

CITY TOP



The new market benchmark



The most efficient Boiler built ever.



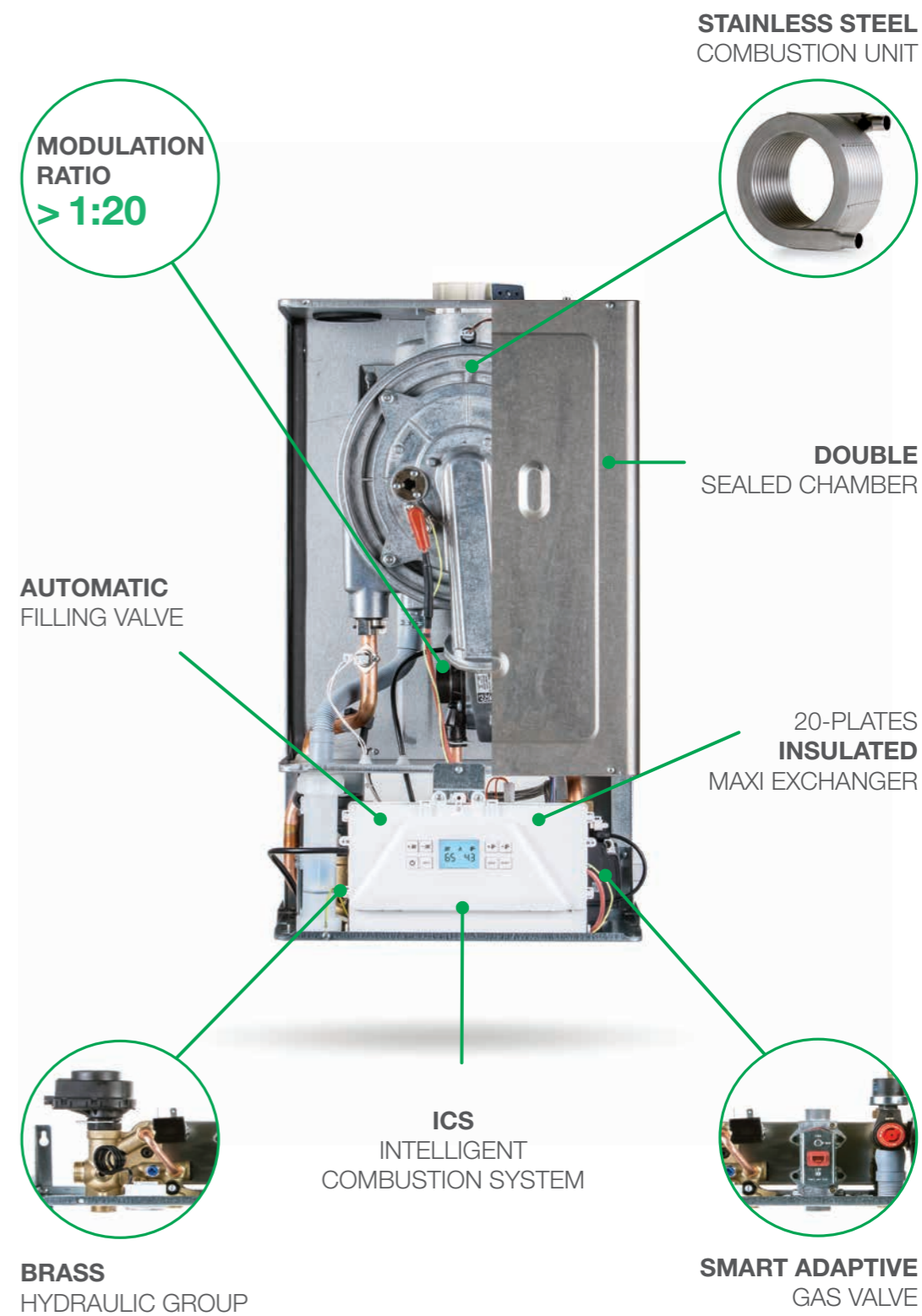
