

Condens 7000 F & FP

Our versatile Condens 7000 floor-standing commercial boilers, suitable for all heating systems









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Training Courses

Our commercial trainers have many year's experience as technical heating technicians and deliver first-class training across a wide range of products, including the Bosch Condens 7000 F & FP.

To book onto one of our Bosch Condens 7000 F & FP training courses:





Product overview

Introducing our floor-standing commercial boiler series

Applications

Our Condens 7000 F & FP floor-standing gas boilers are perfect for new and existing boiler replacements.

The low hydraulic resistance and intelligent burner control means there are no minimum flow rate requirements to be considered and a wide Delta T can be achieved, allowing simple integration into existing heating systems.

Output flexibility

With outputs ranging from 75kW to 1MW, our premium quality boiler can be easily cascaded to meet higher output requirements. The range can be cascaded up to 8MW, with the ability to combine 16 boilers while using our Bosch 8313 control range.



Low emissions

Having an integrated pre-mixed burner provides low NOx emissions that meet ever tougher targets.

The 75 – 300kW boilers can run on natural gas or LPG. All outputs are able to run on a 0 – 20% hydrogen blend – so you and your customer can be confident it will run on gas for it's lifetime.

Compact design

The boilers' compact frame has been designed to aid easier plant room access where space is limited. It is narrow in width and can easily fit through standard door frames and corridors.



Features and benefits





Space saving – Left-hand and right-hand product options allow the service clearances to better match the installation space.



Easy installation – The boiler integrates into existing hydraulic arrangements either with or without a low loss header.

Dedicated cascade connection kits for two boilers have options for use with or without hydraulic separation. This makes it easy to replace old non-condensing boilers without having to adjust the entire system or investing in an additional hydraulic separation kit.



Simple maintenance – Designed with simple maintenance in mind, the wide access openings on the heat exchanger allow mechanical cleaning if necessary. The pressure test points mean the system water quality can be assessed without the boiler needing to be stripped down.



Easy transportation – A transport roller accessory can be used to slot casters underneath the boiler frame and wheel it into the plant room. The casters can then be removed to secure the boilers in position.

In order to significantly reduce the boiler weight for transportation to the plant room, the panels arrive to site already dismantled.

To facilitate installation in plant rooms where access can be limited, the burner can be removed from the heat block to significantly reduce the size.

Features at a glance

Suitable for all heating systems

- ► No minimum flow rate
- Large 50°C ΔT
- ► High flow temperatures (95°C)*

Energy saving

- ► Low pressure loss
- ► Efficient load matching
- ► High modulation of 1:5 & 1:6

Quick and easy installation

- High flue fan pressure (150Pa 7000 F & 200Pa 7000 FP)
- Light weight, compact design

Flexible system and accessories

- Cascade headers, pumps, safety sets and flues
- Multiple control options

^{*}When used with our Bosch 8313 control.

Installation and maintenance

Ready for efficiency

The Condens 7000 F & FP are designed to optimise efficiency. The premix gas burner has a large modulation range of 1:6*. The hydraulic resistance of the heat exchanger means it is highly efficient and provides excellent conductivity for optimum adjustments for your heating requirements.

Space savings

Our Condens 7000 F & FP boilers take up very little space due to the compact design.

If installation space is limited, the modular boiler concept enables you to turn the heat exchanger into an extremely compact unit.

*Refer to output and efficiencies table on page 9 for accurate modulation ranges.



Cascade design for Condens 7000 F boilers with CC8313 control



Simple frame structure

The boiler may be placed on a trolley accessory and moved to the installation site. Many parts such as the burner and mounting brackets for the boiler housing can be easily dismantled for transport.



Burner in maintenance position

Boiler maintenance is simplified further for outputs higher than 200kW due to the construction of the burner on a sliding track for inspection purposes.

Flexibility

Cascade of two boilers can be placed adjacent to one another or they can have a small service lane between them. The boilers can utilise the same accessories for a quick and compact cascade installation.

Accessibility just the way you want it

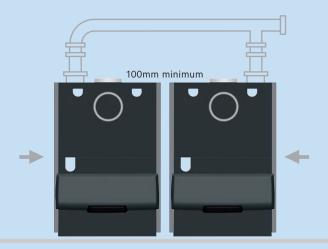
The flue gas outlet can also be designed according to your needs. It can be changed to adapt to the space conditions and placed in the back, or top exit flue arrangement.

