

# **Boilers made better**

### Gas boiler product guide











We are backing you even further with our best ever guarantees.

Sign up to our Loyalty Programme and you can pay to extend your boiler guarantee up to 12 years!



#### Guarantee lengths for accredited installers



Terms and conditions apply. Full terms and conditions can be found online via your Loyalty Programme account. For guarantee lengths for non-accredited installers, please visit: worcesterbosch.ie/professional/guarantee-lengths

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# Condens 8000 combi

The big-time boiler



DimensionsWidth440mmHeight780mmDepth365mmClearances30mmLeft5mmRight5mmBelow200mmFront20mm\*

\*20mm from a removable cupboard door, 450mm from a fixed surface for servicing. Same clearances for ventilated and unventilated compartments.

#### Models and outputs

Max DHW	Flow rate (l/min)		CH output		
output (kW)	ΔT 40°C^	ΔT 35°C#	(kW)		Part no.
Condens 8000	36kW comb				
36	13.5	15.2	5.1 to 33.7	NG	7 736 702 604
Condens 8000	40kW comb	i			
40.8	15	17.1	5.1 to 33.7	NG	7 736 702 605

^40°C - Designed operational flow rate. #35°C - Values for industry comparisons.

#### **Conversion Kits: NG to LPG**

Model	Part no.
Condens 8000 36kW combi	7 736 702 618
Condens 8000 40kW combi	7 736 702 619

#### Flue lengths

Maximum flue lengths inc. terminal (mm)			
Diameter	Direction	36kW	40kW
100	Horizontal	10,000	11,000
100mm	Vertical	14,000	15,000
125mm	Horizontal	29,000	35,000
	Vertical	29,000	35,000

Note: 60/100mm and 80/125mm – for every 90° flue bend deduct 1,500mm and 500mm for every 45° flue bend.

For details of flue components, see page 46.

#### Model weights and efficiencies

Weight – lift	ErP space heating efficiency class	ErP water heating efficiency class**	ErP hot water efficiency
Condens 8000 36	(W combi		
41kg**	A / 94%	А	89%
Condens 8000 40kW Combi			
41kg**	A / 94%	А	86%

\*\*Declared load profile XL. \*\*Without front and side panels.



For details of compatible controls see pages 28-32. See page 44 for relevant accessories.



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You can offer up to a 12 year guarantee, when installed with any Greenstar System Filter<sup>†</sup>. See page 2 for more information.



# Condens 4000 combi

Super quiet powerhouse



A+ → G	
Dimensions	
Width	400mm
Height	724mm*
Depth	310mm
Clearances	
Above flue	30mm**
Left	5mm
Right	5mm
Below	200mm
Front	20mm***

mm  $A+++ \rightarrow G$ 

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\*Side panel height = 710mm. Boiler valves fully enclosed and hidden from vision. \*\* Distance above cabinet for cleaning when vertical flues are used.

\*\*\*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.

#### Models and outputs

	Flow rate	Flow rate (l/min) CH			
Max DHW output (kW)	ΔT 40°C^	ΔT 35°C#	output (kW)		Part no.
Condens 4000	25kW comb				
25	0	10.0	2 += 2444	NG	7 733 601 640
25	25 9 10.2	10.2	3 to 24^^	LPG	7 733 601 642
Condens 4000 30kW combi					
20	10.0	10.0	2 += 2444	NG	7 733 601 641
30	10.8	12.3	3 to 24^^	LPG	7 733 601 643

^40°C - Designed operational flow rate. #35°C - Values for industry comparisons. ^^13kW with low NOx code plug fitted.



**Collect loyalty points** for every installation

#### Flue lengths

Maximum flue lengths inc. terminal (mm)			
Diameter	Direction	Condens 4000 series	
100	Horizontal	12,000	
100mm	Vertical	12,000	
125mm	Horizontal	21,000	
	Vertical	21,000	

Note: 60/100mm and 80/125mm - for every 90° flue bend deduct 1,500mm and for every 45° flue bend deduct 500mm.

 $\mathbb{T}$ For details of flue components, see page 46.

#### Model weights and efficiencies

Weight – lift Condens 4000	ErP space heating efficiency class 25kW combi	ErP water heating efficiency class <sup>++</sup>	SAP efficiency – NG	SAP comparative hot water efficiency
32.0kg	A / 94%	А	89.3%	73.8%
Condens 4000	30kW combi			
32.3kg	A / 94%	А	89.3%	74.2%
<sup>++</sup> Declared load i	orofile XI			

Declared load profile XL.

For details of compatible controls see pages 28-32. See page 44 for relevant accessories.



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# Greenstar 2000 combi

Top value performance



	A			
A++-	+ → G			
<b>ж</b> <sub>хі</sub>	A	•		
A+ -	→ G			
Din	nensions			
Wi	dth	400mm		
Height		724mm*		
Depth		300mm		
Cle	arances			
Ab	ove flue	30mm***		
Lef	ťt	5mm		
Right		5mm		
Be	low	200mm		
Fro	ont	20mm**		

\*side panel height = 710mm.

\*\*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. \*\*\* Distance above cabinet for cleaning when vertical flues are used.

#### Models and outputs

	Flow rate (l/min)		СН		
Max DHW output (kW)	ΔT 40°C#	ΔT 35°C^	output (kW)		Part no.
Greenstar 200	0 25kW com	ıbi			
05	0	10	0.1. 0.444	NG	7 736 902 326
25	9	10	3 to 24^^	LPG	7 736 902 328
Greenstar 2000 30kW combi					
	10.0	10		NG	7 736 902 325
30	10.8	12	3 to 24^^	LPG	7 736 902 327

^35°C – Designed operational flow rate.

#40°C - Values for Worcester Bosch comparisons.

^^13kW with low NOx code plug fitted.



Collect loyalty points for every installation

#### Flue lengths

Maximum flue lengths inc. terminal (mm)			
Diameter	Direction	Greenstar 2000 series	
100mm	Horizontal	12,000	
	Vertical	12,000	
125mm	Horizontal	21,000	
	Vertical	21,000	

Note: For every 90° flue bend deduct 1,500mm for every 45° flue bend deduct 500mm.

**For details of flue components, see page 46.** 

#### Model weights and efficiencies

Weight – lift Greenstar 200	ErP space heating efficiency class 0 25kW combi	ErP water heating efficiency class <sup>++</sup>	SAP efficiency - NG	SAP comparative hot water efficiency - NG
32.1kg	A / 94%	А	89.3%	74.4%
Greenstar 2000 30kW combi				
32.1kg	A / 94%	А	89.3%	70.2%
Greenstar 200	0 30kW combi A / 94%			

\*\*Declared load profile XL

For details of compatible controls see pages 28-32. See page 44 for relevant accessories.



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\*Available as standard to both loyalty programme members and non-WAI's, when fitted with any brand of system filter. Terms and conditions apply.

## Greenstar CDi Compact combi

Small but mighty



A+++ → G					
⊸я. А	≭" А				
A+ → G					
Dimensions					
Width	390mm				
Height	690mm				
Depth	280mm				
Clearances					
Above flue	30mm**				
Left	5mm				
Right	5mm				
Below	200mm				
Front	20mm*				

\*\*Or measured 170mm from the top of the boiler cabinet.\*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.

#### Models and outputs

	Flow rate	e (l/min)	СН	
Max DHW output (kW)	ΔT 40°C^	∆T 35°C#	output (kW)	Part no.
Greenstar 280	Di Compact	combi		
20	10		7 00 1 04	NG 7 733 600 054
28	3 10 11.4 7.03 to 24		7.03 to 24	LPG 7 733 600 057
Greenstar 320	Di Compact	combi		
		10.1		NG 7 733 600 055
32	11	13.1 7.03 to 24		LPG 7 733 600 058
Greenstar 36CDi Compact combi				
20	10		7.03 to 24	NG 7 733 600 056
36	13	13 15		LPG 7 733 600 059

^40°C - Designed operational flow rate. #35°C - Values for industry comparisons.



**Collect loyalty points** for every installation

#### Flue lengths

Maximum flue lengths inc. terminal (mm)			
Diameter	Direction	CDi Compact series	
100mm	Horizontal	6,000	
	Vertical	6,000	
125mm	Horizontal	15,000	
	Vertical	15,000	

Note: For every 90° flue bend deduct 2,000mm and 1,000mm for every 45° flue bend.

 $\mathbb{T}$ For details of flue components, see page 46.

#### Model weights and efficiencies

Weight – lift	ErP space heating efficiency class	ErP water heating efficiency class <sup>++</sup>	SAP efficiency – NG	SAP comparative hot water efficiency
Greenstar 280	Di Compact co	mbi		
32.9kg	A / 94%	А	89.8%	74.9%
Greenstar 32CDi Compact combi				
32.9kg	A / 94%	А	89.8%	75.0%
Greenstar 36CDi Compact combi				
32.9kg	A / 94%	А	89.8%	74.7%
**Declared load (	orofile XL			

For details of compatible controls see pages 33-35. See page 44 for relevant accessories.



