

AMBASSADOR⁺

Condensing central heating boilers

60 / 80 / 100 / 120 / 150 / 180

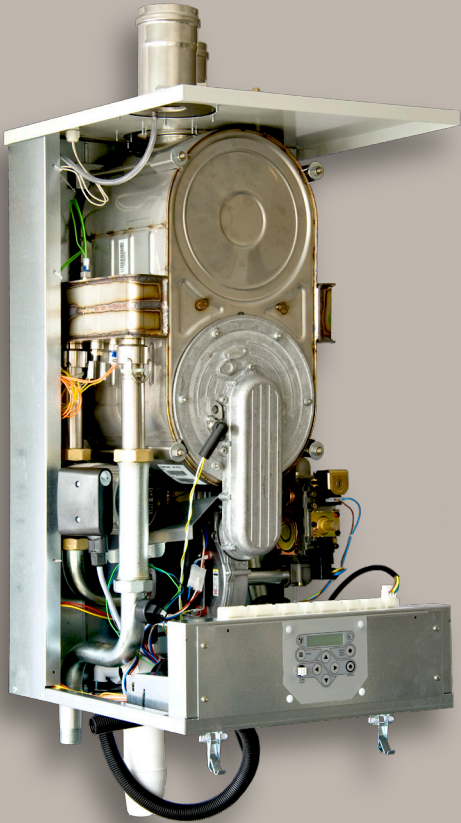


central heating and hot water systems
Eco Heating Systems Groningen B.V.



High capacities

Condensing wall-hung boilers



Advantages at a glance

- High efficiency
- Unique capacities
- Operates on both natural and propane gas
- High modulation range
- Built-in cascade controller for max. twelve boilers
- Built-in boiler circulation pump
- Built-in weather dependent temperature control
- Built-in water pressure sensor
- Built-in 0-10 VDC connection to control temperature or input power
- Built-in Open Therm connection
- Built-in real time clock
- Quick and easy installation
- Remote boiler status signal for heat demand, operating and fault indication due to its three potential-free contacts
- For heating and hot water, three programmable periods each day are available for setting normal and reduced set point
- Freely programmable priority for central heating or hot water
- Freely programmable Anti-Legionella function
- High efficiency two-step boiler flow control
- Suitable for building management systems (BMS) via 0-10 VDC connection and remote status signaling
- Easy maintenance

Ambassador⁺

The Ambassador⁺ is a compact and versatile condensing wall-hung boiler range with reputation for quality, durability and simple design.

It is manufactured in the Netherlands by Eco Heating Systems Groningen B.V. With its high capacities, the boiler is unique in the heating market.

Focus on reliability

Reliability has been the main focus in the development of the Ambassador⁺. In the field of central heating, purchasing an Ambassador⁺ means a durable investment in high quality performance.

Built-in cascade controller

Apart from its unique capacities, the Ambassador⁺ range is fitted with an integrated cascade control, which can sequence up to twelve boilers to their optimum efficiency without utilizing an external controller.

This is saving a lot of time and money commissioning cascade set-ups. Setting of cascades is easily done at the control panel of the boiler.

Your partner in central heating

You can rely on us

Stainless steel heat exchanger

The Ambassador⁺ range has a state-of-the-art stainless steel heat exchanger. Using this high quality material, Eco Heating Systems Groningen B.V. is not only ensuring you of owning a very reliable boiler, but also helping you to reduce your servicing and maintenance costs.

Built-in boiler circulation pump

The Ambassador⁺ range is equipped with an internal boiler circulation pump, which overcomes the resistance between the boiler and the heating system.

Control options

Ambassador⁺ offers all the functionality of a modern boiler. The latest trends in measurement and control technology have been employed for this, enabling easy operation of the boiler at its control panel.

Applying the 0-10 VDC control connection, the boiler can be set and used with most current building management systems (BMS).

Additionally via the Open Therm connection, it is possible to connect Ambassador⁺ with our Open Therm room controllers.



Private labelling

Having a great experience in manufacturing and development of high-efficiency commercial boilers, Eco Heating Systems Groningen B.V. offers the possibility of private labelling to its partners.

It is either possible to take one specific range or the whole assortment of boilers and name it your own brand. Besides private labelling, it is possible for our partners to play an active role in the product development.



As a part of our partnership philosophy, we offer our customers a permanent expert team of engineers on all needed projects. Our aim is to develop a long-term partnership with the customer, through proactive consulting and guaranteeing customer satisfaction.

Because of this very precious input from all our partners worldwide, we can always ensure that our boilers maintain the highest quality standards.

If you would like to know more about our "Private Labelling" conditions or have other questions regarding our boilers and water heaters, please do not hesitate to contact us.

Controllers

Comfort as you wish

Controllers & room thermostats

In general, different zones of large commercial buildings have different heating requirements. The sunny part of the building requires less heat than the parts in shade, and the production area may be cooler than the offices.

Eco Heating Systems Groningen B.V. offers the EBC controller to handle this situation. Equipped with the feature of giving each group in the building a possibility to connect its own thermostat, this controller can be regulated/set according to the ambient heat required by the user.

Spaces that do not require heat demand, will not be heated unnecessarily, which dramatically reduces the amount of fuel used and provides considerable energy savings.



Outside temperature control

With an optional outside temperature sensor, Eco boilers can be controlled depending on the outside temperature.

By controlling the boiler based on the outside temperature in combination with an appropriate heating curve, a complete building can be given a constant temperature in all seasons.

