



Greenstar 4000

Installer's Guide



Which? awarded to Greenstar 4000 combi.

Best Buy

Which?

Cas Boilers September 2020

The best, reborn.

Created from the DNA of the UK's best-selling Greenstar i

Built on all the tried, tested and much-loved features of the Greenstar i, the Greenstar 4000 is instantly familiar and yet totally transformed in appearance, performance and installer plus points.

We've raised the bar with the speed and ease of installation, commissioning and servicing, alongside improvements in efficiency and control. All for the same price as the loved boiler it replaces.

Encompassing features from our range-topping 8000 Style, informed by insights from installers and featuring real advances in siting flexibility, it takes what was the nations' favourite boiler and makes it even better.



Technical specifications

	Combi			System			
	25kW	30kW	12kW	15kW	18kW	21kW	24kW
Output kW to Central Heating	3kW -	24kW	1.9kW – 12kW	1.9 – 15kW	3kW – 18kW	3kW – 21kW	3kW – 24kW
Horizontal and vertical max. flue length (60/100mm)	12	2m	16	m	12m		
Horizontal and vertical max. flue length (80/125mm)	21	lm	20m 21m				
Height	724r	nm**	724mm**				
Width	400	mm	400mm				
Depth	310mm		310mm				
Clearance above boiler (60/100; 80/125)	170; 2	10mm	170; 210mm				
Clearance from sides of boiler	5n	nm	5mm				
Clearance below boiler	186	mm	186mm				
Clearance from front of boiler	450/60	0mm***	450/600mm***				
Clearance from front (to a removable door)	20mi	n****	20mm****				
Combi flow rate at the hot water tap (40°C rise†)	9 l/min	10.8 l/min	N/A				
Combi flow rate at the hot water tap (35°C rise)	10.2 l/min	12.3 l/min	N/A				
ErP Space Heating Efficiency Class	A / 9	94%	A / 94%				
Combi ErP Water Heating Efficiency Class	1	4	N/A				
Minimum static mains pressure for maximum flow rate	1.0bar	1.2bar	N/A				
Sound Power level	45d	B(A)	42dB(A)	43dB(A)	45dB(A)	44dB(A)	45dB(A)

** Side panel height = 710mm. Boiler valves fully enclosed and hidden from vision.

*** 600mm from a fixed surface for servicing. Same clearances for ventilated and unventilated compartments. 450mm front clearance to a fixed surface is permitted if: a) 300mm clearance on one side is guaranteed, b) the bottom of the boiler is between 1000mm and 1500mm from the ground and c) 450mm front clearance is maintained from ground level to boiler.

**** 20mm from a removable cupboard door, 600mm from a fixed surface for servicing. Same clearances for ventilated and unventilated compartments. 450mm front clearance to a fixed surface is permitted if a) 300mm clearance on one side is guaranteed b) the bottom of the boiler is between 1000mm and 1500mm from the ground and c) 450mm front clearance is maintained from ground level to boiler.

Designed flow rate.



Turn to page 26 to discover how you can offer up to a 10 year guarantee with Excelerate.





The boiler that's made of more

The benefits at a glance

• Front access to all key components All key components and test points are easily accessible, including the front-facing PRV, which can be removed in seconds.

• Longer flue lengths up to 12m

Boiler siting flexibility with horizontal and vertical flue lengths of 12m (60/100) along with improved flue length reduction on 45° and 90° bends compared to the Greenstar i.

Intuitive full-colour long-text display

The long-text display couldn't be easier to use, from installing, commissioning and fault-finding to everyday use.

• 500ml condensate siphon

Large capacity condensate siphon helps to significantly reduce the risk of freezing.

• Quiet operation

10% quieter than the Greenstar i, the 4000 combi operates at 45dB(a) and our system variants are as low as 42dB(a).

Compatible with our Greenstar Intelligent Filling System

Our industry-first accessory automatically monitors and adjusts system pressure, reducing the need for end user intervention and associated system pressure call-outs (see page 23 for details).