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You can offer up to a 10 year guarantee, when installed with any Greenstar System Filter<sup>+</sup>. See page 2 for more information.

# **Greenstar Highflow CDi combi**

Ultra powerful heating



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Dimensions	
Width	600mm
Height	850mm
Depth	600mm*
Clearances	
Above	15mm**
Left	5mm
Right	5mm
Front	25mm***

\*Excluding front fascia

\*\*600mm required for installation.

\*\*\*600mm required for servicing. Refer to the installation and servicing instructions for unventilated clearances.

#### Models and outputs

Max DHW output (kW)	Flow rate (ΔT 35°C FOR A 90 LITRE DRAW OFF)	CH output (kW)		Part no.
Greenstar Hi	ghflow 440CDi combi			
29.5	20#	7.4 to 29.2	NG	7 731 600 098
29.5	20#		LPG	7 731 600 099
Greenstar Highflow 550CDi combi				
41.1	41.1 25#		NG	7 731 600 100
41.1 20#	9.7 to 30.6	LPG	7 731 600 101	

#Flow rate shown is only until the heat store is depleted. Once the heat store is depleted, it is advisable to reduce the flow rate to maintain the DHW temperature at the outlet.

#### Flue lengths

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Maximum flue lengths inc. terminal (mm)			
Diameter	Direction	Highflow CDi series	
100mm	Horizontal	4,000	
	Vertical	6,400	
125mm	Horizontal	13,000	
	Vertical	15,000	

Note: 60/100mm – for every 90° flue bend deduct 1,500mm and 750mm for every 45° flue bend. 80/125mm – for every 90° flue bend deduct 2,000mm and 1,000mm for every 45° flue bend.

### For details of flue components see page 47.

#### Model weights and efficiencies

Weight – lift Greenstar High	ErP space heating efficiency class flow 440CDi c	ErP water heating efficiency class** ombi	SAP efficiency – NG	SAP comparative hot water efficiency
112kg	A / 92%	В	89.2%	61.7%
Greenstar Highflow 550CDi combi				
112kg	A / 92%	В	89.2%	61.7%

\*\*Declared load profile XL

For details of compatible controls see pages 33-35. See page 44 for relevant accessories.



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You can offer up to a 10 year guarantee, when installed with any Greenstar System Filter<sup>†</sup>. See page 2 for more information.

# Condens 8000 system

#### The big-time boiler



\*20mm from a removable cupboard door, 450mm from a fixed surface for servicing. Same clearances for ventilated and unventilated compartments.

#### Models and outputs

CH output (kW)	Part no.
Condens 8000 30kW system	
3.0 to 29.6	NG 7 736 702 606
Condens 8000 35kW system	
5.1 to 33.7	NG 7 736 702 607

System boilers using Worcester Bosch control options without the Greenstar Wiring Centre are incompatible with Y or S Plan systems and must have the optional Diverter Valve Kit fitted.

#### **Conversion Kits: NG to LPG**

Model	Part no.
Condens 8000 30kW system	7 736 702 620
Condens 8000 35kW system	7 736 702 621



#### **Optional diverter valve kits**

Description	Part no.
Optional Diverter Valve Kit – 30kW & 35kW	7 738 112 913

#### Flue lengths

Maximum flue lengths inc. terminal (mm)			
Diameter	Direction	30kW	35kW
100mm	Horizontal	17,000	10,000
TOOMM	Vertical	21,000	14,000
125mm	Horizontal	25,000	29,000
	Vertical	25,000	29,000

Note: 60/100mm and 80/125mm - for every 90° flue bend deduct 1,500mm and 500mm for every 45° flue bend.

For details of flue components,
including flues see page 46.

#### Model weights and efficiencies

Weight – lift	ErP space heating efficiency class	SAP efficiency – NG	
Condens 8000 30kW system			
40kg <sup>++</sup>	A / 94%	89.6%	
Condens 8000 Life 35kW system			
40kg <sup>++</sup>	A / 94%	89.6%	
<sup>++</sup> Without front and side panels.			

Without front and side panels.



For details of compatible controls see pages 28-32. See page 44 for relevant accessories.



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You can offer up to a 12 year guarantee, when installed with any Greenstar System Filter<sup>+</sup>. See page 2 for more information.

# Condens 4000 system

#### Super quiet powerhouse



$A + + + \rightarrow G$	
Dimensions	
Width	400mm
Height	724mm*
Depth	310mm
Clearances	
Above flue	30mm**
Left	5mm
Right	5mm
0	
Below	186mm

Α

\*Side panel height= 710mm. boiler valves fully enclosed and hidden from vision. \*\* Distance above cabinet for cleaning when vertical flues are used.

\*\*\*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.

#### Models and outputs

CH output (kW)		Part no.
Condens 4000 15kW system		
1.9 to 15	NG	7 733 601 632
1.9 to 15	LPG	7 733 601 636
Condens 4000 18kW system		
3 to 18	NG	7 733 601 633
3 to 18	LPG	7 733 601 637
Condens 4000 21kW system		
3 to 21	NG	7 733 601 634
	LPG	7 733 601 638
Condens 4000 24kW system		
2 += 24	NG	7 733 601 635
3 to 24	LPG	7 733 601 639

System boilers using Worcester control options are incompatible with Y or S Plan systems and must have the optional Diverter Valve Kit fitted.

#### Optional diverter valve kit

Description	Part no.	
Optional Diverter Valve Kit	7 733 601 251	

#### Flue lengths

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Maximum flue lengths inc. terminal (mm)			
Diameter	Direction 4000 15kW		4000 18-24kW
100mm	Horizontal	16,000	12,000
TOOMM	Vertical	16,000	12,000
125mm	Horizontal	20,000	21,000
	Vertical	20,000	21,000

Note: 60/100mm and 80/125mm - for every 90° flue bend deduct 1,500mm and for every 45° flue bend deduct 500mm.

For details of flue components, see page 46.

#### Model weights and efficiencies

Weight – lift	ErP space heating efficiency class	SAP efficiency – NG			
Condens 4000 15kW system					
30.6kg	A / 94%	89.8%			
Condens 4000 18kW system					
30.6kg	A / 94%	89.5%			
Condens 4000 21kW system					
30.6kg	A / 94%	89.6%			
Condens 4000 24kW system					
30.6kg	A / 94%	89.4%			



You can offer up to a 10 year guarantee, when installed with any Greenstar System Filter<sup>+</sup>. See page 2 for more information.

\*Available if you are a WAI only. Terms and conditions apply.

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# Greenstar i System Compact

#### Small but mighty

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		Rig
-		Be
		Fre
	-	-

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4+++ → G	
Dimensions	
Width	390mm
Height	690mm
Depth	280mm
Clearances	
Above flue	30mm**
Left	5mm
Right	5mm
Below	200mm
Front	20mm*

\*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. \*\* Distance above cabinet for cleaning when vertical flues are used.

#### Models and outputs

CH output (kW)	Part no.
Greenstar i System Compact 27kW	
7 03 to 27	NG 7 733 600 060
7.05 to 27	LPG 7 733 600 061
Greenstar i System Compact 30kW	
7.02 +- 20	NG 7 733 600 062
7.03 to 30	LPG 7 733 600 063

System boilers using Worcester control options are incompatible with Y or S Plan systems and must have the optional Diverter Valve Kit fitted.

#### **Optional diverter valve kits**

Description	Part no.
Optional Diverter Valve Kit – 27kW	7 733 600 220
Optional Diverter Valve Kit – 30kW	7 733 600 221

#### Flue lengths

Maximum flue lengths inc. terminal (mm)			
Diameter	Direction i System Compact 27kW - 30kW		
100mm	Horizontal	6,000	
	Vertical	6,000	
125mm	Horizontal	15,000	
	Vertical	15,000	

Note: for every 90° flue bend deduct 2,000mm and 1,000mm for every  $45^{\rm o}$  flue bend.



For details of flue components, see page 46.

#### Model weights and efficiencies

Weight – lift	ErP space heating efficiency class	SAP efficiency – NG		
Greenstar i System Compact 27kW				
27.3kg	A / 92%	89.0%		
Greenstar i System Compact 30kW				
27.3kg	A / 92%	89.0%		
For details of compatible controls see pages 33-35. See page 44 for relevant accessories.				



Collect loyalty points for every installation



You can offer up to a 10 year guarantee, when installed with any Greenstar System Filter<sup>†</sup>. See page 2 for more information.

## Condens 8000 regular

#### The big-time boiler



\*20mm from a removable cupboard door, 450mm from a fixed surface for servicing. Same clearances for ventilated and unventilated compartments.

