

2023



Product Overview

Nesta Chrome · Nesta · Nesta Plus
CoilMaster · Texas · Hybridos System
Steamel ES · Rex · Silox

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74	Rex Stainless steel instantaneous indirect water heaters

AIC was founded in 2001 and rapidly became an internationally recognised reliable specialist in the design, engineering and manufacture of stainless steel and titanium heat exchangers.

We believe in continuous investment in people and processes. Due to that, we are at the forefront of advanced heat transfer solutions. Thanks to proven design products without compromise on quality and our technologically advanced automated production processes, we can carry out the most complex and technologically advanced heat transfer projects.

In 2018 AIC Europe was established with headquarters in Weert in the Netherlands. By creating a network of subsidiaries throughout Europe, we can now deliver our advanced range of stainless steel gas fired condensing boilers and high-powered water heaters to the market, providing innovative heating solutions with a first class service. The AIC products and technological solutions are the results of continuous investment and research aimed at achieving our objectives of a maximum reduction in polluting emissions with increased energy savings, guaranteeing the user high eco-comfort performance in heating and domestic hot water.

Mission

Developing energy-oriented products that will help the world transition its economy into our greener future.

Vision

Growing a network of subsidiaries and partners throughout Europe and beyond to deliver our advanced heating technologies to the global market, providing innovative heating solutions with unparalleled service.



33.900 m²

Production facilities in Poland

1000

Employees
35% Planning and Management
65% Production and Logistics

14

Commercial branches in Europe,
North America and Asia

Subsidiaries

AIC Europe B.V.	The Netherlands
AIC Heating UK	United Kingdom & Ireland
AIC Italia	Italy
AIC Polska	Poland
AIC Iberica	Spain, Portugal and Andorra
AIC France	France
AIC Advanced Technologies Co. Ltd.	Beijing, China

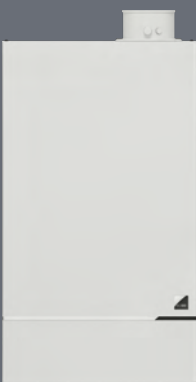
Partners

Germany
Slovenia

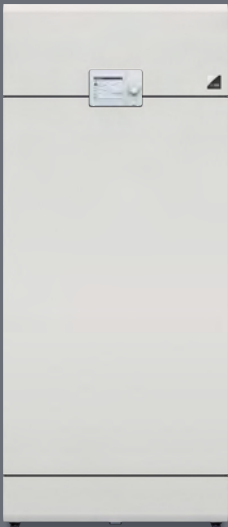




Cascade NESTA Chrome



NESTA Chrome



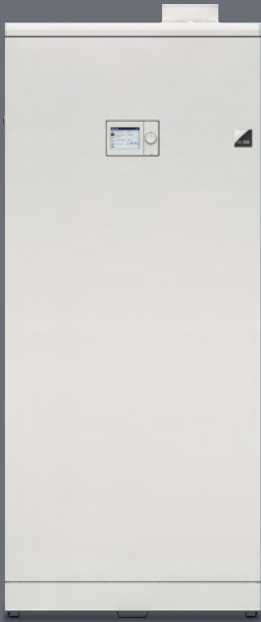
NESTA



NESTA Plus

Product range

NESTA Chrome	24–150 kW
NESTA	120–300 kW
NESTA Plus	280–1260 kW
CoilMaster	35–120 kW
Texas	99–230 kW
Silox	90–1000 l




CoilMaster



Texas



Silox



Specialized know-how of stainless steel



Intelligent stainless-steel utilisation

The ideal material for heat transfer

For over 20 years AIC have specialised in the processing of stainless steel. We are proud of the knowledge we have gained throughout this time, and with extensive investments in technology, we can process the optimal type of stainless steel most suited to the component performance. AIC products are built and designed by experts, and by combining different categories of stainless steel we can assure maximum resistance and reliability of our products over time.

The ideal material for each application

Nickel-free
stainless steel

1.4509

Austenitic
stainless steel

1.4307

Austenitic
stainless steel

1.4404

Duplex
stainless steel

1.4162

Unrivalled resistance to corrosion and oxidation

Consistent performance

All the components of the Fire Tube exchanger are manufactured from selected stainless steel, which offers unmatched resistance to corrosion and oxidation, resulting in consistent performance. These corrosion and oxidation issues can occur due to acid condensation, use of aggressive chemicals, and deposits from dirty gas supply.

All stainless-steel internal components

Condensate dish

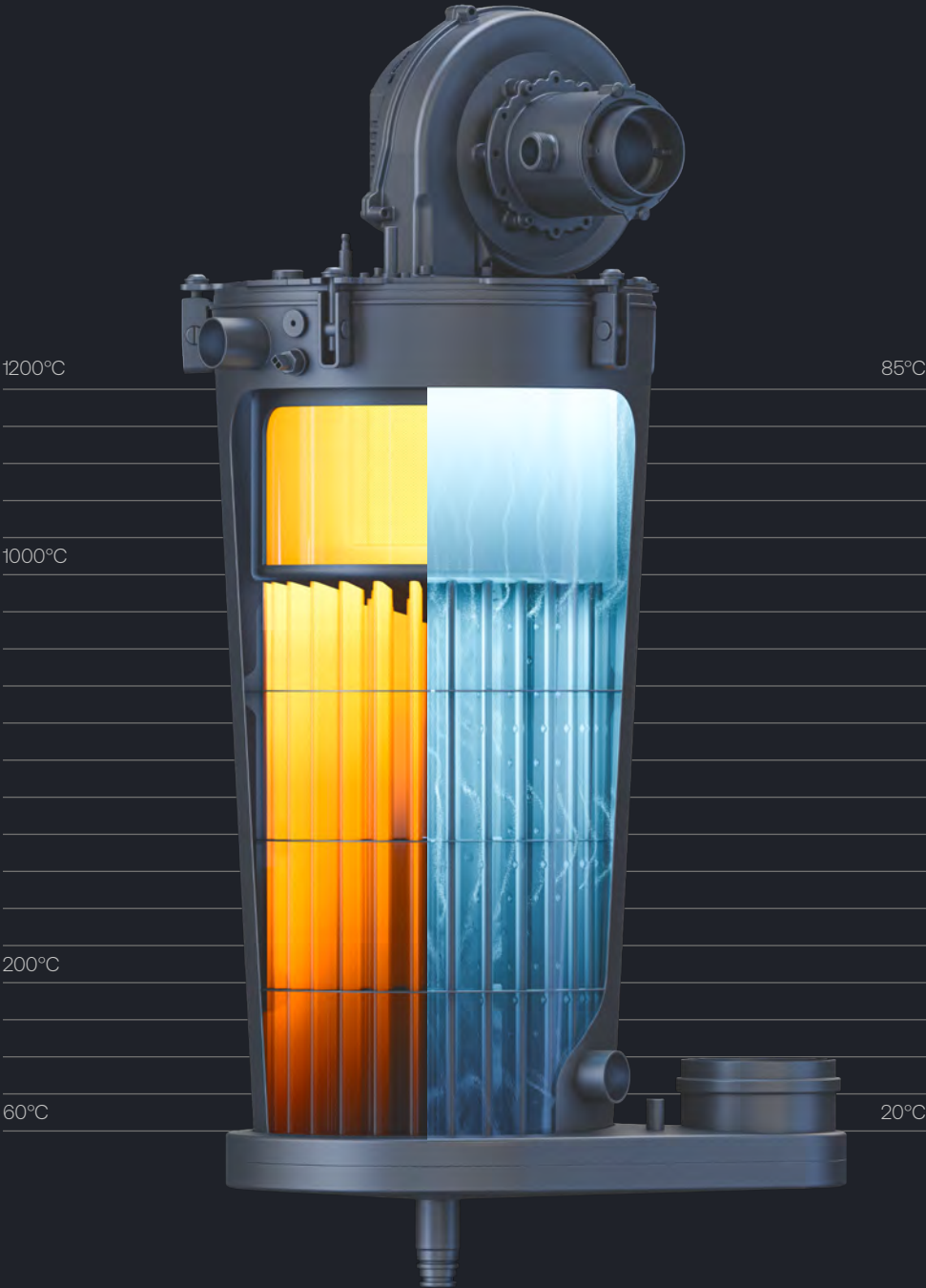
Welded pipework

Resistance to corrosion and oxidation

Stability at high operating temperatures

High Technology AIC

Fire Tube Exchanger



Flue gas flow

Combustion

The efficient combustion process begins as the air/gas mixture enters the burner and ensures low NOx levels and a wide modulation range (up to 1:12).

Exchange

Energy transfer is maximised by the turbulence created by the flow of flue gas from top to bottom against the flow of water.

Low maintenance and long life

The Fire Tube exchanger is self-cleaning thanks to the condensates that run from the top to the bottom of the vertical flue pipes. In this way they keep the internal surface of the pipes clean, guaranteeing constant high performance over time and considerably limiting maintenance interventions.

Very high performance

The completely immersed flue gas tubes of the Fire Tube exchanger, with their exclusive design with high heat transfer coefficient between water and smoke, ensures an optimal counter-current exchange over the entire length of the exchanger. This particular design allows AIC condensing boilers to reach very high efficiency, without the risk of oxidation.

Water flow

Circulation

Water flows are directed by special diaphragms to ensure excellent heat transfer and low pressure drops.

Water flow

The water completely envelops the fire tubes of the heat exchanger, and the flows rise from the bottom to the top, countercurrent to the flue gases

Condensation

The condensation process promotes a self-cleaning function within the fire tubes, which precipitates impurities and greatly reduces maintenance operations.

Stable temperature and low pressure drops

The geometry of the Fire Tube exchanger, thanks to the high water content, gives all AIC boilers a temperature stability, for a more balanced operation, minimizing the risk of overheating, with low pressure drops, both on the water and flue gas sides. The ratio between the water section and the flue gas section has been carefully calculated to achieve the maximum use of energy for a uniform stress on the boiler body.

Wall-hung high efficiency condensing boiler

24 · 32 · 38 · 45 · 60 · 80 · 100 · 115 · 120 · 150

108 %

Thermal efficiency

10:1

Maximum modulation ratio

6

Low NOx burner class

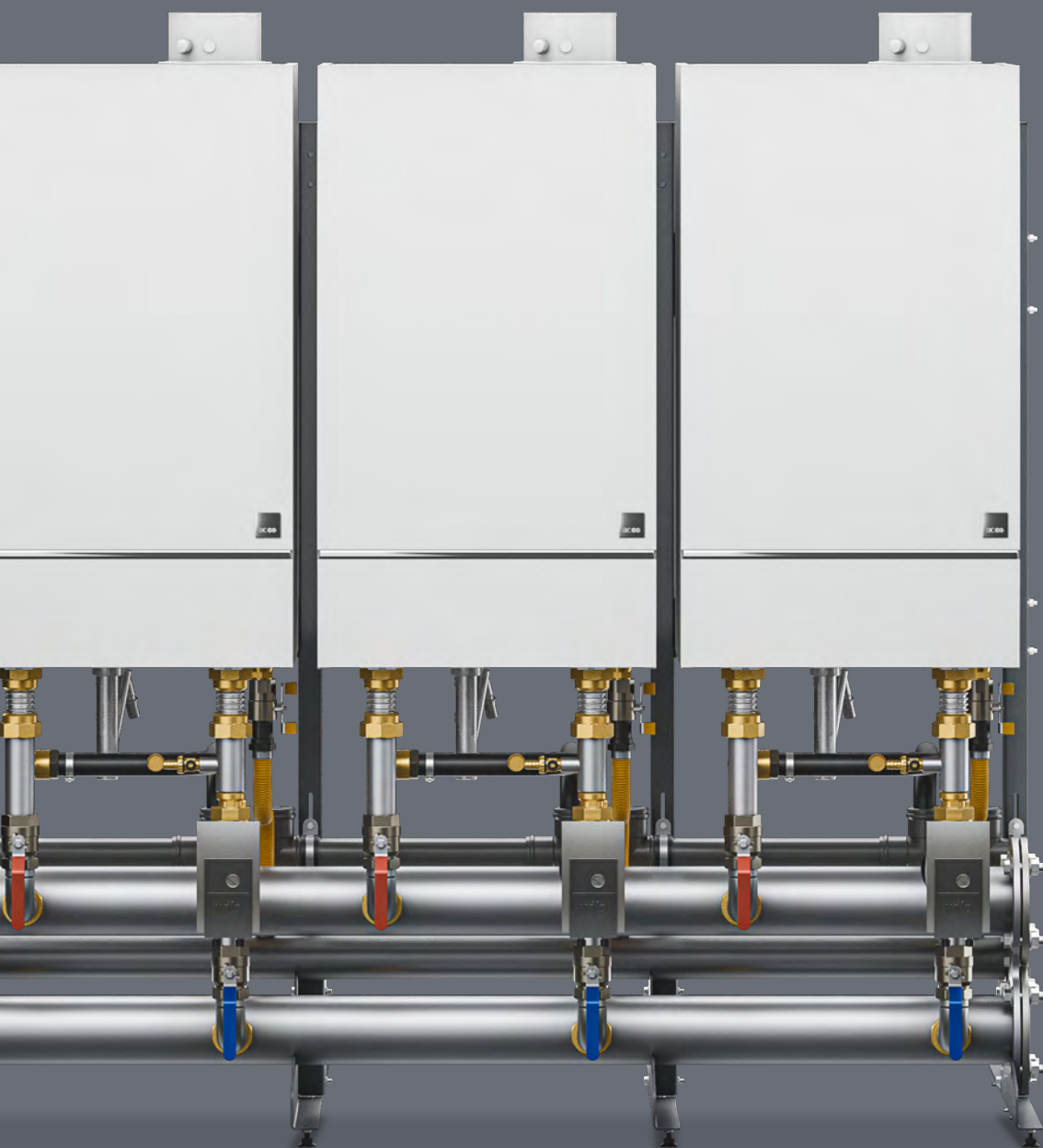
Nesta Chrome – A series of condensing wall hung boilers, with outputs from 24 to 150 kW, perfect for new installations or redevelopment of high end residential and commercial plantrooms. Offering flexible heating solutions for larger output requirements, the Nesta Chrome boilers can be installed in cascade up to 6 boilers in both in-line and back to back formation with an internal controls system.

Nesta Chrome offers a high thermal efficiency at 108% and a large degree of modulation (up to 10:1). A stainless-steel heat exchanger with high water content (up to 28 litres) ensures boiler stability.

Key features and benefits

Self-cleaning flue ways
Fire Tube heat exchanger in stainless steel with self-cleaning flue ways
Internal circuit piping in welded stainless steel
Low pressure drop
Compact dimensions
Reduced maintenance
Very quiet operation

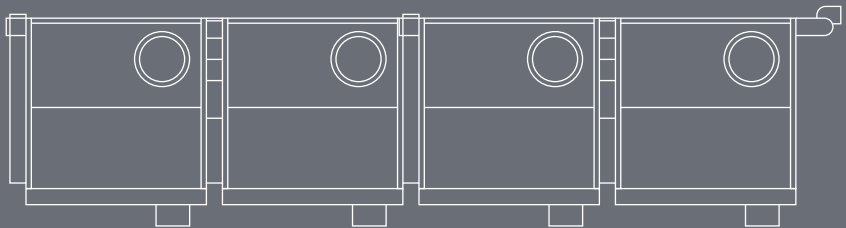
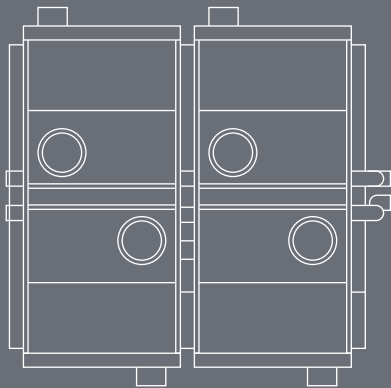




Connectivity

The Nesta Chrome boiler is designed to work in cascade, up to a maximum of 6 boilers and a maximum output of 900 kW. Our cascade system is easy to install thanks to the prefabricated stainless steel hydraulic kits and accessories manufactured by AIC. The perfect solution for medium and large installations where the heating demand fluctuates according to building usage.

