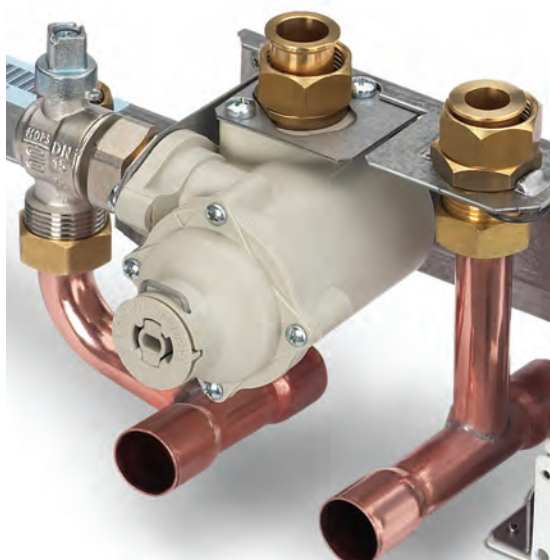


Alpha
HEATING INNOVATION

Heating & Hot Water Solutions

HIGH EFFICIENCY BOILERS
LOW CARBON SOLUTIONS



Make Alpha your first choice

Alpha Heating Innovation's roots in the UK stretch back nearly 50 years, from fledgling local heating installation business to prestigious national heating appliance manufacturer.

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

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

MEETING ALL YOUR NEEDS

Experience as an installation business gives us a unique appreciation of the concerns and requirements of heating engineers and their customers.

It's the reason we go the extra mile when it comes to the things that really matter. From reliability to ease of installation, nothing is left to chance in an effort to ensure total satisfaction.

As an Alpha customer you can rely on us for support before, during or after installation. From product training to technical assistance, we're here to provide expert assistance whenever you need it.





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THE IMMERGAS GROUP

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
0844 871 8764

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

Technical helpline
0844 871 8764

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.

HELPLINE

Before, during or after installation, you can rely on our Helpline 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.



24/7 EMERGENCY COVER

We work in partnership with HomeServe to ensure that you can easily arrange extended cover on our products beyond the lifetime of their original guarantee.

Homeowners needn't worry about missing this opportunity because they will be contacted by HomeServe in plenty of time to explain the cover available, which includes emergency repairs and an annual service.

The HomeServe Freephone Helpline is open round the clock, 365 days a year, ensuring that any problems are dealt with as quickly as possible.

FREE INSTALLER TRAINING

The Alpha Academy offers installers free training in our High Efficiency and Renewables course so that you can make the most of our range of innovative products.

Available at various locations nationwide, the one-day course gives candidates practical hands-on experience of installation, commissioning, servicing and diagnostics for our high efficiency boilers.

It also 'lifts the lid' on our renewable energy products GasSaver, FlowSmart and SolarSmart, exploring all the essentials including how they work, installation, plus features and benefits.

Training Academy
0844 871 8763

Create your perfect heating system

MORE ON PAGES 10-21

BOILERS

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.



MORE ON PAGES 32-43

INTEGRATED SYSTEM SOLUTIONS ►

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.

ACCESSORIES

MORE ON PAGES 24-25

CONTROLS

Controls help optimise heating system efficiency and, in turn, reduce energy bills.

Designed specifically to complement Alpha heating appliances, our Climatic and Comfort controls enable users to precisely programme their heating systems to suit their lifestyles and desired comfort levels.

MORE ON PAGE 22-23

PREMIERPACK PLUS & CYCLONE PLUS

Fitting the PremierPack Plus wall-mounting jig or Cyclone Plus magnetic filter with our InTec boilers delivers a host of benefits to users and installers.

As well as providing built-in protection against debris in the system, they automatically add 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.

Unlike other kits, its 3m electric trace heating wire is controlled by the boiler itself in conjunction with an outside weather probe. This ensures it only operates when the boiler is in operation and producing condensate, keeping electrical consumption to a minimum.

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 the outside temperature. Requires the three-way diverter valve kit when added to an InTec S system boiler or floor standing FlowSmart.

MORE ON PAGES 32-35

MORE ON PAGES 40-43

MORE ON PAGES 36-39

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 two InTec GS boiler models or as a compact add-on unit for positioning neatly above our other boilers.



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.

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.



InTec C



Like all appliances in our InTec range, these are some of the most technologically advanced and innovative combination boilers available today.

Our flagship combi boilers come with a host of premium features that deliver numerous benefits for users and installers alike. In terms of ease of operation and installation, plus performance and economy, they are therefore second to none.

Available in three outputs, InTec C combis are the perfect choice for anything from small to medium-sized homes.



Model	DHW output (kW)	CH output (kW)	Flow rate @ 35°C rise l/min	Dimensions (mm)	Lift Weight (kg)	Standard guarantee	Guarantee with PP [†]	Nox rating (mg/kWh)	LPG version
InTec 26C	26.3	20.0	11.6	720x440x300	38	5 yr	7 yr	22	Yes
InTec 30C	29.0	26.3	12.6	720x440x300	39	5 yr	7 yr	30	Yes
InTec 34C	33.7	30.7	14.5	720x440x300	41	5 yr	7 yr	36	Yes

[†]PremierPack Plus



FEATURES OVERVIEW

- 5 year guarantee
- Seasonality Valve
- Valves and tails factory fitted
- Isothermic stainless steel heat exchanger
- Frost protection and daily pump kick
- LCD display on control panel
- Detailed fault codes
- 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 X



Our entry level InTec X combination boilers are very competitively priced, enabling homeowners to enjoy the advanced benefits of the range, no matter how tight the budget is.