#### Models and outputs

CH output (kW)	Part no.
Condens 8000 40kW regular	
5.1 to 39.8	NG 7 736 702 608

#### **Conversion Kits: NG to LPG**

Model	Part no.
Condens 8000 40kW regular	7 736 702 622

#### Flue lengths

Maximum flue lengths inc. terminal (mm)						
Diameter	Direction	30kW	35kW	40kW	45kW	50kW
100mm	Horizontal	17,000	10,000	11,000	8,000	9,000
	Vertical	21,000	14,000	15,000	12,000	12,000
125mm	Horizontal	25,000	29,000	35,000	35,000	40,000
	Vertical	25,000	29,000	35,000	35,000	40,000

Note: 60/100mm and 80/125mm - for every 90° flue bend deduct 1,500mm and 500mm for every 45° flue bend.

For detail

For details of flue components, see page 46.

#### Model weights and efficiencies

Weight – lift	ErP space heating efficiency class	SAP efficiency – NG		
Condens 8000 40kW regular				
40kg <sup>++</sup>	A / 94%	89.6%		

<sup>++</sup>Without front and side panels.



For details of compatible controls see pages 28-32. See page 44 for relevant accessories.



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# Greenstar Ri regular

#### Cupboard-sized comfort

	~			<b>Ⅲ A</b> A+++ → G
				Dimensions
				Width
				Height
				Depth
				Clearances
				Above flue
100		a		Left
O	•	(0)		Right
			2	Below
				Front

390mm 600mm 270mm

30mm\*\* 5mm

5mm 200mm

20mm\*

\*20mm from a removable cupboard door, 600mm from a fixed surface for servicing. Refer to the installation and servicing instructions for unventilated clearances. 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. \*\* Distance above cabinet for cleaning when vertical flues are used.

#### Models and outputs

CH output (kW)	Part no.		
Greenstar Ri 12kW regular			
3.45 to 12	NG 7 733 600 307		
5.45 to 12	LPG 7 733 600 301		
Greenstar Ri 15kW regular			
4 62 to 15	NG 7 733 600 308		
4.02 to 15	LPG 7 733 600 302		
Greenstar Ri 18kW regular			
5 54 to 18	NG 7 733 600 309		
5.54 (0 10	LPG 7 733 600 303		
Greenstar Ri 21kW regular			
7.38 to 21	NG 7 733 600 310		
7.50 to 21	LPG 7 733 600 304		
Greenstar Ri 24kW regular			
7.38 to 24	NG 7 733 600 311		
7.50 t0 24	LPG 7 733 600 305		

#### Flue lengths

Maximum flue lengths inc. terminal (mm)		
Diameter	Direction	Ri 12kW - 24kW regular
100	Horizontal	4,600
100mm	Vertical	6,400
125mm	Horizontal	13,000
	Vertical	15,000

Note: for every 90° flue bend deduct 2,000mm and for every 45° flue bend deduct 1,000mm.



For details of flue components, see page 46.

#### Model weights and efficiencies

ErP space heating efficiency class	SAP efficiency – NG			
Greenstar Ri 12kW regular				
A / 92%	89.1%			
lar				
A / 92%	88.9%			
Greenstar Ri 18kW regular				
A / 92%	88.9%			
Greenstar Ri 21kW regular				
A / 92%	88.7%			
Greenstar Ri 24kW regular				
A / 92%	88.7%			
	efficiency class tlar A / 92% tlar A / 92% tlar A / 92% tlar A / 92% tlar			

See page 44 for relevant accessories.



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You can offer up to a 10 year guarantee, when installed with any Greenstar System Filter<sup>†</sup>. See page 2 for more information.

# Greenstar Ri Compact regular

Cupboard-sized comfort



\*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. \*\* Distance above cabinet for cleaning when vertical flues are used.

#### Models and outputs

CH output (kW)	Part no.		
Greenstar Ri Compact 27kW regular			
7.02 +- 07	NG 7 733 600 064		
7.03 to 27	LPG 7 733 600 065		
Greenstar Ri Compact 30kW regular			
7.03 to 30	NG 7 733 600 066		
7.03 to 30	LPG 7 733 600 067		

**Collect loyalty points** 

for every installation

#### Flue lengths

Maximum flue lengths inc. terminal (mm)		
Diameter	Direction Ri Compact 27kW - 30kW regular	
100mm	Horizontal	6,000
	Vertical	6,000
125mm	Horizontal	15,000
	Vertical	15,000

Note: for every 90° flue bend deduct 2,000mm and for every 45° flue bend deduct 1,000mm.



#### Model weights and efficiencies

ErP space heating efficiency class	SAP efficiency – NG						
ireenstar Ri Compact 27kW regular							
A / 92%	89.0%						
Greenstar Ri Compact 30kW regular							
A / 93%	89.0%						
	efficiency class 7kW regular A / 92% 0kW regular						





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You can offer up to a 10 year guarantee, when installed with any Greenstar System Filter<sup>†</sup>. See page 2 for more information.

## Greenstar FS CDi regular

#### Heavyweight home heating

<b>Ⅲ A</b> A+++ → G	•
Dimensions	
Width	400mm
Height	850mm
Depth	600mm*
Clearances	
Above	15mm
Left	5mm
Right	5mm
Front	25mm**

\*Excluding front fascia.

\*\*600mm to a removable door for servicing. Refer to Tech & Spec for unventilated clearances.

#### Models and outputs

CH output (kW)	Part no.
Greenstar FS 30CDi regular	
7.7 to 30	NG 7 731 600 102
	LPG 7 731 600 103
Greenstar FS 42CDi regular	
9.6 to 40.8	NG 7 731 600 104
9.6 10 40.8	LPG 7 731 600 105

#### Flue lengths

Maximum flue lengths inc. terminal (mm)							
Diameter	Direction	FS 30CDi regular & FS 42CDi regular					
80mm Flexi Flue	Vertical	12,000					
100mm	Horizontal	4,000					
TOOMM	Vertical	6,400					
105	Horizontal	13,000					
125mm	Vertical	15,000					

Note: 60/100mm – for every 90° flue bend deduct 1,500mm and 750mm for every 45° flue bend. 80/125mm – for every 90° flue bend deduct 2,000mm and 1,000mm for every 45° flue bend.

#### For details of flue components see page 47.

#### Model weights and efficiencies

Weight – lift	ErP space heating efficiency class	SAP efficiency – NG
Greenstar FS 30CDi reg	ular	
55.1kg	A / 92%	88.9%
Greenstar FS 42CDi reg	ular	
55.1kg	A / 92%	88.8%

See page 44 for relevant accessories.



Collect loyalty points for every installation



You can offer up to a 10 year guarantee, when installed with any Greenstar System Filter<sup>+</sup>. See page 2 for more information.

# 2000, 4000 and 8000 controls

Controls on pages 28-32 are compatible with our combi boilers unless stated otherwise. These controls are also compatible with our 4000 and 8000 system boilers when used with an integral diverter valve.

#### Bosch EasyControl

#### Smart internet-connected controller

Part no. 7 736 701 341 (white) Part no. 7 736 701 392 (black)

#### Wireless Bosch EasyControl Bosch EasyControl RF Key

Part no. 7 738 113 610

• Enables wireless connection between the control and the boiler.

#### Bosch EasyControl Stand

Part no. 7 736 701 576

► Used in conjunction with EasyControl and RF Key.



#### Bosch EasyControl Adapter

Part no. 7 736 701 560

► The adapter allows the EasyControl to be compatible with other manufacturer's boilers through OpenTherm protocols or boilers with a 230V room thermostat connection. When connected via a 230V connection, only central heating can be controlled.

#### Individual Smart TRV

Part no. 7 736 701 575

- Decide heating times and temperatures for individual rooms with the Bosch EasyControl.
- ► When installing Smart TRVs, along with our EasyControl Adaptor, a smart TRV must be installed in the same zone as the EasyControl wall unit.
- ► For optimum performance we recommend Smart TRVs are installed on all radiators.
- ► Child-lock setting through EasyControl App.

#### Bosch EasyControl TRV set

Part no. 7 736 701 555 (1 white EasyControl, 3 Smart TRVs) Part no. 7 736 701 556 (1 black EasyControl, 3 Smart TRVs)



#### Bosch Smart Individual Room Thermostat

Part no. 8 750 001 003 (230V) Part no. 8 750 001 004 (24V)

- 205-
0

- Offer multi-zone control in combination with the EasyControl, for systems with radiators and/or water-based underfloor heating.
- Control the temperature on the device or remotely via the Bosch EasyControl app.
- Flexible time schedules can be set, via the app, to individual rooms or areas e.g. upstairs and downstairs.



#### **Greenstar Sense controls**

#### Greenstar Sense I intelligent room thermostat

Part no. 7 738 110 054



- ► Load compensation feature for increased efficiency.
- Boiler output automatically adjusted to precisely meet the heat demand of the property at maximum efficiency.
- ► Maximises the condensing boiler's operation.
- Perfect when replacing an existing, less efficient wired room thermostat.