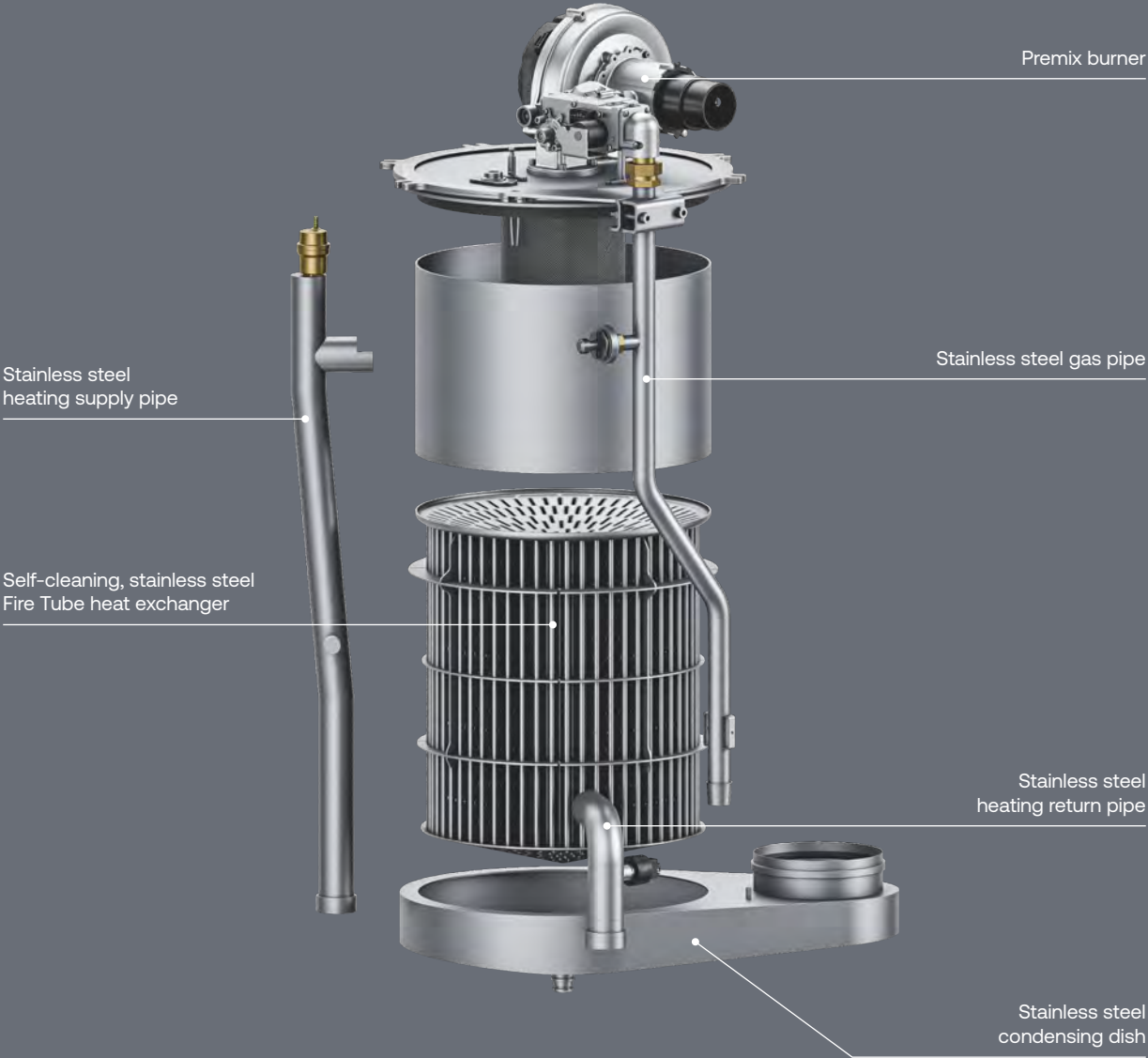
AIC offers a complete and easy to install cascade system, designed to fit multiple layout options. Multiple configurations are available for installation from two to six Nesta Chrome boilers, either in line with wall brackets or mounting frames suitable for in line or back to back installations.



Benefits

- Increased design flexibility
- Quick and easy installation
- Maximum modularity and modulation
- Continuity of operation





Performance			NC 24 WH	NC 32 WH	NC 38 WH	NC 45 WH
Heat input (net)	G20	kW	3,2–24	3,2–32	4,5–38	4,5–38
Heat input (net)	G31	kW	3,2–24	3,2–32	4,5–38	4,5–38
Heat output at 80/60°C	G20	kW	3,1–23,3	3,1–31,1	4,4–37	4,4–37
Heat output at 80/60°C	G31	kW	3,1–23,3	3,1–31,1	4,4–37	4,4–37
Heat output at 50/30°C	G20	kW	3,4–25,4	3,4–33,8	4,8 -40,2	4,8 -40,2
Heat output at 50/30°C	G31	kW	3,4–25,4	3,4–33,8	4,8 -40,2	4,8 -40,2

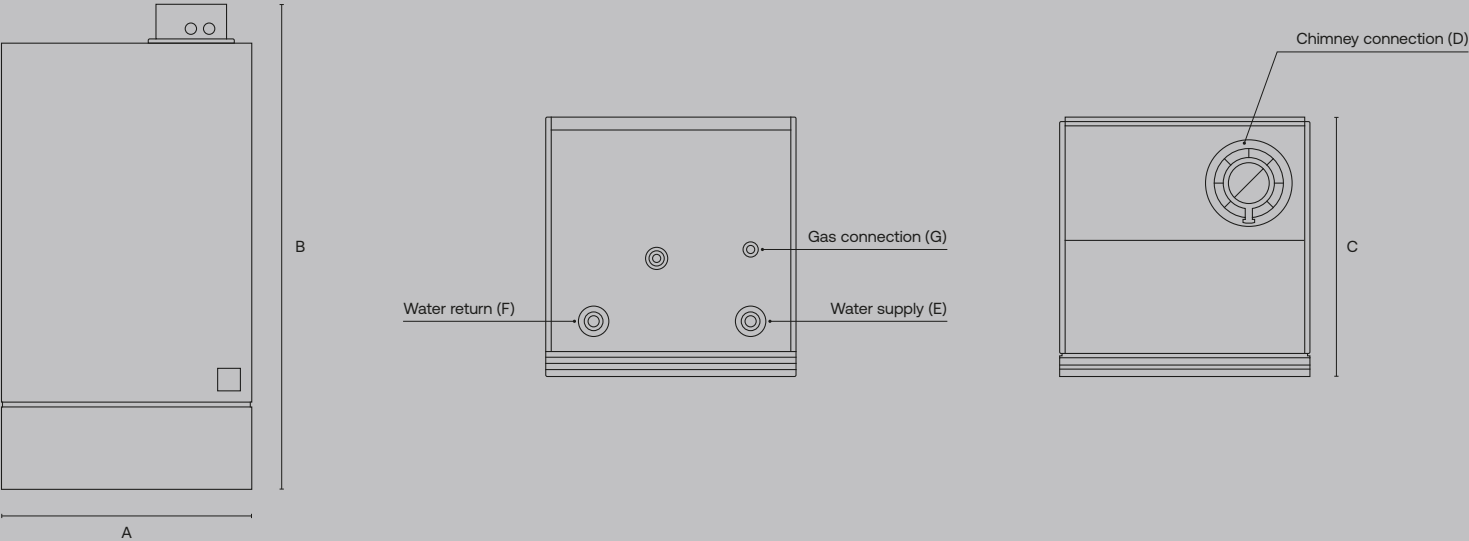
Efficiency						
Heating efficiency 80/60°C	G20/25	%	97	97	97,3	97,3
Heating efficiency 80/60°C	G31	%	97	97	97,3	97,3
Heating efficiency 50/30°C	G20/25	%	105,9	105,7	105,7	105,7
Heating efficiency 50/30°C	G31	%	105,9	105,7	105,7	105,7
Useful efficiency at 30% (return 30°C)	G20/25	%	108,4	108,4	107,7	107,7
Seasonal efficiency		%	93	93	93	93

General						
Water content	I		8	8	11,5	11,6
Gas category			I2E(S,R), I2H, I2E, I2ELL, I2EK, I3P, II2E3P, II2EK3P, II2L3P, II2H3P, II2Er3P			
Gas type			G20–G25–G25,3–G31			
Chimney type(s)			B23–B23P–C13(x)–C33(x)–C43(x)–C53(x)–C63(x)–C83(x)–C93(x)			
CO emission		mg/kWh	25	31	43	57
Gas flow rate (G20)		m³/h	0,34–2,54	0,34–3,37	0,47–4,01	0,47–4,75
Gas flow rate (G25)		m³/h	0,38–2,87	0,38–3,84	0,54–4,54	0,54–5,37
Gas flow rate (G31)		m³/h	0,13–0,96	0,13–1,29	0,18–1,53	0,18–1,81
NOx class			6	6	6	6
Energy class			A	A	A	A

Dimensions		NC 24 WH	NC 32 WH	NC 38 WH	NC 45 WH
Boiler width (A)	mm	445	445	445	445
Boiler height (B)	mm	880	880	880	880
Boiler depth (C)	mm	400	400	400	400
Chimney height	mm	100	100	100	100
Empty weight	kg	53	53	64	64

Connections

Chimney connection (concentric) (D)	mm	80/125	80/125	80/125	80/125
Water supply (E)	in	3/4	3/4	1	1
Water return (F)	in	3/4	3/4	1	1
Gas connection (G)	in	3/4	3/4	3/4	3/4



Performance			NC 60 WH	NC 80 WH	NC 100 WH	NC 115 WH	NC 120 WH	NC 150 WH
Heat input (net)	G20	kW	8,2–57,5	8,2–80	12–99	12–115	12–120	12–141
Heat input (net)	G31	kW	8,4–57,5	8,4–80	12,5–99	12,5–115	12,5–120	14–150
Heat output at 80/60°C	G20	kW	8,0–55,8	8,0–77,7	11,8–96,5	11,8–112,2	11,8–117,1	11,8–137,2
Heat output at 50/30°C	G20/G25	kW	8,8–60,7	8,8–84,4	12,9–105,2	12,9–122,1	12,9–127,4	13–151,3

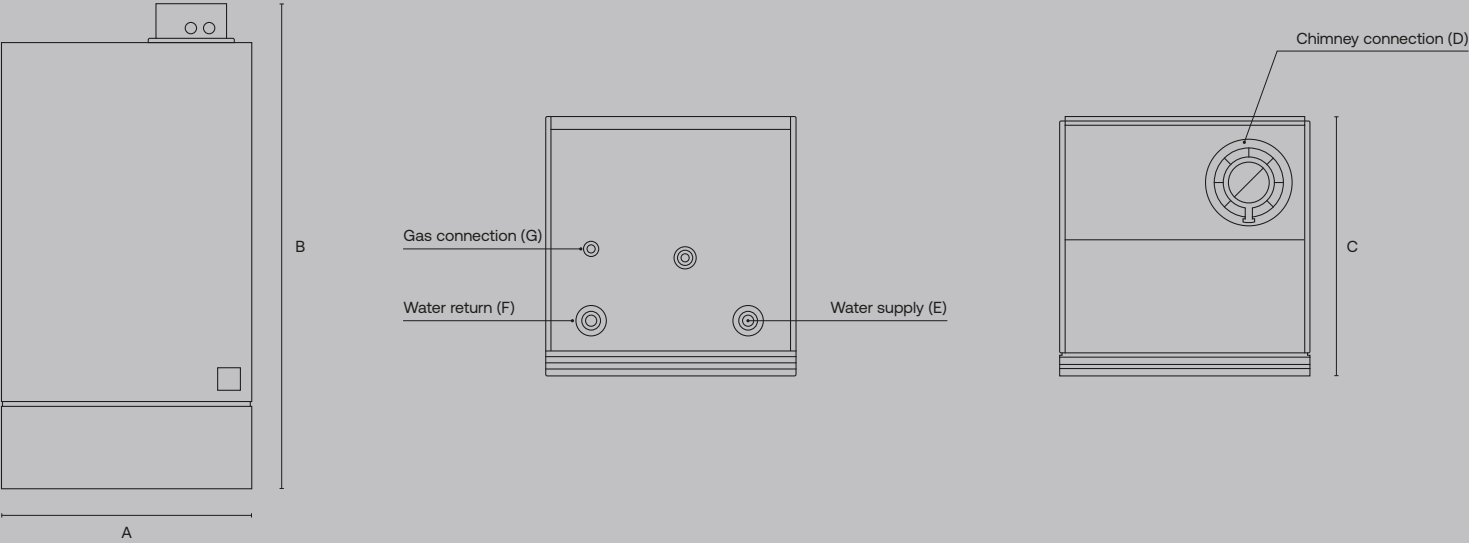
Efficiency								
Heating efficiency 80/60°C	G20/25	%	97,8–97,1	97,8–97,1	98–97,6	98–97,6	98–97,6	98,3–98,2
Heating efficiency 50/30°C	G20/25	%	107,9–105,5	107,9–105,5	107,8–106,2	107,8–106,2	107,8–106,2	108–107,3
Useful efficiency at 30% (return 30°C)	G20/25	%	108,4	108,3	108,3	108,2	108,2	108,1
Seasonal efficiency		%	93	93	93	93	93	93

General							
Water content	I	19,3	17,6	26,3	25,2	25,2	28,3
Gas category	I2E(R), I2E(S), I2E, I2EK, I2ELL, I2H, I3P, II2E3P, II2EK3P, II2Er3P, II2H3P, II2L3P						I2E(S,R), I2H, I2E, I3P, II2E3P, II2L3P, II2H3P, II2Er3P
Gas type	G20–G25–G25.3–G31						G20–G31
Chimney type(s)	B23–B23P–C13(x)–C33(x)–C43(x)–C53(x)–C63(x)–C83(x)–C93(x)						
CO emission	mg/kWh	64,8	32	80,2	69,7	69,7	68,7
Gas flow rate (G20)	m³/h	0,85–6,1	0,84–8,44	1,22–10,29	1,28–11,89	1,28–12,4	1,6–15,35
Gas flow rate (G25)	m³/h	0,95–6,74	0,94–9,45	1,38–11,74	1,38–13,3	1,38–13,90	–
Gas flow rate (G31)	m³/h	0,35–2,37	0,40–3,22	0,52–4,05	0,5–4,63	0,50–4,83	0,59–5,88
NOx class		6	6	6	6	6	6
Energy class		A	A	A	A	A	A

Dimensions		NC 60 WH	NC 80 WH	NC 100 WH	NC 115 WH	NC 120 WH	NC 150 WH
Boiler width (A)	mm	550	550	550	550	550	550
Boiler height (B)	mm	980	980	980	980	980	980
Boiler depth (C)	mm	511	511	562	562	562	612
Chimney height	mm	85	85	85	85	85	85
Empty weight	kg	71	75	93	96	96	117

Connections

Chimney connection (concentric) (D)	mm	100/150	100/150	100/150	100/150	100/150	100/150
Water supply (E)	in	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4
Water return (F)	in	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4
Gas connection (G)	in	3/4	3/4	3/4	3/4	3/4	3/4



Floor-Standing condensing boiler

120 · 160 · 200 · 250 · 300

108 %

Thermal efficiency

10:1

Maximum modulation ratio

6

Low NOx burner class

A wide range of high output Floor-Standing condensing boilers, sized from 120 to 300 kW. Suitable for medium or large residential and commercial installations. Perfect for new build projects or renovations that require a high and dependable heat output. Our stainless steel heat exchanger ensures high efficiency and reliability, with a compact size and small footprint.

The internal control unit of the Nesta boilers allows for management of cascades up to 6 boilers in a series of direct and mixed circuits and additional DHW circuit, with boiler management and alarm. The Nesta is also equipped for remote management via ethernet network or GSM router.

Key features and benefits

Self-cleaning flue ways

Stainless steel heat exchanger

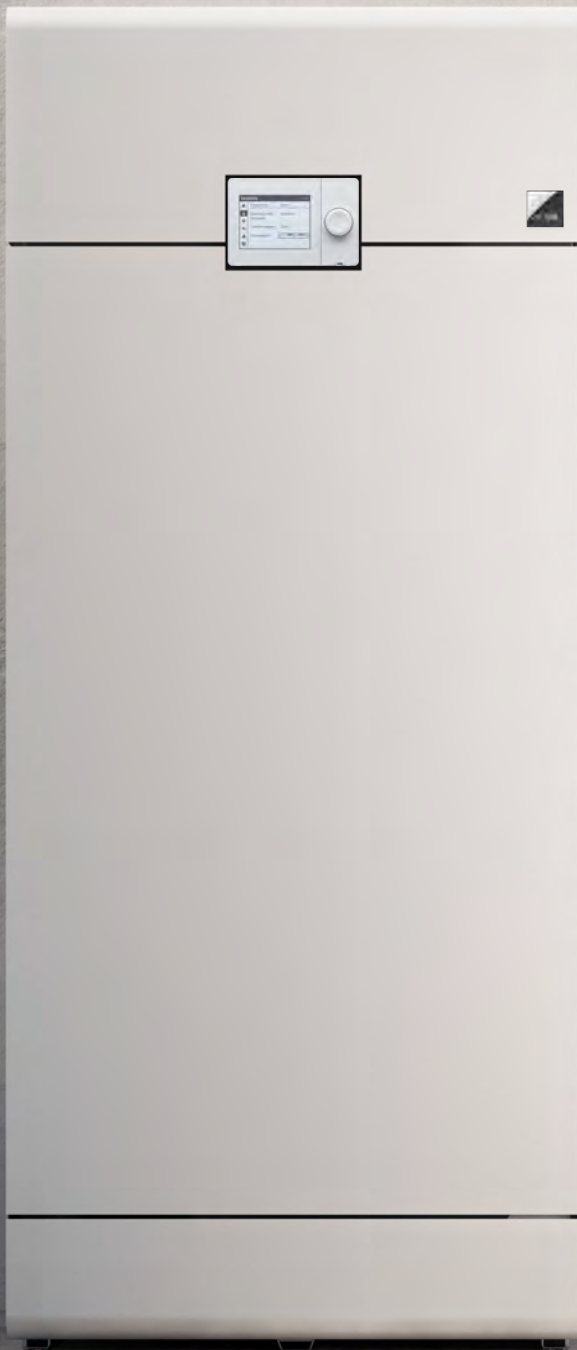
Internal circuit piping in welded stainless steel