In addition, the installer can decide where the front and side access panels should be placed for maintenance works and cleaning of the heat exchanger.

CO detection

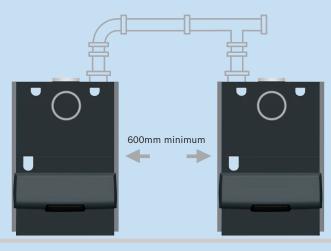
A CO detector and a boiler lock-out module are required as a part of a cascade flue system. Our cascade flue systems come with CO detection as standard.





Maintenance from the outside

The cascaded boiler, adjusted at the factory, includes a version for maintenance from the left and from the right – it can be installed as a compact version.

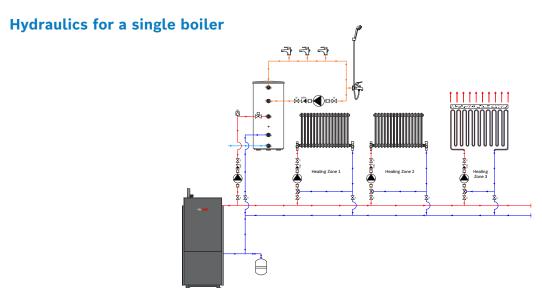


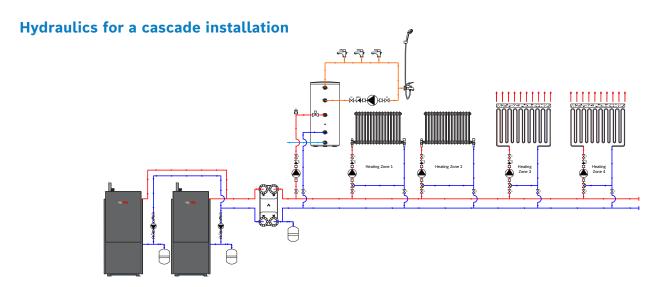
Space for maintenance

Alternative design with space for maintenance between the boilers.

Hydraulics schematics

The Condens 7000 F & FP can be used in many different hydraulic configurations to integrate seamlessly into the existing heating system. Prefabricated cascade hydraulic kits are available, giving significant time saving for installation and confidence of matched hydraulic design.





Hydraulic separation

We offer two types of hydraulic separation for the Condens 7000 F & FP. These consist of a **plate heat exchanger** or a **low loss header**.

Plate heat exchanger is primarily selected for open vented systems. We can also use a plate heat exchanger on sealed systems to provide protection where the water quality in an existing system is low.

Low loss header is selected for use only with sealed systems. This will create a separation between the boilers primary circuit and the systems secondary circuits.

Product	Part number
PHE C/W STAND/PIPING (DN65 - 2X 75KW)	7-736-604-082
PHE C/W STAND/PIPING (DN65 - 2X 100KW)	7-736-604-083
PHE C/W STAND/PIPING (DN65 - 2X 150KW)	7-736-604-084
PHE C/W STAND/PIPING (DN80 - 2X 200KW)	7-736-604-085
PHE C/W STAND/PIPING (DN80 - 2X 250KW)	7-736-604-086
PHE C/W STAND/PIPING (DN80 - 2X 300KW)	7-736-604-087
LLH + INSULATION (DN65 - 2X 75 - 100kW)	7-736-604-088
LLH + INSULATION (DN65 - 2X 150KW)	7-736-604-089
LLH + INSULATION (DN80 - 2X 200 - 300KW)	7-736-604-090

Technical data

Dimensions and model weight

Product			C	ondens 7000 F	Р								
Product	75kW	100kW	150kW	200kW	250kW	300kW	350kW	400kW	500kW				
Height	1570	0mm	1620mm		1620mm 1670mm				1670mm				
Width	670)mm	670mm	670mm			670mm 803mm			mm	803mm		
Depth	736	Smm	914mm	1317mm			1317mm			1317mm 1903mm		3mm	2088mm
Weight	13:	2kg	184kg	231kg 258kg 283kg			330	6kg	384kg				