They come with an LCD control panel that provides detailed heating and hot water information, making them easy to operate, service and maintain.

InTec X boilers come in a choice of two fully-modulating outputs of 24 or 28kW.

Model	DHW output (kW)	CH output (kW)	Flow rate @ 35°C rise l/min	Dimensions (mm)	Lift Weight (kg)	Standard guarantee	Guarantee with PP [†]	Nox rating (mg/kWh)	LPG version
InTec 24X	24.3	20.0	10.8	720x440x300	37	2 yr	4 yr	22	Yes
InTec 28X	28.0	26.8	12.3	720x440x300	38	2 yr	4 yr	30	Yes

[†]PremierPack Plus



FEATURES OVERVIEW

- 2 year guarantee
- Valves and tails factory fitted
- Stainless steel heat exchanger
- Frost protection & daily pump kick
- LCD display on control panel
- Detailed fault codes
- Grundfos pump and hydroblock assembly
- Easy-access NTCs on front of pipes
- One-piece cartridge diverter valve
- Clip-on DHW temperature sensor
- Low electrical consumption



InTec S



These sophisticated system boilers represent the ultimate in boiler design, perfectly illustrating the ethos behind our InTec range.

As well as boasting the same level of advancement and innovation as our InTec C combination boilers, they also have identical casing.

With three outputs to choose from, InTec S models are ideal for any home where a system boiler is the preferred option.

Model	DHW output (kW)	CH output (kW)	Flow rate @ 35°C rise l/min	Dimensions (mm)	Lift Weight (kg)	Standard guarantee	Guarantee with PP [†]	Nox rating (mg/kWh)	LPG version
InTec 12S	-	13.2	-	720x440x300	35	5 yr	7 yr	29	Yes
InTec 18S	-	20.0	-	720x440x300	36	5 yr	7 yr	22	Yes
InTec 28S	-	30.7	-	720x440x300	39	5 yr	7 yr	36	Yes

[†]PremierPack Plus



FEATURES OVERVIEW

- 5 year guarantee
- Valves and tails factory fitted
- Stainless steel heat exchanger
- Frost protection and daily pump kick
- LCD display on control panel
- Detailed fault codes
- Grundfos pump and hydroblock assembly
- Easy-access NTCs on front of pipes
- Low electrical consumption



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. Also must be used if adding the weather compensation probe to an S boiler.

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.

Model	DHW output (kW)	CH output (kW)	Flow rate @ 35°C rise l/min	Dimensions (mm)	Lift Weight (kg)	Standard guarantee	Guarantee with PP	LPG version
CD13R	-	13.1	-	600x390x305	27	3 yr	N/A	Yes
CD18R	-	19.6	-	600x390x305	27	3 yr	N/A	Yes
CD24R	-	25.6	-	600x390x305	28	3 yr	N/A	Yes



FEATURES OVERVIEW

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



CD50 storage combination



In many cases, this storage combination boiler provides an ideal alternative to a traditional system set-up.

It retains all the energy efficiency and space saving benefits associated with the combi boiler but, thanks to a built-in 52 litre cylinder, is far more suited to the hot water demands of the larger family. Hot water can be delivered instantaneously on-demand at a rate of 18 litres per minute, which is enough to fill a bath in three to five minutes.

Thanks to a powerful heat exchanger, the built-in cylinder takes only twelve minutes to fully replenish from cold. While reheating takes place, an automatic flow regulator lowers the flow rate to make sure that hot water is still available.

Model	DHW output (kW)	CH output (kW)	Flow rate @ 35°C rise l/min	Dimensions (mm)	Lift Weight (kg)	Standard guarantee	Guarantee with PP	LPG version
CD50	32.0	29.7	18	900x600x450	70	3 yr	N/A	Yes



FEATURES OVERVIEW

- 3 year guarantee
- 18 litres/min flow rate at 55°C
- 3 minute cylinder recovery time
- Built-in 52 litre storage cylinder
- Option to run secondary circulation
- Valves & tails factory fitted
- Stainless steel heat exchanger
- Daily pump kick
- Frost protection



HEAT EXCHANGER

Inside, a powerful heat exchanger fully recharges the storage cylinder in 3 minutes. This helps ensure the CD50 is able to deliver a continuous supply of hot water even if demand is high.

InTec 50CS



This floor standing storage combination boiler is a great alternative to a traditional system set-up in situations where hot water demand is high, such as multi-bathroom properties.

It is capable of supplying a large quantity of hot water as needed, drawing first on its 53.6 litre storage cylinder before switching to the 'on-demand' combi technology if required.

With a much smaller store of hot water to maintain than a system featuring a separate conventional cylinder, the high hot water performance is delivered using a fraction of the energy.



