

# ALKON CLIPPER



MODEL ALKON CLIPPER			28
Nominal output min-max	Condensing	kW	5,9÷28,9
	Conventional	kW	5,4÷27,1
Nominal input		kW	28
$\eta$ Condensation at 30% part load			107
Efficiency class (CEE directive 92/42)			★★★★

ALKON CLIPPER is a floor standing, room sealed, gas fired condensing boiler, with an output range from 28,9 to 5,9 kW, equipped with a 110 litre stainless steel storage cylinder.

The ALKON CLIPPER boiler makes use of the latest technology to give you high performances and exceptional fuel efficiency:

- **Reduced fuel consumption:** over 30%, thanks to condensation and reduction of the burner on/off times due to the excellent modulation ratio (1:5) compared to a conventional boiler.
- **Flexible system design:** designed for a direct zone, it is also able to control 2 zones, a direct one and a mixed one, with the appropriate optional kit, at different temperatures.
- **Superior DHW production,** thanks to the stainless steel storage cylinder's refined constructive technology.
- **Upto 232 litres** of hot water in 10 minutes with the storage cylinder at 60°C and subsequent DHW production equivalent to a flow rate of 20 l/min with a  $\Delta t$  of 25K!
- **Self-adjustment** of the maximum output depending on the resistances of the flue outlet system
- **Quieter boiler noise operation,** thanks to the innovative pre-mixing system

The control panel, identical to the one used on the ALKON range of boilers, is simple to use thanks to 2 large selection knobs, which permit central heating and domestic hot water adjustment, led diagnostics and temperature-pressure gauge.

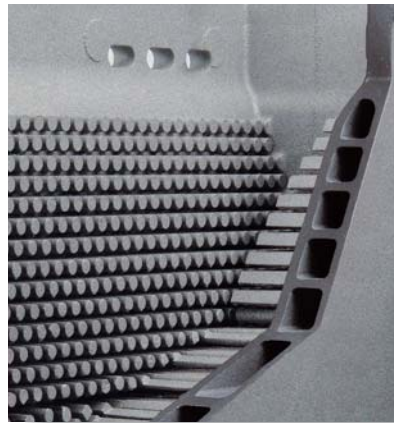
## The details

### The identikit

- 4 stars efficiency class floor standing condensing boiler (CEE directive 92/42).
- Exclusive compact cast aluminium/silicon/ magnesium alloy heat exchanger.
- Pre-mixed, modulating burner, operating at constant combustion rate, low NO<sub>x</sub> (Class 5 according to EN 297 and EN 483).
- 110 litre capacity, stainless steel, rapid storage cylinder.
- Flue outlet pipes over 30 metres long (twin pipe 80/80).
- 60 mm diameter flue pipes available (Approved).
- Standard direct circuit.
- Sliding temperature boiler operation.
- Electrical priority diverting valve.
- Boiler frost protection.
- No-jam pump and diverting valve.
- Overheating protection via pump overrun.
- Chimney-sweeper function.
- Automatic differential by-pass.
- CH (8 litres) and DHW (4 litres) expansion vessel.
- Boiler filling and drain cocks.
- Possibility of management of 3 heating zones.
- Multigas boiler operation (natural gas or LPG).
- Outdoor sensor.

### Optional accessories

- Programmable modulating room thermostats.
- On/Off thermostats for controlling 2 heating zones at different temperatures.
- Second mixed circuit with motorized 4-way valve and pump.
- Flue outlet piping kit.



Compact cast aluminium/silicon/ magnesium alloy heat exchanger



Electronic board



Mixing valve, pump group and electrical interception kit



110 litre capacity, stainless steel cylinder

**5** year guarantee

Thanks to its particular technical configuration, synonymous of quality and safety, the ALKON CLIPPER boiler body is supplied with a 5 year guarantee.

Extra guarantee

# Aquaplus

## Impressive capacity!

The ALKON CLIPPER boiler is equipped with an innovative stainless steel storage cylinder.

The 13 metres long coil is also made in stainless steel, with a surface of 0,81 m<sup>2</sup> placed in a double concentric spiral which easily permits all the available output to be transferred, thereby reducing the heating-up time compared to classical storage cylinders and delivering an impressive quantity of DHW in 10 minutes and a continuous delivery with only 28 kW.

