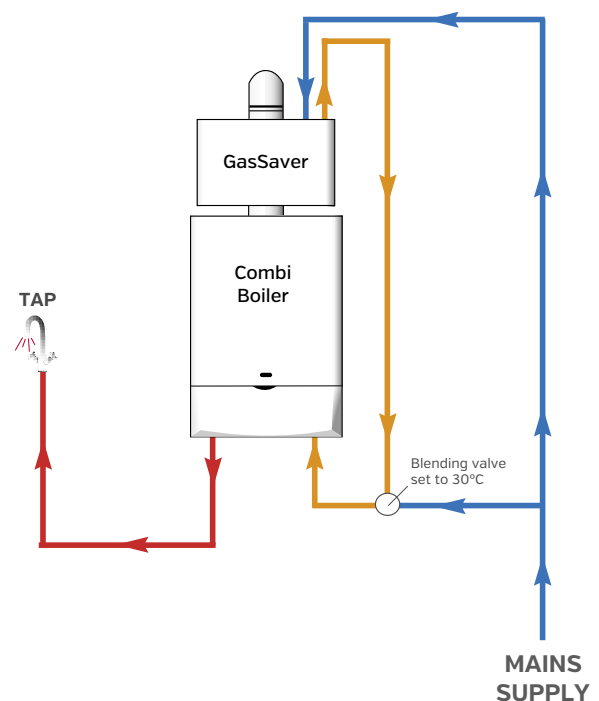
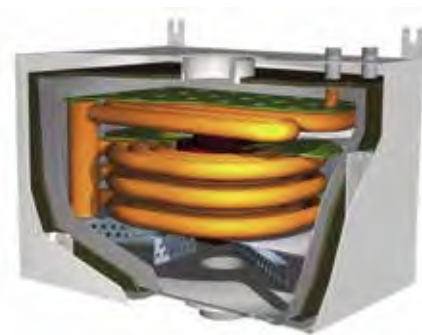
### 03

This significantly reduces the amount of gas required by the boiler to heat water.

### 04

Energy bills and carbon emissions are significantly reduced.

---



# InTec GS Plus



The InTec GS Plus boilers include a built-in GasSaver, representing what must surely be the ultimate combis.

On the one hand they come with all the installer and end user benefits associated with other appliances in the InTec range.

On the other, the unquestionable merits of on-demand combination boiler technology are further enhanced by the addition of the latest heat recovery technology – and all in one space-saving package.

**5 YEAR  
WARRANTY**

Model	Part number	DHW output (kW)	CH output (kW)	Flow rate @ 35°C rise l/min	Boiler dimensions H x W x D (mm)	Lift weight (kg)	Standard guarantee	Modulation range	Max. horizontal flue length (m)	Max. vertical flue length (m)
InTec 30GS Plus	3.025671	26.0	20.0	12.8	1000x440x360	57	5 yr	1:8	8	10
InTec 40GS Plus	3.025672	33.7	30.7	15.8	1000x440x360	60	5 yr	1:5	8	10



## ◀ FEATURES OVERVIEW

- ErP compliant boiler with integrated GasSaver technology
- Two models available
- 35% reduction in gas used to provide hot water
- Same connections as a boiler with no additional exposed pipework
- Low electrical consumption
- Isothermic stainless steel heat exchanger
- High efficiency Grundfos pump and hydroblock assembly
- Backlit LCD with push button controls and detailed operational information
- Easy-access NTCs on front of pipes
- One-piece cartridge diverter valve
- Clip-on DHW temperature sensor



# FlowSmart

**FlowSmart at last enables even large households to enjoy the energy efficiency benefits of the combination boiler.**

The combination boiler is the best and most energy efficient option for most homes with average hot water demands. They provide hot water only when there is a demand and operate without the need to keep a permanent store of hot water.

But due to limits on the combi boiler's ability to supply large volumes of hot water to a number of outlets at the same time, the less efficient conventional boiler and hot water cylinder set-up is the usual choice for larger properties.

The Alpha FlowSmart system overcomes these issues and in fact, more than matches the hot water performance of a system boiler and 200 litre unvented cylinder, while using 25% less gas.