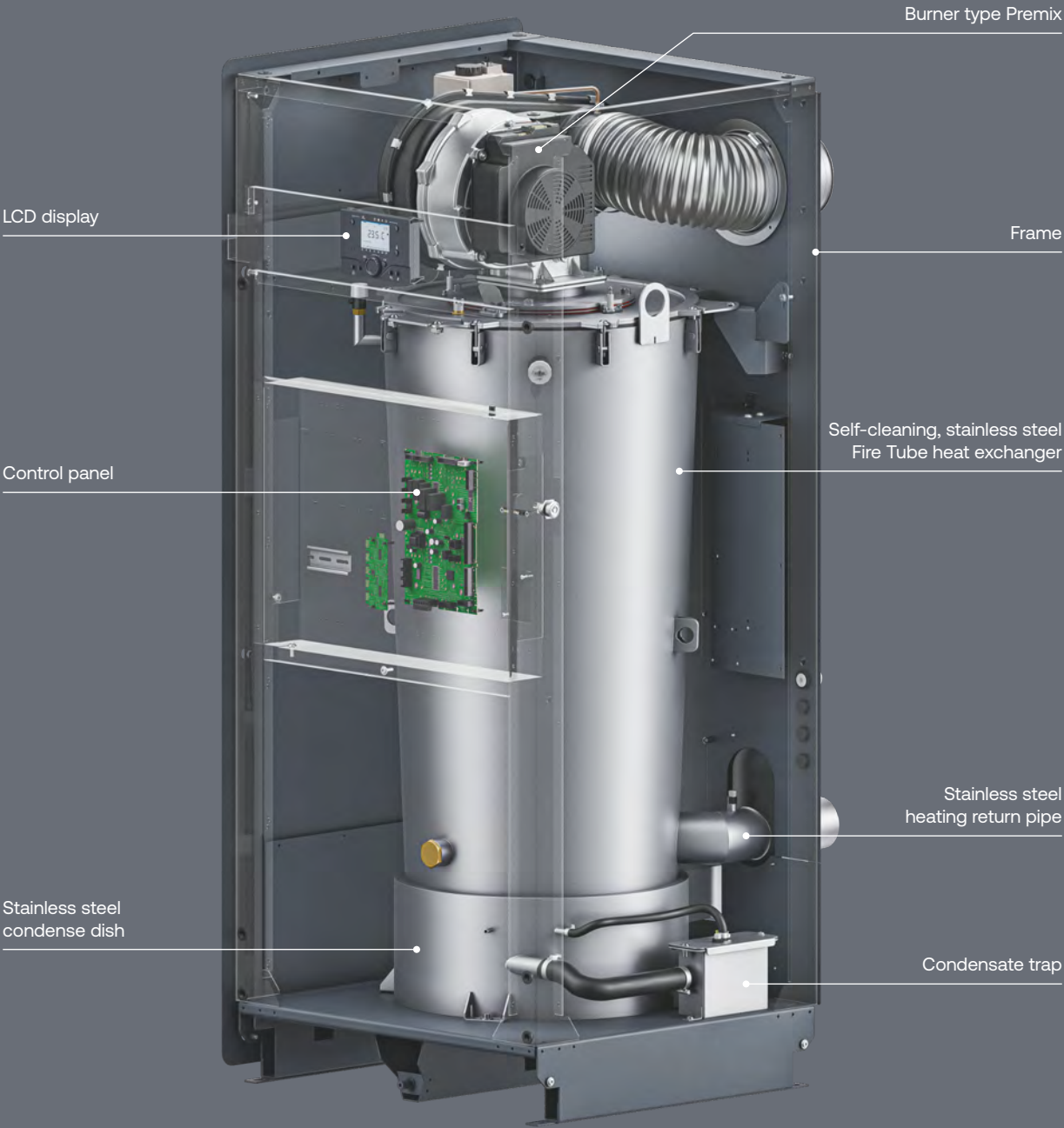
Low pressure drop

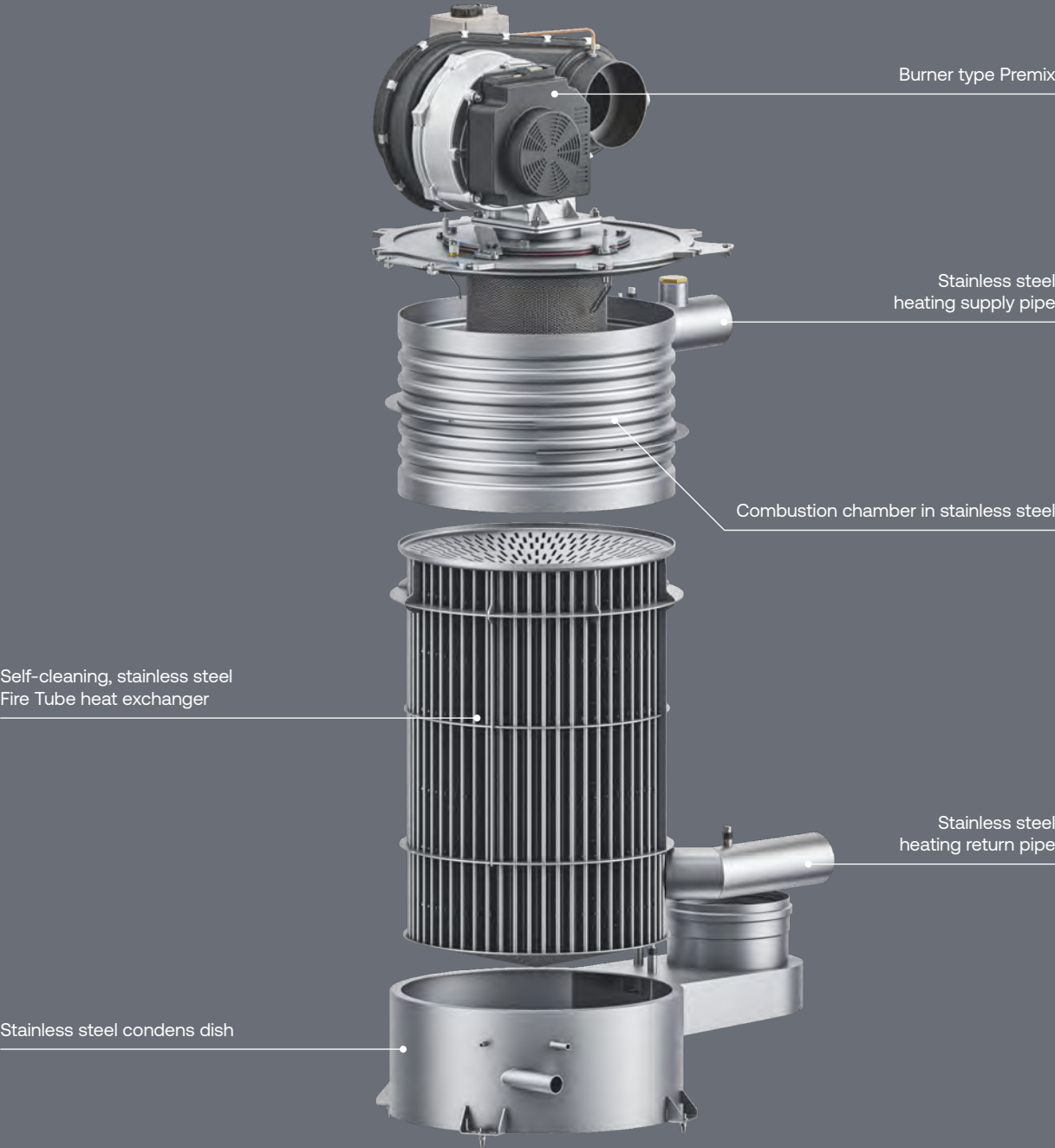
Compact dimensions

Reduced maintenance

Can be installed in cascade up to 6 boilers







Performance			N 120	N 160	N 200	N 250	N 300
Heat input (net)	G20	kW	11,2–115,5	19–150	25–190	25,5–232	31,0–280,0
Heat input (net)	G31	kW	28,9–115,5	37,9–150	47,5–190	58–232	55,0–280,0
Heat output at 80/60°C	G20	kW	10,8–112,8	18,3–146,6	24,2–185,6	24,6–226,7	30,0–272,0
Heat output at 80/60°C	G31	kW	27,9–112,8	36,6–146,5	46–185,6	56,2–226,7	53,3–273,8
Heat output at 50/30°C	G20	kW	12–124	20,4–161,2	26,8–204,2	27,4–249,7	33,2–300,0
Heat output at 50/30°C	G31	kW	30,5–122	40–158,4	50–200,5	61,4–244,5	57,9 –295,1

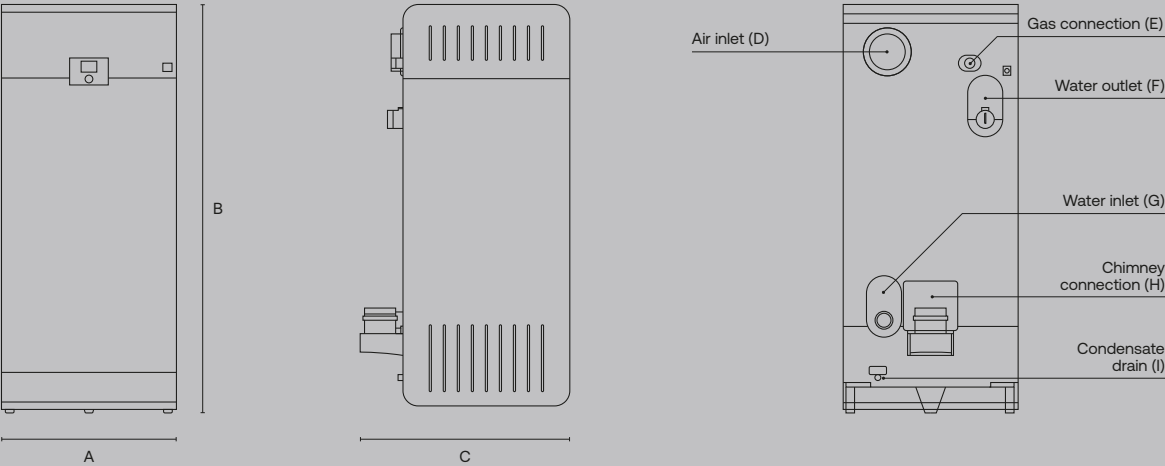
Efficiency							
Heating efficiency 80/60°C	%	96,5–97,8	96,5–97,8	96,8–97,7	96,5–97,7	96,8–97,3	
Heating efficiency 50/30°C	%	107,4–107,5	107,4–107,5	107,2–107,5	107,6–107,7	107,2–107,1	
Useful efficiency at 30% (return 30°C)	%	108,7	108,3	108	108	108,1	
Seasonal efficiency	%	93	93	93	93	93	

General							
Water content	l	51	47	66	62	75	
Gas categories	I2H, I2E, I2E(S), I2E(R), I2ELL, I2HS, I2N, I2EK, I3P, II2E3P, II2E(S)3P, II2E(R)3P, II2EK3P, II2H3P, II2L3P, II2E+3P, IIEsi3P, II2Er3P						
Gas types	G20–G25–G25.1–G25.3–G31						
Chimney type(s)	B23–B23P–C43–C53–C63–C83						
CO emission	mg/kWh	64,5	64,5	64,5	64,5	66,6	
Gas flow rate (G20)	m³/h	1,1–10,7	1,6–14,3	2–18,2	1,7–21,9	3,29–29,02	
Gas flow rate (G31)	m³/h	1,2–4,5	1,5–6	1,9–7,6	2,3–9,2	2,25–11,51	
NOx class		6	6	6	6	6	

Dimensions		N 120	N 160	N 200	N 250	N 300
Boiler width (A)	mm	648	648	648	648	648
Boiler height (B)	mm	1524	1524	1524	1524	1524
Boiler depth (C)	mm	631	631	631	631	890
Empty weight	kg	185	199	224	236	295

Connections

Air inlet (D)	mm	125	125	125	125	130
Gas connection (E)	in	3/4	3/4	1	1	BSPP 1 1/2
Water outlet (F)	in	2	2	2 1/2	2 1/2	BSPP 2 1/2
Water inlet (G)	in	2	2	2 1/2	2 1/2	BSPP 2 1/2
Chimney connection (H)	mm	130	130	180	180	180
Condensate drain (I)	mm	25	25	25	25	25



High output Floor-Standing condensing boiler

280 · 350 · 420 · 570 · 700 · 840 · 1080 · 1260

108 %

Thermal efficiency

7:1

Maximum modulation ratio

6

Low NOx burner class

Floor-Standing condensing boiler, with outputs from 280 to 1260 kW. This range makes the Nesta Plus boilers particularly suitable for commercial and industrial installations requiring greater thermal output. The standard electronic controller on the Nesta Plus is designed for the management of up to 6 boilers in cascade. This also controls the boiler management functions, alarms, and a multi-circuit installation when utilising additional accessories. It is also possible to manage the boiler, cascade and the entire system via ethernet network or GSM router (with WEB Server Module). In addition, the high water content (up to 600 litres) promotes operational stability, and a high efficiency of yield (108%).

Key features and benefits

Self-cleaning flue ways

Internal circuit piping in welded stainless steel

Low pressure drop

Compact dimensions

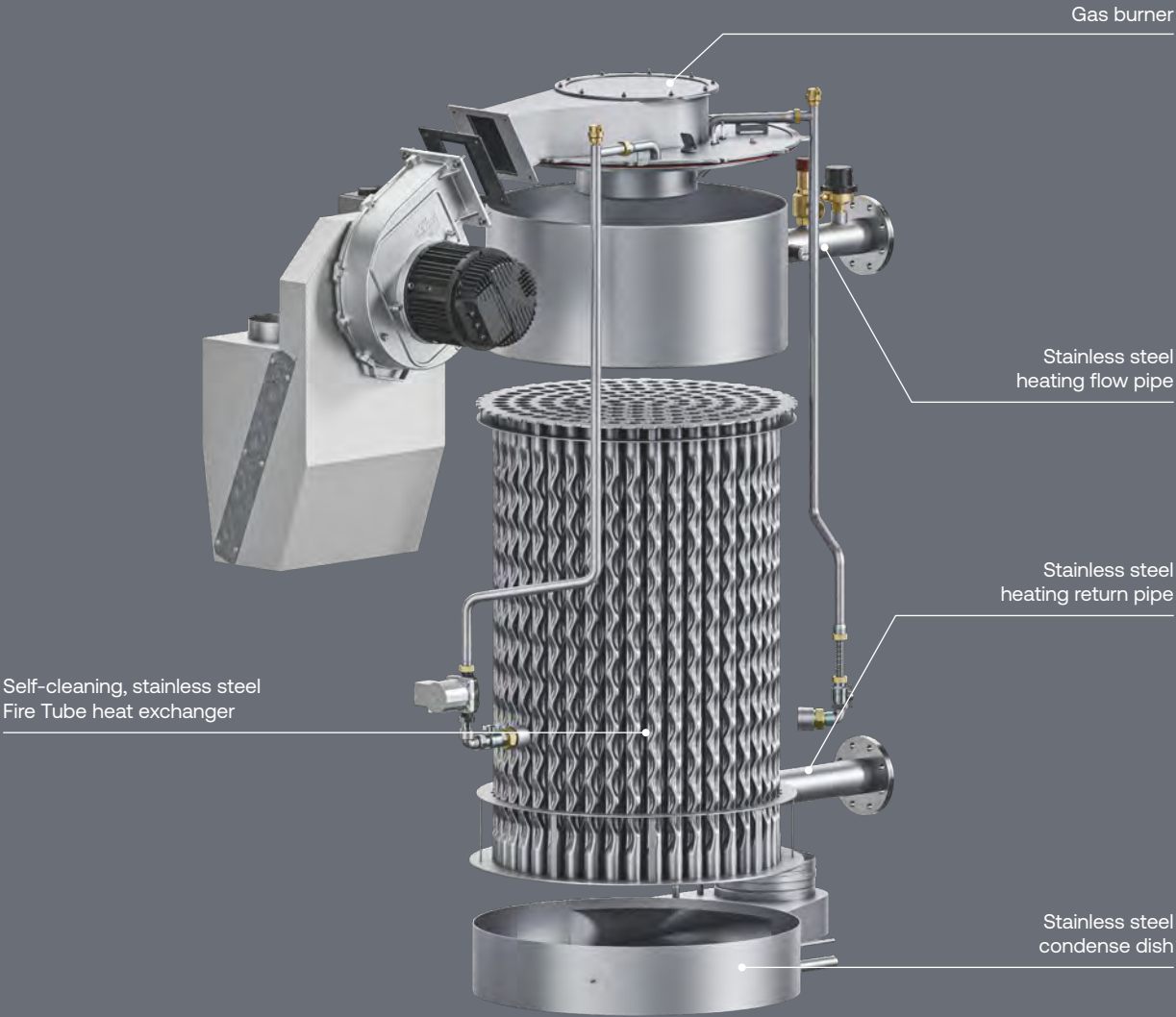
Reduced maintenance

Stainless steel heat exchanger

Lifting points for transportation and positioning







Performance			NP 280 FSW	NP 350 FSW	NP 420 FSW	NP 570 FSW
Heat input (net)	G20	kW	44,0–265,0	48,0–325,0	59,0–401,2	90,0–530,0
Heat input (net)	G31	kW	66,0–265,0	80,0–325,0	99,0–401,2	124,0 -530,0
Heat output at 80/60°C	G20	kW	42,8–259,5	46,7–317,7	57,3–392,0	87,6–518,0
Heat output at 80/60°C	G31	kW	64,0–258,0	77,8–317,1	96,5–391,5	120,0–515,0
Heat output at 50/30°C	G20	kW	47,7–283,6	52,0–346,3	63,8–431,7	97,1–562,8
Heat output at 50/30°C	G31	kW	70,0–276,8	85,0–338,3	105,5–421,0	132,0 -556,0

