

## CITY CLASS K from 25 to 35 kW

Pure design, technology and automotive innovation for your comfort



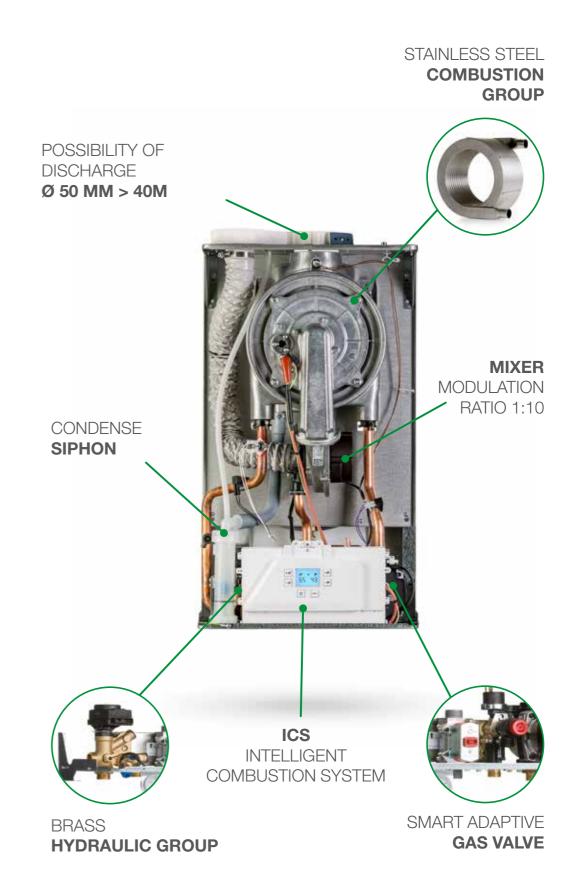


Less is more.

Compact and elegant











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, the City Class has
better thermal efficiency,
better resistance to
limescale and plant dirty
stuff, making the City Class
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.

## it checks, adjusts, fits



Italtherm has designed and developed the ICS -**Intelligent Combustion System** - a system making the City Class 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/CO<sub>2</sub> emissions
- less installation time (there are no manual rules to run)

The City Class is a particularly efficient boiler:

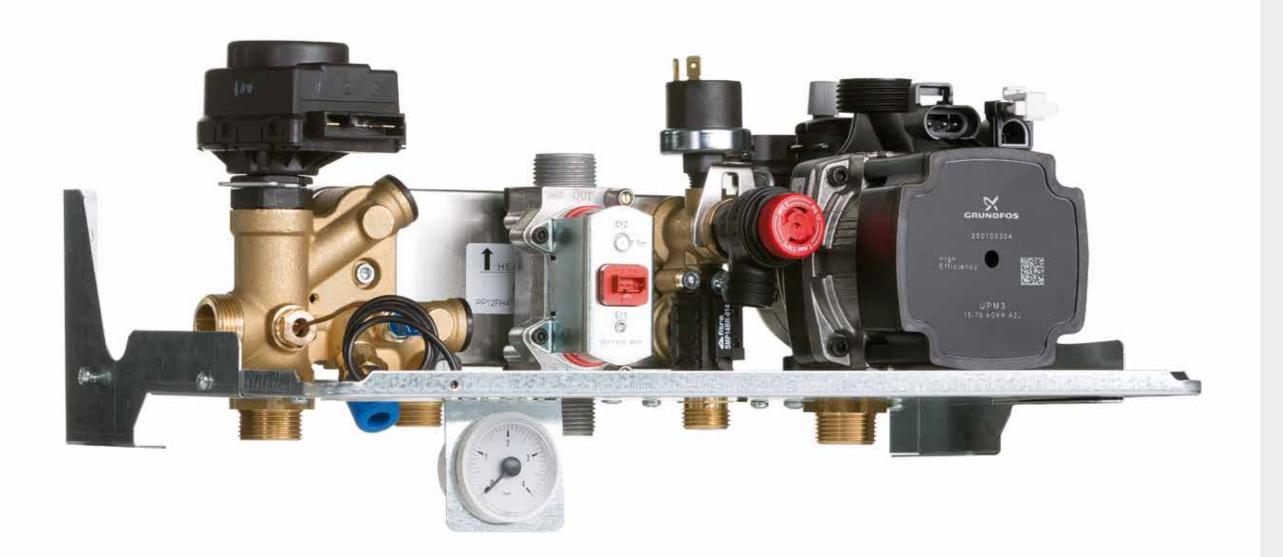
- modulation ratio 1:10
- Always optimum ignition (the system is self-tuning to operating conditions)
- Perfect combustion (getting a longer boiler life for an increasingly reliable product)
- Reduction of on/off **cycles** (increasing efficiency and reducing boiler noise)