Modulates down to 3kW central heating output

Up to 1:10 modulation range reduces gas consumption, energy bills and wear and tear on components.

Increased DHW efficiency whilst reducing waste water

The 30kW combi model achieves a 2% gain in DHW efficiency versus the Greenstar i. Energy and cost-conscious end users can also benefit from an innovative 'Quick tap' feature by simply opening and closing the hot water tap, waiting 30 seconds for hot water to be produced and saving up to 3.5l/min whilst doing so.

Full flow rates from 1 bar mains pressure

The perfect boiler choice for high-rise installations, such as flats or penthouses in addition to areas such as the South East with low mains pressure.

• 100% planet-friendly packaging

Honeycomb cardboard packaging is fully recyclable and we have replaced plastic bags with compostable ones, generating no waste to landfill and reducing carbon impact.

worcester-bosch.co.uk/4000



Faster installation



New boiler, familiar jig.

- A real time-saver for ease of installation and seamless swapping out with i Junior, Si combi and i System boilers (2005-2015).
- Fixing points, pipe centres and distance from flue to valves match predecessor models for minimum time, effort and re-work.
- Wall-frame provides pre-piping option for all 7 combi pipe connections before the boiler is hung.





PRV pre-fit elbow

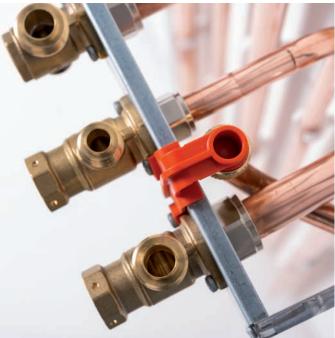
- Supplied with the boiler, the elbow is designed to be angled for SimpleSwitch installations.
- By turning the elbow as pictured, the installer can simply connect to existing i Junior, Si or i System PRV pipework that is often difficult to replace.
- You will only need to provide one 90 degree copper fitting to link the pipework.

SimpleSwitch explained

When quoting for a replacement boiler, it will be fairly common that you will come across one of the Greenstar 4000s predecessors. SimpleSwitch refers to sharing the same positions for the top and bottom wall-frame screws, the pipework positioning, PRV, siphon and flue. The 4000 can easily switch with the following boilers:

- Greenstar i Junior combi (2005-2013)
- Greenstar i Junior combi (2013-2015)
- Greenstar Si combi (2005-2013)
- Greenstar i ErP (2015-2021)
- Greenstar i System (2005-2015)
- Greenstar i System ErP (2015-2021)

Flue to wall-frame service clearances are identical to the previous model. The isolation valves are more hidden inside the boiler casing with the 4000 – for improved aesthetics.



Condensate siphon

The large capacity 500ml condensate siphon increases the volume of condensate discharge and significantly reduces the risk of freezing with the siphonic release increasing speed of flow, pre-warmed to internal boiler temperatures.

- Real homeowner peace of mind during cold snaps.
- Reduction of potential nuisance call-outs.



Front and side panel removal

- We've made it incredibly easy to access the internal components of the Greenstar 4000.
- The front cover can be removed by merely loosening two screws, rather than removing them altogether.
- The boiler has been designed for easy access from the front, however, if space allows, the right-hand side panel can also be removed.

Longer flue lengths

One of the key enhancements of the Greenstar 4000, over the Greenstar i, is the flexibility offered with substantially longer flue lengths.

- Maximum flue lengths up to 12m (60/100mm), when run horizontally or vertically.
- Improved flue length reduction on bends of 0.5m (45°) and 1.5m (90°).
- SimpleSwitch flue adaptor available to allow the same flue hole to be used through the external wall of the property. Turn to page 23 for more information.





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• The wiring connections can be accessed via one, simple, retained screw.

X0100

• The drop-down fascia has a simple wiring layout inherited from our 8000 range.