Model	DHW output (kW)	CH output (kW)	Flow rate @ 35°C rise l/min	Dimensions (mm)	Lift Weight (kg)	Standard guarantee	Guarantee with PP	LPG version
InTec 50CS	32.0	28.0	14.4*	850x650x600	93	3 yr	N/A	Yes

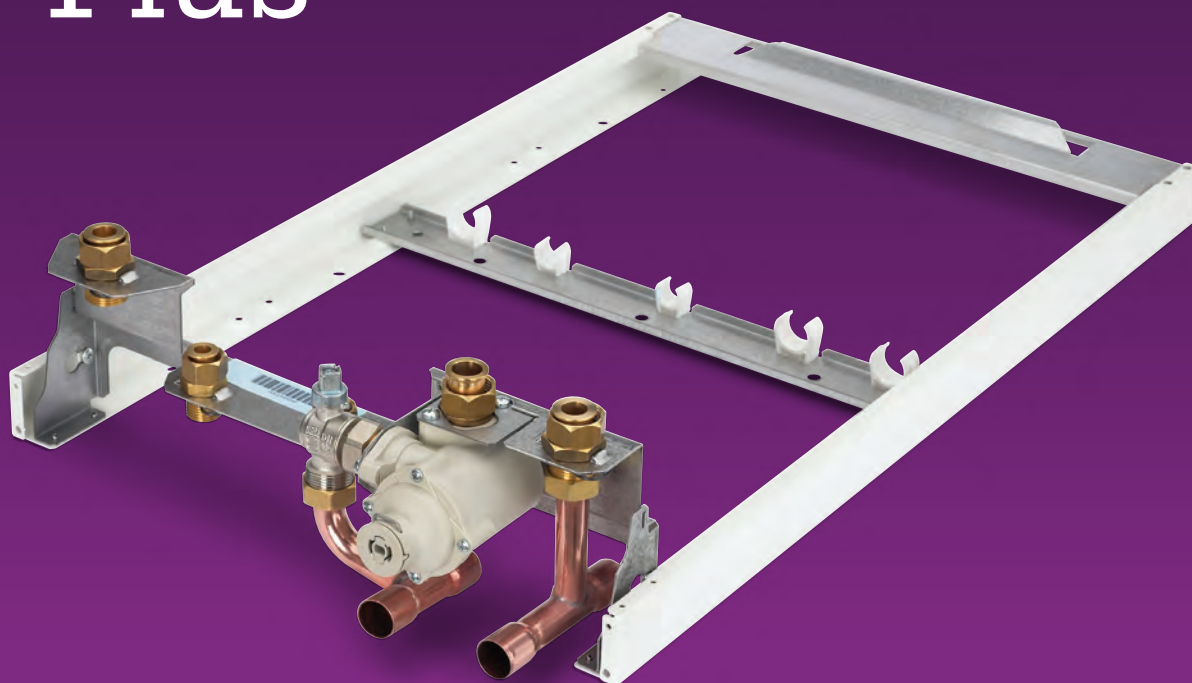
*This boiler is restricted to ensure continued delivery through the boiler and the storage is never depleted, unrestricted the boiler delivers a flow rate @ 35°C rise of 18 l/min.



FEATURES OVERVIEW

- 3 year guarantee
- 14.4 l/min flow rate (18 l/min unrestricted)*
- Built-in 53.6 litre stainless steel storage cylinder
- Option to run secondary circulation (separate kit required)
- Stainless steel heat exchanger
- LCD with easy-to-use controls
- Internal manifold with two pumps, enabling it to serve larger heating systems
- Variable speed pump for large heating circuits
- Built in weather compensation with the use of the external probe
- Low temperature circuit compatible

PremierPack Plus



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

Depending on the boiler model, this means up to 7 years parts and labour cover.

PremierPack Plus 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, and a copper earth bonding plate pre-cut to fit the boiler pipework configuration.

Once PremierPack Plus 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. 7 year guarantee available on InTec C and S boilers.

Cyclone Plus



ERV Pipe Terminal



Earth Bonding Plate



Pipe Cover Tray

FEATURES OVERVIEW

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



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



6 year guarantee available on InTec C and S boilers

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.



	COMBINATION								SYSTEM			OPEN-VENT		
	InTec 26C	InTec 30C	InTec 34C	InTec 24X	InTec 28X	InTec 30GS	InTec 40GS	CD50	InTec 12S	InTec 18S	InTec 28S	CD13R	CD18R	CD24R
CONTROLS														
Alpha Climatic RF	•	•	•	•	•	•	•		•*	•*	•*			
Alpha Climatic	•	•	•	•	•	•	•		•*	•*	•*			
Alpha Comfort RF	•	•	•	•	•	•	•	•						
Alpha Comfort 2CH RF									•	•	•	•	•	•
24hr mechanical EasyStat	•	•	•	•	•	•	•	•						
7 day digital clock	•	•	•	•	•	•	•	•						
7 day 2CH digital clock									•	•	•	•	•	•
24hr mechanical clock	•	•	•	•	•	•	•	•						

*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.

ALPHA COMFORT

The Alpha Comfort radio frequency controller is a digital, wireless programmable room thermostat and timer, capable of controlling time and temperature by communicating with a special receiver that plugs into the boiler, using simple numbered spade connectors. Battery operated, no hard wiring is required and the transmitter can be sited anywhere up to 30 metres away from the boiler.