**5 YEAR WARRANTY**

SAVE  
**£356**  
A YEAR\*



Model	DHW output (kW)	CH output (kW)	Maximum flow rate l/min	Boiler dimensions H x W x D (mm)	Floorstanding cylinder dimensions (mm)	Floorstanding cylinder dimensions (mm)	Standard guarantee	Max. horizontal flue length (m)	Max. vertical flue length (m)
FlowSmart with InTec 34C	33.7	30.7	18	720x440x300	470 Dia x 650 H	1000x360x360	5 yr	12	14
FlowSmart with InTec 40GS Plus	33.7	30.7	18	1000x440x360	470 Dia x 650 H	1000x360x360	5 yr	8	10



## ◀ FEATURES OVERVIEW

- Exceptional energy efficiency
- Ideal for households with above average hot water demands
- Delivers hot water for long periods
- High flow rate even when demand is high
- Simple installation
- Space efficient
- Low voltage PV immersion kit available

Additional controls pack required when installing the original FlowSmart system.

### FLOWSMART ORIGINAL

The traditional FlowSmart system incorporates either an InTec 34C combination boiler with GasSaver unit, or an InTec 40GS Plus integrated GasSaver boiler, with a 50 litre floor standing thermal store.

Piping kit required when using the InTec 40GS Plus in the original set-up.

Part Number: 6.2003555 [FlowSmart with InTec 34C]

Part Number: 6.2005555 [FlowSmart with InTec 40GS Plus]

### WALL-HUNG FLOWSMART

A combined wall-hung version of FlowSmart is also available, which combines the InTec 40GS Plus with a 'bolt-on' thermal store. This version comes complete with a pre-made pipe kit, cylinder sensor and diverter valve. It is quick and easy to install.

We recommend using the Alpha Climatic Control with wall-hung FlowSmart to enhance energy efficiency and control of the system.

Part Number: 6.2004555 (Wall-hung FlowSmart)



# Delivering so much more

## INCREASE ENERGY SAVINGS

The Alpha FlowSmart low voltage PV [photovoltaic] immersion heater is an additional renewable energy source that can be added to an Alpha FlowSmart system to further increase energy savings and reduce CO<sub>2</sub> emissions.

The immersion heater consists of two 12V heater units encased in a 15mm copper sleeve and has been designed specifically to be used in conjunction with a maximum of two 12V/80W photovoltaic solar panels (not supplied).

## HOW IT WORKS ▶

---

### 01

When there is a hot water demand, mains cold water flows into the GasSaver, where it is pre-heated using heat reclaimed from boiler flue gases.

### 02

It then passes through the thermal store's copper coil heat exchanger where it is heated further by surrounding hot water from the primary system (also known as the central heating system).

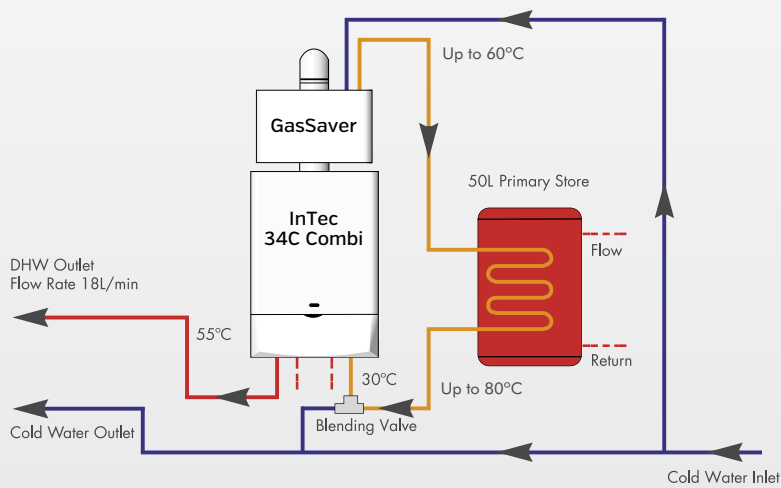
### 03

The water then passes through a blending valve, where it is controlled to an optimum 30°C before entering the boiler. Energy bills and carbon emissions are significantly reduced.