MODULATION RATIO

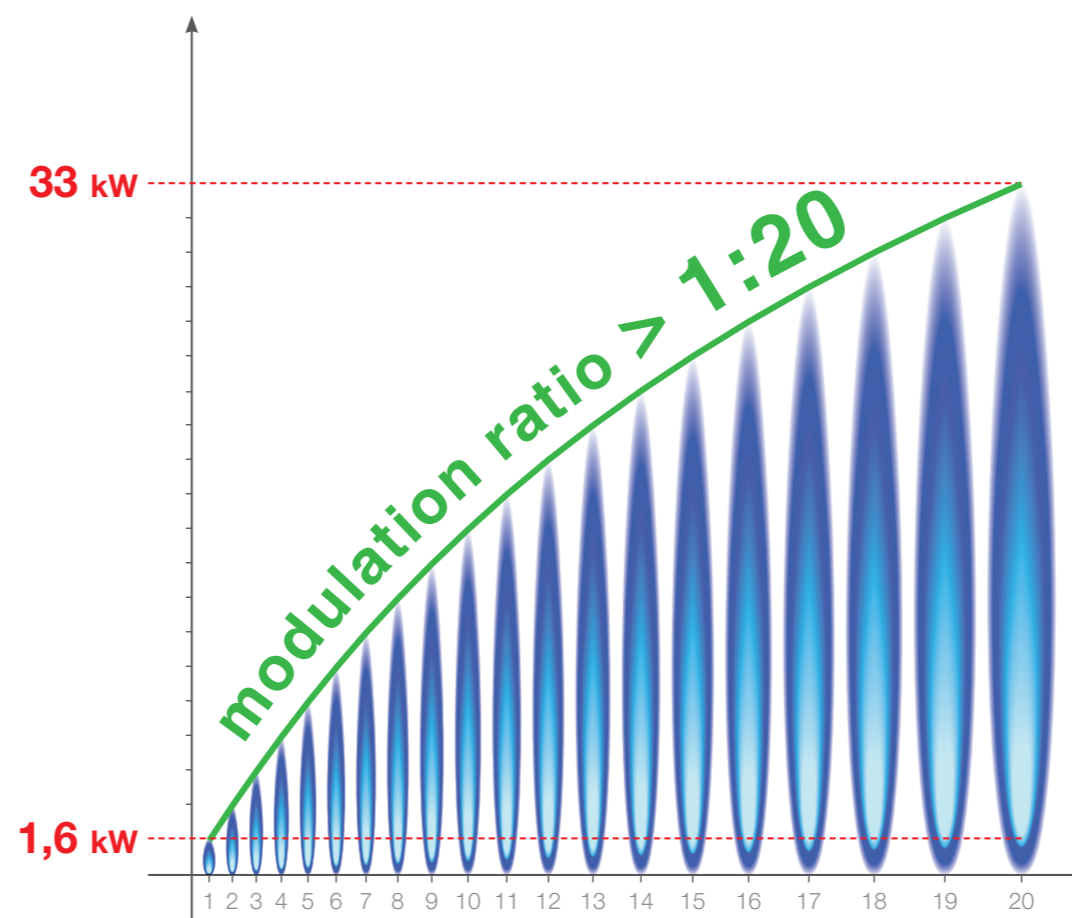
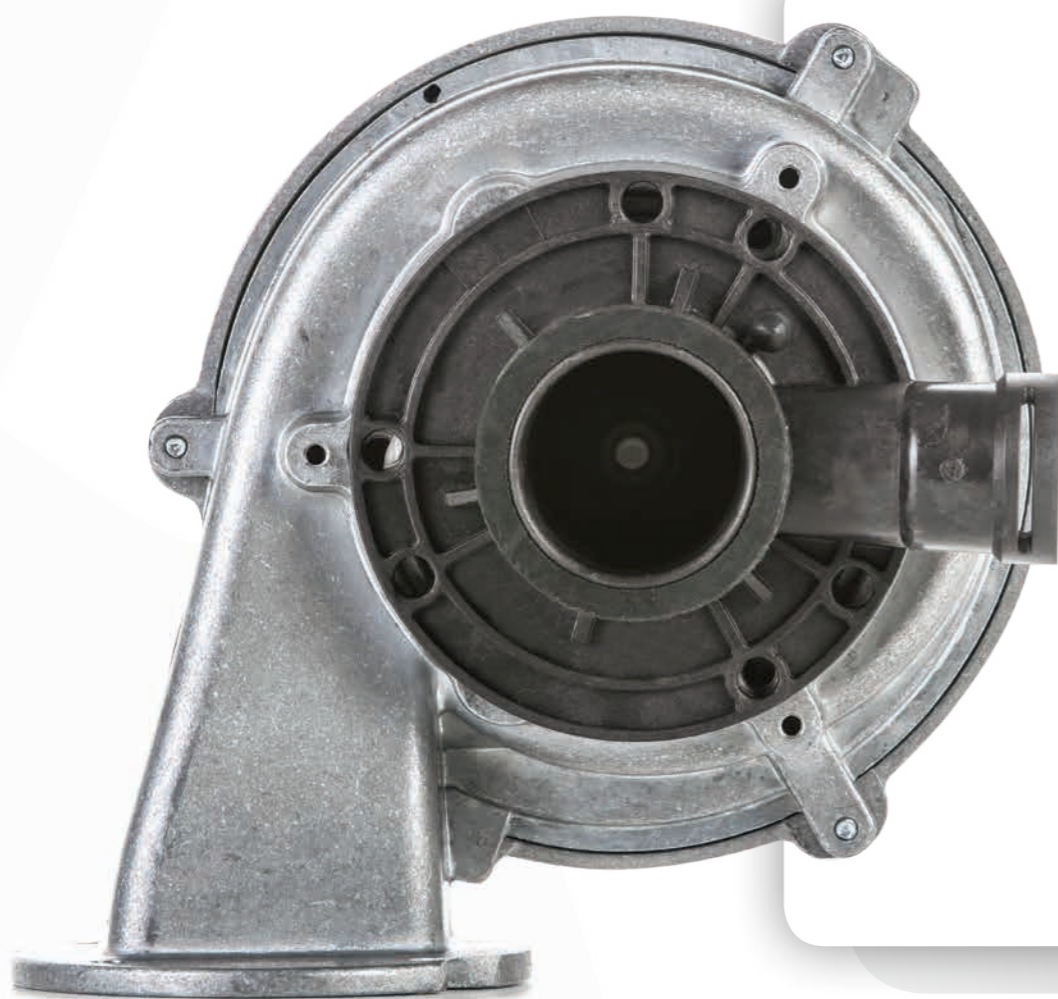


