# ATAG X L





Maximum efficiency

Easy assembly

Lowest lifetime costs

Lowest gas usage

### ATAG XL Commercial Boiler

#### THE MOST EFFICIENT BOILER, WITH THE LOWEST LIFETIME COSTS

The ATAG XL Commercial boilers range from 60kW - 960kW output. Three types of boiler modules are available XL70, XL110 and XL140. Boiler modules can be installed In Line, Back to Back, Wall Mounted or Free Standing.

Modules can be installed as a single boiler or linked together up to an eight boiler cascade arrangement and can be assembled in the minimum time. Providing maximum output with the minimum emission, minimum foot print and lowest lifetime costs.

#### Available in 70kW, 110kW & 140kW inputs

ATAG XL			XL70	110kW	XL140
Nominal load	CH, Hs	kW	68.5	107.9	136.4
Nominal capacity	CH, F/R=80/60°	kW	60.1	95.0	120.0
Nominal capacity	CH, F/R=50/30°	kW	65.1	102.3	130.0
Efficiency according to EN677	CH, Hi F/R=80/60°	%	97.3	97.6	97.6
Efficiency low load	CH, Hi F/R=50/30°	%	110.2	110.3	110.2





#### **Flues**



#### Models



- Concentric
- Twin pipe
- Conventional
- Cascade over pressure
- 70kW, 110kW & 140kW
- In-line
- Back to back
- Wall mounted
- Free standing

#### **Controls**



#### Construction



- Built-in cascade controller
- 0-10 volt
- On/Off
- OpenTherm
- Built in timer
- Stainless steel heat exchanger
- Brand 'A' components
- In-built modulating 'A' rated pump



- DIN 65 452kW
- DIN 100 960kW
- Isolation valves & connection pipe work included



## The Ecological Choice

#### THE MOST EFFICIENT BOILER, WITH THE LOWEST LIFETIME COSTS

The XL boiler range utilises the patented OSS Stainless Steel, long life heat exchanger to provide maximum efficiency for the life time of the boiler.

Combining the fully modulating premix burner technology with the inbuilt electronic modulating pump and the inbuilt energy management system, we have produced possibly the most efficient boiler on the market today.

With class leading efficiencies validated by

Gastec at 110.3%, theoretically means we actually recover 99.3 pence for £1 of gas used.

The high efficiency of the boiler also greatly reduces the amount of flue gas emissions ie, CO2 and Nox.

The XL boiler achieves the maximum BREEAM points for low Nox with emissions of less the 30mg/kWh across the range, again a industry leading feature.

		ATAG XL-Series				
Boiler type	XL70	XL110	XL140			
Type heat exchanger		OSS4	OSS4 OSS2	OSS4 OSS4		
Input Hs CH	kW	68.5	107.9	136.4		
On Input Hi CH	kW	61.8	28.8	123		
Efficiency class according BED		***	****	****		
Efficiency according (50/30°C low load, Hi)*	%	110.2	110.3	110.2		
Efficiency according EN677 (36/30°C part load, Hi)	%	109.8	109.2	108.9		
Efficiency according EN677 (80/60°C full load, Hi)	%	97.3	97.6	97.6		
Modulation range CH (capacity 80/60°C)	kW	8.8 - 60.01	14.8 - 95.0	17.6 - 120.0		
Modulation range CH (capacity 50/30°C)	kW	9.9 - 65.0	16.8 - 102.3	19.8 - 130.0		
Flue gas pressure	Pa	175	195	195		
Nox class EN483		5	5	5		
O <sub>2</sub>	%	4.8	4.8	4.8		
Flue gas temp. CH (80/60°C on full load)	°C	76	73	77		
Flue gas temp. CH (50/30°C on low load)	°C	30	30	30		
Gas consumption G20 CH (at 1013 mbar/15°C)	m³/h	6.53	10.29	13.01		
Gas category	II2L3P					
Boiler flue category	B23 B33 C13 C33 C43 C53 C63 C83 C93					
Electr. power consumption max.	W	161	250	322		
Electr. power consumption part load	W	44	86	88		
Electr. power consumption stand by	W	2.5	3.7	3.7		
Current	V/Hz	230/50	230/50	230/50		
Degree of protection acc. EN 60529	IPX4D (IPX0D for B <sub>22</sub> & B <sub>22</sub> )					
Weight (empty)	kg	65	83	87		
Mounting weight	kg	54	72	76		
Width	mm	660	660	660		
Height	mm	1065	1065	1065		
Depth	mm	460	460	460		
Mounting height (excl. flue connection)	mm	1715	1715	1715		
Water content CH		7	12	14		
Overrun time pump CH	min	1	1	1		
P <sub>MS</sub> Water pressure min./max.	bar	0.7/4	0.7/4	0.7/4		
Flow temperature max.	°C	85	85	85		
Pump Grundfoss UPM	OSS4	GEO 25-85 -	GEO 25-85 GEO 25-60	GEO 25-85 GEO 25-85		
Label	Gastec and KIWA ap	Gastec and KIWA approved				
CE product identification number (PIN)		0063CM3648				
Changes of specifications reserved		1111 300 10				