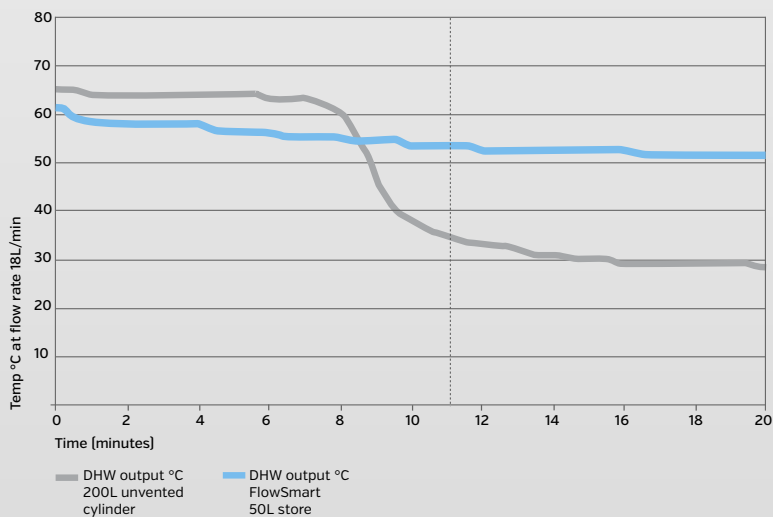
### 04

Due to the mains water being pre-heated, the boiler's workload is significantly reduced.

---



FlowSmart system v 200L unvented cylinder at flow rate 18 litres/minute



# SolarSmart 100

This remarkable solar thermal system has been specifically designed to work with our InTec combination boilers.

With an improved solar-heated water storage capacity of 103 litres, SolarSmart 100 is perfectly suited for all family homes. There's an upgraded LCD and, for better access, a control board mounted in the front panel of the cylinder.

SolarSmart 100 also features a built-in 8 litre expansion vessel, inlet group and pressure relief valves, making it much easier to install.

An optional Solar Valve is available to enable it to be retro-fitted to other Alpha boilers.



#### Product Dimensions

Collector panel: 2150 x 1170 x 83

Cylinder: 1013 x 596 x 569

Drainback unit: 573 x 400 x 245



## ◀ FEATURES OVERVIEW

- Unique combi-based solar thermal solution
- Space saving 103 litre wall-hung cylinder
- Choice of 'in-roof' and 'on-roof' fixing kits
- Easy plug-in controls
- Built-in 8 litre expansion vessel and unvented kit
- LCD display
- Can be retrofitted to any Alpha High Efficiency boiler with solar valve
- 10 year guarantee on collector and cylinder

**Unlike conventional solar thermal systems that operate with a traditional boiler, SolarSmart uses a combination boiler as back-up, giving it a considerable energy saving advantage.**

With less paid-for energy used than conventional solar thermal systems, SolarSmart provides users with the opportunity to make even greater reductions to energy bills and CO<sup>2</sup> emissions.

## **SOLARSMART VERSUS CONVENTIONAL SOLAR SYSTEMS**

Conventional solar thermal systems work with a traditional boiler to maintain a stored supply of hot water. Regardless of demand, the boiler fires-up to replenish the stored water as soon as its volume or temperature deteriorates.

With SolarSmart, the stored volume of hot water is heated only by the collected solar energy, so no gas is used in maintaining the cylinder temperature.

Should the solar heated water be exhausted, however, the combination boiler fires-up to help satisfy any immediate demand for hot water.

# 3 easy steps to free renewable energy

## FIXING OPTIONS

### **SolarSmart in-roof flashing kit single**

For fixing a single panel flush with roof tiles

### **SolarSmart in-roof flashing kit twin**

For fixing twin portrait panels flush with roof tiles

### **SolarSmart on-tile fixing kit single**

On-roof kit for fixing a single solar collector on to tile roofs

### **SolarSmart on-tile fixing kit twin**

On-roof kit for fixing twin solar collectors on to tile roofs

### **SolarSmart on-slate fixing kit single**

On-roof kit for fixing a single solar collector on to slate roofs

### **SolarSmart on-slate fixing kit twin**

On-roof kit for fixing twin solar collectors on to slate roofs

### **SolarSmart flat roof fixing kit - landscape only**

For fixing the solar panel collector at the required angle on a flat roof

### **Also available:**

- SolarSmart connection kit for fitting additional collector panels together
- SolarSmart immersion kit for SolarSmart 100 litre unvented cylinder
- SolarSmart solar valve to enable SolarSmart 100 to be retrofitted to Alpha's older range of boilers



100L cylinder



Universal drainback unit



## HOW IT WORKS

### 01

The stored volume of hot water is only heated using energy collected from the solar panel – so there is never any gas used in maintaining the cylinder temperature.