Product	Condens 7000 F & FP Twin								
Product	400kW	500kW	600kW	700kW	800kW	1MW			
Height	1620mm	1620mm	1620mm	1670mm	1670mm	1670mm			
Width	1440mm	1440mm	1440mm	1706mm	1706mm	1706mm			
Depth	1317mm	1317mm	1317mm	1903mm	1903mm	2088mm			
Weight	462kg	516kg	566kg	672kg	672kg	768kg			

Output and efficiencies

Condens 7000 F					Condens 7000 FP								
1:0	75kW	100kW	150kW	200kW	250kW	300kW	350kW	400kW	500kW	600kW	700kW	800kW	1MW
Max rated heat output at 80/60°C	69.4 kW	93.0 kW	139.8 kW	186.1 kW	232.9 kW	280.0 kW	326.7 kW	380.6 kW	466.7 kW	560.0 kW	653.4 kW	761.2 kW	933.4 kW
Max rated heat output at 50/30°C	75 kW	100 kW	150 kW	200 kW	250 kW	300 kW	350 kW	408 kW	500 kW	600 kW	700 kW	816 kW	1000 kW
Standard seasonal efficiency (to L2B)	95.9%	95.6%	95.3%	95.7%	95.9%	95.6%	93.4%	93.4%	93.4%	95.6%	93.4%	93.4%	93.4%
Modulation	1:5	1:6	1:6	1:6	1:6	1:6	1:5	1:6	1:6	1:12	1:10	1:12	1:12

Flues

GC7000F/FP	75kW	100kW	150kW	200kW	250kW	300kW	350kW	400kW	500kW	600kW	700kW	800kW	1MW
Standard NOx emission factor (EN15502)	45 mg/ kWh	54 mg/ kWh	38 mg/ kWh	40 mg/ kWh	36 mg/ kWh	40 mg/ kWh	33 mg/ kWh	33.4 mg/ kWh	36.7 mg/ kWh	40 mg/ kWh	33 mg/ kWh	33.4 mg/ kWh	36.7 mg/ kWh
Fan for residual pressure differential (flue gas and combustion air system)	150 Pa	150 Pa	150 Pa	150 Pa	150 Pa	150 Pa	200 Pa	200 Pa	200 Pa	150 Pa	200 Pa	200 Pa	200 Pa
Temperature classification to be used for flue system in accordance with EN 1443	min. T120	min. T120	min. T120	min. T120	min. T120	min. T120							

Condens 7000 F & FP part numbers

Condens 7000 F & FP boilers

Output	Part number
Condens 7000 F 75kW	Left: 7-736-603-142
	Right: 7-736-603-136
Condens 7000 F 100kW	Left: 7-736-603-143
	Right: 7-736-603-137
Condens 7000 F 150kW	Left: 7-736-603-144
	Right: 7-736-603-138
Condens 7000 F 200kW	Left: 7-736-603-145
	Right: 7-736-603-139
Condens 7000 F 250kW	Left: 7-736-603-146
	Right: 7-736-603-140
Condens 7000 F 300kW	Left: 7-736-603-147
	Right: 7-736-603-141
Condens 7000 FP 350kW	Left: 7-736-606-239
	Right: 7-736-606-236
Condens 7000 FP 400kW	Left: 7-736-606-240
	Right: 7-736-606-237
Condens 7000 FP 500kW	Left: 7-736-606-241
	Right: 7-736-606-238

Condens 7000 F & FP twin

Output	Part number
Condens 7000 F 400kW	Coming soon
Condens 7000 F 500kW	Coming soon
Condens 7000 F 600kW	Coming soon
Condens 7000 FP 700kW	Coming soon
Condens 7000 FP 800kW	Coming soon
Condens 7000 FP 1000kW	Coming soon

Safety sets

Condens 7000 F

Includes: a manifold, pressure relief valve and a pressure gauge.

75 – 100kW	Part number
Safety set 3 bar (75 – 100kW)	7-736-602-644
Safety set 6 bar (75 – 100kW)	7-733-601-602
Safety set 4 – 6 bar (75 – 100kW no PRV)	7-736-602-646

150 – 300kW	Part number
Safety set 3 bar (150 – 300kW)	7-736-602-645
Safety set 6 bar (150 – 300kW)	7-733-601-603
Safety set 4 - 6 bar (150 - 300kW no PRV)	8-732-908-163

Condens 7000 FP

Includes: a manifold, pressure relief valve, pressure limiters (x2) and a pressure gauge.