## Flue Configurations

THE MOST EFFICIENT BOILER, WITH THE LOWEST LIFETIME COSTS

The boiler is supplied with a twin flue configuration allowing for an "open" or "closed" system

#### **Open system**

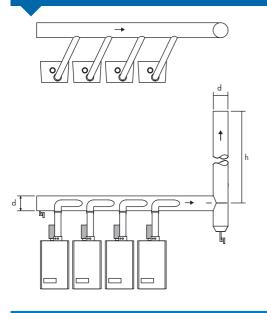
The boilers combustion air can be taken from the ventilated plant room via the air filter, required separately, with the flue discharge being connected together into a cascade header.

#### **Closed system**

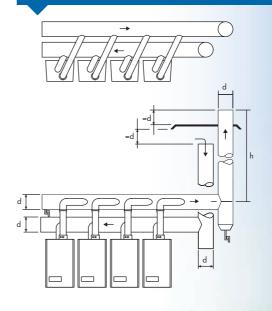
The combustion air can be ducted into the boilers by a cascade header system with the flue discharge being connected together into its own cascade header.

Please see technical specification table for approved flue categories.

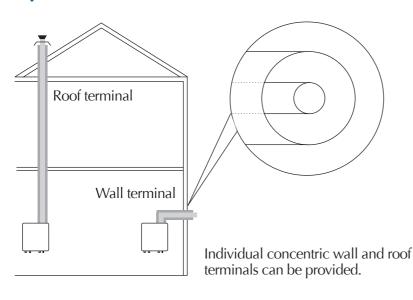
#### **Open System Cascade**



#### **Closed System Cascade**



#### **Concentric System**





## Boiler Configurations

THE MOST EFFICIENT BOILER, WITH THE LOWEST LIFETIME COSTS

The XL boilers are guick and simple to install, the multiple options of boiler sizes and the extensive configuration possibilities make them easy to accommodate in most plant rooms where space is at a premium. The quick fit hydraulic header and gas pipe arrangement simply fixes to the boiler support frames with all the interconnecting pipework supplied as standard. Two sizes of Low Velocity headers are available. For outputs up to 452kW a DN 65 Low Velocity header is supplied. For outputs from 460 kW up to 960 kW a DN 100 Low Velocity Header is supplied. Sectional insulation packs are also available for the hydraulic flow and return pipes.

#### **Modular system**

The ATAG XL is a wall or frame mounted CH-boiler and together with the manifold (the hydraulic system of flow and return pipes and gas pipes) and connection sets forms a compact unit. If the boiler room requires a detached solution, then ATAG XL's delivery programme provides frames for a detached line assembly or an assembly whereby the boilers are mounted back to back Consequently, implementation in an existing situation or new building is virtually always possible. Everything is modular and fits together like building blocks.

The following assemblies are possible:

- from 2 to 8 boilers included, wall-mounted and in line.
- from 2 to 8 boilers included, stand-alone mounted on a frame and in line.
- from 3 to 8 boilers included, stand-alone mounted back to back on a frame.

The hydraulic systems are available in modules for 2 or 3 boilers fitted with twin connections for back-to-back assemblies. The same applies to the gas pipe.

The connection sets between the boiler and pipe work headers are fitted with gas isolation valves, service valves (with connections for a supply - drain and check valves). The optional insulation packages are made of high quality insulation foam and available for the hydraulic parts leading from the boiler right up to the open low velocity header.

