STREBEL
HEATING TECHNOLOGY

H_2 20%

Clean Heating | Naturally STREBEL

COMMERCIAL BOILERS

BREEAM 2018
MAX 2 POINTS

S-CBX

Ultra Low NOx
Wall Hung Condensing Boiler

85 – 155kW

Why choose Strebel?

Strebel Ltd has been supplying, installing and servicing commercial boilers and water heaters in the UK since 1970. Founded by Josef Strebel in Germany in 1893 our company is recognised today as providing an extensive range of highly efficient, innovative and trustworthy boilers and water heaters for many commercial applications.

With energy conservation, low pollution and reliability at the core of what we do we offer ideal solutions for today's environmentally and economically conscious markets. When you choose to invest in a Strebel product you can be confident that not only will you be choosing the right solution tailored to your individual needs but you'll also be backed by Strebel's highly qualified technical support and service team.

We constantly strive to offer products to the highest standards of quality, longevity and reliability. Our extensive range includes technically advanced wall hung and free standing condensing gas boilers, condensing and non-condensing water heaters, a wide range of calorifiers, advanced biomass boilers as well as, of course, our traditional Cast Iron range alongside a diverse range of system accessories such as Boiler Frame Sets, Hydraulic Piping Kits, Low Loss Headers, Plate Heat Exchangers and System Pumps.

Please visit our website for further information on our products and services

www.strebel.co.uk

Trusted By Commercial Heating Engineers Since 1975

Ultra Low NOx Wall Hung Condensing Boiler

The S-CBX range comprises four boiler models of a highly efficient, ultra low emission wall hung condensing gas boiler offering an output range from 16kW to 151kW at 50/30 (F/R) with 85kW, 105kW, 125kW and 155kW individual boiler nominal outputs. Each boiler offers NOx emissions of less than 24 mg/kWh (Class 6) in compliance with the maximum 2 credits available under BREEAM's New Construction 2018 1.0 Technical Manual SD5078 guidelines[1]. With Seasonal Efficiency across the range in excess of 95% to Part L calculations the entire range is also ERP 'A' rated.

Benefiting from a corrosion resistant stainless heat exchanger as well as a small footprint, with a boiler width of only 440mm across the range, the S-CBX offers a wide range of output, ease of installation, ultra low emissions and high efficiency.

The S-CBX is also supplied with a built-in cascade controller to enable up to 16 boilers to be configured together offering up to 2.4MW output for heating and hot water installations. The boilers can be either wall or frame mounted and flued either co-axially (up to the 125kW boiler) or twin piped.

Table 12.4 Maximum NOx emission levels by appliance type, fuel and location

Appliance type and unit	Fuel	1 credit (low pollution location)	1 credit (high pollution location)	2 credit (low pollution location)	2 credit (high pollution location)
Boiler (mg/kWh)	Gas	27	27	24	24

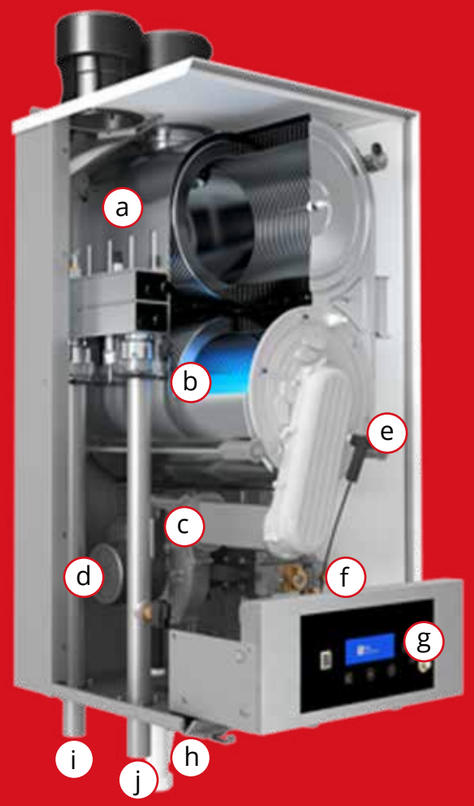
[1] Exert from pg.306 of BREEAM UK New Construction 2018 1.0 Technical Manual SD5078