350 – 500kW	Part number
Safety set 3 bar (350/400/500kW)	7-733-601-607
Safety set 4 bar (350/400/500kW)	7-733-601-606
Safety set 5 bar (350/400/500kW)	7-733-601-605
Safety set 6 bar (350/400/500kW)	7-733-601-604

Gas filters

A gas filter is a requirement for the Condens 7000 F in order to protect the heat exchanger. This is not a requirement for the Condens 7000 FP as a gas filter is built into the larger gas valve.



Product	Part number
Gas filter 1" (75/100kW)	8-317-908-4
Gas filter 1/4" (150/200/250/300kW)	8-317-908-6

Control options

Product	Part number		
MX25	8-718-599-281		
Sense II	7-738-111-064		
or			
Control 8313	7-736-602-245		
8313 FM Modules			
Module FM-CM (for multiple boiler cascade sequencing)	7-736-602-245		
Module FM-MM (2x mixed heating module for use with 8313)	8-718-598-828		
Module FM-MW (1x heating, 1x hot water module)	8-718-598-831		

Please see controls overview on page 13.

Other accessories

Product	Part number		
Drain connection set 1" (75 – 100kW)	7-736-602-648		
Drain connection set 1 ¼" (150 – 200kW)	7-736-602-647		
Drain connection set 2"(350 - 500kW)	8-732-948-018		
Hydraulic isolation set DN100 (Qty 2)	8-738-807-773		

LPG conversion kits

Product	Part number		
Conversion kit G31 - 75 & 100 kW	7-736-603-619		
Conversion kit G31 - 150 kW	7-736-603-807		
Conversion kit G31 - 200 kW	7-736-603-808		
Conversion kit G31 - 250 kW	7-736-603-809		
Conversion kit G31 - 300 kW	7-736-603-810		

Flues

Product	Part number		
Top exit flue kit DN200 (200 – 300kW)	7-736-602-653		
Top exit flue kit DN250 (350 – 500kW)	8-732-951-189		
Flue cascade kit DN160 (2x 75kW/100kW)	7-736-602-689		
Flue cascade kit DN200 (2x 150kW)	7-736-602-691		
Flue cascade kit DN250 (2x 200 – 300kW)	7-736-602-693		

Overpressure flue sets for cascades

Product	Part number		
Stainless steel overpressure flue kit DN110/125 (1x flue connection set, 2x Motorised non return valves DN110)	8-732-934-900		
Or individually:			
Stainless steel overpressure flue gas connection set DN110/125	8-732-934-808		
Motorised non return valve DN110	8-732-934-850		

Product	Part number		
Stainless steel overpressure flue kit DN160/160 (1x flue connection set, 2x Motorised non return valves DN160)	8-732-934-849		
Or individually:			
Stainless steel overpressure flue gas connection set DN160/160	8-732-934-806		
Motorised non return valve DN160	8-732-933-760		

Product	Part number		
Stainless steel overpressure flue kit DN200/200 (1x flue connection set, 2x Motorised non return valves DN200)	8-732-934-871		
Or individually:			
Stainless steel overpressure flue gas connection set DN200/200	8-732-934-805		
Motorised non return valve DN200	8-732-934-082		

Product details and required accessories

	Product Type			Required A		
	Output	Image	Basic safety set (no pressure limiters)	Safety set with 2x pressure limiters	Gas filter	Control unit
Condens 7000 F	75kW		~		~	~
	100kW		✓		✓	✓
	150kW	(20)	✓		✓	✓
	200kW		✓		✓	✓
	250kW		✓		✓	✓
	300kW		✓		✓	✓
Condens 7000 FP	350kW			✓		✓
	400kW	4 Acres		✓		✓
	500kW			✓		✓
Condens 7000 F Twin	400kW		✓		✓	✓
	500kW		✓		✓	✓
	600kW		✓		✓	✓
Condens 7000 FP Twin	700kW			✓		✓
	800kW			✓		✓
	900kW			✓		✓
	1000kW			~		✓

If any Bosch commercial boilers are installed and use a cascaded flue system then a CO detector and boiler cut-off module are required.

Innovative controls

The boiler comes with two control options depending on your requirements.



8313 control

7-736-602-245

The 8313 control offers advanced functions and includes internet connectivity as standard. Operating temperatures up to 95°C can be accommodated and the system can be expanded to include cascade control as well as the control of hot water and heating circuits.