# \_



Greenstar Comfort+ I RF (4000 & 8000 only)

- ▶ Pre-paired wireless room thermostat and RF key receiver.
- ► Load compensation for enhanced efficiency.
- ▶ Plug and Play installation.

Greenstar Comfort+ controls

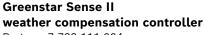
#### **Greenstar Comfort+ II RF**

Part no. 7 738 112 324



All the features of Greenstar Comfort+I RF while also including:

- ► 6 adjustable CH temperatures for each set-point per day.
- Programme and control CH and DHW at the room thermostat - perfect for boilers that are not easily accessible.
- Compatible with our Comfort+ Wireless Outdoor Weather Sensor (Part no. 7 738 112 343). Boosts the heating system's ErP rating by an extra +1% compared to standalone Comfort+ II.



Part no. 7 738 111 064



- Intelligently interacts with the boiler to provide weather compensation via a wired outdoor sensor.
- Solar thermal optimisation in conjunction with MS100 or MS200 solar module.
- Displays the amount of energy recovered from a solar system.
- ► Service reminder function.

 $^{*}4\%$  when installed via a BUS connection & weather compensation mode enabled.



Up to a 12 year guarantee. The guarantee of our EasyControl, Comfort and Sense range will match the Bosch boiler that it is installed with<sup>†</sup>.

#### *Wiring modules* Greenstar Wiring Centre

Part no. 7 738 110 116



#### MS100 and MS200 intelligent solar module

MS100 Part no. 7 738 110 144 MS200 Part no. 7 738 110 146

- Specially designed interface that integrates a solar heating system with a gas-fired system boiler.
- Works in conjunction with a solar-compatible weather or load compensation unit such as the Sense II. MS200 unit allows integration of more complex solar heating systems, including east / west split or swimming pools.

#### Weather sensors Wired outdoor weather sensor Part no. 7 716 192 764

Comfort+ wireless outdoor weather sensor (for Greenstar Comfort+ II only) Part no. 7 738 112 343

# CDi Compact, Highflow CDi and i System Compact controls

Controls on pages 33 to 35 are compatible with our CDi Compact, CDi Highflow and, when used with an integral diverter valve, our i System Compact boilers.

#### Bosch EasyControl Smart internet-connected controller

#### Bosch EasyControl controller

Part no. 7 736 701 341 (white) Part no. 7 736 701 392 (black)



- Decide times and temperatures for heating and hot water, all from your smart device.
- ► Home presence detection.
- Easy to use and set up with simple displays and intuitive app.
- Visual graphs to monitor heating and hot water use.
- Requires just a 2-core wire connection between the control and the boiler.

#### Bosch EasyControl TRV set



Part no. 7 736 701 555 (1 white EasyControl, 3 Smart TRVs) Part no. 7 736 701 556 (1 black EasyControl, 3 Smart TRVs)

#### Bosch EasyControl Adapter

Part no. 7 736 701 560



Collect loyalty points for every installation

#### Greenstar Sense controls

#### Greenstar Sense I intelligent room thermostat

Part no. 7 738 110 054



- Load compensation feature for increased efficiency.
- Boiler output automatically adjusted to precisely meet the heat demand of the property at maximum efficiency.
- ▶ Easy to handover to the end user; no reliance on batteries.

#### Greenstar Sense II weather compensation controller

Part no. 7 738 111 064



- ▶ Intelligently interacts with the boiler to provide weather compensation via a wired outdoor sensor.
- ▶ Displays the amount of energy recovered from a solar system.
- Service reminder function.

#### Mechanical timer for combi boilers

#### MT10 mechanical timer\*

Part no. 7 716 192 036



\*4% saving is achieved when installed as a room thermostat; 2% when installed in the boiler fascia.

#### Greenstar Comfort controls

#### Greenstar Comfort I RF wireless room thermostat and plug-in twin channel programmer

Part no. 7 733 600 001



- Enhanced load compensation for increased efficiency.
- ▶ Quick installation no wiring required.
- ► Extremely reliable RF signal.

#### Greenstar Comfort II RF wireless programmable room thermostat and plug-in RF receiver Part no. 7 733 600 002



All the features of Comfort I while also including:

- ▶ 6 adjustable heating temperatures per day.
- ▶ Set programme at the room thermostat.
- Remote access to boiler diagnostic codes.
- ▶ Compatible with the Ri Compact when fitted with the Greenstar Wiring Centre (7 738 110 116).

#### Comfort wall plate kit

Part no. 7 733 600 039

#### Weather sensors

Wired outdoor weather sensor Part no. 7 716 192 764

\*This control will not provide hot water pre-heat time control when installed with a combi boiler.

**REG\*** 

# **Greenstar controls**

				8000 & 4000	CDi COMPACT		HIGHFLOW CDİ	8000 & 4000	i SYSTEM COMPACT	NР		Ri COMPACT
CONTROL Part	no.	ErP class	% system efficiency gain	8000	CDi C	2000	нісн	8000	i syst	7000 WP	8000	Ri CO
Mechanical timers												
MT10 Mechanical Timer 7 716 1	92 036	-	-		✓		✓					
Digital and wireless programmers and room	thermosta	ats										
Greenstar Comfort I RF 7 733 6	00 001	V	3		✓		✓		✓			
Greenstar Comfort II RF 7 733 6	00 002	V	3		✓		✓		✓			✓
Greenstar Comfort+ I RF 7 738 1	12 323	V	3	✓				✓				
Greenstar Comfort+ II RF 7 738 1	12 324	V	3	✓		✓		✓			✓	
Advanced intelligent controls												
Greenstar Sense I** 7 738 1	10 054	V	3	✓	✓	✓	✓	✓	✓	$\checkmark^1$		
Greenstar Sense II 7 738 1	11 064	VI	4†	✓	✓	✓	✓	✓	✓	$\checkmark^1$		
Weather sensors												
Outdoor Weather Sensor 7 716 1	92 764	П	2	✓	✓	✓	✓	✓	✓	<b>∀</b> <sup>1</sup>		
Comfort+ Wireless Outdoor Weather Sensor <sup>1+</sup> 7 738 1	12 343	VI	4**	~		~		~				
Wiring modules												
MS100 Intelligent Solar Module 7 738 1 MS200 Intelligent Solar Module 7 738 1		-	-					•		✓ 1		
Greenstar Wiring Centre 7 738 1	10 116	-	-	<b>√</b> <sup>2</sup>		<b>√</b> <sup>2</sup>		<b>√</b> <sup>2</sup>			<b>√</b> <sup>2</sup>	✓

<sup>†</sup>4% when installed via a BUS connection & weather compensation mode enabled;

\* With optional wiring centre (Part no. 7 738 110 116).

\*\*Must be used with external 230v timer (Greenstar Highflow) or MT10.

^ With optional integral diverter valve.

<sup>++</sup>In combination with the Greenstar Comfort+ II RF & weather compensation mode enabled.

 $^1$  When installed with a single boiler. The Sense range can be installed in a cascade when installed with a MC400.  $^2$  When installed with a Greenstar Comfort+ II.

Gas-fired boilers

# Bosch EasyControl

				Gas-fired boilers							
					CO	MBI		SYS	ГЕМ	REG	ULAR
				000	IPACT		W CDi	000	i SYSTEM COMPACT		АСТ
CONTROL	Part no.	ErP class	% system efficiency gain	8000 & 4000	CDI COMPACT	2000	HIGHFLOW CDI	8000 & 4000	i syster	8000	Ri COMPACT
Smart controls											
EasyControl – White	7 736 701 341	VI	4†	✓	✓	✓	✓	✔ <sup>2</sup>	<b>√</b> <sup>2</sup>	✓ 1	✓ 1
EasyControl – Black	7 736 701 392	VI	4†	<b>~</b>	✓	<b>~</b>	✓	✓ <sup>2</sup>	✓ <sup>2</sup>	✓ <sup>1</sup>	✓ 1
EasyControl RF Key	7 738 113 610	-	-	<b>~</b>		~		~		~	
EasyControl Table Stand	7 736 701 576	-	-	<b>~</b>		<b>~</b>		✓		<b>~</b>	
EasyControl and 3x Smart TRV set – White	7 736 701 555	VIII	5†	~	~	~	~	✔ <sup>2</sup>	✔ <sup>2</sup>	<b>∀</b> <sup>-1</sup>	<b>∀</b> 1
EasyControl and 3x Smart TRV set – Black	7 736 701 556	VIII	5†	~	~	✓	~	✓ <sup>2</sup>	✔ <sup>2</sup>	✓ 1	✓ <sup>1</sup>
Individual Smart TRV	7 736 701 575	-	-	✓	✓	✓	<b>~</b>	✓	✓	✓	✓
Smart Individual Room Thermostat (230V)	8 750 001 003	-	-	~	~	~	~	~	~	~	~
Smart Individual Room Thermostat (24V)	8 750 001 004	-	-	~	•	~	~	~	•	~	~
EasyControl Adapter	7 736 701 560	-	-					✓	~	~	~

 $^{\rm t}4\%$  when installed via a BUS connection or EasyControl RF Key and with weather compensation mode enabled;

5% when installed via a BUS connection or EasyControl RF Key and with 3 or more smart radiator thermostats installed in the system.

