

SYSTEMA

HEATING COOLING GREEN ENERGY

EOLO BC

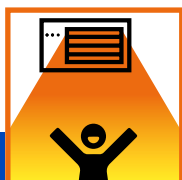
Suspended hot air generator for small, medium and large industrial environments, from 16 to 105kW



FAST AND EASY
INSTALLATION



HIGH EFFICIENCY
AND EMISSIVITY



SILENT AND
HEALTHY



LOW
MAINTENANCE



FAST AND HIGH
THERMAL COMFORT



LOW RUNNING
COSTS

GENERAL CHARACTERISTICS

The family of wall-mounted gas-fired hot air generators produced by Systema has been enriched with the new **EOLO BC** model, a generator developed in the research and development centre **in compliance with the latest European regulations and EcoDesign and ERP certifications.**

The **EOLO BC** has seen profound changes in the design of the combustion chamber and the flue gas exchanger, ideal for condensing operation, a new command and control board capable of optimising generator operation even in the face of the most critical performance and efficiency requirements, new fan units specifically designed to make the generator among the quietest on the market today. All this leads to the result of having a family of wall-mounted gas generators ready for the new regulatory requirements and at the highest levels of the market.

Present with models equipped with helicoidal fans and with centrifugal fans, suitable for indoor and outdoor installation, with an offer of accessories capable of satisfying even the most demanding requests, **EOLO BC** maintains its renowned and well-known qualities in terms of simplicity of installation and maintenance as well as maximum flexibility during use, and represents a true strong point in the Systema S.p.A. product offer.



ADVANTAGES

- **5-YEAR WARRANTY** on exchanger and combustion chamber (subject to scheduled periodic maintenance)
- **AUTONOMOUS** in operation
- **EASY** to install
- **FLEXIBLE** as it adapts to multiple applications
- **QUIET** in operation
- **HEAT EXCHANGER AND BURNER DESIGNED AND MANUFACTURED BY SYSTEMA** for maximum efficiency
- **HIGH PERFORMANCE** > up to 106%
- **FUEL:** Natural gas, LPG
- **MODULATION** of heat output from 100% to 30%

PERFORMANCE



HIGH EFFICIENCIES

With the use of premix burners, specially designed for this specific application combined with new exchangers, high combustion efficiencies are achieved.

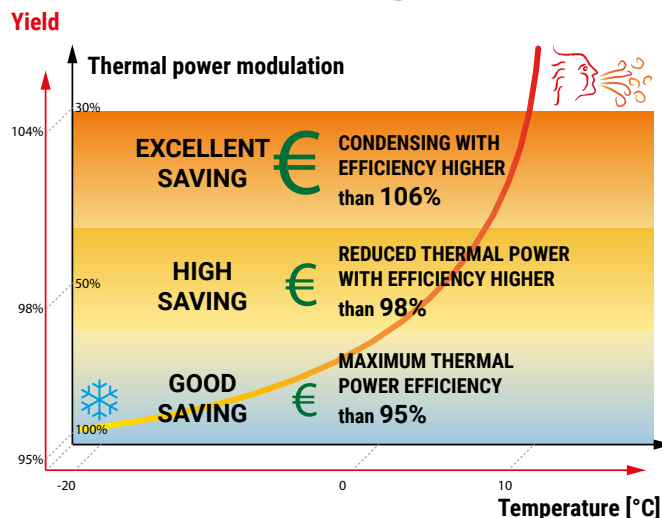
ENERGY SAVING

The high efficiency of the system and the modulation of the maximum thermal capacity of the gas burner, allows the delivery of thermal power in relation to the required climatic conditions, avoiding waste, and achieving energy saving levels that are among the best on the market.

MINIMUM POLLUTING EMISSIONS

NOx values are less than 30 ppm (CLASS 5 NOx emissions) and CO is almost absent.

High efficiencies lead to a significant reduction in fuel consumption and consequent reduction in CO emissions.