 The clear layout of connections makes installing third party controls straightforward and familiar.



Control key

Similar to our 8000 and 2000 range, the Greenstar 4000 is compatible with our industry-first 'RF key' slot-in receiver.

- Provides wireless RF communication between the boiler and our load compensating controls.
- Enables you to quickly and easily fit our wireless Bosch EasyControl, Greenstar Comfort+ II RF and other Comfort+ controls.
- Certain control keys will awaken the boiler's built-in timer functions, allowing for intuitive control of central heating and hot water pre-heat times. Turn to page 18 for more information on our controls range.

Planet-friendly packaging

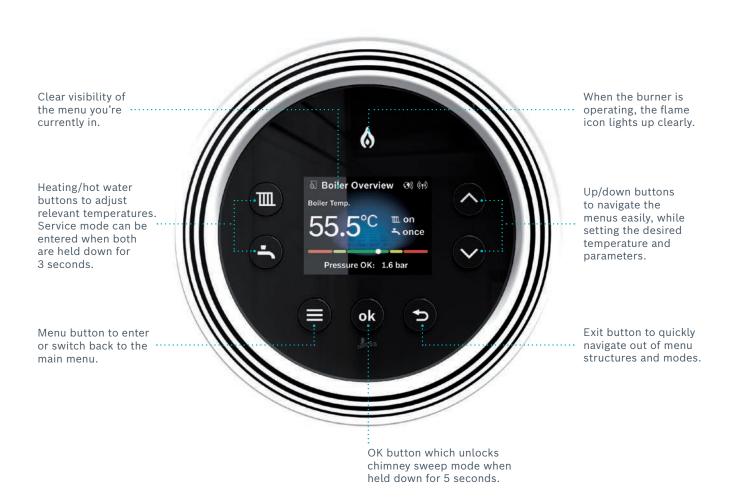
We've made a concerted effort to make the Greenstar 4000 as planet-friendly as possible.

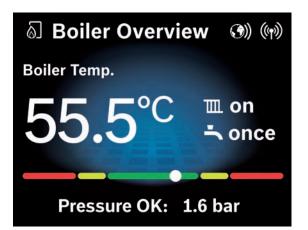
- We've removed all polystyrene packaging and replaced it with a household recyclable honeycomb cardboard.
- Intense transport tests ensure product protection is as robust as our Greenstar i.
- Plastic bags have also been removed and replaced with compostable bags.
- These bags can be thrown away with household waste, placed in garden waste for composting or used as a food waste bin bag.



Boiler control display Visibly superior

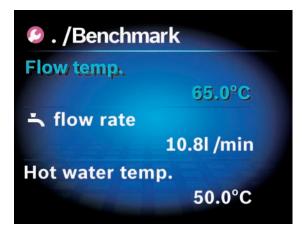
The pioneering control display from the industry-defining 8000 Style provides you with complete control of the boiler and heating system for faster commissioning and future fault-finding, system control, servicing and current boiler status.





Boiler status overview

Intuitive control display means you can walk away knowing that you have set the boiler to achieve maximum comfort and efficiency for your customer.



Benchmarking

Complete your Benchmark Commissioning Checklist easily thanks to our clearly laid out Benchmark menu structure.



Clear menus

Effortless navigation through the sub menus for faster commissioning and future fault-finding, system control, servicing and energy consumption data.



Full-text descriptions

Allow you and your customer to know the exact status of the boiler. The above system pressure message can be avoided with our Intelligent Filling System!