S-CBX Ultra Low NOx

- Under 24 mg/kWh NOx. Qualifies for maximum 2 points under BREEAM 2018 NOx limits.
- 95% Part L Seasonal Efficiency
- Cascade output up to 2.4MW
- Seven Year Warranty on Stainless Steel Heat Exchanger

Key Components

- (a) Stainless Steel (316L) Heat Exchanger
- (b) Ultra Low NOx Burner
- (c) Built-in Non Return Valve
- (d) Fan
- (e) Ignition Electrode
- (f) Gas Valve
- (g) Control Panel Display
- (h) Condensate Siphon
- (i) Return Inlet
- (j) Flow Outlet



S-CBX delivers high efficiency heating with ultra-low NOx

Standard Screenshot of Boiler Controls

Central Heating Only

Central Heating with DHW

Sophisticated Digital Controls

The S-CBX boiler utilises the latest in digital control with logic based proving to provide an easy to use, total boiler control solution.

When utilising the fully inbuilt cascade control, the S-CBX boasts the capability for full logic step control of multiple S-CBX boilers (up to 16 boilers). The logic control also accepts a 0 to 10 volt signal for full cascading temperature control for both single and multiple boilers.

When fitted with the optional Strebel outside sensor, the boiler will also give full weather dependent compensation; further increasing the overall product performance to a possible A+ rating.

Stainless Steel
Corrosion resistant stainless steel (316L) heat exchanger

Ultra Low Emissions
All models sub 24mg/kWh NOx achieve maximum 2 credits for BREEAM 2018

7 Year Warranty
Standard 7 Year warranty on the heat exchanger and up to 2 years on other parts and labour

Compact Size
Space saving footprint. Largest 155kW boiler measures 845mm by 440mm wide

'A' Rated Pump
All boilers supplied with 'A' rated pump for installation external to casing

Low Frames
Reduced frame height to 1775mm for all boilers for easier low plant room installation

Advanced Controls
Fully built-in cascade controls to enable optimal load matching

Flexible Cascading
Can cascade up to 16 boilers. Easy to assemble

Compact Design
Wall or frame mounted the compact design of the S-CBX can deliver 4 outputs ranging from 85kW to 155kW. The super compact 155kW boiler measures only 845mm high x 440mm wide and weighs only 86kg when empty.

Flexible Flueing
The S-CBX has excess fan power when provided with individual flues and air intakes. This flue fan capacity allows for extensive air inlet and flue run capabilities with various choices of horizontal and vertical flue run configurations.

S-CBX boilers are ideal to fulfil both space heating loads as well as Domestic Hot Water requirements.

A full range of 'tank-in-tank' or coiled stainless steel or enamel lined calorifiers are available in sizes from 100 to 2000 litres.

Cascade System

These versatile boilers can be combined and controlled as part of a multi-boiler cascade system offering a flexible and energy efficient heating solution for many applications, with endless choice of cascade outputs.

The cascade system provides many advantages for commercial installations:

Significant energy savings and greater comfort
The total boiler output can be matched precisely to variations in heating demand throughout the year, as the boilers in operation can be modulated and sequenced on and off according to the heating load.

System Accessories

A full range of hydraulic kits including both brazed and gasketed plate heat exchangers and low loss headers are available.

The S-CBX cascade system offers a wide choice of power output

Simple installation

Our cascade systems are available with all of the necessary support frames, pipe connections, valves and headers, ensuring that fitting is as reliable and as straight forward as possible.

All our cascades have a maximum frame height of 1775mm, making them easy to install in low height plant rooms.

Services and Warranty

Commissioning, Service and Spares

It is highly recommended that all boilers are commissioned by our Service department by experienced Strebel service engineers. This ensures that your boiler will be set up both safely and optimally for maximum efficiency and that the combustion settings will be matched to the plant room conditions. After each successful commissioning a full report will be issued to evidence the initial operating set-up conditions and readings.

Our Service Department offers a range of servicing options that can be tailored to meet individual requirements. Please contact us for more information.