DESIGN



TECHNOLOGY





City Top is the only boiler on the market with a **modulation range higher than 1:20**.

This allows:

- a reduction of ignitions and shutdowns
- silent operation
- a reduction of gas consumption and polluting emissions
- a longer life of the boiler.

City Top is the most efficient and flexible boiler on the market, able to adapt to the actual heat requirement of the system.



City Top ensures the highest safety standards in the market thanks to the **double sealing of the combustion group**.

The double sealed chamber, further increasing the **level of safety**, improves **the acoustic performance** of City Top inside the home.

Within this objective, Italtherm R&D, after a series of tests on various materials, has decided **to coat the City Top combustion chamber with a material having high soundproofing and noise-absorbing properties**.

City Top has thus reached **the lowest noise levels in the market**, to the benefit of comfort.



Italtherm has designed and developed **a new stainless steel heat exchanger with extra wide water passages:** the inner section of the coils has been increased by 4 times in comparison to the market standards.

Thanks to the new heat exchanger, City Top has **better thermal efficiency, better resistance to limescale and plant dirty stuff,** making City Top ideal even when replacing boilers on pre-existing plants; in addition, the single coil design of the new exchanger guarantees high flow rates, low hydraulic load losses, easier cleaning and maintenance.



Italtherm has designed and developed the **ICS - Intelligent Combustion System** - a system making the City Top a smart boiler, the only boiler that controls, adjusts and fits itself independently.

The **ICS - Intelligent Combustion System** - controls the combustion values and adjusts the gas flow rate in order to always get the correct air / gas ratio, thus obtaining:

- reduction of the gas consumption
- lower CO/CO2 emissions
- less installation time (there are no manual rules to run).

The City Top is a particularly efficient boiler:

- modulation ratio 1:20
- always optimum ignition (the system is self-tuning to operating conditions)
- perfect combustion (getting a longer boiler life for an increasingly reliable product)
- reduction of on / off cycles (increasing efficiency and reducing boiler noise).