"MIX" CONFIGURATION FOR EXTERNAL INSTALLATIONS



All the advantages of EOLO BC AC and EOLO BL AC for the external installation (MIX version)

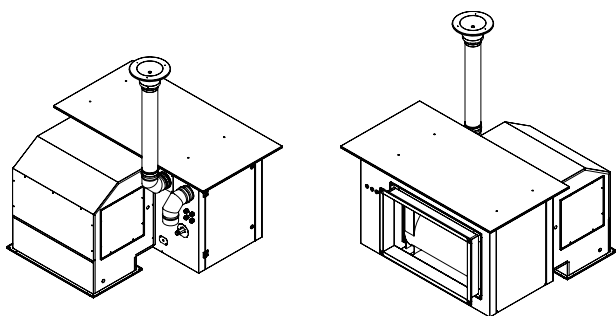
Painted steel coating with a self-supporting structure complete of a double roof for a better protection from the atmospheric agents.

Centrifugal fans fitted inside the air intake plenum, where it is possible to install a filter and add the duct for the external air intake and air recirculation.

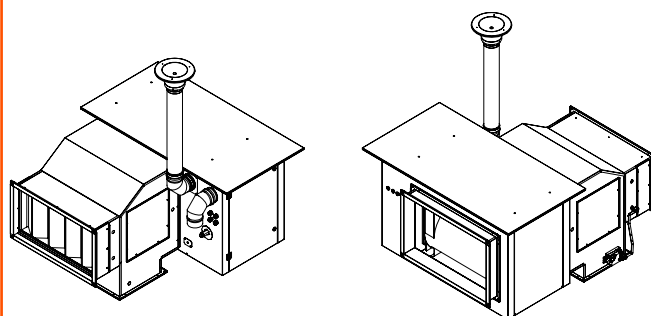
Flange for connection to the air distribution duct, provided on the front of the machine.

To complete the supply, various accessories (optional) are available: filter, fire dampers and regulation dampers, support brackets, return air ducts and control panels to meet the various system requirements, inox steel terminals, curved combustion air intake, as in the **EOLO BC** versions.

Example MIX configuration with Optional PL plenum box



Example MIX configuration with optional outside air mixing chamber from bottom to Version C



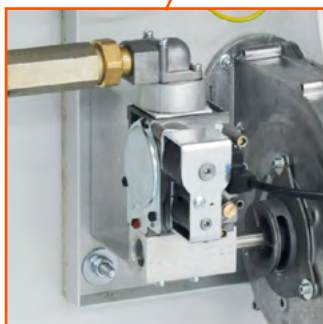
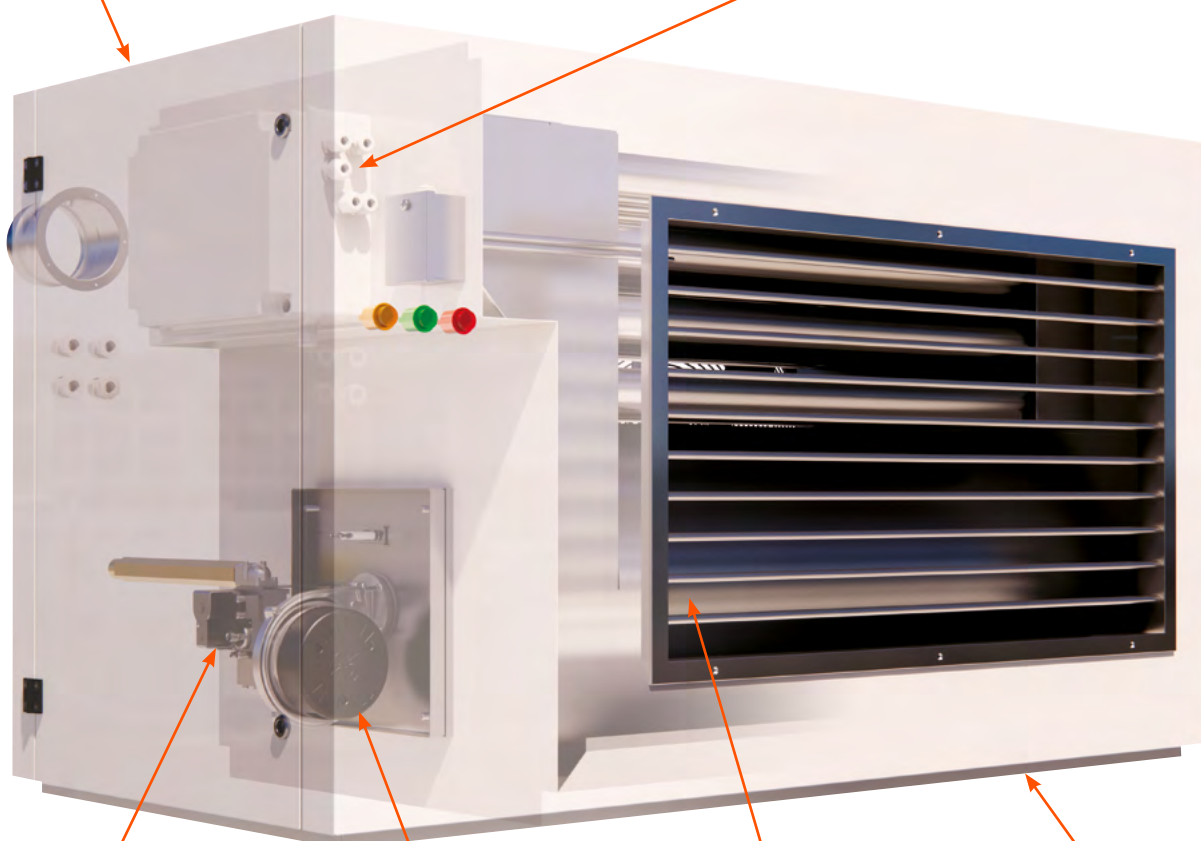
COMPONENT FEATURES