#### **ATAG XL** 2 Boilers free standing in-line







#### ATAG XL 3 Boilers free standing back to back







#### ATAG XL 4 Boilers free standing in-line







#### ATAG XL 8 Boilers free standing back to back







#### ATAG XL 8 Boilers free standing in-line







ATAG XL boilers are designed to have multiple configuration possibilities including:

Cascade up to 8 boiler modules.

- Wall-mounted
- Wall-mounted & in-line
- Back to Back
- Free standing



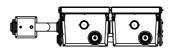
## **Boiler Configurations**

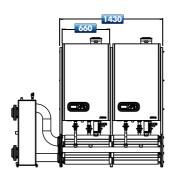
ULTIMATELY VERSATILE AND FLEXIBLE TO SUIT YOUR NEEDS

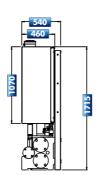
"The XL boiler range has been designed to fit into multiple layout possibilities. This allows the designer to maximise the available plant room space to accommodate other items of plant around the small footprint of the XL boiler modules."

#### ATAG XL 2 boilers free standing in-line



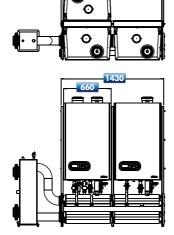


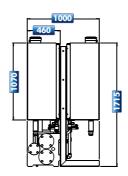




#### ATAG XL 3 boilers free standing back to back



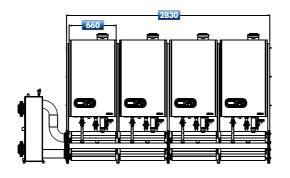


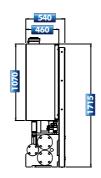


#### ATAG XL 4 boilers free standing in-line



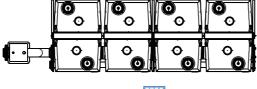


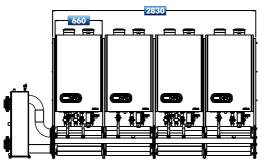


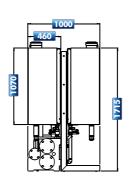


#### ATAG XL 8 boilers free standing back to back



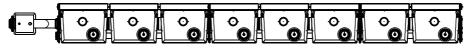


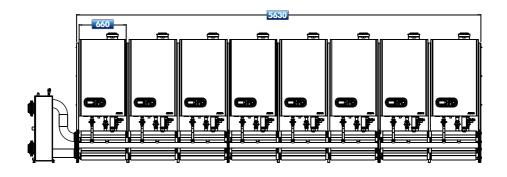


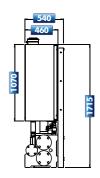


#### ATAG XL 8 boilers free standing in-line





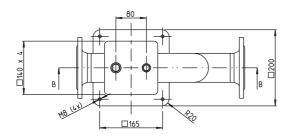




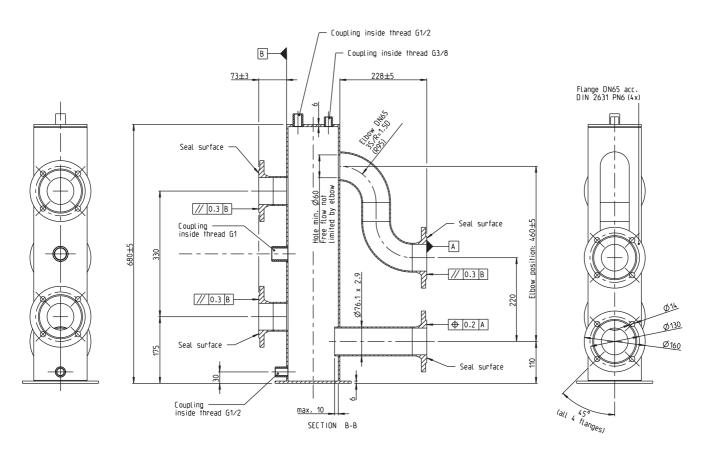
### **DN 65**

#### RECOMMENDED HEADER CONFIGURATIONS

A low velocity header type is selected depending on the capacity of the assembly. ATAG supplies a DN65 low velocity header up to 452kW and a DN100 low velocity header up to 960 kW. The compact low velocity header may be positioned on either the left or right hand side of the cascade assembly. Low velocity headers come standard with adjustable feet, vent, assembly material (bolts, nuts and spring washers) and a connection for, for instance, a water pressure gauge or temperature sensor. As an option, the low velocity header can either be positioned in a straight line from the main pipe work headers or (with the optional bend sets DN65 or DN100) at a forward or backward angle of 90°.