ALPHA EASYSTAT

Like the Alpha Comfort, the 24-hour Mechanical EasyStat is a time and temperature controller that can provide maximum and minimum room temperature control. Both controllers are compatible with our range of high efficiency boilers.

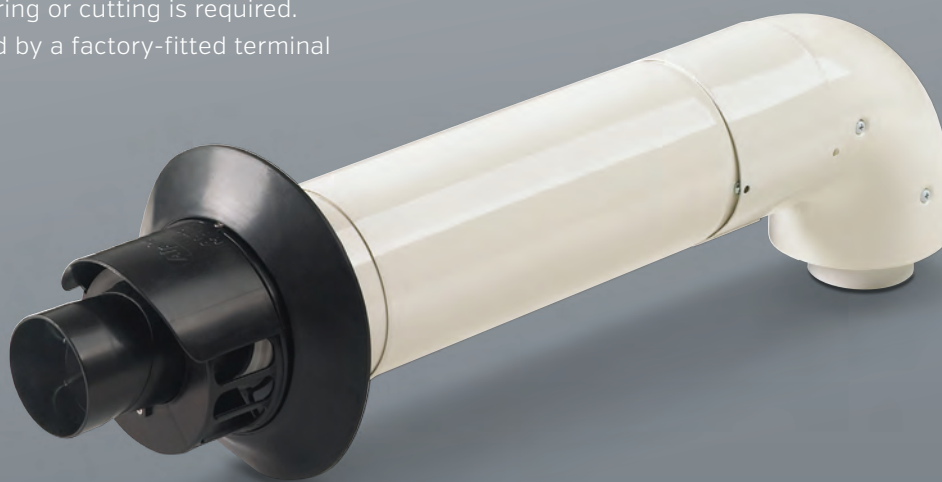


Flueing and plume management

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

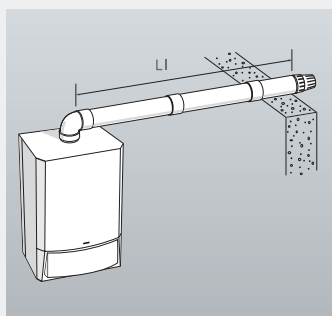
Available in 500mm and 1000mm lengths for simple horizontal flueing, extension kits can also be purchased to allow a maximum of up to 12m horizontal flue or 15m vertical flue for CD model boilers, 12m horizontal or 14m vertical for the InTec C, X and S boilers, and 8m horizontal or 10m vertical for InTec GS.

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.

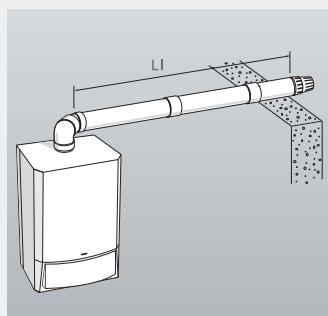


HORIZONTAL FLUES

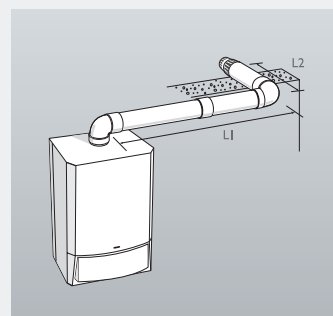
For horizontal flues, purchase telescopic EasyFlue with terminal fitted and the relevant number of extensions/bends.



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.



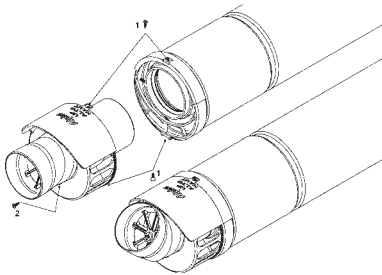
A 90° bend is equivalent to 1.3m of straight flue. Maximum length of flue (L1+L2) with 90° bend is 10.7 metres for InTec models.



RIDGE TERMINAL

As well as providing a discrete finish, the roof-mounted low profile Ridge Flue Terminal eliminates nuisance pluming at low levels.

It is used predominantly in new-build situations where a terminal of this type can be easily incorporated into the original building design. It is compatible with any Alpha condensing boiler featuring an Alpha CD concentric (60/100) flue system.



BUILT-IN PLUME MANAGEMENT CONTROL

The EasyFlue 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.



OPTIONAL PLUME MANAGEMENT KIT

The optional Plume Management Kit overcomes the problems of nuisance pluming by giving a choice of where the plume can be directed.

The standard kit and accessories are available in black and comprise of: 2 x 90° elbows, 1000mm extension pipe, wall bracket and wall collar.