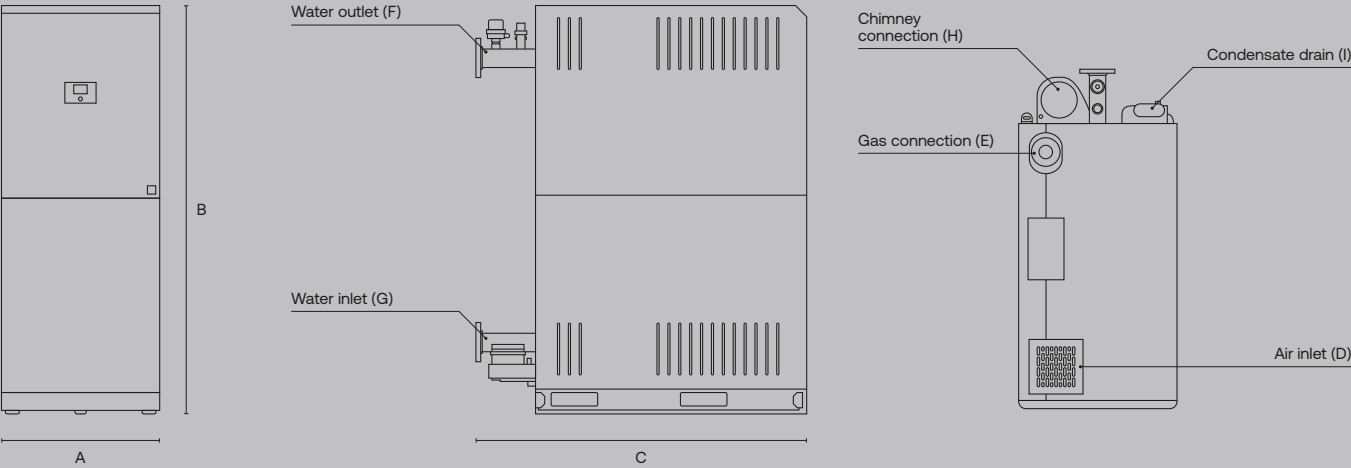
Efficiency						
Heating efficiency 80/60°C		%	97,3–97,9	97,3- 97,8	97,2–97,7	97,4–97,8
Heating efficiency 50/30°C		%	108,4–107,0	108,4–106,6	108,2–107,6	107,9–106,2
Useful efficiency at 30% (return 30°C)		%	108,7	108,7	108,4	109,0
Seasonal efficiency		%	93	93	93	93

General						
Water content		l	291	291	390	444
Gas category			I2E(S), I2E, I2H, I2ELL, I2HS, I2N, I2EK, I3P, I2E(R), II2E3P, II2E(S)3P, II2EK3P, II2H3P, II2L3P, II2E+3P, II2E(R)3P, II2Esi3P, II2Er3P, IIELL3P			
Gas type			G20–G25–G25.1–G25.3–G31			
Chimney type(s)			B23–B23p–C43–C53–C63–C83			
CO emission		mg/kWh	20,4	27,9	24,7	17,18
Gas flow rate (G20)		m³/h	4,5–27,8	5,0–33,4	6,3–41,6	9,2–54,8
Gas flow rate (G31)		m³/h	2,7–11,1	3,3–13,3	3,7–15,0	5,1–20,7
NOx class			6	6	6	6

Dimensions		NP 280 FSW	NP 350 FSW	NP 420 FSW	NP 570 FSW
Boiler width (A)	mm	762	762	762	865
Boiler height (B)	mm	1970	1970	1970	1970
Boiler depth (C)	mm	1306	1306	1306	1556
Empty weight	kg	549	549	624	728

Connections

Air inlet (D)	mm	150	150	150	250
Gas connection (E)	in	G 1 1/2	G 1 1/2	G 1 1/2	Flange DN 65 Class PN 6
Water outlet (F)	in	Flange DN 80 Class PN 16	Flange DN 80 Class PN 16	Flange DN 80 Class PN 16	Flange DN 80 Class PN 16
Water inlet (G)	in	Flange DN 80 Class PN 16	Flange DN 80 Class PN 16	Flange DN 80 Class PN 16	Flange DN 80 Class PN 16
Chimney connection (H)	mm	180	180	200	200
Condensate drain (I)	mm	26,7	26,7	26,7	26,7



Performance			NP 700 FSW	NP 840 FSW	NP 1080 FSW	NP 1260 FSW
Heat input (net)	G20	kW	104,0–660,0	107,8–792,0	167,0–1020,0	185,0–1190,0
Heat input (net)	G31	kW	155,0–660,0	197,0–792,0	255,0–1020,0	301,0–1190,0
Heat output at 80/60°C	G20	kW	101,0–644,4	104,7–773,8	163,0–993,5	180,7–1158,7
Heat output at 80/60°C	G31	kW	150,8–645,1	190,9–771,8	249,6–996,5	294,7 -1162,6
Heat output at 50/30°C	G20	kW	112,2–702,6	116,6–835,6	179,4–1082,8	199,0–1258,4
Heat output at 50/30°C	G31	kW	165,2–693,2	210,0–818,1	271,1–1051,6	310,3 -1226,9

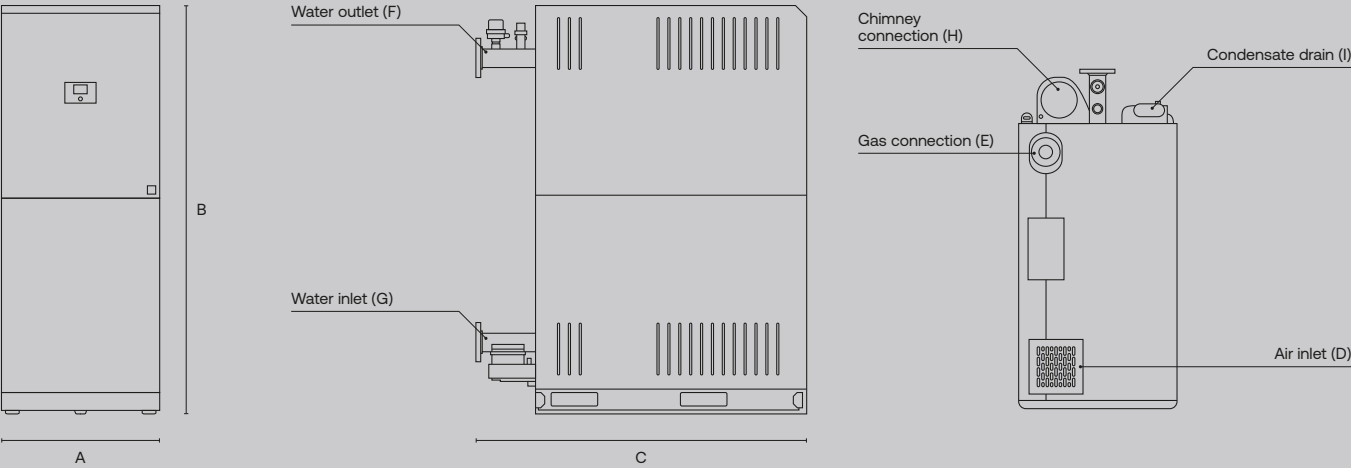
Efficiency						
Heating efficiency 80/60°C		%	97,1–97,6	97,1–97,7	97,7–97,4	97,7–97,4
Heating efficiency 50/30°C		%	107,8–106,5	108,2–105,5	107,5–106,2	107,6–105,8
Useful efficiency at 30% (return 30°C)		%	108,4	108,5	108,1	108,0
Seasonal efficiency		%	93	93	93	93

General						
Water content		l	563	563	600	600
Gas category			I2E(S), I2E, I2H, I2ELL, I2HS, I2N, I2EK, I3P, I2E(R), II2E3P, II2E(S)3P, II2EK3P, II2H3P, II2L3P, II2E+3P, II2E(R)3P, II2Esi3P, II2Er3P, IIELL3P			
Gas type			G20–G25–G25.1–G25.3–G31			
Chimney type(s)			B23–B23p–C43–C53–C63–C83			
CO emission		mg/kWh	18,26	21,48	21,48	21,48
Gas flow rate (G20)		m³/h	10,6–68,0	10,6–77,8	17,5–106,6	19,2–123,6
Gas flow rate (G31)		m³/h	6,3–26,8	7,6–31,0	10,4–41,3	12,4–48,1
NOx class			6	6	6	6

Dimensions		NP 700 FSW	NP 840 FSW	NP 1080 FSW	NP 1260 FSW
Boiler width (A)	mm	865	865	1132	1132
Boiler height (B)	mm	1970	1970	2025	2025
Boiler depth (C)	mm	1556	1556	1806	1806
Empty weight	kg	887	897	1158	1250

Connections

Air inlet (D)	mm	250	250	300	300
Gas connection (E)	in	Flange DN 65 Class PN 6	Flange DN 65 Class PN 6	Flange DN 80 Class PN 16	Flange DN 80 Class PN 16
Water outlet (F)	in	Flange DN 65 Class PN 6	Flange DN 80 Class PN 16	Flange DN 150 Class PN 16	Flange DN 150 Class PN 16
Water inlet (G)	in	Flange DN 80 Class PN 16	Flange DN 80 Class PN 16	Flange DN 150 Class PN 16	Flange DN 150 Class PN 16
Chimney connection (H)	mm	250	250	305	305
Condensate drain (I)	mm	26,7	26,7	33,4	33,4



Combination Floor-Standing
Condensing Boiler

35 · 45 · 60 · 70 · 80 · 100 · 120

3,270 ltr/h

Maximum DHW
production at 40°C

104 %

Useful efficiency
in DHW mode

10:1

Maximum
modulation ratio

Modern living demands energy efficient boilers. Enhanced building insulation has shifted the main requirement of gas consumption from heating to hot water, and in many cases the demands of the hot water service exceed that of heating. Therefore it is important to install an appliance that condenses in both heating and hot water mode, achieving the most from every kW input of gas used.

Key features and benefits

Coil Fire Tube heat exchanger in stainless steel

Self-cleaning flue ways, anti-legionella

Passage through a 75 cm wide doorway

Class 6 low NOx burner

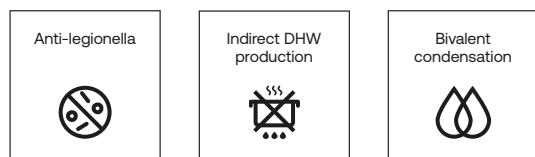
Easy installation and maintenance

Energy class A

Indirect DHW production



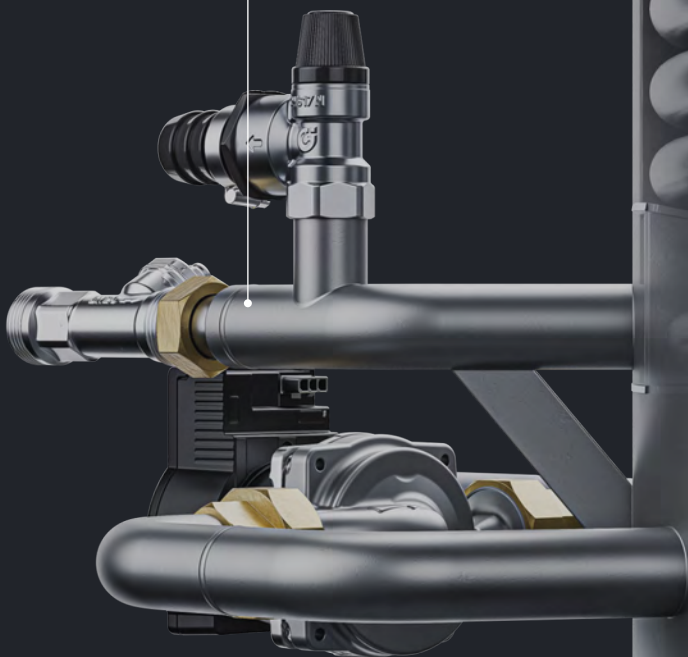
Domestic hot water always in condensing mode

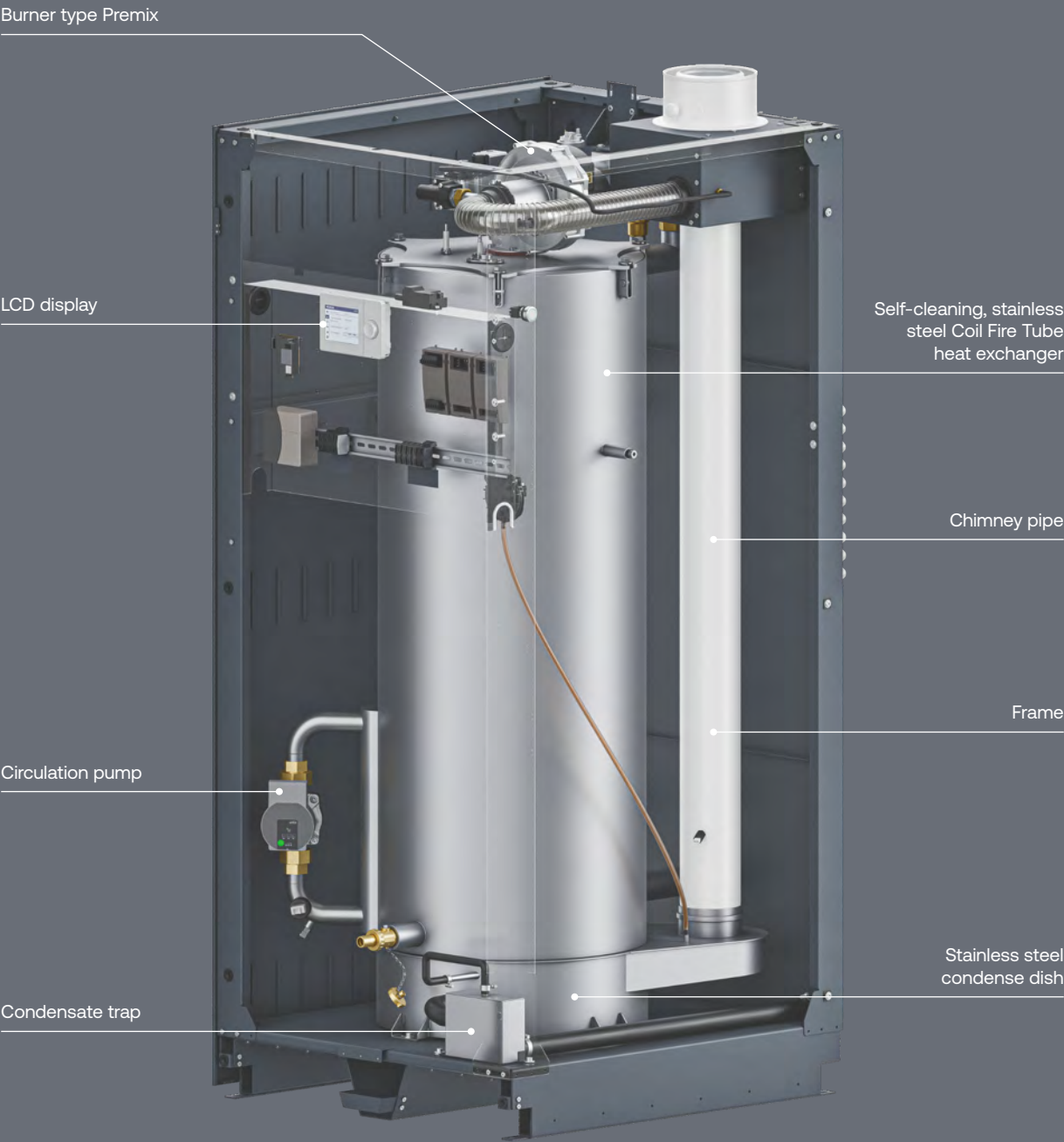


The stainless steel domestic hot water coil is completely immersed in the primary circuit and ensures effective condensation thanks to the low temperatures of inlet water (10-15°C). The high production of continuous DHW is thus delivered consistently by the large heat exchange surface and indirect heat transfer, protecting the coil itself from the harmful limescale deposits which would significantly reduce performance over time. The threat of legionella is negated due to the high operating temperature of both the primary and domestic circuits, allowing for high volume, rapid hot water production.