<sup>1</sup> When installed with an EasyControl Adapter to control a single heating channel.

<sup>2</sup> When installed with an integral diverter valve and connected to the EasyControl via emsBUS or, when installed using an EasyControl Adapter as part of an S or Y plan to control a single central heating channel.

For further support on our range of controls, please call our controls technical support team on **015 118 572**.

# Accessories



#### **Greenstar System Filter Range**

Part no. 7 733 600 266 (22mm mini) 7 733 600 236 (22mm) 7 733 600 237 (28mm) 7 733 600 476 (22mm brass)

#### Isolation valve indicators

Can be opened using a single 90° turn, with red and green indicators showing when the filter is in operation.

#### Mini System Filter

Designed for installs with space restrictions as it is 54mm smaller in height than the normal 22mm filter.

#### Brass System Filter

Precision engineered, robust filter, with a large capacity, that is both easy to install and clean. The brass filters have a bypass, making it easy to remove and clean while the boiler continues to operate.



#### Greenstar Intelligent Filling System\* Part no. 7 738 112 911

- ► Compatible with Condens 4000 and 8000 combi boilers.
- ► This industry-first revolutionary software allows the internal filling valve to automatically fill the heating system.
- Once optimum pressure has been reached, the integrated filling valve will automatically stop and close.
- ► Will recognise if there is a leak in the system and will not automatically fill the system.
- ► It also alerts your customer if the heating system is losing too much pressure.



Worcester Keyless Filling Link Part no. 7 716 192 610

- ▶ WRAS approved.
- ▶ Simple lever operation, no key or hose required.
- ► No risk of the end user losing or misplacing the filling link.
- ► For safe use as a filling link with the domestic water supply.

\*In order for the Intelligent Filling System to work successfully, there must be an appropriate level of water pressure from the mains supply. The minimum required is 1.5 bar standing pressure.



Collect loyalty points for every installation



#### Worcester CondenseSure

Part no. 7 716 192 746

- ► No electrical supply needed.
- ► Compatible with all gas boilers.
- ► Installation flexibility.



# Condens 4000 SimpleSwitch flue adaptor (60/100mm)

Part no. 7 733 601 245

This adaptor allows you to use the same vertical or horizontal sideways flue run hole through the external wall of the property when replacing an i Junior or Si boiler.



#### **Vertical Pre-piping Assembly Kits**

Part no. 7 716 192 607 (Condens 8000 Combi and System) Part no. 7 733 601 250\* (CDi Compact, Condens 4000 and i System Compact).

Our Vertical Pre-piping Assembly Kits come pre-bent with swaged ends for easy soldering. This can save you approximately 30 minutes on installation time. Gas pipe and sleeves not included in 7 733 601 250.

 $^{\ast}\textsc{i}$  System Compact includes two 15mm copper pipes for use with an optional diverter value.



Low Loss Header Part no. 7 716 192 614

Our low loss header is compatible with the Condens 8000 range, i System Compact, Ri and FS CDi. A ready-made solution for the connection of two Greenstar system or regular boilers on a sealed heating system with a combined output of up to 70kW.

# Accessories' compatibility Ga

Cashellana					Gas-fired boilers												
Gas boilers						сомві						EGULA	AR				
				CDi COMPACT			HIGHFLOW CDI		SYSTEM COMPACT				CDİ REGULAR				
Accessory	Part no.		8000	CDi 0	4000	2000	HIGF	8000	i sys	4000	8000	ä	FS C				
Worcester CondenseSure	7 716 192 746			✓		✓			✓			<b>~</b>					
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 Low Loss Header	7 716 192 614		✓					✓	✓		✓	✓	✓				
DHW Pre-heat Kit (4000)	7 733 601 289				✓												
DHW Pre-heat Accessory (8000)	7 738 113 072		✓														
DHW Pre-heat Accessory (CDi Compact)	7 716 192 735			✓													
Kits and Earth Bonding Strip																	
Vertical pre-piping assembly kit (8000)	7 716 192 607		✓					✓									
Vertical pre-piping assembly kit*	7 733 601 250			✓	✓				~	✓							
Earth Bonding Strip**	7 733 601 316			✓	✓	✓			~	✓							
Remote PRV Kit (4000 and CDi Compact)	7 733 601 314		✓**	~	✓		✓**	✓**	~	✓							
Remote PRV Kit (8000)	7 738 112 910		✓			✓		✓									

\* When used with a Condens 4000 and i System Compact boilers, the two 15mm pipes

are best used in conjunction with optional diverter valve kits.

\*\*Comes as standard with Condens 8000 and Greenstar Highflow CDi.

#Comes as standard with Condens 8000 combi.

# Wall-hung boiler flues

#### 100mm diameter

	7 716 191 082	Standard telescopic flue & terminal (350 - 570mm)
	7 716 191 171	Long telescopic flue kit (570 - 790mm)
Ê	7 719 002 430	Vertical 1,090mm BF kit (inc. adaptor)
	7 716 191 083	Extension flue kit (960mm)
	7 716 191 172	2m flue extension
	7 716 191 133	Short flue extension (220mm)
$\square$	7 716 191 084	90° flue bend
$\triangleleft$	7 716 191 085	45° flue bend x 2
$\square$	7 719 002 432	High level horizontal flue adaptor
ΓÕ	7 716 191 177	Support bracket kit
Γð	7 716 191 178	Support bracket kit (6 pack)
<u> </u>	7 716 191 090	Flashing – flat roof
<u>A</u>	7 716 191 091	Flashing – pitched roof
FAS	7 716 191 086	Plume management kit (60mm dia.)
	7 733 601 221	Horizontal high rise fixed flue kit
	7 733 600 298	Horizontal fixed flue kit (1050mm)
	7 733 601 245	4000 SimpleSwitch flue adaptor

*Condensfit* **II**<sup>™</sup>

#### 125mm diameter

	7 719 003 702	Standard telescopic flue & terminal (405 - 600mm)
Ê	7 719 002 431	Vertical 1,365mm BF kit (inc. adaptor)
Ē	7 719 003 666	Extension flue kit (960mm)
$\square$	7 719 003 664	90° flue bend
$\triangleleft$	7 719 003 665	45° flue bend
	7 719 002 433	High level horizontal flue adaptor
ΓÕ	7 716 191 179	Support bracket kit
<u> </u>	7 716 191 090	Flashing – flat roof
A	7 716 191 091	Flashing – pitched roof

## Gas floor-standing boiler flues

80mm diamete		
	7 733 601 207	12m flexible flue system (for use with Greenstar FS CDi)
100mm diame		
	7 716 191 155	Standard telescopic flue kit (310 - 530mm)
Ê	7 716 191 156	Vertical 1,140mm BF kit (inc. adaptor)
Ĵ	7 716 191 083	Extension flue kit (960mm)
	7 716 191 172	2m flue extension
	7 716 191 133	Short flue extension (220mm)
$\square$	7 716 191 084	90° flue bend
$\triangleleft$	7 716 191 085	45° flue bend
	7 716 191 164	Vertical flue adaptor
	7 733 600 048*	High level horizontal telescopic flue kit (383 - 603mm)
□ TÕ	7 716 191 177	Support bracket kit
ΓÕ	7 716 191 178	Support bracket kit (6 pack)
<u> </u>	7 716 191 090	Flashing – flat roof
<u>A</u>	7 716 191 091	Flashing – pitched roof
JA	7 716 191 086	Plume management kit (60mm dia.)
*Eesuee with his	In the set to a standard of the	and a strategy of the state of the strategy of

\*For use with high level horizontal flue adaptor and flue adaptor part number 8 718 682 324 0. Also requires a flue clamp fitting part number 8 716 116 815.

125mm diameter			
	7 716 191 157	Standard horizontal flue kit (965mm)	
Ê	7 716 191 158	Vertical 1,365mm BF kit (inc. adaptor)	
[ <b></b> ;	7 719 003 666	Extension flue kit (960mm)	
$\square$	7 719 003 664	90° flue bend	
${\color{black} \bigcirc}$	7 719 003 665	45° flue bend	
	7 716 191 165	Vertical flue adaptor	
ГО	7 716 191 179	Support bracket kit	
二	7 716 191 090	Flashing – flat roof	
<u>a</u>	7 716 191 091	Flashing – pitched roof	

Condensfit II SLOOR

# Gas flue terminal positioning

- 1. The terminal must not cause an obstruction nor the discharge a nuisance. Particular care should be exercised with regards to the pluming of the flue gases and any increase in noise levels.
- 2. If a terminal is fitted less than 2 metres above a surface to which people have access, then a guard must be fitted. The terminal guard must be securely fixed to the wall using suitable plugs and corrosion resistant screws. The guard must be symmetrically positioned about the terminal assembly and spaced such that there is a gap of 50mm between the end of the terminal and the guard. This applies to the air intake and exhaust terminal when a plume management kit is used.
- 3. In certain weather conditions, a white plume of condensation will be emitted from the flue terminal and siting where this could be a nuisance should be avoided e.g. near security lighting.