PLUME MANAGEMENT ACCESSORIES

Plume Management – 1000mm extension including wall bracket

Plume Management – 45° elbows x 2

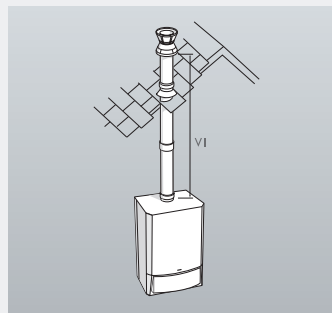
Plume Management – 90° elbow x 1

Plume Management – Flue sealing collar

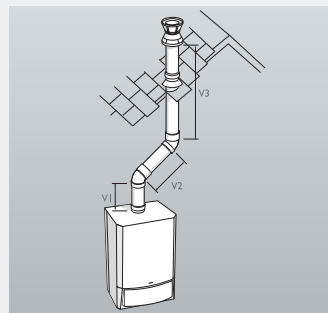
Plume Management – Wall bracket kit (pack of 5)

VERTICAL FLUES

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

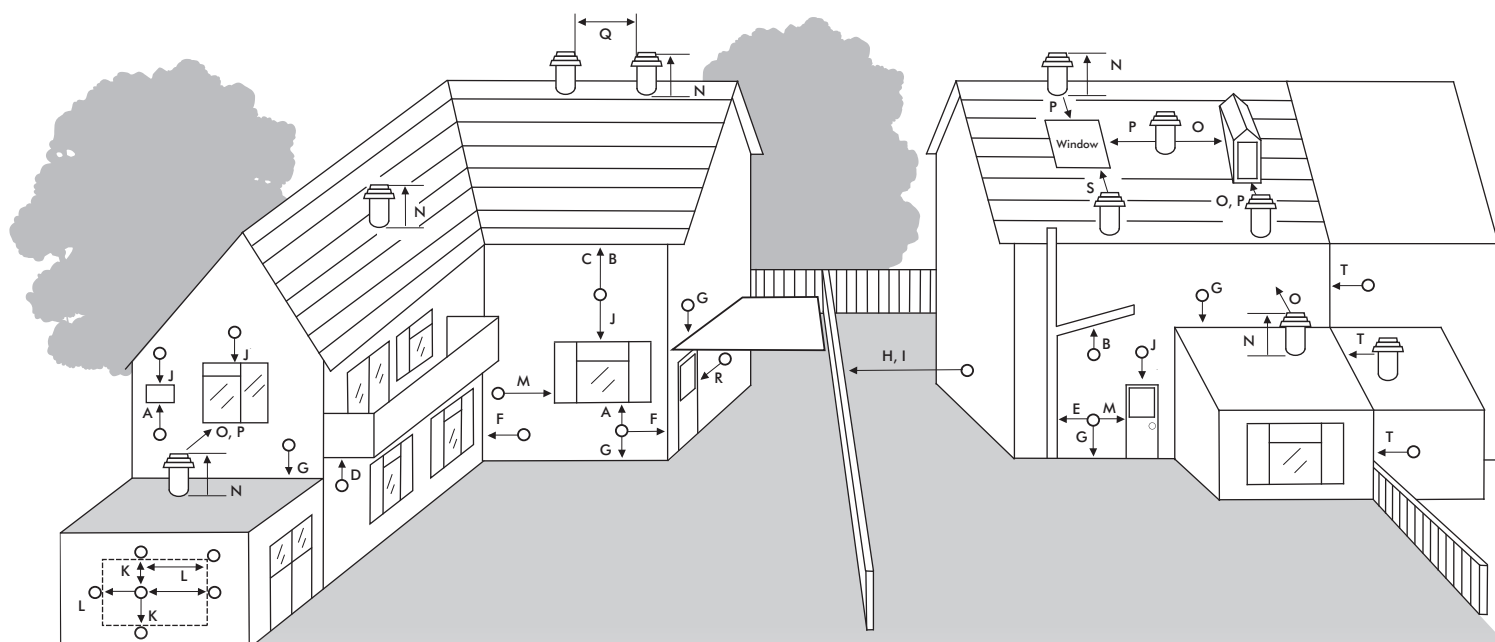


Maximum vertical flue length is 14m for InTec models. Allow 0.9m of flue for each 45° bend.



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.

Flueing and plume management



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 4]
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:

1. 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.
2. 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.
3. 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.
4. 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.
5. A terminal must not be sited under a car port roof.
6. 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.
7. 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.
8. A terminal must not be sited below 2 m where people have access to, such as public footpaths, access routes, patios etc. However, If the terminal is fitted less than 2 m above a surface where there is no public access, the terminal must be protected by a terminal guard. A suitable guard is available from Alpha Therm Ltd.