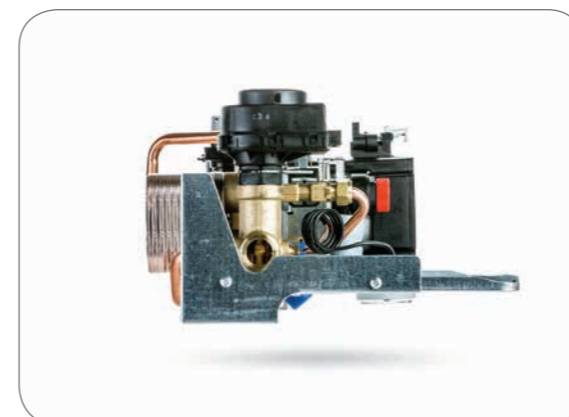
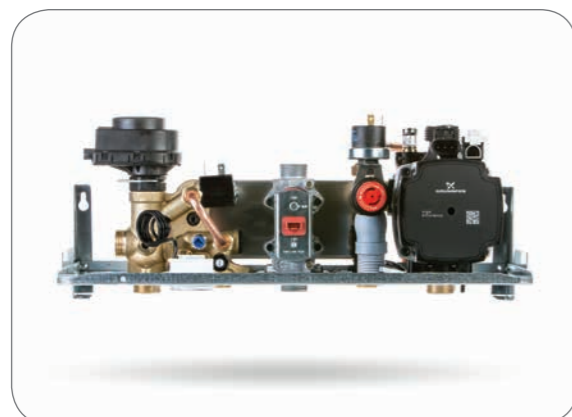
Finally, thanks to the adaptive gas function, the City Top can operate with all types of gas without requiring the replacement of the nozzles (the boiler is supplied with a single product code)



Italtherm keeps using the **brass** on its hydraulic units to ensure maximum reliability and robustness of its products

The new **brass hydraulic group** is equipped with:

- 20-plates insulated maxi exchanger
- automatic filling valve
- external by pass
- flow regulator
- one-way valve
- high modulating pump with degasser





1. INTELLIGENT REMOTE CONTROL



2. END-USER APP

compact as no other

technical data



MODEL		City Top 25 K	City Top 35 K
Gas type		G20	G20
Max heat input Qn	<i>kW</i>	25	34.9
Max heat input Heating	<i>kW</i>	25	33
Min heat input Qr	<i>kW</i>	1.6	1.6
Max heat output 60°/80°C *	<i>kW</i>	24.1	32.2
Min heat output 60°/80°C *	<i>kW</i>	1.5	1.5
Max heat output 30°/50°C *	<i>kW</i>	26.7	35.3
Min heat output 30°/50°C *	<i>kW</i>	1.7	1.7
NOx Class		6	6
EFFICIENCY			
Nominal efficiency (NCV) at 60°/80°C *	%	96.2	97.1
Nominal efficiency (NCV) at 30°/50°C *	%	104.4	105.1
Efficiency at 30% Qa (NCV) at 30°C	%	105.3	105.6
* return temperature / flow temperature; NCV = Net Calorific Value (= Hi) • Note: the data were detected with horizontal coaxial flue kit = 1 meter			
HEATING			
Temperature ranges (min÷max) • main zone	°C	35÷80	
Temperature range (min÷max) • secondary zone	°C	20÷45	
Expansion vessel	<i>l</i>	10	10
Expansion vessel pre-load pressure	<i>bar</i>	1	1
Loss of water switch pressure on / off	<i>bar</i>	0.5 / 1.0	0.5 / 1.0
Max working pressure	<i>bar</i>	3	3
Max temperature	°C	90	90
Antifreeze function temperature on / off	°C	5÷30	5÷30
DOMESTIC HOT WATER			
Flow rate at ΔT 25°C	<i>l/min</i>	15	19.5
Flow rate at ΔT 30°C	<i>l/min</i>	12.3	16.1
Min DHW flow (for DHW activation)	<i>l/min</i>	2.8	2.8
Min DHW pressure (for DHW activation)	<i>bar</i>	0.2	0.2
Max DHW pressure inlet	<i>bar</i>	6	6
DHW range temperature (min÷max)	°C	30÷55	
ELECTRICAL DATA			
Voltage / Frequency (nominal voltage)	<i>V / Hz</i>	230V / 50	
Power consumption	<i>W</i>	87	110
Protection level		IPX5D	
DIMENSIONS			
Width - Height - Depth	<i>mm</i>	400 x 700 x 324	
Weight	<i>kg</i>	36.8	36.8
CONNECTIONS			
Coaxial Ø 60/100 mm max length (inlet / outlet)	<i>m</i>	10	
Split Ø 80 mm max length (inlet / outlet)	<i>m</i>	62	
Split Ø 60 mm max length (inlet / outlet)	<i>m</i>	18	
GAS PRESSURE INLET			
Nominal pressure	<i>mbar</i>	20	
Inlet pressure (min÷max)	<i>mbar</i>	17-25	
ErP DATA SHEET			
DHW declared load profile		XL	XXL
Seasonal heating energy efficiency class		A	A
DHW energy efficiency class		A	A
Seasonal space Heating Energy Efficiency (GCV)	(η_s) %	90	



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