The flue system must be installed and terminated in accordance with the manufacturer's instructions and recommendations of BS 5440:Part 1.

#### Note

- Please refer back to the installation manuals for product specific clearances
- ▶ All measurements are the minimum clearances required
- Terminals must be positioned so as to avoid combustion products entering the building
- Support the flue at approximately one metre intervals and at a change of direction, use suitable brackets and fittings. Flue support bracket kit part numbers: 7 716 191 177 (100mm dia.) 7 716 191 178 (100mm dia. x 6)
  - 7 716 191 179 (125mm dia.)
- Installations in car ports are not recommended
- The flue cannot be lower than 1,000mm from the top of a light well due to the build up of combustion products
- Dimensions from a flue terminal to a fanned air inlet to be determined by the ventilation equipment manufacturer
- A flue terminal guard shall be fitted whenever a terminal or air inlet is fitted less than 2,000mm above ground, above a balcony or above a flat roof to which people have access.

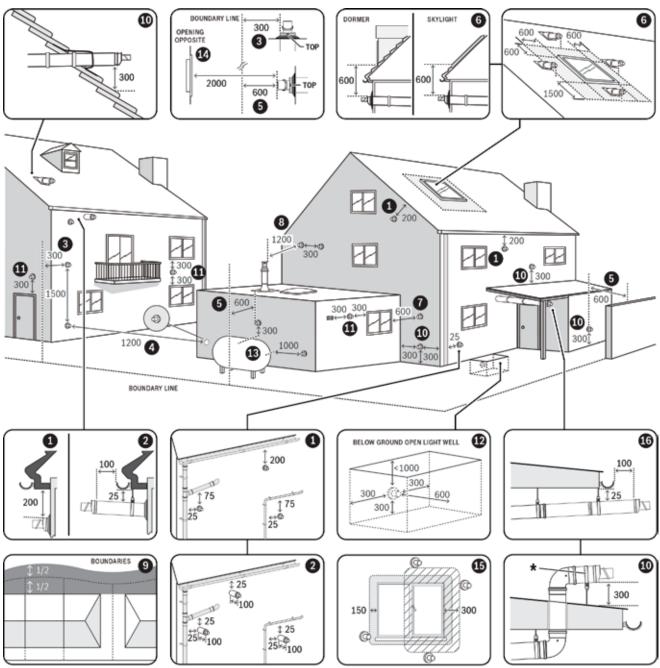
#### Key to illustration – horizontal flue terminal positions (see page 50)

- 1. 200mm below eaves and 75mm below gutters, pipe and drains.
- The dimension below eaves, gutters, pipes and drains can be reduced to 25mm, as long as the flue terminal is extended by 100mm past any overhang. The telescopic flue joint must be sealed with suitable silicone sealant if it is external to the building.
- 3. 300mm adjacent to a boundary line, unless it will cause a nuisance. BS 5440: Part 1 recommends that care is taken when siting terminal in relation to surfaces or boundary lines.
- 4. 1,200mm separation measured between terminals facing each other.
- 600mm distance to a surface or boundary line facing a terminal, unless it will cause a nuisance. BS 5440: Part 1 recommends that care is taken when siting terminal in relation to surfaces or boundary lines.
- 6. The terminal must be at least 1,500mm from the opening or vent when sited below the window or 600mm when sited to either side or above.
- 7. 600mm diagonally to an opening door, air vent or opening window.
- 8. 1,200mm separation measured between a vertical flue and a horizontal flue terminal.
- 9. For the purpose of determining suitable flue terminal positions for gas appliances, the boundary can be considered to extend to the centre line of any adjacent routes or waterways e.g. paths, streets, rights of way, canals, rivers or railways.
- 10. 300mm to an internal or external corner. 300mm above a surface, such as the ground/ floor level or roof surface.

\*If the terminal section is less than 150mm and has two screws securing it to the elbow, the terminal section will not require a supporting bracket. However, the flue terminal can only be cut down to a minimum of 130mm.

- 11. 300mm above, below and either side of an opening door, air vent or opening window.
- 12. Below ground level in an open lightwell. The flue must be at least 600mm from the opposing surface and have at least 300mm clearance either side and below. The flue terminal must be no more than 1,000mm from the top of the lightwell.
- 13. Flues should clear any LPG storage by 1,000mm horizontally and 300mm above.
- 14. Proximity of flue duct outlet to boundaries, 2,000mm distance to an opening in adjacent building facing a terminal. BS 5440: Part 1 recommends that care is taken when siting terminal in relation to boundary lines.
- 15. 300mm from an opening or vented window, 150mm to a manufactured fixed unvented window.
- 16. The dimension below eaves, balconies and car ports can be reduced to 25mm, as long as the flue terminal is extended by 100mm past any overhang. The telescopic flue joint of the terminal must be sealed with suitable silicon sealant if it is external to the building.

All measurements in millimetres



#### Plume management

# Condensfit II™ plume management system

#### Part numbers 60mm dia. plume management kit

Comprises:

- 1 x terminal bend
- 1 x extension 500mm
- 1 x outlet assembly
- 1 x clamp pack

#### 7 716 191 086

#### Accessories

#### *€ondensfit* **II**<sup>™</sup>

Components	Part no.	Description	
60mm diameter			
JA	7 716 191 086	Plume management kit (60mm dia.)	
	7 716 191 087	Extension (1,000mm) kit	
G	7 716 191 088	90º Bend	
	7 716 191 089	45º Bend (pair)	
	7 716 191 176	Plume management terminal guard round	
0	8 716 111 2750	Plume management clamp	

For every 90° plume management kit bend deduct 1,500mm and 750mm for every 45° plume management kit bend.

#### **Plume management kits**

Plume management kits are available for 100mm horizontally terminated flues. Please refer to the installation instructions supplied with the plume management kits.

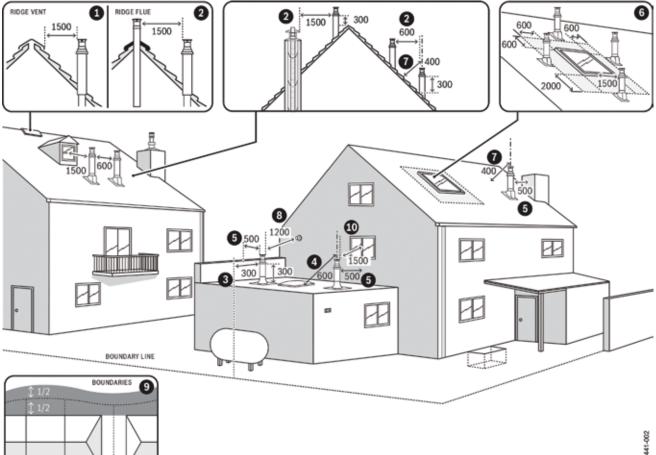
For more information on plume lengths and reduced flue terminal clearances, please read the relevant boiler installation manual.

# Key to illustration – vertical flue terminal positions (see page 54)

- 1. 1,500mm measured between a vertical flue terminal and an opening or vented window. 500mm measured horizontally between a vertical flue terminal and an opening or vented window providing the flue terminal is at least 300mm above the opening.
- 2. Minimum clearance to an additional flue, 600mm to a room sealed flue or 1,500mm to an open flue.
- 300mm clearance from a vertical flue terminal adjacent to a boundary line, unless it will cause a nuisance. BS 5440: Part 1 recommends that care is taken when siting a terminal in relation to boundary lines.
- 600mm minimum clearance measured from an opening or vented skylight to a vertical flue terminal. If the terminal is within 1,500mm of the opening or vented skylight then it must be at least 300mm above the opening.
- 500mm clearance measured horizontally from a vertical flue to a vertical structure. Not required if the terminal is 300mm above the structure.
- The flue must not penetrate the roof in the shaded area. The terminal must be at least 1,500mm from the opening or vent when sited below the window or 600mm when sited to either side or above.
- 400mm measured diagonally from a pitched roof or 500mm in regions with heavy snow fall. 300mm measured vertically from the air intake to the closest intersection with the roof.
- 8. 1,200mm separation measured between a vertical flue and a horizontal flue terminal.
- 9. For the purpose of determining suitable flue terminal positions for gas appliances, the boundary can be considered to extend to the centre line of any adjacent routes or waterways e.g. paths, streets, rights of way, canals, rivers or railways.
- 10. 1,500mm measured between a vertical flue terminal and an opening or vented window. 500mm measured horizontally between a vertical flue terminal and an opening or vented window providing the flue terminal is at least 300mm above the opening.

