

# AMBASSADOR<sup>+</sup>

Condensing Central Heating Boilers  
60, 80, 100, 120, 150 & 180 kW



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



## Unique capacities

Condensing wall-hung boilers up to 180 kW



### Advantages at a glance

- High efficiency
- Unique capacities: 60, 80, 100, 120, 150 and 180 kW
- Operates on both natural and propane gas
- High modulation range
- Built-in cascade controller for max. 12 boilers
- Built-in boiler circulation pump
- Built-in weather dependent temperature control
- Built-in water pressure sensor
- Built-in 0 -10 VDC control connection based on both temperature and power
- Built-in Open-Therm connection
- Built-in real time clock
- Quick and easy installation
- Remote boiler status signal for heat demand, operating & fault indication due to its 3 potential-free contacts
- For heating and hot water, there are three programmable periods in each day for setting a normal and reduced set-point
- Freely programmable Central Heating / Hot Water priority
- Freely programmable Anti-Legionella program
- 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<sup>+</sup>

The Ambassador<sup>+</sup> is a compact and versatile condensing wall-hung boiler range with reputation for quality, durability and simple design. With unique capacities from 60 kW up to 180 kW, this range stands for a revolutionary change in the commercial heating sector.

### Built-in cascade controller

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

### Stainless steel heat exchanger

The Ambassador<sup>+</sup> range has a state-of-art stainless steel heat exchanger. Using this high quality material, Eco Hsg is not only ensuring that you own a very reliable boiler but also helping you to reduce your servicing and maintenance costs.

Another feature of the Ambassador<sup>+</sup> range is the 1:4 modulating special burner which delivers high-efficiency and quiet operation while ensuring that the gas consumed is directly optimized to the heat demand.

## Your partner in central heating

You can rely on us

### Built-in boiler circulation pump

Beside an integrated cascade control unit, the Ambassador<sup>+</sup> range is also equipped with an internal boiler circulation pump which overcomes the resistance between the boiler and the low velocity header.



### Control options

Ambassador<sup>+</sup> boilers can be controlled by a 0-10V DC signal and an Open-Therm connection.

Through the 0-10 VDC control connection, the boiler can easily be set and used with Building Management Systems (BMS).

Additionally via the Open-Therm connection, it is possible to connect Ambassador<sup>+</sup> with our OT room controllers.

### Private Labelling

Having a great experience in manufacturing and development of high-efficiency commercial boilers, Eco HSG 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 also possible for our partners to play an active role during 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 then please do not hesitate to contact us.

# Controllers

## Controllers & Room thermostats

In general, different zones of large commercial buildings have different heating requirements. The sunny part of the building requires less heat compared to those in shade or the production area should be cooler than the offices.

Eco Heating Systems Groningen offers the EBC controller to tackle this problem. Equipped with the feature of giving each group 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 HSG's boilers can also be regulated depending on the outside temperature.

When the temperature changes outside, this information is sent to the boiler through the outside temperature sensor. Then accordingly, the boiler makes necessary adjustments in the room temperature, preventing extra fuel consumption.

## Building management systems

Eco HSG's boilers can completely be integrated into Building Management Systems (BMS) via the integrated 0-10V control connection.



## Standard cascade solutions

### Simple and easy

Cascade systems from Eco Heating Systems Groningen 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 under [www.ecohs.nl](http://www.ecohs.nl) at any time for selection of right components suitable for your requirements.



Technical specifications Ambassador <sup>+</sup>							
Dimensions (h x w x l)	mm	842 x 476 x 486				898 x 476 x 677	
Classification		II2H3P					
Gas appliance type		B23; C13X, C23X, C33X, C43X, C53X, C63X, C83X					
Type boiler		A <sup>+</sup> 60	A <sup>+</sup> 80	A <sup>+</sup> 100	A <sup>+</sup> 120	A <sup>+</sup> 150	A <sup>+</sup> 180
Water content	Liter	3,9	5	6,5	8,3	10,4	12,9
Weight (empty)	kg	46	73	78	83	92	101
Concentr. flue duct flue/air inlet	mm	80/125	80/125	100/150	100/150	100/150	100/150
Parallel flue connection	mm	80/80	80/80	100/100	100/100	130/130	130/130
Central heating							
Nominal Input min.	kW	11-56	15-74	17-92	22-111	34-138	43-166
Nominal output 80/60 at 100%	kW	10,6-53,9	14,0-70,9	16,5-88,2	20,9-106	32,6-132	41,4-160
Nominal output 50/30 at 100%	kW	11,4-57,8	15,2-77,2	18,0-96,0	23,1-116	35,5-144	45,2-175
Nominal output 37/30 at 30%	kW	11,8-60,3	15,7-79,8	18,6-99,2	23,8-120	36,7-149	46,4-179
Efficiency 40/30°C DIN 4702-8	%	up to 110,6% within the Ambassador <sup>+</sup> range					
Technical data							
Available pressure for the flue system	Pa	200					
Max. flue temperature	°C	90					
Pressure CH system min/max	bar	1-4					
NOx class [EN483 / EN15420]		5					
Standard components							
Cascade manager for twelve boilers						Standard	
Boiler circulation pump						Standard	
Open-Therm connection						Standard	
0-10 Volt control connection						Standard	
Weather dependent temperature controller **						Standard	
<b>**Outside temperature sensor is an ancillary and must be purchased seperately</b>							



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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.