Availability of Spares to the right specification and at the right time is essential to the successful operation of any plant room item. We recommend taking the time to stock up on Spares before the Heating season to minimise unplanned downtime. At our central Warehouse facility we stock a wide range of commonly used parts which can be dispatched directly to site for the following day assuming the order is received the morning before.

Warranty

The S-CBX is offered with a 7-year standard warranty on the heat exchanger and 2-years on other parts and labour from the date of commissioning (assuming this date is no less than 12 weeks after supply to site) subject to satisfactorily evidenced water treatment regime (ICOM Guidelines Apply). This warranty is conditional based upon the boiler(s) being commissioned by Strebel. If the boilers are not commissioned by Strebel the 2-year parts and labour warranty is reduced to 1 year, but the heat exchanger warranty is unaffected.

Strebel S-CBX Technical Data

		Technical Specifications			
Model		S-CBX 85	S-CBX 105	S-CBX 125	S-CBX 155
Nominal INPUT Min/Max (Nett)	kW	15.4 - 81.7	18.6 - 97.3	23.6 - 119.4	35.0 - 145.3
Nominal OUTPUT 80/60°C at 100%	kW	14.9 - 79.1	18.0 - 94.2	22.9 - 115.6	33.9 - 140.9
Nominal OUTPUT 50/30°C at 100%	kW	16.0 - 85.1	19.5 - 101.3	24.7 - 124.7	36.4 - 151.0
Nominal OUTPUT 37/30°C at 30%	kW	16.6 - 88.4	20.2 - 105.5	25.6 - 129.4	38.0 - 157.8
Efficiency 40/30°C DIN 4702-8	%	Up to 108.6% in the S-CBX Range			
Seasonal Efficiency (Part L)	%	95.62	95.7	95.68	95.84
Gas Consumption (Natural Gas)	m^3/h	1.6 - 8.5	1.9 - 10.2	2.5 - 12.5	3.7 - 15.3
Gas Consumption (LPG)	m^3/h	0.6 - 3.2	0.8 - 3.9	1.0 - 4.8	1.6 - 5.7
CO_2 (Natural Gas)	%	7.9 - 8.4	7.9 - 8.4	7.9 - 8.4	7.9 - 8.4
CO_2 (LPG)	%	10	10	10	10
NOx - Class (EN483 / EN15420)		6	6	6	6
NOx to EN15502	mg/kWh	23.1	21.3	23.9	20.1
Burner Control		Pre-mix Fully Modulating			
Electrical Power Supply	V/Hz	230/50	230/50	230/50	230/50
Electrical Power Consumption	W	355	355	355	370
Protection Class		IPX4D	IPX4D	IPX4D	IPX4D
Max Boiler Flow Temperature	°C	90	90	90	90
Working Pressure Min/Max	bar	0.7 - 6.0	0.7 - 6.0	0.7 - 6.0	0.7 - 6.0
Boiler Water Content	Litre	5	6.5	8.3	10.4
Flow/Return Connection (boiler)	inch	1"	1"	1"	1¼"
Gas Connection	inch	¾"	¾"	¾"	1"
Flue / Air Supply Connections					
Coaxial System	mm	100/150	100/150	100/150	-
Twin Pipe System - Flue / Air Supply	mm	100-100	100-100	100-100	150-150
Dimension & Weight					
Height	mm	845	845	845	845
Width	mm	440	440	440	440
Depth	mm	530	530	530	530
Dry Weight	kg	77	79	83	86

The company reserves the right to change the specifications and dimensions without prior notice. E.&O.E.

Customer Support

As with all Strebel products, the S-CBX boiler range is fully supported by our excellent customer service team and experienced technical engineers. Whether you are looking for product advice or for maintenance and repair, our service team are on hand to support you and can be contacted easily via telephone or online.

+44 (0) 1276 685 422 info@strebel.co.uk

STREBEL HEATING TECHNOLOGY

Strebel Ltd Unit 10, Invincible Road,
Farnborough, Hampshire, GU14 7QU
Tel: +44 (0) 1276 685 422 | **Email:** info@strebel.co.uk | **www.strebel.co.uk**