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

Finally, thanks to the







## 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:

- High efficiency pump
- three-way valve
- bypass
- filling-in tap
- one-way valve
- flow regulator
- NTC DHW probe

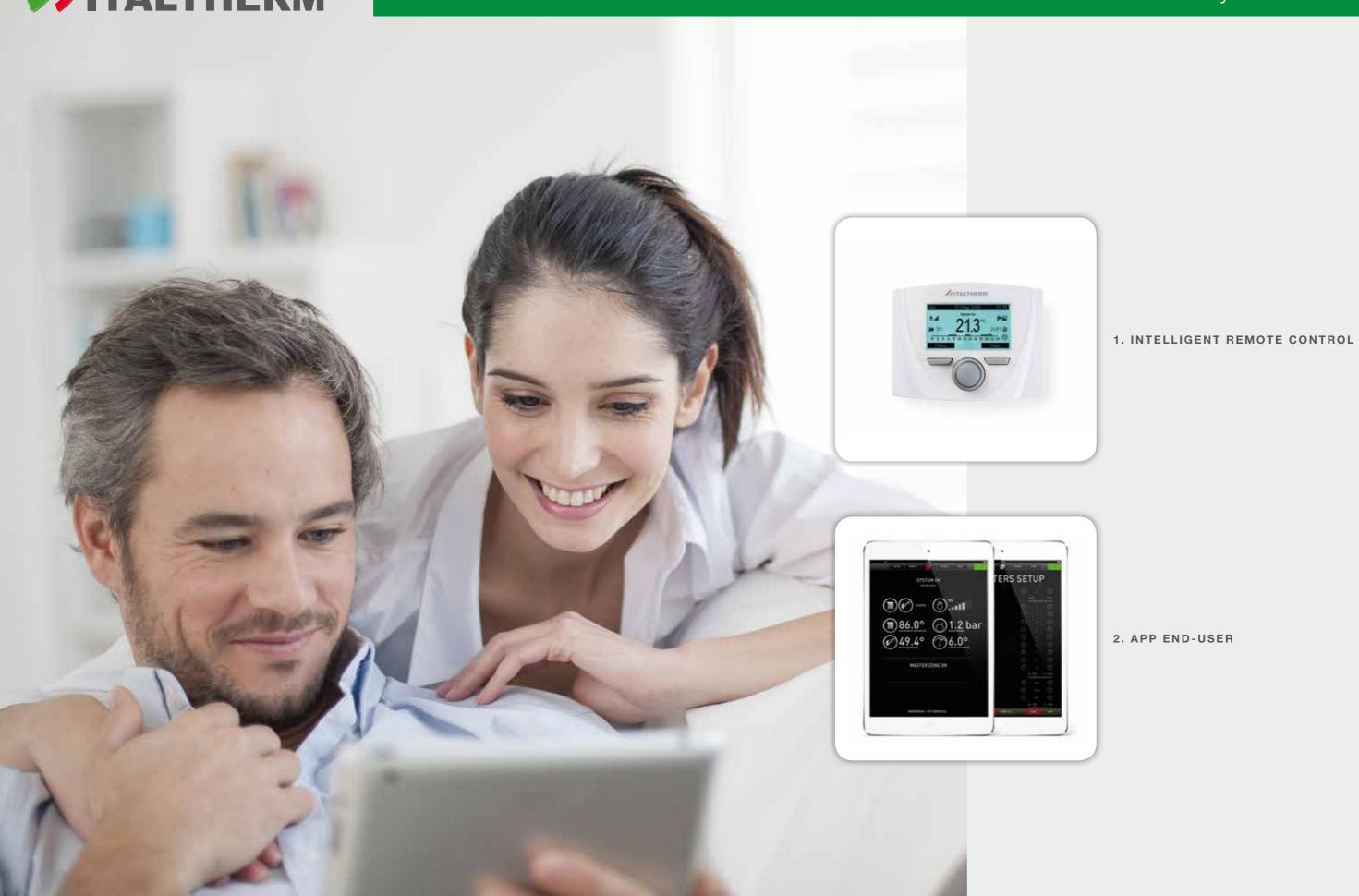












## compact as no other



	Model	City Class 25 K	City Class 30 K	City Class 35 K	City Class 25 KR	City Class 35 KR	
	Gas type	G20	G20	G20	G20	G20	
Max heat input Qn	kW	25.0	30.0	33.2	25.0	33.2	
Max heat input Heating	kW	20.0	24.0	28.0	20.0	28.0	
Min heat input Qr	kW	2.5	3.0	3.5	2.5	3.5	
Max heat output 60°/80°C *	kW	19.4	23.3	27.4	19.4	27.4	
Min heat output 60°/80°C *	kW	2.4	2.8	3.3	2.4	3.3	
Max heat output 30°/50°C *	kW	21.0	25.2	29.5	21.0	29.5	
Min heat output 30°/50°C *	kW	2.7	3.1	3.7	2.7	3.7	
NOx Class				6			
EFFICIENCY							
Nominal efficiency (NCV) at 60°/80°C *	%	96.1	96.0	96.2	96.1	96.2	
Nominal efficiency (NCV) at 30°/50°C *	%	105.1	105.2	106.4	105.1	106.4	
Efficiency at 30% Qa (NCV) at 30°C	%	106.4	106.0	106.7	106.4	106.7	
* return temperature / flow temperature; NCV = Net	 Calorific Valu	ie (= Hi) • Note: the	e data were detected	uith horizontal coaxial	I flue kit = 1 meter	I.	
HEATING PAGE 1							
Temperature ranges (min÷max) ◆ main zone	°C	35÷80 / 20÷45					
Temperature range (min÷max) • secondary zone	°C	20÷80					
Expansion vessel	1	8	8	10	8	10	
Expansion vessel pre-load pressure	bar	1	1	1	1	1	
Loss of water switch pressure on / off	bar	0.4 / 0.9 (±0.2)	0.4 / 0.9 (±0.2)	0.4 / 0.9 (±0.2)	0.4 / 0.9 (±0.2)	0.4 / 0.9 (±0.2)	
Max working pressure	bar	3	3	3	3	3	