TECHNICAL DATA

FEATURES	COMBINATION								SYSTEM			OPEN-VENT		
	InTec 26C	InTec 30C	InTec 34C	InTec 24X	InTec 28X	InTec 30GS	InTec 40GS	CD50	InTec 12S	InTec 18S	InTec 28S	CD13R	CD18R	CD24R
GENERAL														
SEDBUK rating	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Lift weight (kg)	38	39	41	37	38	57	60	70	35	36	39	27	27	28
DHW flow rate [l/min @ 35°C rise]	11.6	12.6	14.5	10.8	12.3	12.8	15.8	18.0		450	450	450	450	450
Max horizontal flue (m)	12	12	12	12	12	8	8	12	12	12	12	12	12	12
Max vertical flue (m)	14	14	14	14	14	10	10	15	14	14	14	15	15	15
Standard guarantee [years]	5	5	5	2	2	5	5	3	5	5	5	3	3	3
BOILER DIMENSIONS														
Height (mm)	720	720	720	720	720	1000	1000	900	720	720	720	600	600	600
Width (mm)	440	440	440	440	440	440	440	600	440	440	440	390	390	390
Depth (mm)	300	300	300	300	300	360	360	450	300	300	300	305	305	305
INSTALLATION CLEARANCES (relative to the casing)														
Above (mm)	235	235	235	235	235	235	235	220	235	235	235	235	235	235
Below (mm)	150	150	150	150	150	150	150	250	150	150	150	100	100	100
Side (mm)	5	5	5	5	5	5	5	10	5	5	5	5	5	5
Front (mm)	450	450	450	450	450	450	450	450	450	450	450	450	450	450
GASSAVER COMPATIBLE	•	•	•	•	•			•	•	•	•	•	•	•
SOLARSMART COMPATIBLE	•	•	•	•	•			•						
FEATURES														
Stainless steel heat exchanger	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Seasonality valve	•	•	•											
Built-in filling loop	•	•	•			•	•	•						
Factory fitted valves and copper tails	•	•	•	•	•	•	•	•	•	•	•			•
Pipes clip distance from the wall	•	•	•	•	•	•	•	•	•	•	•			
Pre-wired	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Electronic ignition	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Anti-cycling device	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Pump overrun on heating	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Daily pump kick	•	•	•	•	•	•	•	•	•	•	•			
Frost thermostat	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Fully modulating burner	•	•	•	•	•	•	•	•	•	•	•	•	•	•
One man lift												•	•	•
Cyclone protection	• ¹	• ¹	• ¹	• ¹	• ¹			•	• ¹	• ¹	• ¹		•	•
Earth bonding plate	• ¹	• ¹	• ¹	• ¹	• ¹				• ¹	• ¹	• ¹			•
Rear piping	• ¹	• ¹	• ¹	• ¹	• ¹	•	•		• ¹	• ¹	• ¹			•
Split flow tails	• ¹	• ¹	• ¹	• ¹	• ¹	•	•		• ¹	• ¹	• ¹			•
CONTROLS														
Alpha Climatic RF	•	•	•	•	•	•	•		•*	•*	•*			
Alpha Climatic	•	•	•	•	•	•	•		•*	•*	•*			
Alpha Comfort RF	•	•	•	•	•	•	•	•						
Alpha Comfort 2CH RF									•	•	•	•	•	•
24hr mechanical EasyStat	•	•	•	•	•	•	•	•						
7 day digital clock	•	•	•	•	•	•	•	•						
7 day 2CH digital clock									•	•	•	•	•	•
24hr mechanical clock	•	•	•	•	•	•	•	•						

¹When fitted with optional PremierPack Plus. *Alpha diverter valve kit must be used.

High output system boilers



Specifically designed for larger output requirements, these fan-assisted condensing system boilers provide heating only for sealed central heating systems and open systems.

Available in four different outputs ranging from 50kW to 115kW, all models are SEDBUK Band 'A' rated, can be wall mounted and come with a 3 year guarantee.

They can be supplied for use with Natural or Propane Gas (LPG) and are capable of being installed as a single unit or in simple modular formations for even bigger outputs.



Model	CH output (kW)	Output (Btu/h)	Flow rate (l/min)	Dimensions (mm)	Weight (kg)
CD50S	53.8	183,700	N/A	950x600x525	63
CD70S	72.8	248,600	N/A	950x600x525	68
CD90S	97.8	333,700	N/A	1010x600x610	98
CD115S	120.5	411,200	N/A	1010x600x610	106

PCD50S, CD70S, CD90S and CD115S boilers are supplied with a type B23 flue configuration (open chamber and forced draught). To allow for flexible siting, the configuration can be changed to type 'C' (room sealed) by using a special flue adaptor kit.



FEATURES OVERVIEW

- 3 year guarantee
- Suitable for single unit or cascade installations
- High grade stainless steel heat exchanger
- Built-in circulation pump
- Fully modulating low NOx burner
- Pre-wired 2m flying mains lead
- Open or concentric push fit flue systems
- Built-in plume management
- Easy access for servicing
- Built-in self diagnostics
- LPG versions available

Maximum flue lengths

	Single pipe flue			Concentric pipe flue		
Model	50/70S	90S	115S	50/70S	90S	115S
Maximum vertical length	30m	17m	14m	18m	12m	8m
Maximum horizontal length	30m	17m	14m	14m	10m	7m
90° bend is equivalent to		2.1m			1.9m	106
45° bend is equivalent to		1.3m			1.4m	106

B23 flue system

80mm CD single pipe flue
80mm CD horizontal terminal flue kit
80mm CD vertical terminal flue kit
80mm CD 1m flue extension
80mm CD flue bend 90°
80mm CD flue bend 45°
80mm flue support brackets pack 5
80mm flue sealing plates

Concentric flue system

80mm CD concentric flue
80/125mm CD concentric horizontal terminal flue kit + adaptor
80/125mm CD concentric vertical terminal flue kit + adaptor
125mm flue sealing collar (white)
80/125mm CD concentric 1m flue extension
80/125mm CD concentric flue bend 90°
80/125mm CD concentric flue bend 45°
125mm flue support brackets pack 5
125mm flue sealing collar (black)

Fitting a GasSaver to any of our boilers is a simple way of taking energy efficiency to a higher level.