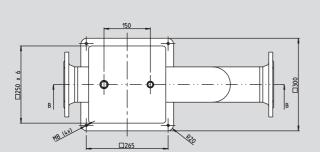


### **DN 100**

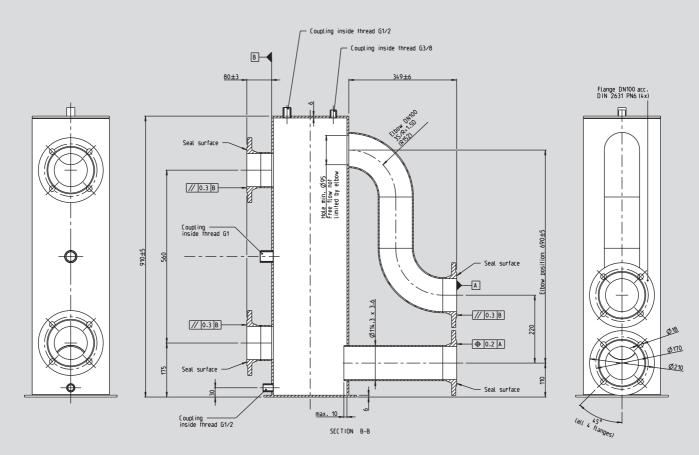
#### RECOMMENDED HEADER CONFIGURATIONS

The DN 65 and DN 100 high performance low velocity headers are designed for a neat, quick and time saving installation.

ATAG also supply Air and Dirt separators and Dosing Pots to protect the boilers and increase the longevity of the boiler plant.







## Heat Exchanger

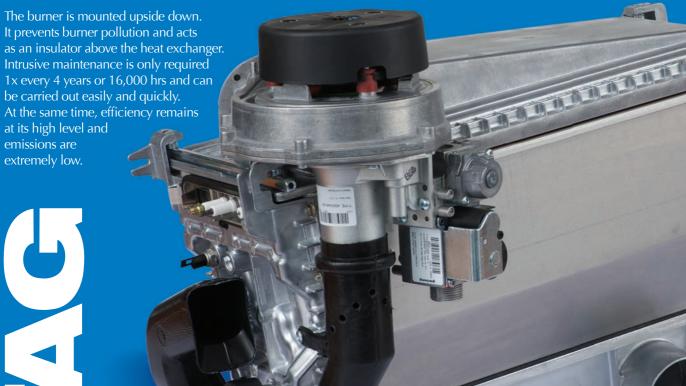
THE MOST EFFICIENT BOILER, WITH THE LOWEST LIFETIME COSTS

"The same technology, on which ATAG's based its most efficient CH-boiler, is also used for the new ATAG XL. For years on end, the patented stainless steel OSS heat exchangers will continue to provide the **highest efficiency** of 110.3%. **It makes the ATAG XL the most efficient boiler on the market.**"

The stainless steel heart, the heat exchanger, consists of a number of stainless steel pipes. These ensure a direct heat transfer to the water of the CH. The result of the large number of pipes extracting so much heat from the flue gases is a high level of condensation. The slanted position of the heat exchanger ensures quick disposal of the condensate. The smooth pipes and assembly prevent pollution of the exchanger. In addition, stainless steel does not pollute as much as aluminium and hardly requires any cleaning.

#### **Durable materials**

The use of durable materials and the stainless steel OSS heat exchanger results in minimal maintenance intervals and a maximum operating life of the CH-boiler. In combination with the investment, this turns the ATAG XL Cascade into a central heating system with the lowest Total Cost of Ownership (TCO).





#### **Lowest energy costs**

Since you are achieving the highest efficiency of 110.3%, you require less energy to produce the same amount of heat. As a result, the ATAG XL cuts your energy costs significantly.