Building management systems

Because of their various control options, Eco boilers can completely be integrated into building management systems (BMS) via the Open Therm connection or the integrated 0-10 V control connection.

Standard cascade solutions

Simple and easy

Cascade systems from Eco Heating Systems Groningen B.V. are designed and developed in cooperation with installers in accordance with their essential needs.

Our systems are very easy to assemble and install, consisting of all necessary components like cascade frames, pre-assembled hydraulics kits, gas connections and a fitting low velocity header to match any heating output.

You may also contact our sales support department or make use of our online cascade selector at www.ecohs.nl at any time for selection of the right components suitable for your requirements.



General							
Product Identification number	CE 0063 BP3254						
Classification	II2L3B/P						
Gas Appliance Type	B23, B23P; C13X, C23X, C33X, C43X, C53X, C63X, C83X						
Heater type :	A⁺ 60	A⁺ 80	A⁺ 100	A⁺ 120	A⁺ 150	A⁺ 180	
Technical specifications							
Dimensions (h x w x d)	mm	842 x 476 x 486			898 x 476 x 677		
Water content estimated	liter	3,9	5,0	6,5	8,3	10,4	12,9
Weight (empty)	kg	46	73	78	83	92	101
Flow/return connection (boiler)	inch	R 1"	R 1"	R 1"	R 1"	R 1½"	R 1½"
Flow/return connection (T-piece)	inch	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1½"	Rp 1½"
Gas connection	inch	R ¾"	R ¾"	R ¾"	R ¾"	R 1"	R 1"
Flue duct flue/air inlet	mm	80/125	80/125	100/150	100/150	100/150	100/150
Parallel connection	mm	80-80	80-80	100-100	100-100	130-130	130-130
Nominal input (net) (G20)	kW	12,5 - 55,6	14,6 - 74,3	17,2 - 92,2	26,0 - 111	34,0 - 138	45,0 - 166
Nominal input (gross) (G20)	kW	13,9 - 61,8	16,2 - 82,5	19,1 - 102	28,9 - 123	37,8 - 153	50,0 - 184
Efficiency (Hi) 50/30°C	%	107,6	107,9	107,9	108,2	107,9	107,8
Efficiency 40/30°C DIN 4702-8	%	up to 110,6% within the Ambassador ⁺ range					
Natural gas consumption nom. (G20)	m ³ st/h	1,54 - 6,84	1,80 - 9,14	2,12 - 11,4	3,20 - 13,7	4,18 - 17,0	5,54 - 20,4
Gas supply pressure nom. (G20)	mBar	20					
NOx class [EN483 / EN15420]	-	5					
Max. pressure for flue/air system ¹	Pa	200					
Max. flow temperature	°C	90					
Water pressure boiler min-max.	bar	1,0 - 4,0 ²					
Power supply	V/Hz	230/50					
Max. electrical power consumption	W	240	265	270	280	505	520
Protection class	-	IPX4D					

1 Maximum allowed combined resistance of flue gas and air supply piping at high fire3

2 When the built-in water pressure sensor is replaced by a water pressure switch, water pressure may go up to 6,0 bar.

Note: For detailed specifications, we refer to the technical manual

Technical parameters according the European ERP (Energy Related Products) legislation:							
Type Boiler:		A ⁺ 60	A ⁺ 80	A ⁺ 100	A ⁺ 120	A ⁺ 150	A ⁺ 180
Condensing boiler:		Yes	Yes	Yes	Yes	Yes	Yes
Low temperature boiler:		Yes	Yes	Yes	Yes	Yes	Yes
B11 boiler:		No	No	No	No	No	No
Cogeneration space heater:		No	No	No	No	No	No
Combination heater:		No	No	No	No	No	No
	units	Value	Value	Value	Value	Value	Value
Rated heat output	kW	53,5	72,1	89,4	107,7	132,9	159,9
P-rated (P4) at 60-80°C	kW	53,5	72,1	89,4	107,7	132,9	159,9
Heat output (p1) 30% at 30-37°C	kW	17,9	24,1	29,8	36,0	44,7	53,7
Seasonal space heating energy efficiency (η_s).	%	91,9	92,3	92,4	92,6	92,3	92,3
energy efficiency (η ₄) at 60-80°C	%	86,8	87,4	87,4	87,4	86,8	86,8
energy efficiency (η ₁) at 30-37°C	%	96,9	97,2	97,2	97,5	97,2	97,1
Auxiliary electricity consumption							
At full load (elmax).	kW	0,111	0,136	0,142	0,151	0,214	0,229
At part load (elmin)	kW	0,024	0,025	0,025	0,032	0,041	0,041
In standby mode (Psb)	kW	0,004	0,004	0,004	0,004	0,004	0,004
Other							
Standby heat loss (Pstby)	kW	0,063	0,067	0,071	0,076	0,084	0,094
Ignition burner power consumption (Pign)	kW	0,000	0,000	0,000	0,000	0,000	0,000
Annual Energy consumption (QHE)	Gj	112	x	x	x	x	x
Emissions (Nox) of nitrogen oxides (EN15502)	mg/kWh	38	57	44	49	45	30
Sound power level, indoors (EN 15036-1:2006)	dB	65	67	65	62	66	69



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Eco Heating Systems Groningen B.V. is a dynamic company, focusing on development and production of commercial condensing boilers and direct-fired gas water heaters. Combining our significant experience in the commercial heating field with the requirements of our partners, we have been producing superior quality products suitable for any commercial installation. Our equipment, systems and services are dedicated to helping our partners to optimize the performance of their processes.