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.

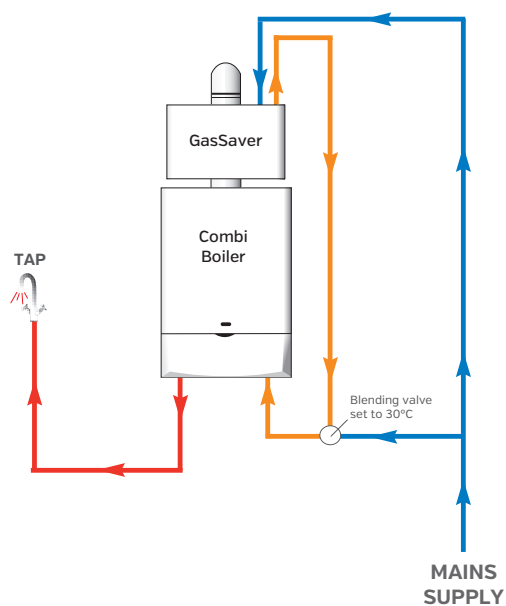
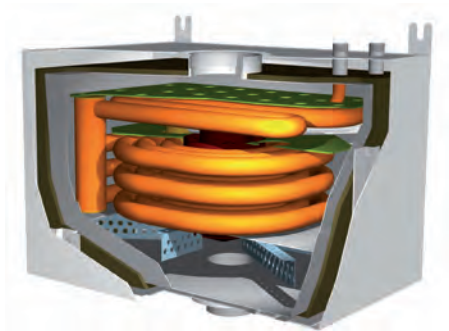
In addition, less water is wasted due to a quicker heat time.

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 Appendix Q recognised



HOW IT WORKS

1

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

2

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

3

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

4

Energy bills and carbon emissions are significantly reduced.

GAS SAVER

InTec GS



The InTec GS 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.

Model	DHW output (kW)	CH output (kW)	Flow rate @ 35°C rise l/min	Dimensions (mm)	Lift Weight (kg)	Standard guarantee	Guarantee with PP	Nox rating (mg/kWh)	LPG version
InTec 30GS	26.0	20.0	12.8	440x1000x360	57	5 yr	N/A	33	Yes
InTec 40GS	33.7	30.7	15.8	440x1000x360	60	5 yr	N/A	24	Yes



FEATURES OVERVIEW

- EuP compliant boiler with integrated GasSaver technology
- Two models available
- 35% reduction in gas used to provide hot water
- Same connections as a standard InTec boiler with no additional exposed pipework
- Low electrical consumption



For homes with above average hot water demands, look no further than 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.



FEATURES OVERVIEW

- 5 year guarantee
- 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.



SAVE
£356
A YEAR*

FLOWSMART ORIGINAL

The traditional FlowSmart system incorporates either an InTec 34C combination boiler with GasSaver unit, or an InTec 40GS integrated GasSaver boiler, with a 25 or 50 litre floor standing thermal store. Piping kit required when using the InTec 40GS in the original set-up.

WALL-HUNG FLOWSMART

A combined wall-hung version of FlowSmart is also available, which combines the InTec 40GS 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.



*Source data DEFRA.
For more details visit www.alpha-innovation.co.uk/energysavings



Delivering so much more

HOW IT WORKS

1

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.

2

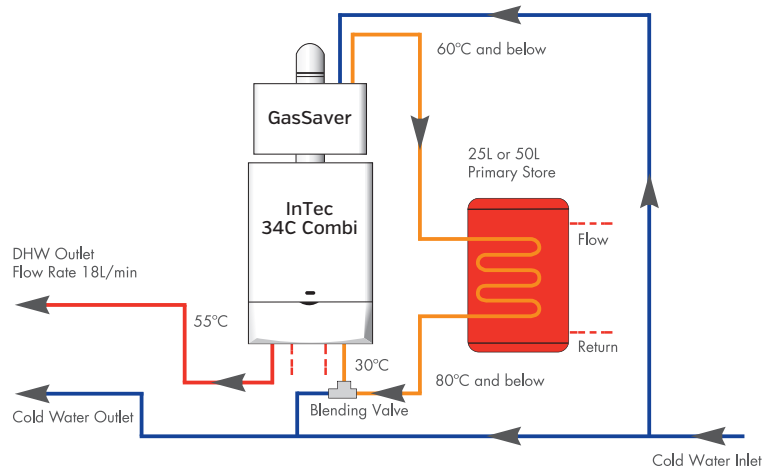
It then passes through the thermal store's copper coil heat exchanger where it is heated further by surrounding hot water from the primary system (also known as the central heating system).