10°C

Domestic cold water inlet at the bottom of the exchanger promotes a wide condensing mode





Burner type Premix

DHW outlet

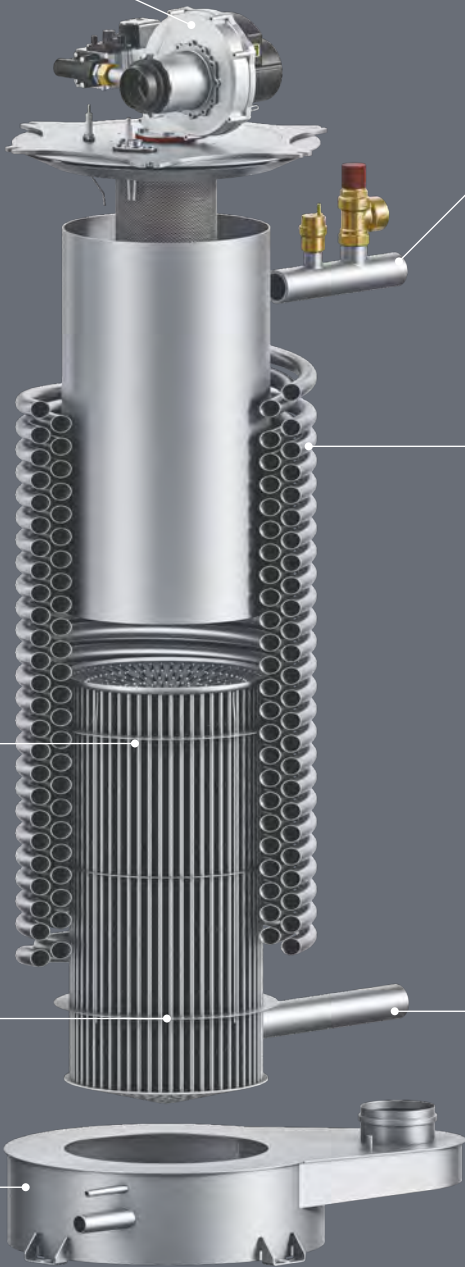
Stainless steel
316L DWH coil

Self-cleaning, stainless steel
Fire Tube heat exchanger

Stainless steel Primary
Flue gas pipes

Stainless steel
heating return pipe

Stainless steel
condense dish



Performance			CM 35	CM 45	CM 60	CM 70	CM 80	CM 100	CM 120
Heat input (net)	G20/G25	kW	5–34,9	5–45	9,5–57,5	9,5–69,9	9,5–80	12,5–99	12,5–115
Heat output at 80/60°C	G20/G25	kW	4,9–34	4,9–43,9	9,2–55,9	9,2–68,2	9,2–77,8	12,1–97,2	12,1–112,9
Heat output at 50/30°C	G20/G25	kW	5,4–37,6	5,4–48,4	10,3–61,6	10,3–74,9	10,3–85,9	13,4–106,9	13,4–124,2

Efficiency									
Heating efficiency 80/60°C	%	97,2–97,3	97,2–97,5	97,1–97,3	97,3–97,5	97,2–97,3	97,5–97,8	97,5–97,9	
Heating efficiency 50/30°C	%	108,3–107,8	108,5–107,6	108,2–107,2	108–107,2	108,4–107,4	107,7–108	107,7–108	
Useful efficiency at 30% (return 30°C)	%	108,3	108,5	108,2	108,0	108,4	108,2	108,2	
Seasonal efficiency	%	92,4	93	92,4	92,3	93	93	93	

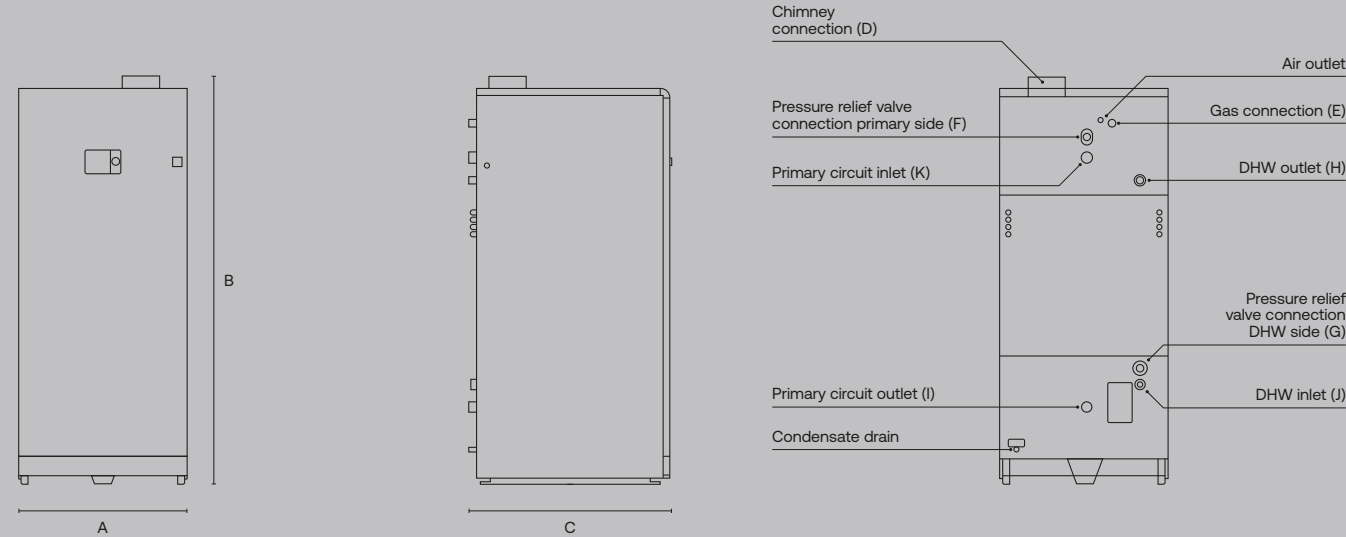
General								
Seasonal space heating energy efficiency class		A	A	A	A	A	A	A
Water heating efficiency class		A	A	A	A	A	A	A
Gas category		I2E(S), I2E, I2Er, I2H, I3P, II2E3P, II2EK3P, II2ELL3P, II2Esi3P, II2H3P, II2L3P					I2E(S), I2E, 2Er, I2H, I3P, II2E3P, II2EK3P, II2Esi3P, II2H3P, II2L3P	
Gas type		G20–G25–G25.3–G31						
Chimney type		B23–B23p–C13–C33–C43–C53–C63–C83–C93						
Primary water content	l	43,6	43,6	63	63	63	83	83
Domestic hot water content	l	10,6	10,6	18	18	18	25	25
CO emission	mg/kWh	5,2	5,2	43,3	43,3	43,3	28,4	28,4
NOx class		6	6	6	6	6	6	6
Max DHW operating temperature	°C	80	80	80	80	80	80	80
Max operating pressure heating (primary)	bar	3	3	3	3	3	3	3
Max operating pressure (DHW)	bar	8	8	8	8	8	8	8
Voltage	V	230	230	230	230	230	230	230

Domestic hot water performance									
1st hour and continuous hour at 40°C	l/min	17,8	22	27,2	32,8	37,2	47,5	54,5	
1st hour and continuous hour at 60°C	l/min	10	12,5	16,3	19,5	22,3	26	30,5	
Water heating efficiency	%	104	104	104	104	104	104	104	
Load profile for water heating		XXL	XXL	XXL	XXL	XXL	XXL	XXL	

Dimensions		CM 35	CM 45	CM 60	CM 70	CM 80	CM 100	CM 120
Boiler width (A)	mm	602	602	632	632	632	698	698
Boiler height (B)	mm	1604	1604	1446	1446	1446	1650	1650
Boiler depth (C)	mm	641	641	774	774	774	801	801
Dry weight	kg	180	180	200	200	200	285	285

Connections

Chimney connection (D)	mm	80/125	80/125	100/150	100/150	100/150	100/150	100/150
Gas connection (E)	in	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Pressure relief valve connection primary side (F)	in	1	1	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4
Pressure relief valve connection DHW side (G)	in	3/4	3/4	1	1	1	1	1
DHW outlet (H)	in	3/4	3/4	1	1	1	1	1
Primary circuit outlet (I)	in	1	1	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
DHW inlet (J)	in	3/4	3/4	1	1	1	1	1
Primary circuit inlet (K)	in	1	1	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2



Floor-Standing Condensing
storage water heater
99 · 230

7,573 ltr/h
Maximum DHW
production at 40°C

6:1
Maximum
modulation ratio

1 m²
Small footprint

Texas is a condensing water heater with integrated storage of 500 litres and an output range from 99 to 230 kW. The unique design of the exchanger, comprised of a large number of helical flue pipes totally immersed in DHW water ensures unrivalled results in hot water performance. This method of heat transfer reduces mechanical stress on the water heater and safeguards durability.

Manufactured from Duplex stainless steel, the Texas water heater is defined by its patented Helical Fire Tube heat exchanger, offering low pressure drop and large surface area for maximum heat transfer.

Key features and benefits

Helical Fire Tube heat exchanger in Duplex stainless steel

High production of peak and continuous DHW

Large heat transfer surface area

Self-cleaning flue gas tubes

High resistance to corrosion

Fast recovery times

Built in destratification pump







Applications

Load profile

4XL

DHW
Condensation



Wherever you need lots of hot water

Hotels

Hospitals

Nursing homes (RSA)

Canteens

School buildings

Sport centres

Campsites

Restaurants

SPAs

Industrial changing rooms

Industrial applications

Food processing applications



Premix burner

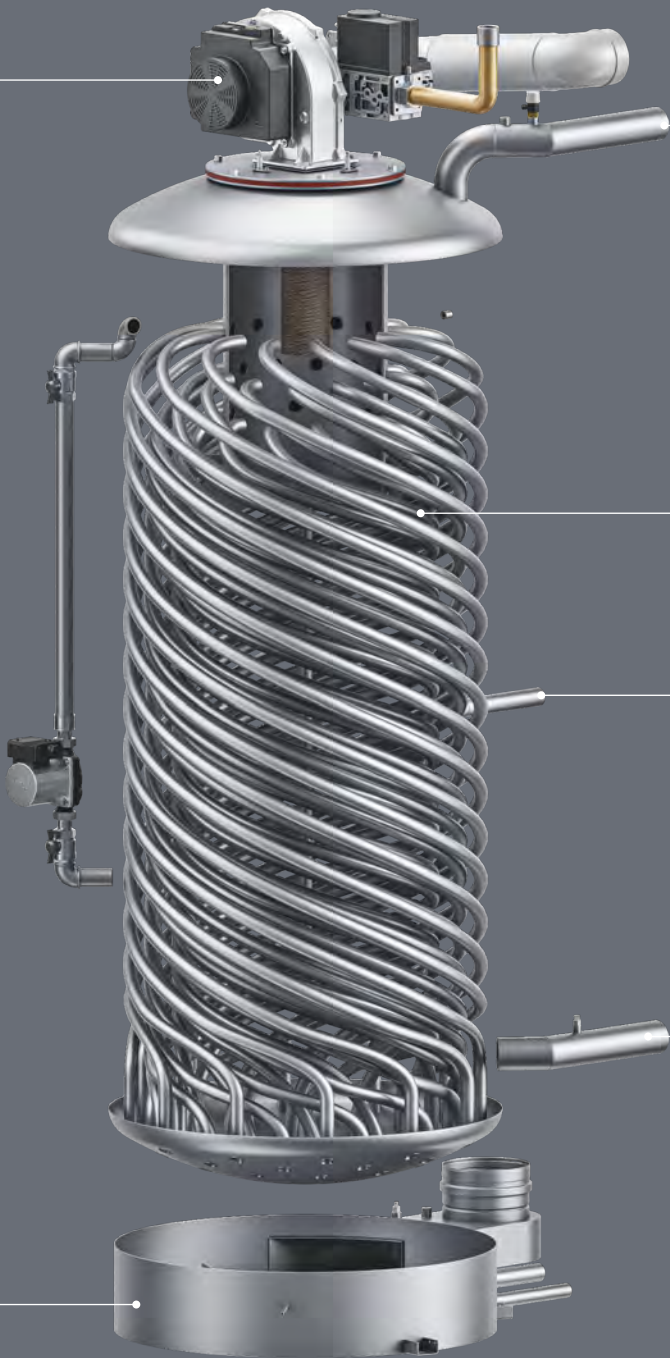
DHW outlet

Self-cleaning, Duplex stainless steel Helical Fire Tube heat exchanger

Water recirculation

Cold water inlet

Duplex stainless steel condense dish



Performance and efficiency			Tx 99	Tx 230
Nominal heat input (Q)	G20	kW	18,3–99	37–230
Nominal heat input (Q)	G31	kW	24–99	54,4–230
Nominal useful output (P)	G20	kW	105,1	246,8
Nominal useful output (P)	G31	kW	105,2	239,5
Efficiency for continuous draw-off at constant dT (ηu)	G20	%	106,2	107,3
Efficiency for continuous draw-off at constant dT (ηu)	G31	%	106,3	104,2

General

Power consumption		W	169	290
Supply voltage / Frequency /Current		V/Hz/A	230/50/6	230/50/6
Water content (V)		ltr	500	500
Minimum water pressure		bar	0,8	0,8
Maximum water pressure		bar	10,0	10,0
Maximum DHW temperature		°C	80	80
Gas type(s)			G20–G25–G25.1–G25.3–G31	
Gas categories			I2E(S), I2E, I2H, I2ELL, I2HS, I2N, I2EK, I3P ,I2E(R), II2E3P, II2E(S)3P, II2EK3P, II2H3P, II2L3P, II2E+3P, II2E(R)3P, II2Esi3P, II2Er3P	
CO emission	G20	mg/kWh	4,3	9,67
CO emission	G31	mg/kWh	10,74	20
NOx level			37,6	37,5
Mass flow rate of flue gases		g/s	8–42	16–96
Maximum flue gas temperature		°C	60	71

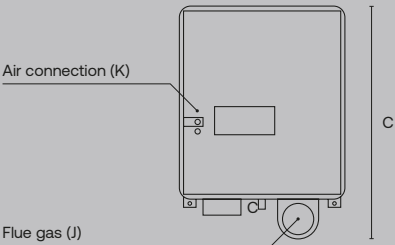
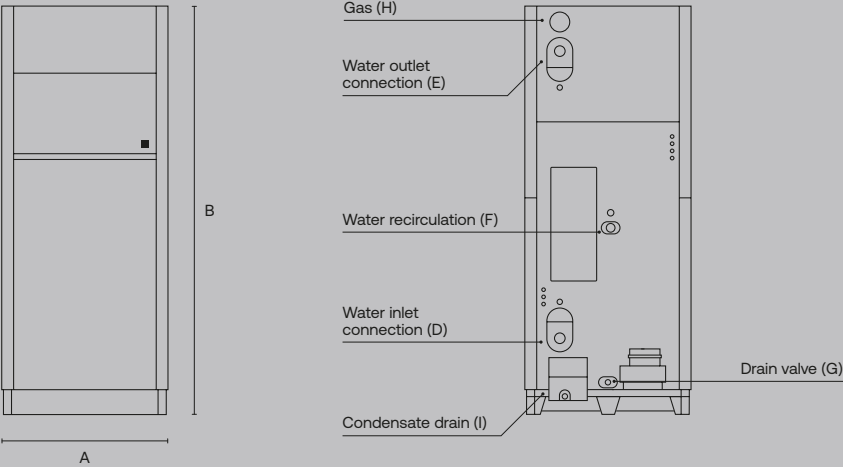
DHW flow rates

Peak flow at 40°C first 10 minutes		ltr/10’	1418	1749
Peak flow at 40°C first hour		ltr/60’	3926	7573
Continuous flow rate at 40°C		ltr/h	3010	6989
Recovery time		min	20	11
Peak flow at 60°C first 10 minutes		ltr/10’	846	1040
Peak flow at 60°C first hour		ltr/60’	2308	4435
Continuous flow rate a 60°C		ltr/h	1754	4075
Recovery time		min	16	8

Dimensions		Tx 99	Tx 230
Width (A)	mm	880	880
Height (B)	mm	2,174	2,174
Depth (C)	mm	1,233	1,233
Empty weight	kg	415	425

Water heater connections

Water inlet connection (D)	in.	G 2	G 2
Water outlet connection (E)	in.	G 2	G 2
Water recirculation (F)	in.	G 1	G 1
Drain valve (G)	in.	G 2	G 2
Gas (H)	in.	G 3/4	G 1 1/4
Condensate drain (I)	in.	26,7	26,7
Flue gas (J)	mm	150	150
Air connection (K)	mm	100	100



The modern plantroom solution.
Our contribution into a greener future

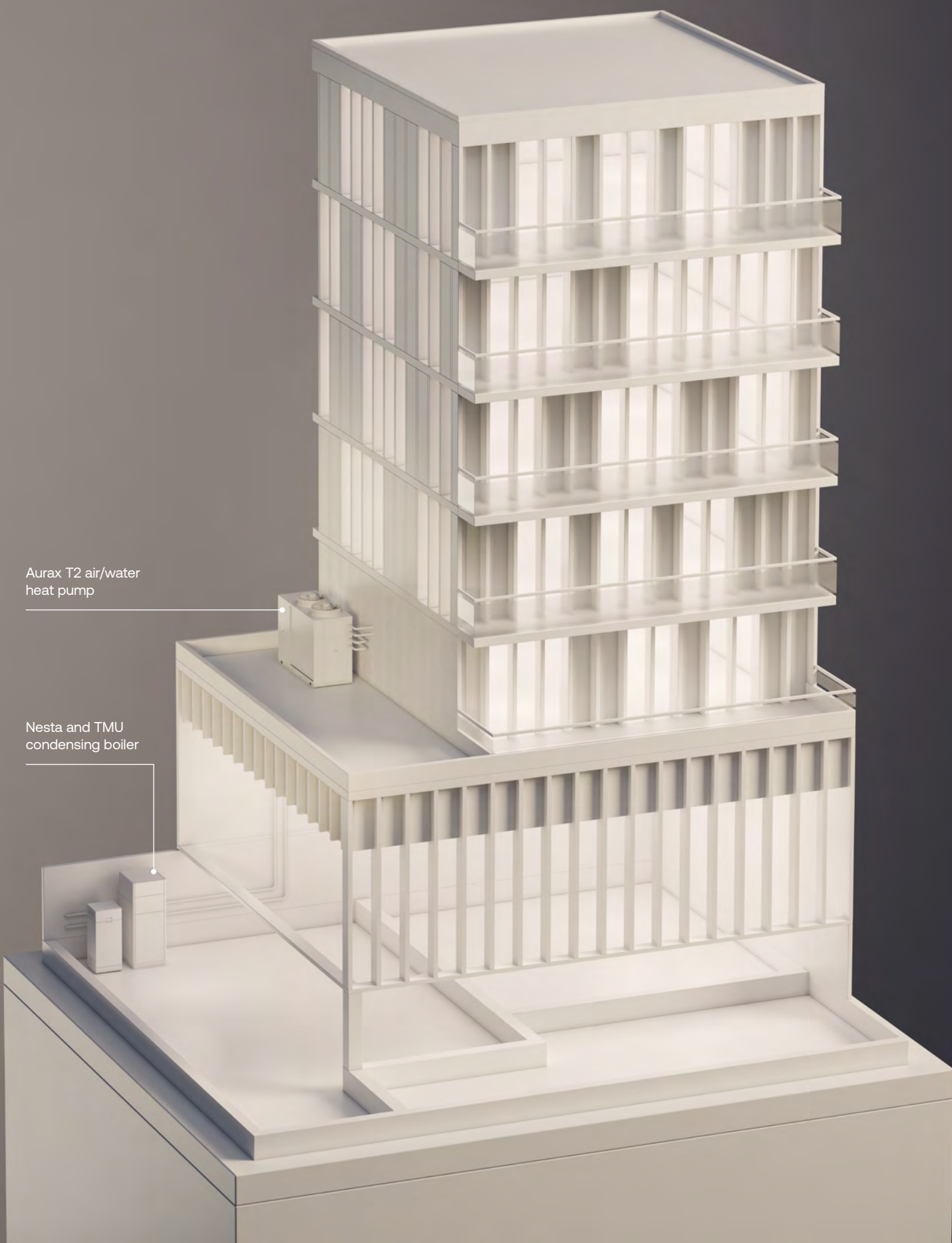
In Europe, there are 120 million heating systems, 60% of them are in class C and D. (source: EHI). A hybrid installation is an excellent solution for the evolution of integrated hydronic systems for environmental comfort (Seasonal heating and air conditioning with DHW). Delivering ambient comfort for the future.