The premix burner and electrical equipment are housed in a separate, easily inspected, sealed compartment with IP 45 protection.



The electronic equipment is already integrated with an interface for connection to remote Systema switchboards, which can control one or more generators depending on the type of switchboard and configuration required.



Combustion management

Flame control equipment in combination with gas valve



Systema burner

Patented premix burner with flame inversion head, designed and manufactured by Systema.



Combustion chamber

The stainless steel combustion chamber guarantees long life and high efficiency.



Small dimensions

The dimensions of the generator are very small with a design that fits harmoniously into all installation environments.



CE certification 1450BU001

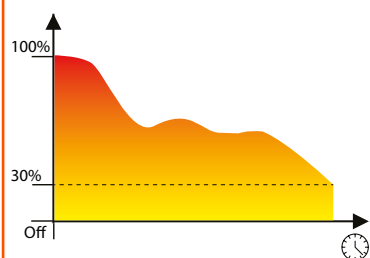
The heater is CE certified for type C installations, with sealed connections for combustion air intake and flue gas exhaust.

TWO OPERATING MODES

Total modulation Eolo BC AE

Automatic modulation of heat output from 100% to 30%, and fan flow.

PWM fan speed control.



Six-flue exchanger

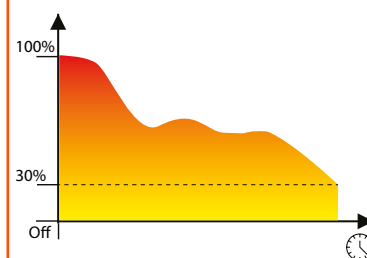
High-efficiency stainless steel condensation exchanger with six smoke passes manufactured by Systema S.p.A. and equipped with condensate drain.



Burner modulation Eolo BC AC

Automatic heat output modulation from 100% to 30%.

PWM fan speed control.

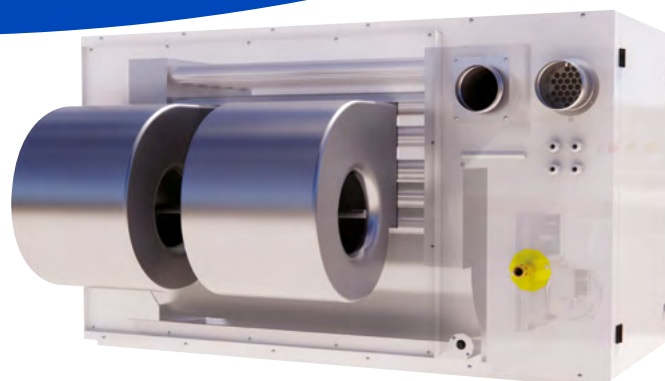


TWO VENTILATION MODES



Axial AE

Axial fans for heating all environments



Centrifugal AC

Centrifugal fans for ducted heating



EOLO BC RANGE

Model	η_s	Power									
BC 100	89,6%	da 19 a 102 kW									
BC 85	89,9%	da 19 a 82 kW									
BC 65	90,3%	da 15 a 63 kW									
BC 55	90,6%	da 12 a 52 kW									
BC 45	90,2%	da 9 a 41 kW									
BC 35	90,2%	da 7 a 32 kW									
BC 25	90,4%	da 6 a 21 kW									
BC 15	90,5%	da 6 a 16 kW									