Easier servicing Access all areas

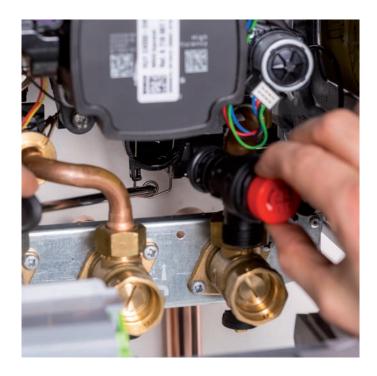
Front access to all components

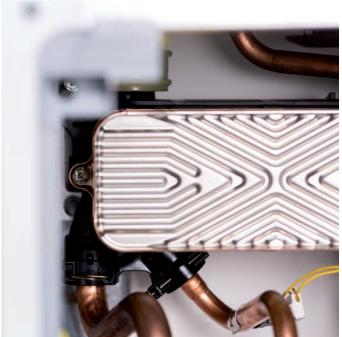
The 4000 can easily be serviced from the front, assuming that there may only be 5mm either side of the boiler when installed. However, for further access:

- The right-hand panel can be removed to reveal improved side access to the primary heat exchanger, pump and diverter valve.
- Access to heat exchanger sensors and electrodes is also improved.

Improved PRV access

With the PRV situated at the front and, after easily pulling down on the PRV clip with a screwdriver, the ability to remove it couldn't be anymore straightforward.





Hydraulics

Ease of servicing was always at the forefront of the Greenstar 4000's design evolution from the tried, tested and much-loved Greenstar i.

- The open architecture of the Greenstar 4000 internal design allows for easy access to all hydraulic components.
- The secondary heat exchanger can be taken out of the boiler with the removal of just one screw.

Primary heat exchanger

With a 10 year guarantee* as standard, the new C6 heat exchanger is an evolution of our tried and tested WB3 heat exchanger from the Greenstar i, already installed in millions of UK homes.

- Improved modulation decreases gas consumption, cuts energy bills and reduces component wear and tear through lower fan speeds.
- Access to burner and heat exchanger baffles by removing just one screw and one bolt.
- A clearly marked, green-capped fan pressure test point indicates where to test for heat exchanger restriction and whether or not cleaning is required.
- For easy cleaning, maintenance and inspection, an access hatch is built into the bottom of the heat exchanger.



*Terms and conditions apply.



Digital and manual pressure gauge

- A digital pressure gauge is featured on the boiler control display, however a traditional gauge is situated to the side of the hydraulics.
- This allows the pressure to be monitored during installation and maintenance even when the power is off.
- To improve access to the boiler's drain valve, the pressure gauge bracket can be easily removed from the structure.

Tool tray design within the control panel

Utilising the control panel as an installer-friendly tool tray is just another example of how we've ensured no component has been left unturned within the appliance.

- Echoing the installer-friendly design from the 8000 Lifestyle range, the improved tool tray features a dedicated area for screws and integrated screwdriver holders.
- The tray will easily hold the weight of the heaviest components such as the fan, pump or plate heat exchanger which is perfect when servicing the boiler.



Service reminders and helpful display menus

There are almost as many simple-to-use tools at your disposal in the boiler's menu structure as there are in your van!

- A range of service reminders to promote a responsible servicing regime and an ongoing relationship with your customer.
- Service reminders can be set by the number of months (default is 12 months) or the number of burner operating hours. Specific dates can be selected when a Comfort+ or Comfort+ I RF is installed.
- The boiler menus highlight the current fault complete with a long-text description.

- The last 10 faults are contained in time order in the 'Fault History' menu.
 - Component test function allows particular components to be activated via the 'Activate Test' menu in order to quickly diagnose potential issues, without having to remove the front cover. The fan, pump, diverter valve, ignition transformer and the burner can all be activated in this way.
- Ensure complete boiler drain-down by moving the diverter valve into mid-position via the "Special Function" menu.

/ Service date	/Current fault	/Activate test
Day Month Year 12 . 03 . 2022	2927 Flame failed during burner operation	Burner Ignition Fan Pump 3-way valve
Ø /Maintenance	/Fault history	/Special Function
End date	01/10 2965	Ventilation func.