The term ‘hybrid’ refers to an appliance or installation that combines at least two different energy sources and whose operation is managed by one control. The most common option is a hybrid system which combines an electric heat pump with a condensing boiler.

The option of drawing from different technologies makes hybrid systems very efficient; depending on your building's insulation value, the installation will respond to demand, generally running the heat pump during spring and autumn seasons. It will then employ the condensing boiler during the coldest days of the year for maximum comfort.

Main features and benefits

Embracing renewable energy
Significant carbon savings
Great energy efficiency and CO2 emission reductions
Help balance demand on the electricity grid
Suitable for many building contexts
Ready for green energy



Aurax T2 air/water
heat pump

Nesta and TMU
condensing boiler



The hybrid solution specially designed by AIC is particularly suited to the redevelopment of existing residential buildings, buildings and apartment blocks with centralised systems. This will perform to obtain the highest possible efficiency in heating as well as producing all the domestic hot water needed.



The system consists of

The heat pump generator

High efficiency gas boiler (single or in cascade)

Thermal Management Unit (TMU)

Thermal Management Unit
500 · 800

100 %
Stainless steel

6 bar
Operating pressure

Introducing the Thermal Management Unit—the ultimate solution for efficient heat management. Combining a cutting-edge stratification buffer tank with a hybrid heat controller exploiting all the industry's recent standards, this unit offers unparalleled performance and versatility.

Featuring pure stainless steel stratification heat storage, the TMU is designed for simultaneous operation of multiple heat sources, utilising a separation diaphragm to maximise heat input from the Heat Pump. With an operating pressure of 6 bar, the TMU is engineered to handle the demands of even the most complex heating systems. The advanced energy management regulator ensures that you always use the most economical form of energy, all housed within an elegant and robust casing available in TMU 500/800.

Main features and benefits

Heat source control

Maximises renewable input

Stainless steel construction

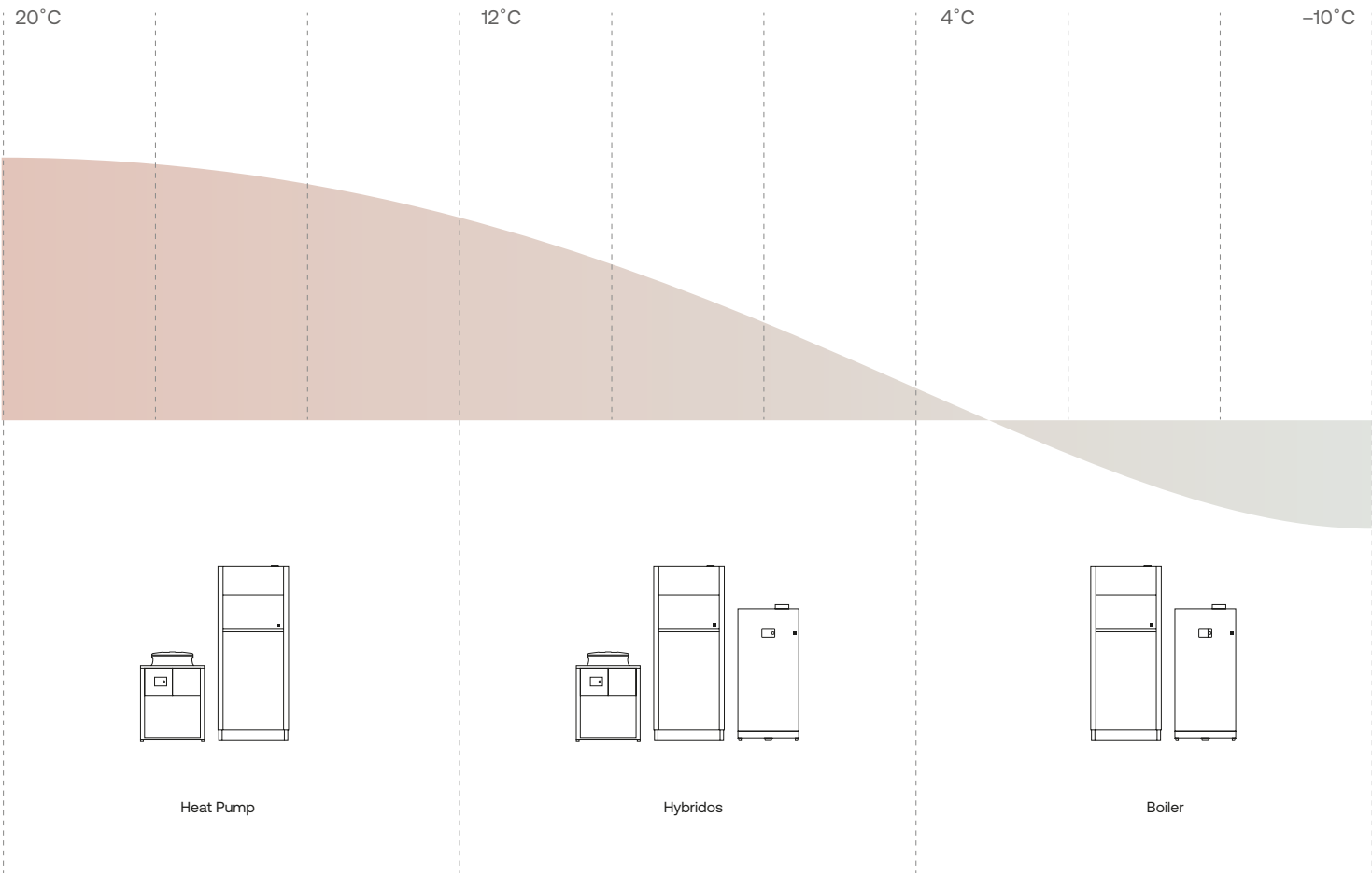
Multiple circuit management

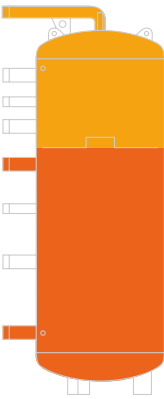
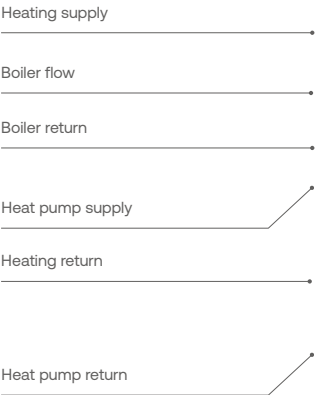
Stratification buffer tank with separation diaphragm



How it works?

Hybrid heat controller manages both heat sources: Heat pump and Boiler to deliver heat in the most efficient and economical way for the customer. As well as heat source control, the unit also manages up to 4 mixed circuits and a domestic hot water circuit when fitted with additional modules.





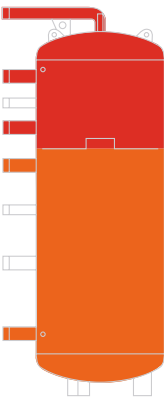
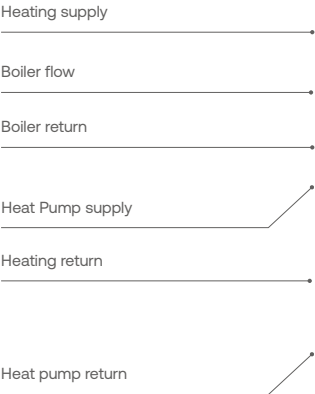
Solo Heat Pump



Heat Pump + Heating circuit

Heat pump

Alternating operation only heat pump
The heat pump works in the lower part of the TMU. The hot water stratifies towards the upper part of the storage and serves the system.



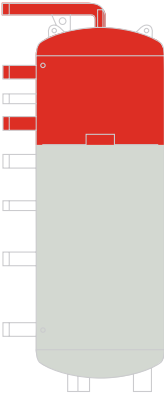
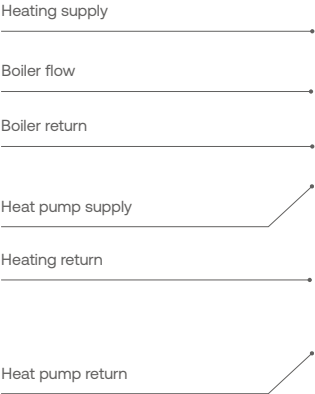
PdC + Boiler



PdC + Boiler + Heating circuit

Hybridos Parallel operation boiler and heat pump

The heat pump works in the lower part of the TMU, contributing to the maximum contribution from renewable sources. The boiler raises the temperature, when necessary, by heating the upper part of the TMU near the delivery to the system. In this way each generator is exploited to the fullest by optimizing its peculiarities.



Boiler only



Boiler + Circuit heating

Boiler Alternating boiler only operation

The boiler works in the upper part of the TMU, heating the minimum volume of water at a high temperature to serve the system.

The Hybridos system can be installed without any major adaptation to the building fabric and also facilitate staged renovation, if progressive increasing of insulation is scheduled, for instance. To reduce CO2 even further they can be used with decarbonised and renewably sourced fuels or electricity.

Hybrid System Model	Boiler model	Power kW	Heat Pump Model	Power kW	TMU Model	Capacity Litres
Hybridos NC60.22	NC 60 WH	57,5	Aurax A 22 T2	22,2	TMU 500	500
Hybridos NC80.37	NC 80 WH	80	Aurax A 37 T2	37,3	TMU 500	500
Hybridos NC100.47	NC 100 WH	99	Aurax A 47 T2	47,1	TMU 500	500
Hybridos NC115.51	NC 115 WH	115	Aurax A 51 T2	50,8	TMU 500	500
Hybridos NC150.61	NC 150 WH	141	Aurax A 61 T2	61,2	TMU 500	500
Hybridos NC120D.51	2 x NC 60 WH	115	Aurax A 51 T2	50,8	TMU 500	500
Hybridos NC160D.67	2 x NC 80 WH	160	Aurax A 67 T2	67,3	TMU 500	500
Hybridos Plus NC200D.75	2 x NC 100 WH	198	Aurax A 75 T2	74,9	TMU 800	800
Hybridos Plus NC230D.93	2 x NC 115 WH	230	Aurax A 93 T2	93,2	TMU 800	800
Hybridos Plus NC300D.93	2 x NC 150 WH	282	Aurax A 93 T2	93,2	TMU 800	800
Hybridos N120.51	N 120 FS	115,5	Aurax A 51 T2	50,8	TMU 500	500
Hybridos N160.67	N 160 FS	150	Aurax A 67 T2	67,3	TMU 500	500
Hybridos Plus N200.75	N 200 FS	190	Aurax A 75 T2	74,9	TMU 800	800
Hybridos Plus N250.93	N 250 FS	232	Aurax A 93 T2	93,2	TMU 800	800
Hybridos CM45.22	CM 45	45	Aurax A 22 T2	22,2	TMU 500	500
Hybridos CM60.22	CM 60	57,5	Aurax A 22 T2	22,2	TMU 500	500
Hybridos CM80.37	CM 80	80	Aurax A 37 T2	37,3	TMU 500	500
Hybridos CM100.47	CM 100	99	Aurax A 47 T2	47,1	TMU 500	500
Hybridos CM120.51	CM 120	115	Aurax A 51 T2	50,8	TMU 500	500

Aurax T2 heat pump

- High-efficiency 2-pipe air/water heat pump with double compressor, optimized in heating mode.
- Silent version
- Models from 22 to 93 kW

Condensing boiler

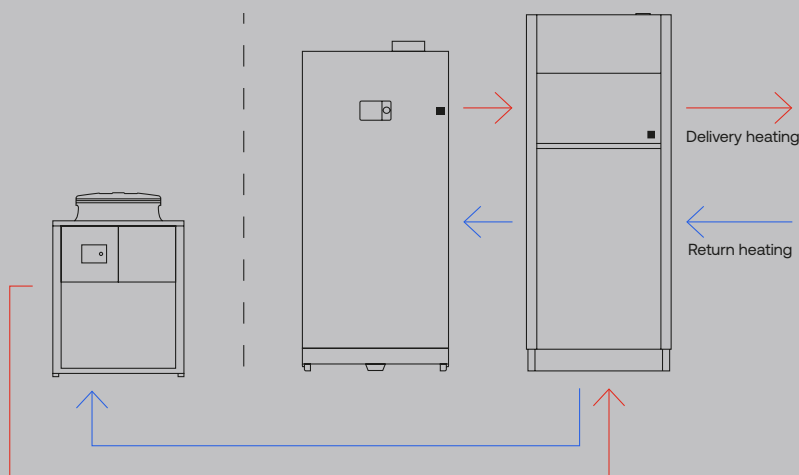
Depending on the configurations, the Hybridos AIC system is equipped by the following boiler models

- Nesta Chrome-wall-mounted boiler
- Nesta Chrome Cascade
- Nesta Floor-Standing boiler
- CoilMaster Floor-Standing boiler
- Models from 60 to 300 kW

Thermal Management Unit-TMU

Thermal control unit with integrated stratified storage, dual function:

- System control unit
- Stainless steel thermal stratified storage tank
- Models from 500 to 800 litres



Hybridos System NC
With Nesta Chrome single wall-mounted condensing boiler and Aurax T2 heat pump



Hybridos System NCD
With two cascade "In Line" Nesta Chrome wall-mounted condensing boilers and Aurax T2 heat pump



Hybridos System N
With Nesta single condensing floor-standing boiler and Aurax T2 heat pump



Hybridos System CM
With CoilMaster twin condensing floor-standing boiler and Aurax T2 heat pump

Heat & Power Generation
Energy Storage
Microgrid Management

107 %
Maximum efficiency

6 kWe
Electrical power
(1-phase, 230V AC)

10 kWh
Lithium-ion battery
energy storage

Steamel is a cogeneration heat & power (CHP) appliance dedicated for microgrids, flexible energy installations and applications where power supply safety is a priority. It combines condensing gas boiler with power generator and energy storage.

Key features and benefits

- Plug & play system for microgrid applications
- EMS controls for flexible energy self-generation and utilization
- Power supply safety in case of utility grid blackout
- Seamless black-start (no power supply disruption)
- On-grid, islandable or island operation modes
- Excess of energy stored in battery storage or feed to grid
- Lower cost of self-generated electric energy then from the grid
- Easy retrofit with regular gas heating boilers
- Touch-screen and web server remote access
- Scalable by cascading







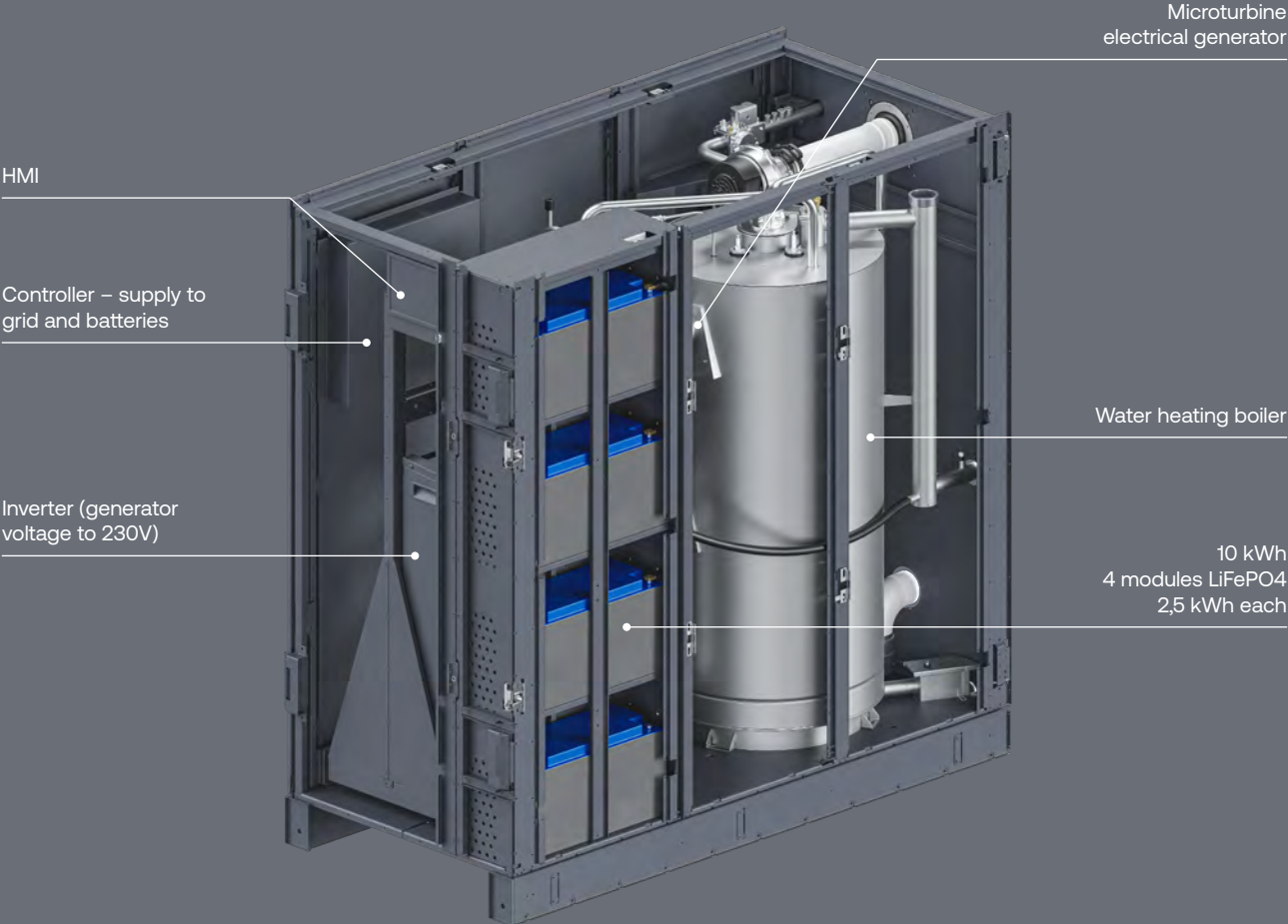
Applications

Residential applications

- Multi-family houses
- Terraced villas
- Apartments with swimming pool

Commercial applications

- Hotels, guesthouses, agrotourism
- Hospitality
- Grocery stores
- Senior and nursing homes
- Clinics, hospitals
- Food processing industry
- Public and administration buildings



HMI

Controller - supply to
grid and batteries

Inverter (generator
voltage to 230V)

Microturbine
electrical generator

Water heating boiler

10 kWh
4 modules LiFePO4
2,5 kWh each

How does it work?