### 02

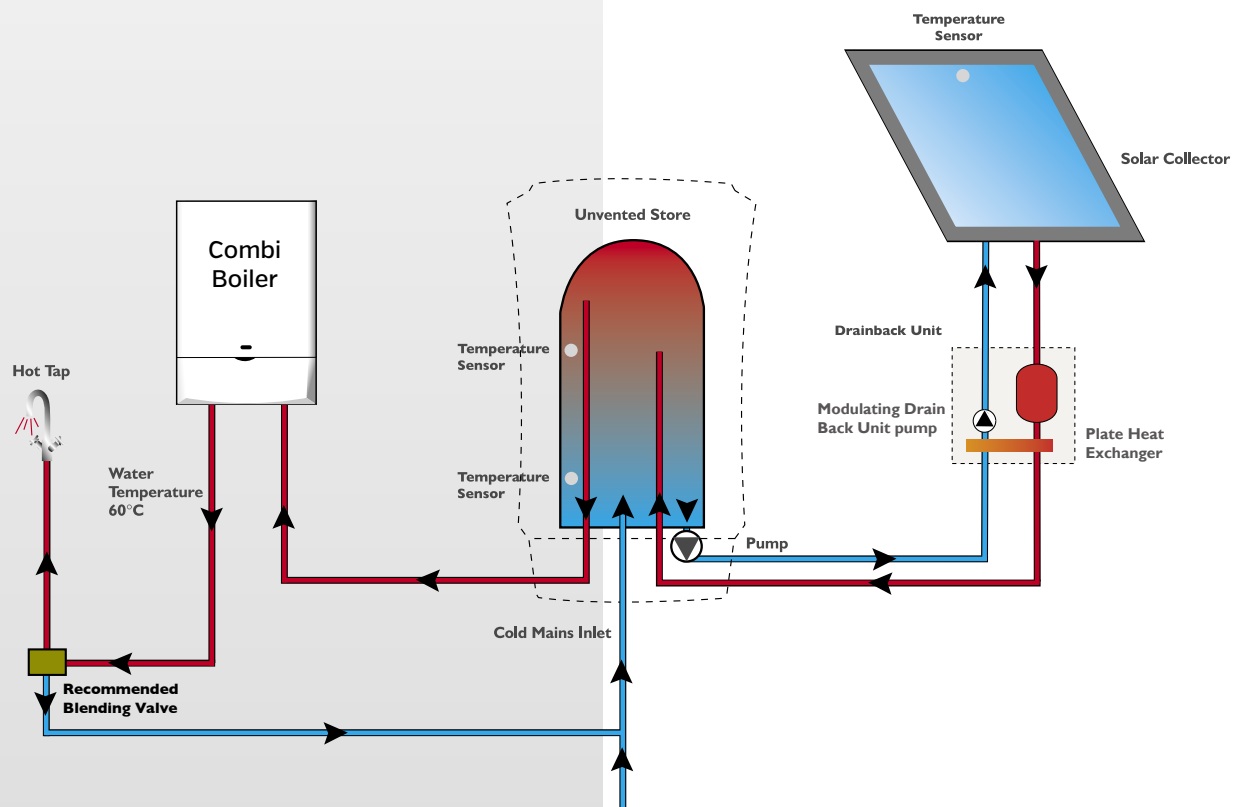
If the boiler does fire, then the water being fed to it will usually be pre-heated, so it will only need to operate at part load, using less gas.

### 03

Because the system works with a combination boiler, hot water isn't stored unnecessarily, but is always available, on demand, even if the cylinder is depleted. Energy bills and carbon emissions are significantly reduced.

## OPTIONS

- Landscape or portrait flat panel collector
- Fixing kits for mounting collector flush with, or on top of roof tiles
- A-Frame kit for mounting collector on flat roofs
- Multi-panel set-up available



## **HEAD OFFICE:**

Nepicar House  
London Road  
Wrotham Heath  
Kent  
TN15 7RS

## **USEFUL NUMBERS:**

General sales enquiries	0344 871 8760
Order/Delivery enquiries	0344 871 8761
Sales order fax	0344 871 8762
Sales order email	orders@alpha-innovation.co.uk
Training academy	0344 871 8763
Technical helpline	0344 871 8764

**[www.alpha-innovation.co.uk](http://www.alpha-innovation.co.uk)**