Controls and accessories



Wireless Bosch EasyControl

White EasyControl: Part number – 7 736 701 341 Black EasyControl: Part number – 7 736 701 392 White EasyControl and 3 Smart TRVs: Part number – 7 736 701 555 Black EasyControl and 3 Smart TRVs: Part number – 7 736 701 556

The Bosch EasyControl is a smart internetconnected room thermostat that offers customers a simple, stylish and intuitive solution to optimising their home comfort.

• Can be powered from a 3-pin plug when fitted with an EasyControl RF Key (part number – 7 738 112 351). Alternatively, it can be installed via a 2-core wired connection between the control and the boiler.

• With the EasyControl RF Key (same part number as above) and EasyControl Table Stand (part number – 7 736 701 576) you can have greater siting flexibility around the home. It's simple and practical.

DHW and CH can be programmed, monitored and controlled via the Bosch EasyControl app at any time and from anywhere with an internet connection.

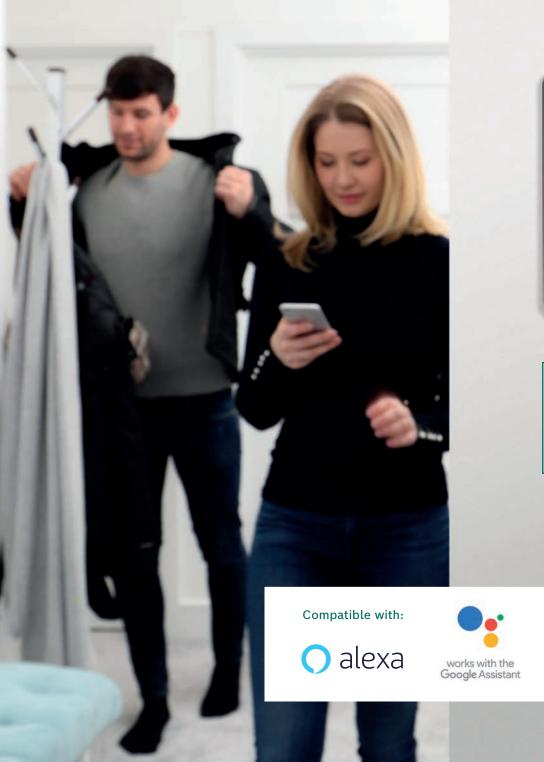
• Presence detection and self-learning to keep in tune with your customers homes comfort levels and helps save energy.

Decide heating times and temperatures for individual rooms with our smart Bosch TRVs (part number – 8 750 000 270).

• Store your details directly into the app, so your customer can contact you when they need to.

*4% - When installed via a BUS connection and weather compensation mode enabled.

5% - When installed via a BUS connection and with 3 or more smart radiator thermostats installed.



BOSCH

"Alexa, set the living room temperature to 22 degrees."



Works with Google Assistant and Messenger via .tiarda, the Bosch virtual assistant.

Greenstar Comfort+ controls

Choose from our proven and popular range of comfort controls to provide your customers with the most suitable solution for their home.





Comfort+ II RF

Part number - 7 738 112 324

Our most popular Comfort+ control is an all-in-one time and temperature wireless room thermostat – perfect for boilers that are not easily accessible.

Features the same as Comfort+ I RF and includes:

- Low pressure indication
- 6 adjustable heating and hot water time periods using our easy to use menu





Comfort+ Stat RF

Part number - 7 738 112 338

Wireless room thermostat will offer energy savings compared to standard on/off controls.

Features include:

- Works with our MT20 mechanical control or your existing timer or programmer
- Clear display with simple dial adjustment
- Load compensation



Part number - 7 738 112 323

Wireless room thermostat with timer functionality in the boiler.

Features the same as Comfort+ and includes:

- Wireless set point room thermostat for simple heating control
- Load Compensation for enhanced efficiency
- Pre-paired transmitter and key receiver
- Landlord function



Upgrade to Boiler Plus compliant by adding a third party timer or programmer or wired MT20.