#### Note

 Where a vertical flue terminates in an area that is enclosed on 3 sides, the flue must be no more than 1,000mm below the lowest roof line. You must ensure that all clearances are maintained and that products of combustion disperse safely from the area.



0010021441-002

# Green Storage WB Range unvented cylinders



- ▶ G3 kit included.
- ► Larger capacity cylinders, with 7 variants from 90 up to 300 litres all offering high flow rates\*\*.
- Can be installed with our system diverter valve kit.
- ▶ Rapid re-heat times with excellent levels of heat retention.
- ► Factory installed G3 temperature and pressure relief valve.
- Quiet operating cylinder only 15db(A).
- ▶ 5 year guarantee on components<sup>+</sup>.
- ▶ 25 year guarantee on the stainless steel cylinder body<sup>+</sup>.
- ▶ Benchmark, Hot Water Association and Kiwa approved.



Diameter (mm)	Height (mm)	Weight dry (kg)	Part no.	
Green Storage WB Unvented 90				
550	745	30	7 733 601 298	
Green Storage WB Unvented 120				
550	933	35	7 733 601 299	
Green Storage WB Unvented 150				
550	1,120	35	7 733 601 300	
Green Storage WB Unvented 180				
550	1,308	45	7 733 601 301	
Green Storage WB Unvented 210				
550	1,496	50	7 733 601 302	
Green Storage WB Unvented 250				
550	1,746	55	7 733 601 303	
Green Storage WE	Green Storage WB Unvented 300			
550	2,055	60	7 733 601 304	

#### **Volumes and efficiencies**

Volume domestic hot water (litres)	Standing heat loss – 24hr (kWh/24hrs)	ErP energy efficiency class/standing heat loss (W)		
Green Storage WB Unvented 90				
87.9	1.18	C / 49		
Green Storage WB Unvented 120				
120.1	1.29	C / 54		
Green Storage WB Unvented 150				
150.4	1.41	C / 59		
Green Storage WB Unvented 180				
180.6	1.61	C / 67		
Green Storage WB Unvented 210				
210.6	1.79	C / 75		
Green Storage WB Unvented 250				
250.9	2.02	C / 84		
Green Storage WB Unvented 300				
300.3	2.24	C / 93		



#### Collect loyalty points for every installation

# Green Storage WB Range solar compatible unvented cylinders



- ▶ G3 kit included.
- ► Larger capacity cylinders, with 7 variants from 90 up to 300 litres all offering high flow rates\*.
- Can be installed with our system diverter valve kit.
- ▶ Rapid re-heat times with excellent levels of heat retention.
- ► Factory installed G3 temperature and pressure relief valve.
- Quiet operating cylinder only 15db(A)
- ▶ 5 year guarantee on compontents<sup>+</sup>.
- ▶ 25 year guarantee on the stainless steel cylinder body<sup>†</sup>.
- ▶ Benchmark, Hot Water Association and Kiwa approved.

#### Dimensions and dry weights

Diameter (mm)	Height (mm)	Weight dry (kg)	Part no.	
Green Storage WB Range Unvented Solar 180				
550	1,308	60	7 733 601 306	
Green Storage WB Range Unvented Solar 210				
550	1,496	65	7 733 601 307	
Green Storage WB Range Unvented Solar 250				
550	1,746	70	7 733 601 308	
Green Storage WB Range Unvented Solar 300				
550	2,059	75	7 733 601 309	

#### **Volumes and efficiencies**

Volume domestic hot water (litres)	Dedicated solar volume (litres)	Standing heat loss performance (kWh/24hrs)	ErP energy efficiency class/ standing heat loss (W)		
Green Storage WB Range Unvented Solar 180					
178	53.6	1.61	C / 67		
Green Storage WE	Green Storage WB Range Unvented Solar 210				
204.6	51.8	1.79	C / 75		
Green Storage WB Range Unvented Solar 250					
247	92.2	2.02	C / 84		
Green Storage WB Range Unvented Solar 300					
295.6	79.3	2.24	C / 93		



Collect loyalty points for every installation

# Bosch Commercial and Industrial

Offering a broad portfolio that covers all heating and cooling requirements

#### Expand your business with Bosch Commercial and Industrial

The products and support services you can access gives you the chance to expand your business offering and provide installations for:

- Large domestic properties.
- Hotels, guest houses and holiday parks.
- Sports and leisure centres.
- Education and healthcare facilities.
- Mini district heating schemes.

#### Wall-hung commercial solutions



- ► Gas boilers with individual outputs from 50kW to 145kW.
- Ability to cascade in banks up to 860kW when operating at 50:30.
- Range of digital and smart controls, including our industry first internet-connected commercial heating control.



#### **Floor-standing solutions**



- Condens 7000 F & FP floor-standing boiler, with outputs from 75kW to 1MW.
- Our industrial steam and hot water boilers are available in electric and gas-fired, meaning they can help maximise efficiency, reduce operational costs and minimise downtime.

For more information please call **0330 123 3004** or visit **bosch-industrial.ie** 

(in) Bosch Commercial and Industrial UK

(X) @BoschHeating\_UK

## Condens 7000 WP Commercial boiler series



520mm		
1,429mm**		
458mm		
Dimensions 125-145kW		
520mm		
1,429mm**		
588mm		

Boiler (Output kW)	Part number
GC7000WP 50kW	7 736 702 194
GC7000WP 65kW	7 736 702 195
GC7000WP 85kW	7 736 702 196
GC7000WP 100kW	7 736 702 197
GC7000WP 125kW	7 736 702 198
GC7000WP 145kW	7 736 702 199
Insulation and connection set	Part number
Insulation pump group single	7 736 701 876
Connection set (for pump group)	5 584 552
Hydraulic Separation	Part number
Low loss header + Insulation 300kW	7 736 701 907
Low loss header + Insulation 300kW Sinus LLH with insulation up to 100KW***	7 736 701 907 8 920 097 2
Sinus LLH with insulation up to 100KW*** Sensor Pocket R 1/2" 95MM for sinus LLH	8 920 097 2
Sinus LLH with insulation up to 100KW*** Sensor Pocket R 1/2" 95MM for sinus LLH (required accessory)	8 920 097 2 5 446 142
Sinus LLH with insulation up to 100KW*** Sensor Pocket R 1/2" 95MM for sinus LLH (required accessory) 50KW Plate Heat Exchanger	8 920 097 2 5 446 142 7 733 600 013
Sinus LLH with insulation up to 100KW*** Sensor Pocket R 1/2" 95MM for sinus LLH (required accessory) 50KW Plate Heat Exchanger 65KW Plate Heat Exchanger	8 920 097 2 5 446 142 7 733 600 013 7 733 600 014

\*\*\*up to 100kW at 11k  $\Delta T$ 

#### Light commercial boilers

Pump group	Part number
Pump group 70kW (3 bar PRV)	7 736 701 864
Pump group 100kW (3 bar PRV)	7 736 701 865
Pump group 150kW (4 bar PRV)	7 736 702 214

Please contact our sales team for more information on

Condens 7000WP floor standing frame sets, cascade components, controls and accessories.

#### Flue lengths 50-85kW

Maximum flue lengths inc. terminal (mm)				
Diameter	Direction	50kW	65kW	85kW
110/160mm	Horizontal	11,000	16,000	11,000
110/160mm	Vertical	21,000	22,000	16,000

#### Flue lengths 100-145kW

Maximum flue lengths inc. terminal (mm)				
Diameter	Direction	100kW	125kW	145kW
110/160mm	Horizontal	12,000	3,000	3,000
110/160mm	Vertical	16,000	5,000	5,000

Note: For every  $87^{\rm o}$  flue bend deduct 1,500mm, for every  $45^{\rm o}$  flue bend deduct 500mm.

#### Horizontal and vertical fluing options

110/160mm diameter			
	7 738 113 669	Horizontal flue kit	
Ê	7 738 113 668	Vertical flue kit	
	7 738 113 100	1m flue extension	
[]	7 738 113 101	2m flue extension	
	7 738 113 099	0.5m flue extension	
$\square$	7 738 113 105	87º bend	
$\triangleleft$	7 738 113 104	45° bends	
$\square$	7 738 113 103	30° bend	
$\mathbb{Z}$	7 738 113 102	15° bend	
<u> </u>	7 738 113 677	Flue wall clamps 160mm (Qty 3)	
<u> </u>	7 738 113 126	Flat roof flashing 166mm 0°	
<u> </u>	7 738 113 127	Flat roof flashing 166mm 0-15°	
<u>a</u>	7 738 113 128	Pitched roof flashing 166mm 5-25° black	
1	7 738 113 129	Pitched roof flashing 166mm 25-45° black	

## Bosch Climate Air Conditioning Units



Pictured is our Bosch Climate Single Split Air to Air Heat Pump.

Heats and cools homes, small businesses and offices.