Max temperature	°C	90	90	90	90	90	
Antifreeze function temperature on / off	°C	5/30	5 / 30	5 / 30	5 / 30	5 / 30	
DOMESTIC HOT WATER							
Flow rate at ΔT 25°C	I/min	14.8	17.2	18.7	-	-	
Flow rate at ∆T 30°C	I/min	12.0	13.8	16.0	-	-	
Min DHW flow (for DHW activation)	I/min	2.8	2.8	2.8	-	-	
Min DHW pressure (for DHW activation)	bar	0.2	0.2	0.2	-	-	
Max DHW pressure inlet	bar	6	6	6	-	-	
DHW range temperature (min÷max)	°C	30÷55	30÷55	30÷55	30÷60	30÷60	
ELECTRICAL DATA							
Voltage / Frequency (nominal voltage)	V / Hz	220÷240 / 50 (230V)	220÷240 / 50 (230V)	220÷240 / 50 (230V)	220÷240 / 50 (230V)	220÷240 / 50 (230V)	
Power consumption	W	73	85	86	73	86	
Protection level		IP X5D	IP X5D	IP X5D	IP X5D	IP X5D	
DIMENSIONS							
Width - Height - Depth	mm	400X700X324					
Weight	kg	28,4	30,2	34.2	26,5	30.3	
CONNECTIONS							
Hydraulic and gas connections		see the technical sheet					
Coaxial Ø 60/100 mm max length (inlet / outlet)	m	10	8	8	10	8	
Split Ø 80 mm max length (inlet / outlet)	m	52	52	52	52	52	
Split Ø 60 mm max length (inlet / outlet)	m	16	16	16	16	16	
GAS PRESSURE INLET							
Nominal pressure	mbar	20	20	20	20	20	
Inlet pressure (min÷max)	mbar	17 ÷ 25	17 ÷ 25	17 ÷ 25	17 ÷ 25	17 ÷ 25	
ErP DATA SHEET							
DHW declared load profile		XL	XL	XXL	_	-	
Seasonal heating energy efficiency class		A	A	A	A	A	
DHW energy efficiency class		A	A	В	_	-	
Seasonal Space Heating Energy Efficiency (GCV)	(n ) %	91	90	91	91	91	
Soussial opace floating Elicity Elitololley (dos)	(η <sub>s</sub> ) %	J1	] 30	J 1	J 1	J1	



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