Upgrade to Boiler Plus compliant with a wired load compensation temperature control e.g. our Greenstar Sense I.

Comfort+

Part number - 7 738 112 321

Does not come with a thermostat, rather it awakens the timer function on the 4000 boiler display itself.

Features include:

- 7 day time control for heating and hot water
- 3 adjustable heat and hot water time periods
- Pre-set heating and hot water time periods
- Ability to set future servicing date

Greenstar System Care Pack

Each cost-effective care pack contains a Greenstar Mini System Filter which unlocks an extended guarantee up to 10 years on the 4000 range*.





Wireless Bosch EasyControl (White) RF System Care Pack

Part number - 7 733 600 433



Wireless Bosch EasyControl (Black) RF System Care Pack Part number - 7 733 600 443 • Bosch EasyControl (White) & RF Key

- EasyControl Table Stand
- Greenstar Mini System Filter
- Greenstar WB1 Inhibitor 500ml Bottle
- Greenstar WB3 Cleaner 500ml Bottle
- Bosch EasyControl (Black) & RF Key
- EasyControl Table Stand
- Greenstar Mini System Filter
- Greenstar WB1 Inhibitor 500ml Bottle
- Greenstar WB3 Cleaner 500ml Bottle

NEW

Greenstar Comfort+ I RF System Care Pack Part number - 7 733 601 324

Greenstar Comfort+ I & RF Key
Greenstar Mini System Filter
Greenstar WB1 Inhibitor 500ml Bottle
Greenstar WB3 Cleaner 500ml Bottle



Greenstar Comfort+ II RF System Care Pack

Part number - 7 733 600 423

• Greenstar Comfort+ II & RF Key

- Greenstar Mini System Filter
- Greenstar WB1 Inhibitor 500ml Bottle
- Greenstar WB3 Cleaner 500ml Bottle

*Terms and conditions apply. Excelerate members, who are non-Worcester Accredited Installers, can achieve these guarantee lengths with an additional £150 payment to Bosch Thermotechnology Ltd. via their Excelerate account after the boiler has been registered. Full terms and conditions can be found online via your Excelerate account.

Greenstar Intelligent Filling System

The Greenstar 4000 combi joins our 8000 Style combi in being compatible with our Intelligent Filling System, bringing the very latest innovative technology to millions of potential homes.

- Unique software ensures the boiler maintains optimum pressure, delivering carefree heating comfort and reducing unnecessary call outs.
- If the system pressure becomes low, the revolutionary software opens the internal filling valve to restore optimum pressure automatically and then closes the valve.
- Recognises a significant or sudden leak in the system and prevents the boiler from overfilling. It will also alert the homeowner if the heating system is losing too much pressure.



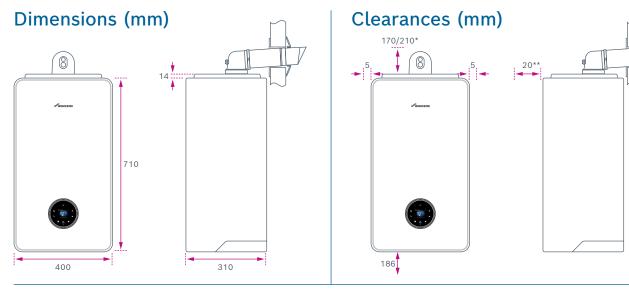


SimpleSwitch Flue Adaptor

Due to the position of the flue being slightly different to the i Junior and Si (2005-2015), this adaptor allows you to use the same flue hole when flueing vertically or horizontally to the side.

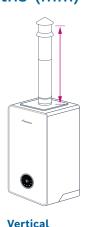
- When using this time-saving accessory, 8m of available flue length will still remain, exceeding any i Junior or Si flue length of the past.
- Available in 60/100mm only.

Technical drawings



Maximum flue lengths (mm)





60/100 maximum flue length 12m.