#### Installer benefits

- Power output adjusts to match the demand to avoid frequent compressor start-up/shut down and to increase energy efficiency\*
- Operates with the highest SEER efficiency rating over the majority of the operating time
- The powerful DC inverter compressor and the exterior fan motor are used to adjust the air flow and volume
- Straightforward to install and maintain
- ► Low GWP refrigerant R32.

\*In cooling mode.

#### **Homeowner benefits**

- Compact design, requiring only an outside wall
- ► Inbuilt air filtration is perfect for allergy sufferers
- Control your air conditioning from your smart phone via Bosch HomeCom Easy app (requires optional accessories)
- Turbo mode increases fan speed to reach the required temperature more quickly
- ▶ Sleep function. Controls ambient temperature during the night.



Collect loyalty points for every installation

#### <sup>†</sup>Terms and conditions apply.

Single Split Air Conditioning		
CL3000i-Set 26 WE	7 733 701 735	
CL3000i-Set 35 WE	7 733 701 736	
CL3000i-Set 53 WE	7 733 701 737	
CL3000i-Set 70 WE	7 733 701 738	

Multi Split Air Conditioning	
CL5000M 41/2 E Outdoor Unit	7 733 701 932
CL5000M 53/2 E Outdoor Unit	7 733 701 933
CL5000M 62/3 E Outdoor Unit	7 733 701 934
CL5000M 79/3 E Outdoor Unit	7 733 701 935
CL5000M 82/4 E Outdoor Unit	7 733 701 936
CL5000M 105/4 E Outdoor Unit	7 733 701 937
CL5000M 125/5 E Outdoor Unit	7 733 701 938
Climate 3000i - CL3000iU W 20 E Indoor Unit	7 733 701 997
Climate 3000i - CL3000iU W 26 E Indoor Unit	7 733 701 564
Climate 3000i - CL3000iU W 35 E Indoor Unit	7 733 701 566
Climate 3000i - CL3000iU W 53 E Indoor Unit	7 733 701 568
Climate 3000i - CL3000iU W 70 E Indoor Unit	7 733 701 570
CL5000iM 4CC 21 E Indoor Unit	7 733 701 939
CL5000iM 4CC 26 E Indoor Unit	7 733 701 940
CL5000iU 4CC 35 E Indoor Unit	7 733 701 878
CL5000iU 4CC 53 E Indoor Unit	7 733 701 879
CL5000iU 4C 70 E Indoor Unit	7 733 701 880
Panel CL5000i-P 4CC Indoor	7 733 701 886
Panel CL5000i-P 4C Indoor Units (7kW only)	7 733 701 887
CL5000iU D 35 E Indoor Unit	7 733 701 888
CL5000iU D 53 E Indoor Unit	7 733 701 889
CL5000iU D 70 E Indoor Unit	7 733 701 890

#### Large Split Cassette Air Conditioning

	-
CL5000iL Set 35 4CCE	7 733 701 908
CL5000iL Set 35 4CCE - Outdoor unit	7 733 701 869
CL5000iL Set 35 4CCE - Indoor unit	7 733 701 878
CL5000iL Set 35 4CCE - Cassette panel	7 733 701 886
CL5000iL Set 53 4CCE	7 733 701 909
CL5000iL Set 53 4CCE - Outdoor unit	7 733 701 870
CL5000iL Set 53 4CCE - Indoor unit	7 733 701 879
CL5000iL Set 53 4CCE - Cassette panel	7 733 701 886

Large Split Cassette Air Conditioning (cont'd)		
CL5000iL Set 70 4CE	7 733 701 910	
CL5000iL Set 70 4CE - Outdoor unit	7 733 701 871	
CL5000iL Set 70 4CE - Indoor unit	7 733 701 880	
CL5000iL Set 70 4CE - Cassette panel	7 733 701 887	
CL5000iL Set 88 4CE	7 733 701 911	
CL5000iL Set 88 4CE - Outdoor unit	7 733 701 872	
CL5000iL Set 88 4CE - Indoor unit	7 733 701 881	
CL5000iL Set 88 4CE - Cassette panel	7 733 701 887	
CL5000iL Set 105 4CE	7 733 701 912	
CL5000iL Set 105 4CE - Outdoor unit	7 733 701 873	
CL5000iL Set 105 4CE - Indoor unit	7 733 701 882	
CL5000iL Set 105 4CE - Cassette panel	7 733 701 887	
CL5000iL Set 125 4CE	7 733 701 924	
CL5000iL Set 125 4CE - Outdoor unit	7 733 701 875	
CL5000iL Set 125 4CE - Indoor unit	7 733 701 883	
CL5000iL Set 125 4CE - Cassette panel	7 733 701 887	
CL5000iL Set 140 4CE-3	7 733 701 925	
CL5000iL Set 140 4CE-3 - Outdoor unit	7 733 701 876	
CL5000iL Set 140 4CE-3 - Indoor unit	7 733 701 884	
CL5000iL Set 140 4CE-3 - Cassette panel	7 733 701 887	
CL5000iL Set 160 4CE-3	7 733 701 926	
CL5000iL Set 160 4CE-3 - Outdoor unit	7 733 701 877	
CL5000iL Set 160 4CE-3 - Indoor unit	7 733 701 885	
CL5000iL Set 160 4CE-3 - Cassette panel	7 733 701 887	

Large Split Ceiling/Floor Air Conditioning		
CL5000iL-Set 53 CF	7 733 701 920	
CL5000iL-Set 53 CF - Outdoor unit	7 733 701 870	
CL5000iL-Set 53 CF - Indoor unit	7 733 701 896	
CL5000iL-Set 70 CF	7 733 701 921	
CL5000iL-Set 70 CF - Outdoor unit	7 733 701 871	
CL5000iL-Set 70 CF - Indoor unit	7 733 701 897	
CL5000iL-Set 105 CF	7 733 701 922	
CL5000iL-Set 105 CF - Outdoor unit	7 733 701 873	
CL5000iL-Set 105 CF - Indoor unit	7 733 701 898	
CL5000iL-Set 140 CF-3	7 733 701 930	
CL5000iL-Set 140 CF-3 - Outdoor unit	7 733 701 876	
CL5000iL-Set 140 CF-3 - Indoor unit	7 733 701 899	
CL5000iL-Set 160 CF-3	7 733 701 931	
CL5000iL-Set 160 CF-3 - Outdoor unit	7 733 701 877	
CL5000iL-Set 160 CF-3 - Indoor unit	7 733 701 900	

Large Split Ducted Air Conditioning		
CL5000iL Set 35 DE	7 733 701 914	
CL5000iL Set 35 DE - Outdoor unit	7 733 701 869	
CL5000iL Set 35 DE - Indoor unit	7 733 701 888	
CL5000iL Set 53 DE	7 733 701 915	
CL5000iL Set 53 DE - Outdoor unit	7 733 701 870	
CL5000iL Set 53 DE - Indoor unit	7 733 701 889	
CL5000iL Set 70 DE	7 733 701 916	
CL5000iL Set 70 DE - Outdoor unit	7 733 701 871	
CL5000iL Set 70 DE - Indoor unit	7 733 701 890	
CL5000iL Set 88 DE	7 733 701 917	
CL5000iL Set 88 DE - Outdoor unit	7 733 701 872	
CL5000iL Set 88 DE - Indoor unit	7 733 701 891	
CL5000iL Set 105 DE	7 733 701 918	
CL5000iL Set 105 DE - Outdoor unit	7 733 701 873	
CL5000iL Set 105 DE - Indoor unit	7 733 701 892	
CL5000iL Set 125 DE	7 733 701 927	
CL5000iL Set 125 DE - Outdoor unit	7 733 701 875	
CL5000iL Set 125 DE - Indoor unit	7 733 701 893	
CL5000iL Set 140 DE-3	7 733 701 928	
CL5000iL Set 140 DE-3 - Outdoor unit	7 733 701 876	
CL5000iL Set 140 DE-3 - Indoor unit	7 733 701 894	
CL5000iL Set 160 DE-3	7 733 701 929	
CL5000iL Set 160 DE-3 - Outdoor unit	7 733 701 877	
CL5000iL Set 160 DE-3 - Indoor unit	7 733 701 895	

Accessories		
Module IP - Gateway G10-3	7 736 606 771	
Gateway connector required for connecting IP-Gateway to 4way compact cassette and ducted indoor units	7 733 701 951	

We offer a range of cassette, ducted and ceiling/floor indoor units suitable for a wide range of applications.

To view our entire range of large single split air conditioning units, please visit **worcester-bosch.ie/air-conditioning** 

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- Level 3 Award Low temperature heating and hot water systems in dwellings
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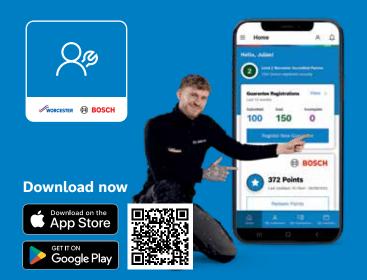
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# Get in touch

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