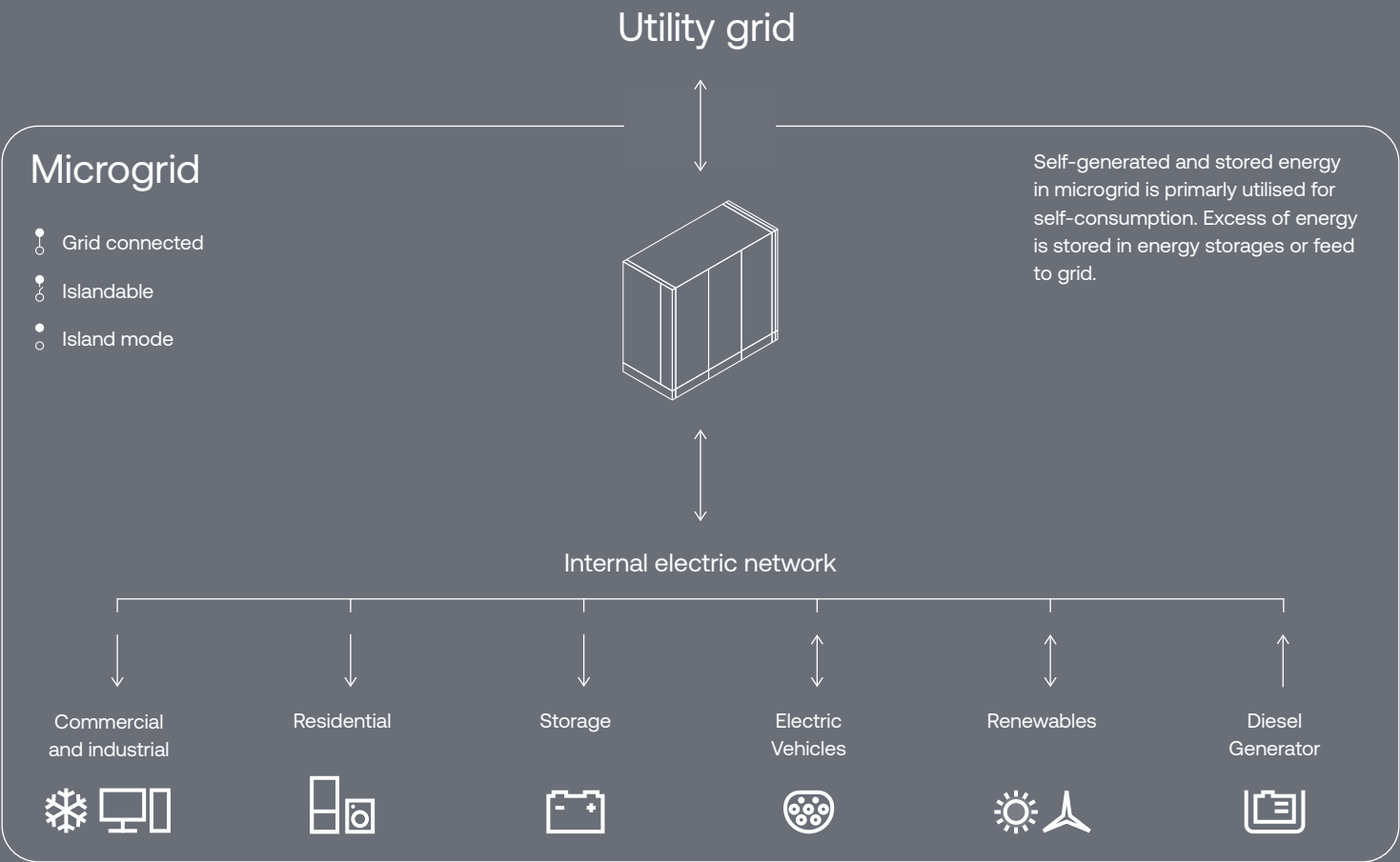
Electric energy generated from Steamel and local energy sources is primarily utilised for self-consumption. During higher or peak demands electricity is supplied from build-in battery energy storage (ES). Additional power could be sourced from the utility grid only in case the battery is discharged or microgrid energy sources cannot cover demand. During periods of low or no power, demand excess generated electricity is stored in the Steamel's battery or fed to the utility grid. The battery charge level can be set up to perform as UPS in case of a utility grid outage (blackout).

Black-start function

Steamel can start operation (turn on) without any power from the utility grid (remote areas, grid blackouts) thanks to special controls and built-in battery energy storage which state of charge (SOC) is always kept at the level necessary to start up Steamel.

Anti-islanding protection:

Steamel will seamlessly continue operation even in case of utility grid outage with a build-in anti-islanding relay.



Performance			Steamel 60 ES
Power modulation ratio			1:5
Output at 80/60°C	Power	kWe	0,8–4
	Combined heat and power	kW	15,6–77,6
Output at 50/30°C	Power	kWe	1–6
	Combined heat and power	kW	17–85
Efficiency at 80/60°C	Combined heat and power	%	97,2–97
Efficiency at 50/30°C	Combined heat and power	%	106,5–106,2

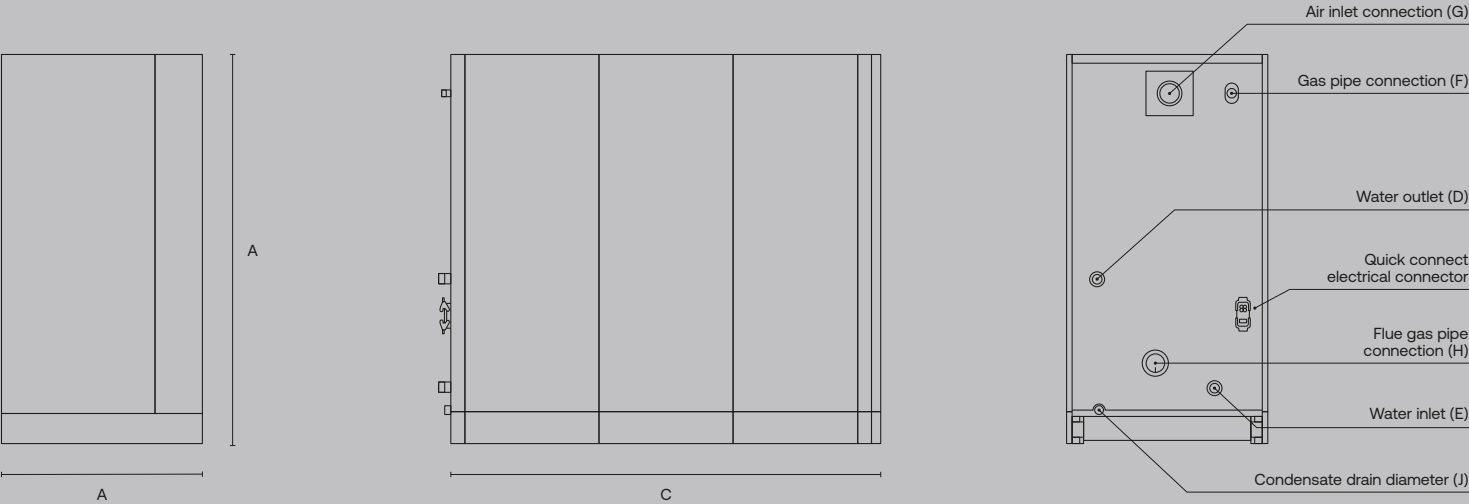
Electric		
Power output	kWe	11,5
Nominal voltage output	V	230
Maximum current output	A	50
Frequency	Hz	50
Battery storage input power	kVA	4,9
Battery storage output power	kVA	9,6
Battery storage capacity	kWh	10,2
Battery storage DC voltage	V	48
Battery module 12,8V 200Ah	pc.	4
Battery type: lithium-ion		LiFePO4
Working temperature	°C	-20 to 60
Number of cycles @100% DoD		>2000
Number of cycles @80% DoD		>5000
BMS		integrated

Gas		
Gas category		I2E(S), I2E, I2H, I2ELL, I2HS, I2N, I2EK, I3P, I2E(R), I12E3P, I12E(S)3P, I12EK3P, I12H3P, I12L3P, I12E+3P, I12E(R)3P, I12Esi3P, I12Er3P
Gas type		G20–G25–G25.1–G25.3–G31
Chimney type(s)		B23–B23P–C43–C53–C63–C83
CO emission	mg/kWh	64,5
Gas consumption	m³/h	1,2–6
NOx class		6

General		Steamel 60 ES
Width (A)	mm	767
Height (B)	mm	1598
Depth (C)	mm	1630
Weight empty	kg	600
Water content	l	90

Connections

Water outlet (D)	in.	1 1/4
Water inlet (E)	in.	1 1/4
Gas pipe connection (F)	in.	3/4
Air inlet connection (G)	mm	125
Flue gas pipe connection (H)	mm	80
Maximum flue gas pipe length	m	30
Condensate drain diameter (I)	mm	34



Stainless steel instantaneous
indirect water heaters

99 °C

DHW generating
efficiency

20.7 bar

Tube pressure

11 bar

Shell pressure

Rex heaters use a boiler or a pump to heat domestic water instantly upon demand. As the boiler water enters the storage tank (contrary to coils storage), it is ready for a domestic water call. Rex line consists of 4 models. With various capacity volumes, ranging from 150 to 435 l (40-115 gal), they are designed to fully satisfy both residential and commercial applications.

Rex also acts as a buffer tank—it eliminates boiler short cycling. Boiler water is circulated through the heater in a closed-loop system, effectively expanding boiler lifespan. Rex heaters last longer by a soft heat transfer of the boiler water instead of a direct flame type transfer, which is commonly used in conventional heaters.

Rex indirect instantaneous system wins it all: high efficiency, extended lifespan and sustainable solutions. Lack of stagnant water in the coils prevents bacterial growth and lime buildups. Constructed of stainless steel, Rex water heaters are made to last. They are designed for modular installations and can easily fit through a 36" doorway. Rex heaters are the most efficient solution for new projects and retrofit applications – they are able to improve the existing system performance and reduce installation costs.

Key features and benefits

High efficiency and reliable performance

Extended lifespan

Energy-saving water heating solution

Excellent performance in use with hydronic, radiant and steam heating



Pressure and temperature port

Boiler water outlet

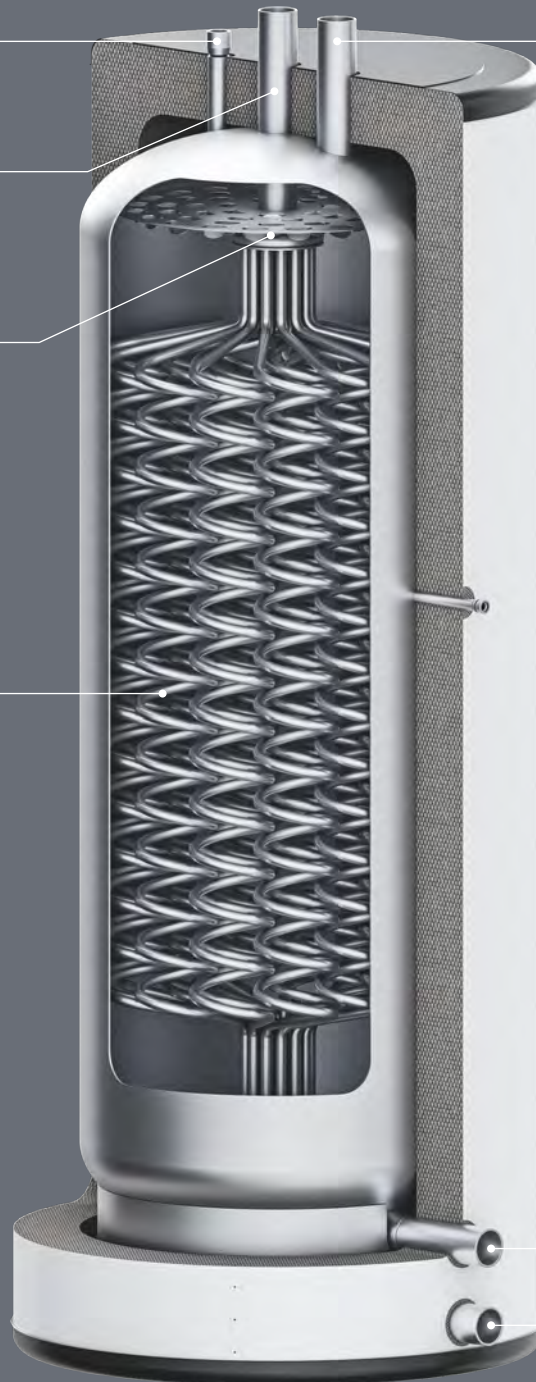
Domestic water outlet

Stainless steel water distributor
For hydrodynamics
and greater turbulence

High efficiency heating
stainless steel coils

Domestic water inlet

Boiler water outlet



Technical specification

Characteristics		150	190	300	435
Tank capacity	l	138,8	171,2	275	415,7
Coil capacity	l	7,9	6,5	13,9	20,1
Heat transfer area	m²	2,3	1,9	4	5,8

Connections

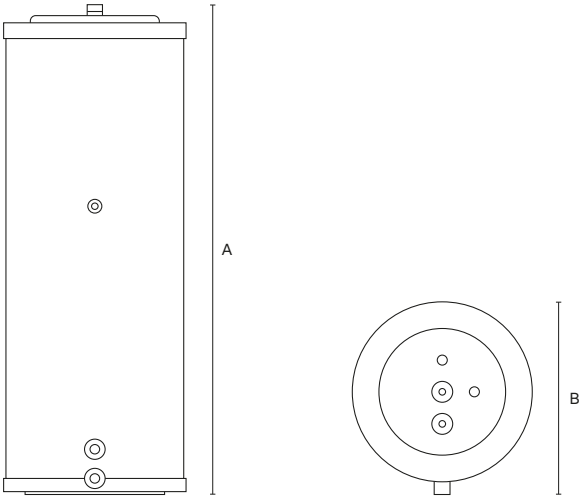
Domestic water	l	1	1 1/2	1 1/2	2
Boiler water	gal	1	1 1/2	1 1/2	700
Safety Valve	in	3/4	3/4	3/4	3/4
P/T	in	1/2	1/2	1/2	1/2
Aquastat	Ø	22	22	22	22

Performance

Max exchange capacity	DHW=40°C	123	60	238	356
Liters/hour	DHW=40°C	3024	1494	5839	8748
Max exchange capacity	DHW=60°C	54	25	111	167
Liters/hour	DHW=60°C	846	400	1735	2610
Max exchange capacity	DHW=70°C	27	11	60	1220
Liters/hour	DHW=70°C	353	151	800	92

Geometrical dimensions

Height (A)	mm	1609	1401	2001	2014
Depth (B)	mm	600	700	600	700
Weight	kg	64	67	101	143



Twin wall stainless steel cylinder
140 · 180 · 215 · 260 · 400 · 600 · 1000
90S · 130S · 190S · 260S · 400S · 600S · 1000S

316_L
Stainless steel

4753/8
DIN Standard

Stainless Steel DHW cylinders from AIC cover a wide range of capacities suitable for most applications. To optimise the product design and manufacturing process only the highest quality materials are used, ensuring long term performance and efficiency.

Utilising twin wall technology, the Silox cylinder extracts every possible kW of heat from the primary skin of the cylinder, transferring this to the inner DHW store to ensure fast recovery and uninterrupted hot water production.