η_s = Seasonal energy efficiency of area heating ($\geq 74\%$) with installation outside the heated area



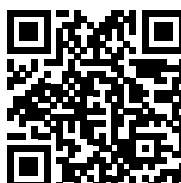
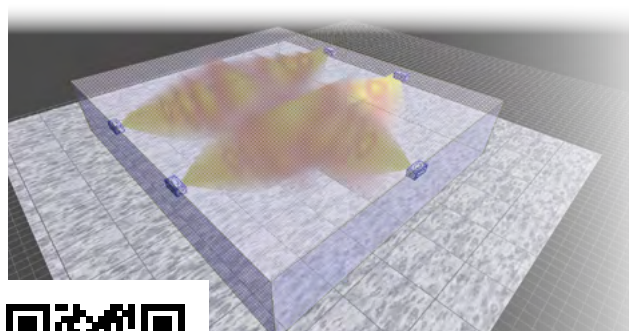
SYSTEMA RADIANT SOFTWARE

AUTOMATIC PLANT DIMENSIONING

The **design and calculation software** developed by Systema S.p.A. allows optimal plant dimensioning for heating all types of rooms. The software is equipped with a wide range of specific settings, which can be selected according to the needs of the room to be heated, allowing the right solution to be designed.

The software allows you to change the type, quantity, power and position of the products to be installed while maintaining the dimensions of the building, so that you can evaluate the most appropriate solution for the system to be heated.

By changing the dimensions of the 3D rooms to be heated, the software will automatically vary the number or power of the selected products to achieve the best thermal comfort.



To download the software,
subscribe and fill the form on:

<https://www.systema.it/en/login>

CENTRALISED CONTROL

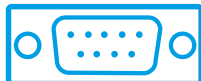


**Control panel SYS850 controls up to 30 generators and
Control panel SYS830 controls up to 16 generators**

In addition to the Basic versions also available:



LAN Ethernet (TCP-IP) for PC monitoring both in the network and via the internet with EYE-LAN software

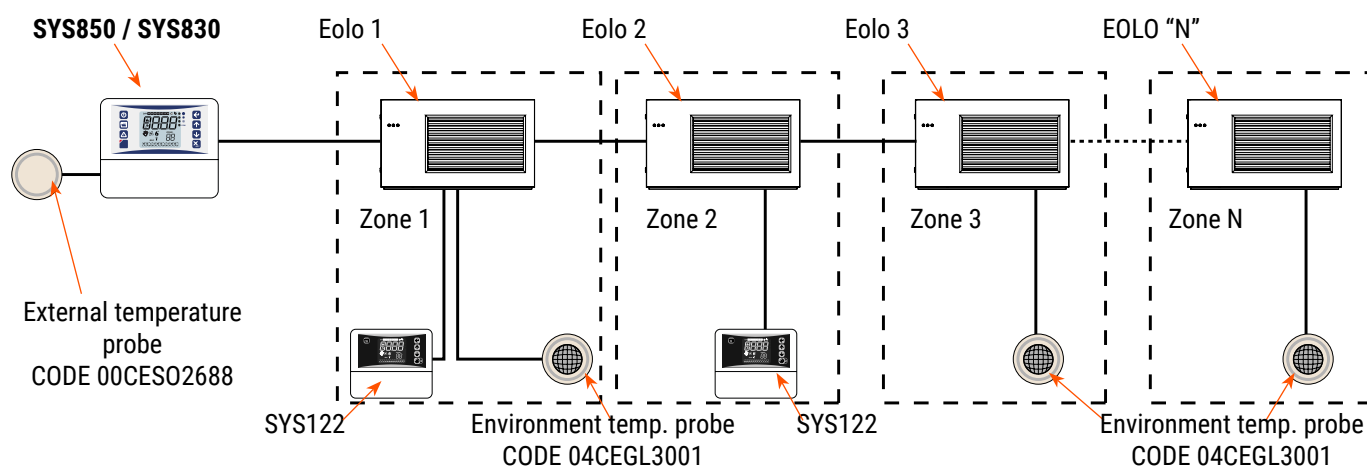


Modbus equipped with specific communication port for control via Modbus



FULL equipped with both **LAN Ethernet** (TCP-IP) and **Modbus** port

In the connection example, the EOLO 1 generator uses a removable room probe and uses local control via the SYS122 control panel, while the EOLO 2 generator has local room temperature control via the probe integrated in the SYS122 control panel.