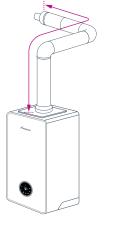
80/125 maximum flue length 21m.

Horizontal

60/100 maximum flue length 12m. 80/125 maximum flue length 21m.

* 60/100 = 170mm and 80/125 = 210mm.

** 20mm from a removable cupboard door, 600mm from a fixed surface for servicing. Same clearances for ventilated and unventilated compartments. 450mm front clearance to a fixed surface is permitted if a) 300mm clearance on one side is guaranteed b) the bottom of the boiler is between 1000mm and 1500mm from the ground and c) 450mm front clearance is maintained from ground level to boiler.



Upwards & horizontal

Each bend used has an equivalent straight flue length. 1.5m must be reduced from the maximum flue length per each 90° bend after the first elbow. In this instance the 60/100 maximum flue length would be 10.5m.

Vertical 2x45 degree

Each bend used has an equivalent straight flue length. 0.5m must be reduced from the maximum flue length per each 45° bend. In this instance the 60/100 maximum flue length would be 11m.

Parts

Combi NEW	
Greenstar 4000 25kW combi (NG)	7-733-600-371
Greenstar 4000 30kW combi (NG)	7-733-600-373
Greenstar 4000 25kW combi (LPG)	7-733-600-372
Greenstar 4000 30kW combi (LPG)	7-733-600-374

System NEW

Greenstar 4000 12kW system (NG)	7-733-600-377
Greenstar 4000 15kW system (NG)	7-733-600-379
Greenstar 4000 18kW system (NG)	7-733-600-381
Greenstar 4000 21kW system (NG)	7-733-600-383
Greenstar 4000 24kW system (NG)	7-733-600-385
Greenstar 4000 12kW system (LPG)	7-733-600-378
Greenstar 4000 15kW system (LPG)	7-733-600-380
Greenstar 4000 18kW system (LPG)	7-733-600-382
Greenstar 4000 21kW system (LPG)	7-733-600-384
Greenstar 4000 24kW system (LPG)	7-733-600-386

100mm flues

Standard telescopic flue & terminal (350 - 570mm)	7-716-191-082
Long telescopic flue kit (570 - 790mm)	7-716-191-171
Vertical 1,090mm BF kit (inc. adaptor)	7-719-002-430
Extension flue kit (960mm)	7-716-191-083
2m flue extension	7-716-191-172
Short flue extension (220mm)	7-716-191-133
90° flue bend	7-716-191-084
45° flue bend x 2	7-716-191-085
Support bracket kit	7-716-191-177
4000 SimpleSwitch flue adaptor 60/100mm NEW	7-733-601-245

125mm flues

Standard telescopic flue & terminal (405 - 600mm)	7-719-003-702
Vertical 1,365mm BF kit (inc. adaptor)	7-719-002-431
Extension flue kit (960mm)	7-719-003-666
90° flue bend	7-719-003-664
45° flue bend	7-719-003-665

Controls

Bosch EasyControl (White)	7-736-701-341
Bosch EasyControl (Black)	7-736-701-392
Bosch EasyControl RF Key	7-738-112-351
Bosch EasyControl Table Stand	7-736-701-576
Comfort+	7-738-112-321
Comfort+ Stat RF	7-738-112-338
Comfort+ I RF	7-738-112-323
Comfort+ II RF	7-738-112-324
MT20 Mechanical Timer	7-733-600-332
MT20RF Mechanical Thermostat	7-733-600-333

Accessories

Greenstar System Filter (22mm mini)	7-733-600-266
Greenstar System Filter (22mm)	7-733-600-236
Greenstar System Filter (28mm)	7-733-600-237
Greenstar System Filter (22mm brass)	7-733-600-476
Worcester Keyless Filling Link	7-716-192-610
Greenstar Intelligent Filling System	7-738-112-911
Greenstar Xtra FGHR Unit	7-736-900-525
4000 System Diverter Valve Kit	NEW 7-733-601-251
4000/Compact Pre-Piping Kit	NEW 7-733-601-250
4000/Compact Remote PRV Kit	NEW 7-733-601-314