#### Work out your savings!

Low maintenance costs

Low maintenance frequency

The lowest emissions

The highest efficiency

(110.3%) Lowest energy consumption

Minimum downtime

### www.atagcommercial.co.uk

ATAG

**ONLINE: QUOTATION, SPECIFICATIONS** TEXT AND CAD-DRAWINGS...

Visit www.atagcommercial.co.uk where you will find the ATAG Cascade Selection program where you can easily configure your own application. Real-time insight into dimensions, assembly possibilities, options and prices is provided. Your configuration

provides the basis for an online quotation giving you the opportunity to download the corresponding

quotation, specifications texts and CAD-drawings.



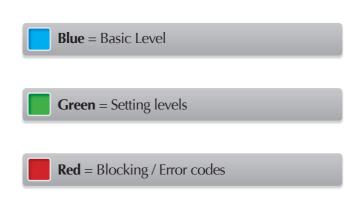
## Intelligent Controls

SMART THINKING INSIDE THE BOX

"The XL boiler is supplied as standard with a built in energy management system. The unit can be connected to 0-10 volt, Volt Free on /off or Opentherm signals."

#### Standard functions of the control unit are as follows:

- Cascade management and routine rotation of the lead boiler module.
- Programme settings, Parameter chapter, Service/ Commissioning settings, Error log chapter and Info screen.
- Fault finding diagnostic codes indicating blocking and error messages
- Gas error fault signals back to a BMS or control panel.
- The simple to operate controller works on a back 'lit traffic light system:



### **Quality Assured**

"A" BRAND COMPONENTS

We only utilise the very best quality components to ensure maximum durability and product life.

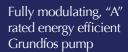


Honeywell air/gas ration 230 volt gas valve

**OSS 316 Stainless** Heat exchanger guaranteed for 5 years as standard.

S.I.T electronic MMI cascade controller





Electrical connection rail with push fit/ release connections

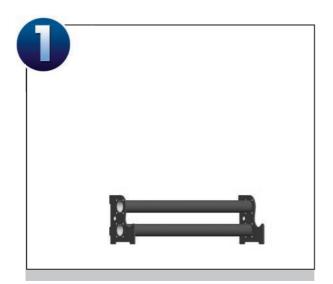
BUS communication cable pre wired for ease of installation.



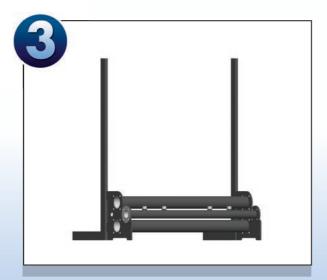
### Easy Assembly

#### DESIGNED FOR EASE AND SIMPLICITY





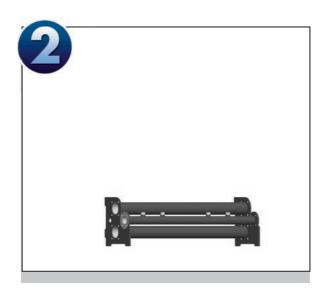
Step 1: Level hydraulic group on the floor



**Step 3:** Fit 'L' or 'l' support frames



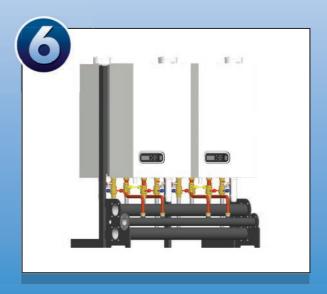
Step 5: Hang boilers



**Step 2:** Fit the gas line



**Step 4:** Fit boiler frames



Step 6: Connect isolation valves & pre-formed pipework

## ChooseanATAG Condensing Boiler



#### It's a comfortable decision to make

#### ATAG - Just who are we?

Based in Holland, ATAG Heating Group is a world leader in the design and manufacture of high efficiency, low emission, condensing, gas boilers.

Manufactured from the highest quality materials to ensure years of trouble-free use, all ATAG boilers are designed with ease of access to key components for servicing and repairs, should they ever be required.

#### Your **local** installer

ATAG don't just stop at making boilers, we train the people who fit them. With a number of dedicated training facilities across the UK, we ensure that whoever installs your boiler has access all the technical knowledge and expertise to provide a first class job. So, that means heating and hot water just right for you, for many years to come.













**ATAG Heating UK Limited** 

Unit 3 Beaver Trade Park, Quarry Lane, Chichester, West Sussex PO19 8NY