Key features and benefits

- Stainless steel maintenance-free design
- Large DHW capacity
- Anti-legionella
- Rigid PU thermal insulation
- Fast recovery
- Optional heating element
- Self-cleaning



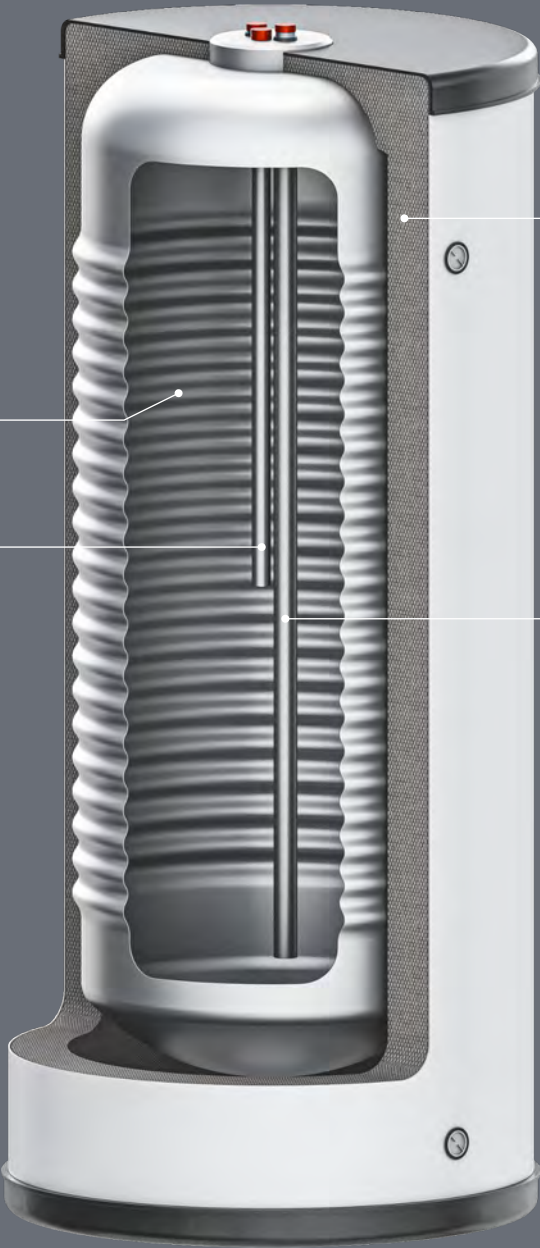


316 L Stainless steel
DHW inner storage tank

Drywell for temperature sensor

Thermal insulation

Dip tube

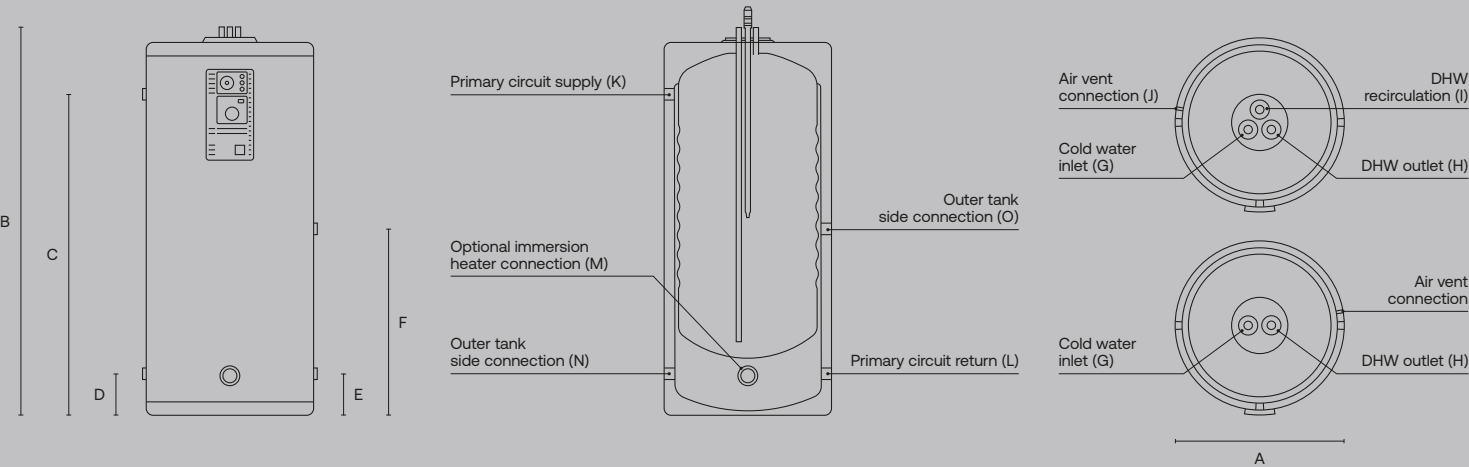


General		Sx 140	Sx 180	Sx 215	Sx 260	Sx 400	Sx 600	Sx 1000
Total capacity	litre	138	176	214	252	355	574	955
Primary circuit								
Primary tank capacity	litre	46	49	53	56	90	141	243
Max. primary temperature	°C	110	110	110	110	110	110	110
Max. operating primary pressure	bar	3	3	3	3	3	3	3
Secondary (DWH) circuit								
Secondary (DHW) tank capacity	l	92	127	161	196	265	433	712
Maximum temperature of (DHW) tank	°C	90	90	90	90	90	90	90
Maximum pressure of (DHW) tank	bar	8	8	8	8	8	8	8
Product data								
Heat transfer area	m²	0,9	1,2	1,6	1,9	2,2	2,8	4
Standing heat loss	W	49	53	56	61	99	103	113
Energy efficiency class		B	B	B	B	C	C	C
Dhw performance data								
Peak flow at 40°C	litre/10'	422	522	655	770	1148	1658	2752
Peak flow at 45°C	litre/10'	312	389	484	569	847	1229	2040
Peak flow at 60°C	litre/10'	199	249	309	363	536	791	1314
Peak flow at 40°C	litre/60'	1382	1493	2159	2523	3366	4159	6808
Peak flow at 45°C	litre/60'	989	1112	1545	1806	2411	2994	4902
Peak flow at 60°C	litre/60'	466	634	874	1022	1368	1731	2837
Continuous flow at 40°C	litre/h	1017	1029	1594	1857	2208	2650	4297
Continuous flow at 45°C	litre/h	826	882	1293	1508	1793	2161	3490
Continuous flow at 60°C	litre/h	489	517	773	881	1041	1283	2070
Heating time (from 10 to 60°C)	min.	23	23	21	21	23	32	36
Primary flow rate	m3/h	2,9	3,1	4,6	5,2	6,3	7,6	12,2

Dimensions		Sx 140	Sx 180	Sx 215	Sx 260	Sx 400	Sx 600	Sx 1000
External diameter (A)	mm	560	560	560	560	620	770	950
Overall height (B)	mm	1029	1279	1529	1767	1722	1728	2250
Dimension (C)	mm	834	1084	1345	1574	1510	1491	1926
Dimension (D)	mm	214	214	214	214	180	190	336
Dimension (E)	mm	214	214	214	214	180	190	336
Dimension (F)	mm	n/a	649	775	895	845	835	n/a
Empty weight	kg	49	59	70	80	90	133	239

Connections

Cold water inlet (G)	mm	G 3/4	G 3/4	G 3/4	G 1	G 1	G 1	G 1 1/4
DHW outlet (H)	mm	G 3/4	G 3/4	G 3/4	G 1	G 1	G 1	G 1 1/4
DHW recirculation (I)	mm	G 3/4	G 3/4	G 3/4	G 1	G 1	G 1	n/a
Air vent connection (J)	mm	G 1/8	G 1/8	G 1/8	G 1/8	G 1/8	G 1/8	G 1/2
Primary circuit supply (K)	mm	G 1	G 1	G 1	G 1	G 1 1/2	G 1 1/2	G 1 1/2
Primary circuit return (L)	mm	G 1	G 1	G 1	G 1	G 1 1/2	G 1 1/2	G 1 1/2
Optional immersion heater connection (M)	mm	G 2	G 2	G 2	G 2	G 2	G 2	G 2
Outer tank side connection (N)	mm	G 1	G 1	G 1	G 1	G 1 1/2	G 1 1/2	G 1 1/2
Outer tank side connection (O)	mm	n/a	G 1	G 1	G 1	G 1 1/2	G 1 1/2	n/a

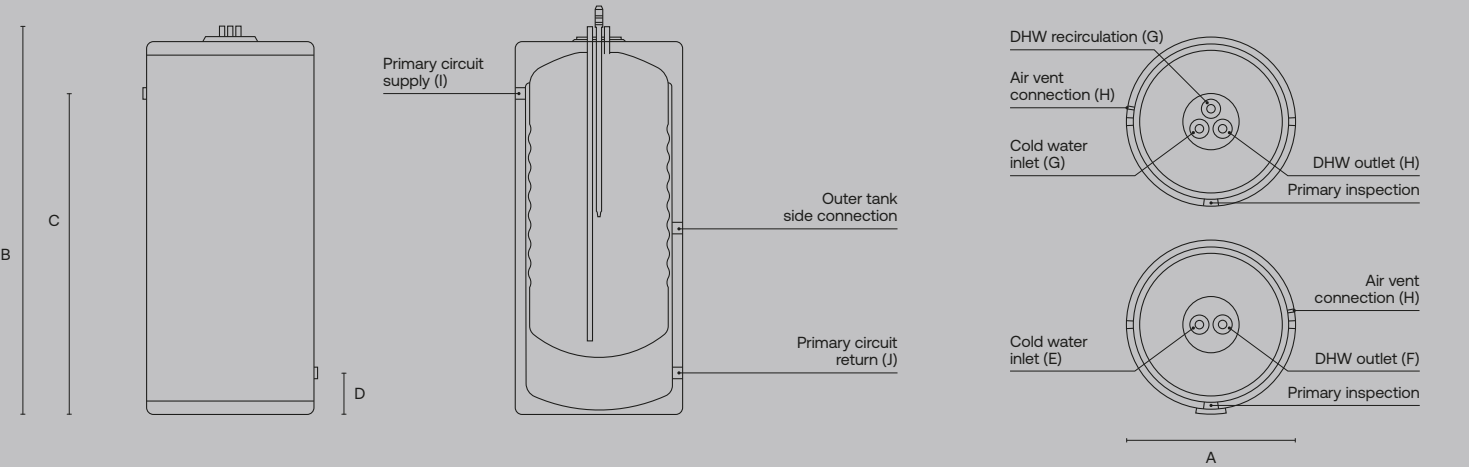


General		Sx 90 S	Sx 130 S	Sx 190 S	Sx 260 S	Sx 400 S	Sx 600 S	Sx 1000 S
Total capacity	litre	80	122	187	249	321	570	955
Primary circuit								
Primary tank capacity	litre	21	30	41	56	65	108	243
Max. primary temperature	°C	110	110	110	110	110	110	110
Max. operating primary pressure	bar	3	3	3	3	3	3	3
Secondary (dwh) circuit								
Secondary (DHW) tank capacity	litre	59	92	146	193	256	462	712
Maximum temperature of (DHW) tank	°C	90	90	90	90	90	90	90
Maximum pressure of (DHW) tank	bar	B	B	B	B	B	B	B
Product data								
Heat transfer area	m²	0,8	1	1,2	1,6	2,4	3,1	4
Standing heat loss	W	45	50	58	62	99	103	113
Energy efficiency class		B	B	B	B	C	C	C
Dhw performance data								
Peak flow at 45°C	litre/10'	180	287	421	594	810	1226	2040
Peak flow at 60°C	litre/10'	110	183	270	356	516	789	1314
Peak flow at 45°C	litre/60'	597	1046	1199	1862	2389	2936	4902
Peak flow at 60°C	litre/60'	270	569	688	973	1357	1700	2837
Continuous flow at 45°C	litre/hr	470	920	947	1336	1769	2085	3490
Continuous flow at 60°C	litre/hr	265	545	548	873	1028	1241	2070
Heating time (from 10 to 60°C)	min.	18	20	25	24	23	32	36
Primary flow rate	m3/h	1,5	3,2	3,4	4,7	6,2	7,3	12,2

Dimensions		Sx 90 S	Sx 130 S	Sx 190 S	Sx 260 S	Sx 400 S	Sx 600 S	Sx 1000 S
Dimension (A)	mm	480	480	620	620	620	770	950
Dimension (B)	mm	749	1155	983	1239	1724	1730	2250
Dimension (C)	mm	170	170	182	182	182	192	336
Dimension (D)	mm	575	980	777	1027	1512	1493	1926
Empty weight	kg	35	51	64	78	106	151	239

Connections

Cold water inlet (E)	inch	G 3/4	G 3/4	G 3/4	G 3/4	G1	G1	G1 1/4
DHW outlet (F)	inch	G 3/4	G 3/4	G 3/4	G 3/4	G1	G1	G1 1/4
DHW recirculation (G)	inch	G 3/4	G 3/4	G 3/4	G 3/4	G1	G1	n/a
Air vent connection (H)	inch	1/8	1/8	1/8	1/8	1/8	1/8	1/2
Primary circuit supply (I)	inch	1	1	1	1	1	1	2
Primary circuit return (J)	inch	1	1	1	1	1	1	2



AIC is ready for a sustainable future

Nesta condensing boilers are certified to operate perfectly with a 20% hydrogen blend. In this way, AIC takes a first big step towards the energy transition that foresees the use of hydrogen as the primary power source for condensing boilers of the future on the horizon.

Hydrogen is present in large quantities on our planet and can offer the domestic heating sector energy security while respecting the climate and environment. AIC Research and Development has dedicated time and investment to studying the use of 'green' hydrogen as a power source for its condensing boilers, achieving this first important milestone for sustainable comfort.

Hydrogen
Ready



Quality guaranteed over time

Extend for free the warranty of AIC boilers

The formula for obtaining free extended warranties on major components of AIC boilers.

Based on proven and reliable technology, AIC designs and manufactures energy-responsible products that are built to last and minimize maintenance. To further protect its customers' investment, AIC has developed a unique and affordable component warranty extension formula, FULL LIFE Extension, applicable to its entire range of boilers. Contact your local AIC contact person to find out how to get it.



Building information modeling

AIC is BIM Ready and has made the Technical/BIM library of its high-power boiler range available at www.myaic.co.uk. The BIM models contain the 3D geometry describing the physical appearance of the product, as well as data (parameters) indicating what type it belongs to, how it is classified, performance values, materials, expected lifetime, and more.

Autodesk
Revit

.rfa

Autodesk Free
Online File Viewer

.rvt

Microsoft
Excel

.xlsx



Thermesis

The AIC software for calculating domestic hot water requirements

AIC supports the heating professional, not only by providing access to its in-house technical department, but also with Thermesis software. A professional working tool for determining domestic hot water requirements in large users, providing not only the calculation, but also the ideal AIC solution complete with specification description, calculation report and diagrams in pdf and dwg format.

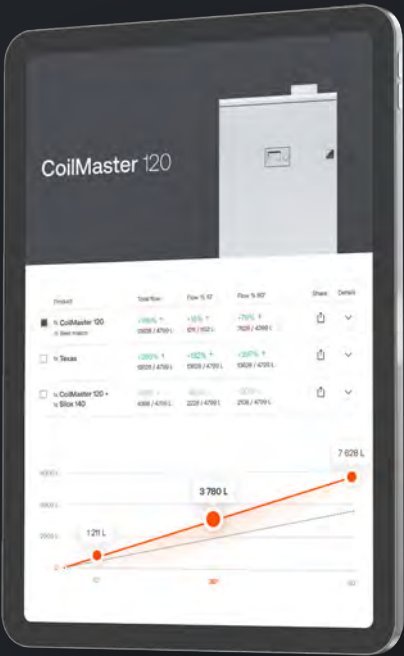
Applications

Industrial applications
Industrial showers
Restaurants (or canteens)
Prisons
Campsites
Hospitals
Hotels
Nursing homes
Apartment buildings
Team sports e.g. soccer fields
Gym inc. Judo, fitness, tennis



Thermesis

The professional software for determining domestic hot water requirements in large users and providing the ideal AIC solution complete with diagrams and project data.



Service Centre Network

Professional and always up-to-date

For AIC, the training of its partners is extremely important and it invests a lot of resources and energy to keep its network of Authorised Service Centres and Premium Partners constantly updated. For this purpose, the AIC Academy has been organised with an intensive and engaging program of theoretical and practical courses at the training centre located in your local AIC subsidiary.



aicON

The AIC app for professionals

The AIC App for installers, service centres and users to keep track of the installation and maintenance of AIC products. The complete history of the boiler from the date of installation and commissioning, including all annual maintenance and replacement parts: all in one App.

The different input profiles allow access to additional functions reserved for professionals to have at hand at all times:

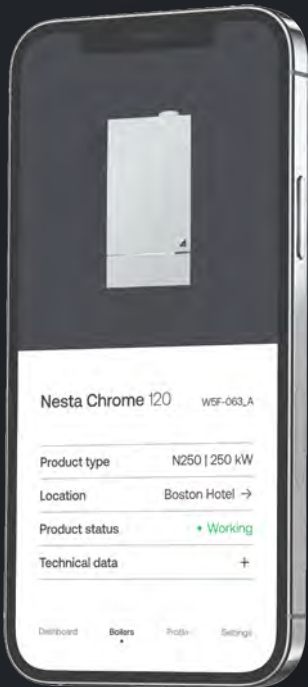
- Documentation and Manuals
- Commissioning Reports
- Exploded views and Spare parts



aicON Assistance Application

To have the boiler history at your fingertips: installation, commissioning, spare parts and maintenance. All in one App.

The screenshot provided is for illustration purposes only and may not reflect the current design of the app interface.



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