3

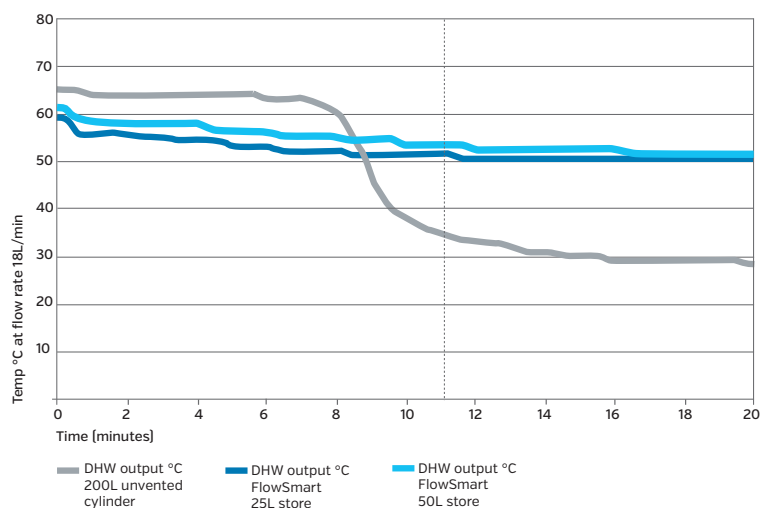
The water then passes through a blending valve, where it is controlled to an optimum 30°C before entering the boiler. Energy bills and carbon emissions are significantly reduced.

4

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



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 CO2 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.

Makes solar-based domestic water heating more accessible and cost-effective than ever before.

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 CO² emissions.

SOLARSMART VERSUS CONVENTIONAL SOLAR SYSTEMS

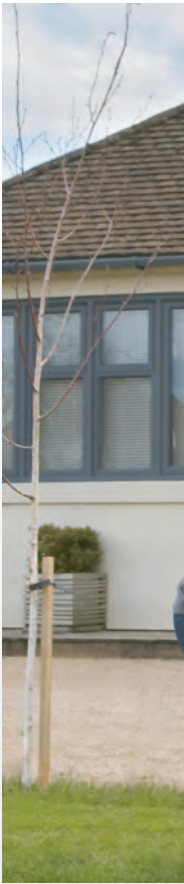
Conventional solar thermal systems work with a traditional boiler to maintain a stored supply of hot water. Regardless of demand, the boiler fires-up to replenish the stored water as soon as its volume or temperature deteriorates.

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.

FEATURES OVERVIEW

- Unique combi-based solar thermal solution
- Space saving 103 litre wall-hung cylinder
- Choice of 'in-roof' and 'on-roof' fixing kits, plus a flat roof kit
- Easy plug-in controls
- Built-in 8 litre expansion vessel and unvented kit
- LCD display
- Fully WRAS approved system
- Can be retrofitted to any Alpha high efficiency boiler, using additional solar valve
- 10 year guarantee on collector and cylinder



*Source data DEFRA.
For more details visit www.alpha-innovation.co.uk/energysavings



NEW SOLARSMART 100

The latest version of 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.

SAVE
£400
A YEAR*



3 easy steps to free renewable energy

1. FLAT PANEL COLLECTOR ►

◀ 2. WATER STORAGE



100L cylinder



Universal drainback unit

3. 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

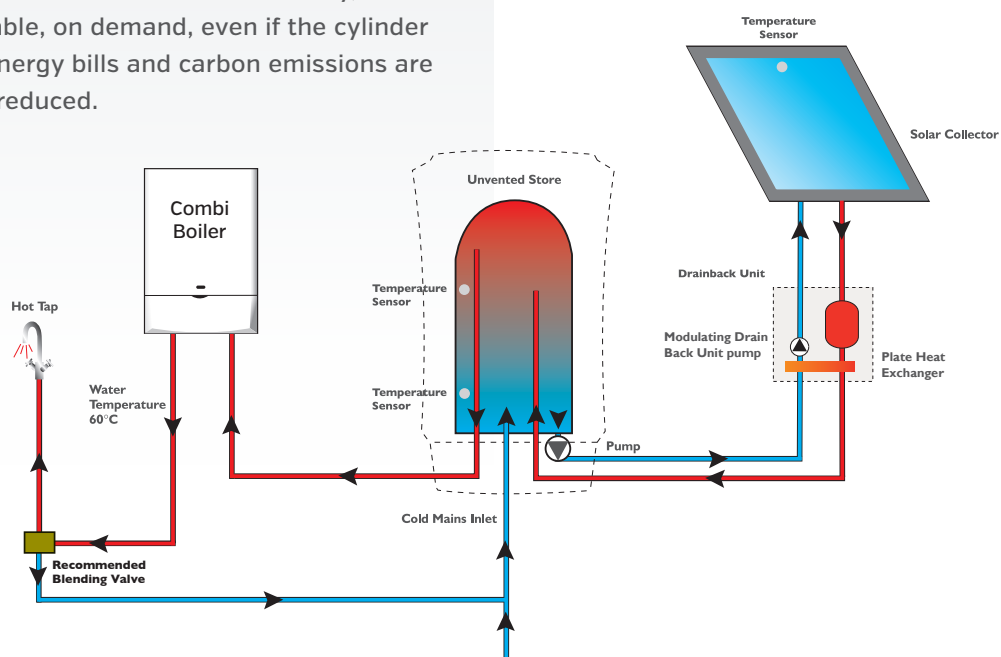


HOW IT WORKS

- 1 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.
- 2 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.
- 3 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



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