Unvented Cylinders NEW

Green Storage WB Range Unvented 90l	7-733-601-298
Green Storage WB Range Unvented 120l	7-733-601-299
Green Storage WB Range Unvented 150l	7-733-601-300
Green Storage WB Range Unvented 1801	7-733-601-301
Green Storage WB Range Unvented 210l	7-733-601-302
Green Storage WB Range Unvented 250l	7-733-601-303
Green Storage WB Range Unvented 300l	7-733-601-304
Green Storage WB Range Unvented Solar 180l	7-733-601-306
Green Storage WB Range Unvented Solar 210l	7-733-601-307
Green Storage WB Range Unvented Solar 250l	7-733-601-308
Green Storage WB Range Unvented Solar 300l	7-733-601-309

Up to a **10 Year Guarantee** on the 4000 with Excelerate



Comprehensive guarantees

We are backing you even further with our best ever guarantees. Sign up to Excelerate and you can pay to extend your boiler guarantee up to 10 years!

Worcester Installers (non-WAIs)

	Standard Guarantee**	With any Greenstar System Filter**	With any Greenstar System Filter + £150*
8000	8 YEAR Guarantee	10 YEAR Guarantee	12 YEAR Guarantee
CDi Compact Si Compact 4000 Ri FS CDi	YEAR Guarantee	8 YEAR Guarantee	10 YEAR Guarantee
2000	5 YEAR Guarantee	6 YEAR Guarantee	N/A

Register your guarantees through Excelerate which now includes free of charge Gas Safe notifications and start collecting points today!



*Terms and conditions apply. Excelerate members, who are non-Worcester Accredited Installers, can achieve these guarantee lengths with an additional £150 payment to Bosch Thermotechnology Ltd. via their Excelerate account after the boiler has been registered. Full terms and conditions can be found online via your Excelerate account. **Terms and conditions apply. For full terms and conditions proves the visit worcester-bosch.co.uk/extended-guarantee-tc.



Support

Local sales

Our Technical Area Sales Managers are ready to support whenever you needs us. Visit worcester-bosch.co.uk/localcontacts and type your postcode to find your nearest representative.

Technical helpline

TEL: 0330 123 0664 EMAIL: technical-advice@uk.bosch.com

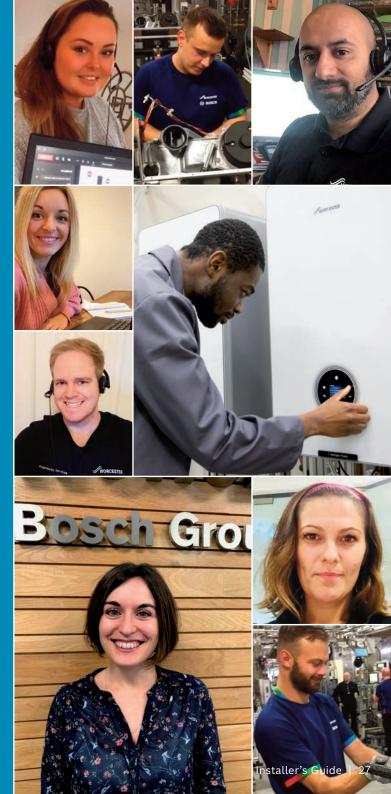
Training

TEL: 0330 123 0166 EMAIL: training@uk.bosch.com VISIT: worcester-bosch.co.uk/training

Spare parts

TEL: 0330 123 9779 EMAIL: worcester-bosch.co.uk/spares

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Share

We would love to see your Greenstar 4000 installs.

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- 🞯 @WorcesterBoschProfessional
- 🗩 Worcester Bosch Group

Literature

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Worcester Bosch

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worcester-bosch.co.uk

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