- Operates multiple heating circuits
- Internet connectivity allowing remote monitoring
- Optimise efficiency by detecting faults quickly
- Compatible with various building management systems.

8313 Control Options



FM-MW Heating and DHW Control Module

8-718-598-831

This controls one mixed or unmixed heating circuit and one DHW circuit (with cylinder load and circulation pump). All wiring has colour coded plugs for quick installation into the main control unit.



FM-MM Heating Circuit Control Module

8-718-598-828

This controls up to two mixed or unmixed circuits. Comes supplied with one FV/FZ temperature sensor. All wiring has colour coded plugs for a quick installation into the main control unit. An additional FV/FZ sensor is required if using two mixed circuits.



FM-CM Cascade Control Module

7-736-602-098

The FM-CM can control the modulation and sequencing strategy from 2 to 4 boilers. A 0-10V input, for use with the BMS control.



MX25 control 8-718-599-281

The MX25 control is perfect where existing BMS control systems are in place and flow temperatures are below 85°C. It provides all the common interfaces needed for the BMS to create a heat demand and monitor fault conditions.



Sense II

If an internet connection is not required for your install, the Sense II control in combination with expansion module MM100 can be used. Where the system also includes solar thermal, the MS200 can be used. Where there are multiple heating circuits, a Sense I can be used to give individual zone control.

A Sense II is required with the MX25 control unit

- ► The Sense II control platform uses the EMS 2 which allows advanced functions such as weather compensated control and optimum start.
- ▶ Weather compensation is particularly useful for larger buildings where it can be difficult to locate a good reference room to suit the area being heated. A north facing outside sensor is used to determine the correct flow temperature needed to achieve the desired room temperature, based on a heating curve. Local TRV's on radiators, for example, can then fine tune the final room temperature to suit the occupants.
- ▶ Using weather compensation allows lower flow temperatures for large parts of the heating season, which in turn leads to lower return temperatures to help make the condensing boiler more efficient.

- Flexible for simple or complex systems
- Functional module options
- Compatible with various building management systems.



MC400 cascade control

The MC400 can control up to 4 boilers, but can be connected to other MC400 controls to support up to 16 boilers (requires 5 x MC400). The control will sequence the boilers to match the demand and rotate the lead boiler to ensure even use across the cascade.

MC400 has several different configuration options that allow 0-10VDC or 230V enable signals from an existing external control. A 230V alarm signal is also available to indicate a fault situation.

A flow sensor (part number 7-735-600-657) is required for the low loss header or plate heat exchanger.



MM100

7-738-110-140 Used for additional heating circuit (maximum of 4) or additional DHW circuit (maximum of 1).



MS200

7-738-110-146

Module for integration of solar thermal panels.

Project team service

Our team are available at every stage of your project.



Feasibility

- Assisting you with the right selection for the project
- Highlighting the best options and choices of configuration available
- Calculate the carbon impact of installations and various heating options
- Provide a wide scope of products and hybrid solutions.



Initial and detailed design

- Provide support with your design
- Detailed technical information
- CAD & BIM Level 2 available
- Customised drawings and selections for your individual scheme.



Tendering process

- Provide CAD & BIM drawings with specified data sheets
- Provide a 'shopping list' of products for the project
- Assist with pricing and efficiency cost savings
- Value engineering and project optimisation.



Implementation

- Process the order, ensuring availability and delivery
- Provide installer training at our renowned training facilities
- Our service teams can provide appliance commissioning services
- Support your project after installation with continued after-sales service and extensive spare parts.

Contact us to book your free, no obligation project consultation and site visit.



Website:

bosch-industrial.co.uk/condens7000ffp



Phone: **03330 608 456**



Email:

commercial.industrial@uk.bosch.com



Commission your installation

In order to book commissioning for a boiler or cascade system, simply scan the QR code, and complete the pre commissioning checklist.



Useful numbers

Sales

Tel: 0330 608 8456

Email: commercial.industrial@uk.bosch.com

Technical Helpline (Pre & Post Sales)

Tel: 0330 123 0165

Email: technical-advice@uk.bosch.com

Spare Parts

Email: spares.mailbox@uk.bosch.com

or telephone 0330 123 9779

Controls Helpline

Tel: 0330 123 3641

Training

Email: training@uk.bosch.com or telephone 0330 123 9779

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