SYS122 CONTROL PANEL FOR ONLY 1 GENERATOR

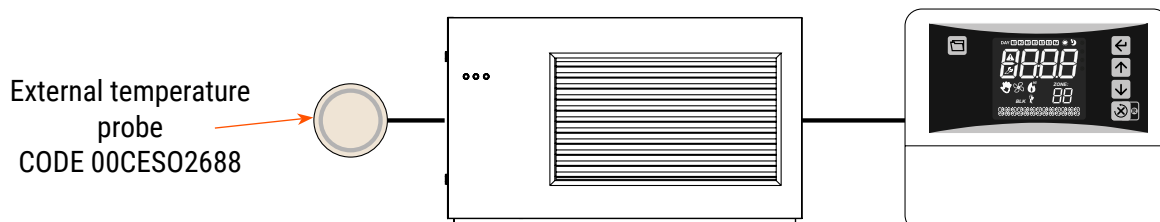


**Command and control of all integrated functions of EOLO generators (ALL),
connectable directly to the machine** (1 per generator) up to a distance of 20 metres.
CODE 04CEQU1218

It is possible to use this panel as a zone control, its internal temperature probe can be set either as a room temperature probe or as a zone probe once the generator is connected to the network with the SYS850 or SYS830 Master Panel.

The use of this type of switchboard is recommended for a maximum of 4 generators (4 control panels), beyond that the SYS850 or SYS830 is preferable.

**SYS122 control panel
CODE 04CEQU1218**





Since 1986, Systema S.p.A. is one of the leader companies in Italy and Europe in designing, developing and producing devices for the heating and conditioning in industrial and commercial buildings.

There has been always in Systema's Research and Development department where high investments have been made, since the beginning, for the creation of an internal laboratory who could design and offer highly innovative products that can satisfy and anticipate all the requests coming from the market. In this field Systema works together with important Italian, European and extra-European laboratories and university departments. A cooperation which leads to the concept of innovative and visionary products and solutions and to the obtaining of several international patents.

Systema S.p.A. differs from competitors because can offer a complete range of products that goes from commercial and industrial heating with radiant and hot air solutions, to conditioning with absorption chillers, electric heat pumps and evaporative adiabatic coolers and with a specific focus on the agricultural and breeding farms products for heating (both heaters and radiant systems) and conditioning with adiabatic coolers. This range has been conceived looking for environmental-friendly products with the lowest energy consumption.

Managing such a large range of products is not easy but, also in this field, Systema S.p.A. has been always different with an internal and external organization that guarantees high quality services through an extensive commercial network made of highly qualified technical salesmen, an internal organization of customer service with experience in designing and consultancies well aware of all the required standards and rules and a massive after sales structure both internal and external that Systema keeps regularly update in order to have technicians who are always very well prepared.

The work of these structures is greatly facilitated by Systema S.p.A.'s production facilities, which are made up of the highest quality standards and production processes that are technologically advanced and constantly modernised. The united work of those responsible for production, procurement and quality allows Systema S.p.A. to make available to its commercial structure products and systems that are of high quality, reliable and made in full compliance with the most advanced standards.

Systema S.p.A. is able to supply its sales organisation with products and systems of high quality and reliability and manufactured in full compliance with the most advanced standards.

Systema S.p.A. has thus managed, over the years, to gain a strong international presence which sees it active in markets all over the world, carrying forward the flag of top quality Made in Italy and achieving leadership positions in many countries. A strategic decision was taken by Systema S.p.A. to create Systema Polska, which is able to provide a highly qualified, high quality production force and a commercial structure, in synergy with that of Systema S.p.A., which is able to present and improve the commercial penetration of Systema products in markets such as Poland and neighbouring countries.

The synergies put in place have greatly facilitated the growth of the services offered to the market, services made up of a very high level of attention to the customer, who in Systema finds not only a business partner but also a highly qualified technical consultancy service that goes hand in hand with reliable after-sales services that are always ready to quickly resolve any problems reported by the customers themselves.

*Systema: focus on the future
by interpreting the present...*



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