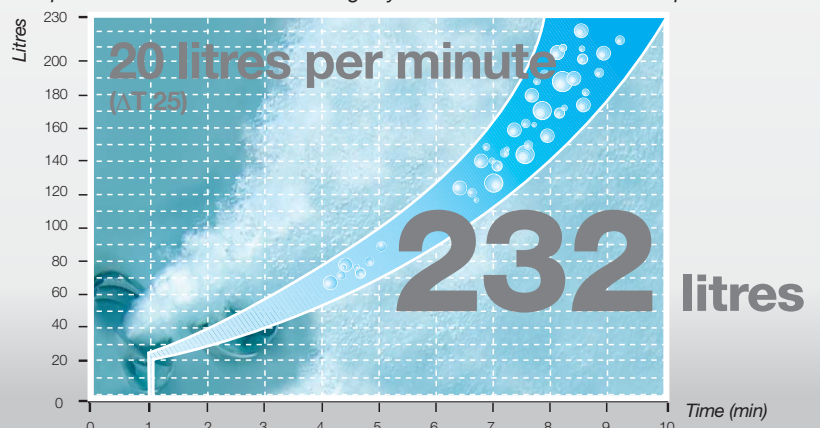
## The advantages

- *An increase in the resistance to corrosion*, thanks to the employment of stainless steel and to the impeding effect of the sacrificial magnesium anode
- *High refractoriness* to the lime scale deposits thanks to the specular surfaces which prevent the lime particles depositing themselves and which can be removed by using the practical inspection flange.
- *Complete transfer* of the heat produced to the hot water
- *Insulated in high density* 4 cm thick polystyrene which limits the heat losses, actively contributing to reducing fuel consumption.



Stainless steel 110 litre storage cylinder

DHW production in 10 minutes – Storage cylinder at 60°C - Inlet water temperature 15°C



## The control panel

Simple to use thanks to 2 large selection knobs which permit boiler ignition, central heating adjustment 30-80°C and domestic hot water adjustment 25-60°C.

The temperature-pressure gauge shows the boiler temperature and pressure. As well as the various system power on, CH mode, burner on indicator leds, over 14 different led indicators highlight system problems at a glance, from: no water to a NTC sensor fault, giving peace of mind to the user and providing a diagnostic facility for the installer and service engineer.



Detailed view of control panel

## Technical data and dimensions

ALKON CLIPPER		28
<b>Output</b>		
OUTPUT RANGE IN CONDENSING MODE min/max	kW	5,8-28,9
OUTPUT RANGE IN CONVENTIONAL MODE	kW	5,4-27,1
NOMINAL INPUT	kW	28
<b>Efficiency</b>		
EFFICIENCY CLASS (DIRECTIVE CEE 92/42)		★★★★
EFFICIENCY AT FULL LOAD (100%) IN CONDENSING MODE	%	101,92
EFFICIENCY AT 30% PART LOAD IN CONDENSING MODE	%	107
EFFICIENCY AT NOMINAL LOAD (100%) IN CONVENTIONAL MODE	%	96,80
EFFICIENCY AT 30% PART LOAD IN CONVENTIONAL MODE	%	103,16
<b>Combustion</b>		
CO <sub>2</sub> (min/max output)	%	8,8-9
NOx (value according to EN 297/A3 and EN 483)	mg/kWh	49,65
MAX CONDENSATE PRODUCTION	kg/h	4,5
NOx class		5
<b>Central Heating</b>		
CH ADJUSTABLE TEMPERATURE RANGE	°C	30 / 80
DHW ADJUSTABLE TEMPERATURE RANGE	°C	25-60
DHW PRODUCTION WITH Δt 25 K	l/min	20
CH/DHW EXPANSION VESSEL CAPACITY	l	8/4
<b>Electrical supply</b>		
ELECTRICAL SUPPLY - VOLTAGE / FREQUENCY	V/Hz	230/50
MAXIMUM ABSORBED POWER	W	143
<b>Weight and Technical Data</b>		
NET WEIGHT	kg	98
ELECTRICAL PROTECTION	IP	X4D
APPLIANCE GAS CATEGORY		II 2H3P

