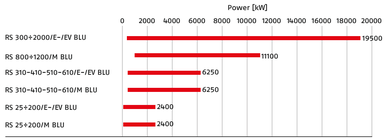
LOW NOx BURNERS FOR HEATING ROOMS

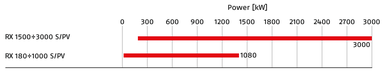
Riello, world-wide leader in the production and commercialization of burners, has been designing and manufacturing for almost 90 years, with vanguard technologies aimed to continuous innovation.
Across the years, Riello has gained the position of absolute leader in the world of residential, commercial and industrial burners, using technologies aimed to reduce consumption and caring for the environment.
Riello offers a complete range of burners to satisfy any specific need. In particular the Low NOx burners - One Stage, Two Stage and Modulating are the ideal match for boilers installed in the heating rooms for residential and commercial applications.
Moreover the premix gas burner is the ultimate technological frontier, able to satisfy the requirements of high modulating turn down ratios and low polluting emissions, representing the ideal answer for the condensing applications.

GAS Burners

Low NOx RS SERIES

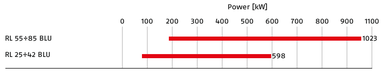


Ultra Low NOx PREMIX SERIES



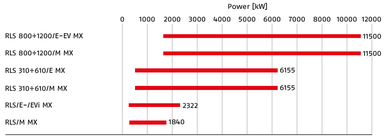
OIL Burners

Low NOx RL SERIES



DUAL FUEL Burners

Low NOx RLS SERIES



VERSATILITY | TECHNICAL FOCUS | LOW NOISE | OPERATION & MAINTENANCE

7 PRODUCTION CENTRES OF EXCELLENCE | **4** R&D CENTRES WITH OVER 60 ACTIVE PATENTS | **120** COUNTRIES WITH THOUSANDS OF CUSTOMERS

WORLDWIDE LEADER IN COMBUSTIONTECHNOLOGY AND MAJOR PLAYER IN THE HEATING BUSINESS

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INSIDE THE HEATING ROOM WITH RIELLO

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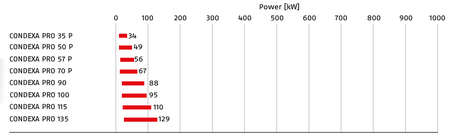
Energy For Life

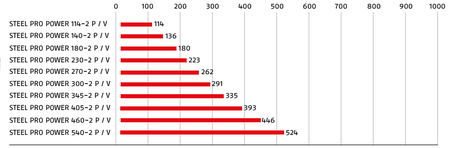
CONDENSING SOLUTIONS FOR HEATING ROOMS

Riello, leader in the heating and combustion sector, has always been present in the boiler room.
The intimate knowledge of the boiler room allows the design and manufacture of appliances for any specific need.
Riello condensing boilers are an example of expertise and competence of those who make continuous improvement a matter of culture.
The completeness of the proposal, the use of high-quality materials and the top-level performances, are accompanied by a highly qualified assistance network.
Advanced equipment, design-supporting tools and presence on the field are a guarantee of reliability, low emissions and minimum consumptions, fundamental conditions to ensure a quick recovery of the investment.

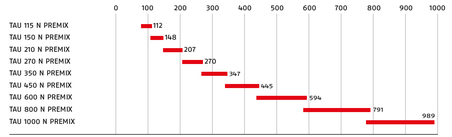
Low water content CONDEXA PRO



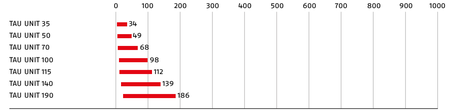
Low water content STEEL PRO POWER



High water content TAU N PREMIX



High water content TAU UNIT



ONLINE CONFIGURATOR AVAILABILITY | BIM FILE AVAILABILITY | RELIABILITY | EFFICIENCY & EMISSIONS

CONDEXA PRO

- MODULAR STAINLESS STEEL BOILER, WATER TUBE WITH HIGH SPECIFIC POWER
- EXTREME VERSATILITY THANKS TO THE WIDE RANGE OF ACCESSORIES AND POSSIBLE CONFIGURATIONS
- POSSIBILITY OF SINGLE INSTALLATION OR IN CASCADE UP TO 1120 KW

NEW

The stainless steel used for the heat exchange bodies, together with the reduced thermal stress and the high quality of all the materials used, guarantees maximum reliability and durability over time. In cascade use, Condexa Pro guarantees maximum continuity of operation.

The high level design can be appreciated in every single component and the choice of materials responds to logics of duration, efficiency and reliability. Low emissions allow CONDEXA PRO to be Class 6 NOx according to UNI EN 15502.

Digital electronic control, with managing / depending logic integrated into each module, allows sophisticated boiler and system management.

The wide range of optional accessories allows to realize multiple configurations. Condexa Pro can be used in single or cascade installations up to 10 modules, in line or back / back, conventional flue or room sealed. For models up to 70 kW the pump is provided as standard.

ALU PRO POWER

- CENTRAL HEATING BOILER COMPOSED OF INDIPENDENT ALUMINUM BODIES WITH LOW WATER CONTENT
- THE MODULAR STRUCTURE ALLOWS HIGH TURNDOWN AND LOW NOISE OPERATION
- THE FLUE EXHAUST IS POSITIONED IN THE LOW PART AND IS ALREADY COLLECTED WITHIN THE BOILER CASING

The aluminum alloy used for the indipendent boiler modules guarantees a high heat transmission and a homogeneous heat distribution. Specific layouts on the water side ensure low heat losses and reduces mud and carbonates deposit.

The air necessary for combustion is taken from the upper part of the boiler and helps to reduce heat losses, to the advantage of the overall efficiency.
ALU PRO POWER complies with Class 6 NOx according to UNI EN 15502.

Each boiler body is equipped with its own ignition and safety control.
All "specific" controls are, in turn, governed by a sophisticated central system.

The fundamental characteristic of the project (battery of indipendent boiler bodies) allows very high turndown ratios and great load tracking.

TAU UNIT

- COMPACT MONOBLOC STAINLESS STEEL BOILER WITH MEDIUM-HIGH WATER CONTENT
- VERY COMPACT FOOTPRINT
- SMOOTH SMOKE TUBES AND COUNTERCURRENT LAYOUT FACILITATE THE DESCENT AND DRAINAGE OF THE CONDENSATE

NEW

The titanium stabilized stainless steel boiler body guarantees full reliability and has a totally vertical development.

The dimensions of the combustion chamber and the premix high modulation burner (1:10) allow very low pollutant and noise emissions.
TAU UNIT complies with Class 6 NOx according to UNI EN 15502.

The electronic on-board control oversees the safety devices, the boiler and system management and the cascade configurations (up to 16).

The large front door ease the access to the boiler body, the burner and the control panel, reducing intervention and maintenance times.

TAU N PREMIX

- HIGH POWER MONOBLOC STAINLESS STEEL BOILER WITH HIGH WATER CONTENT
- THE NARROW STRUCTURE EASE THE ACCESS IN THE BOILER ROOM AND REDUCES DIRECT AND INDIRECT CLEARANCES
- HEAD LOSSES IN THE WATER CIRCUIT AND THE LOW THERMAL LOAD ALLOWS ZERO-FLOW OPERATION

The large stainless steel boiler body is characterized by its very low volumetric and superficial thermal load. The 3-pass structure optimizes heat transfer without stressing the heat exchange surfaces.

The extensive use of special steels for the combustion chamber, the PREMIX series burner and the exchange body ensure long life and insignificant wear levels.
Burner complies to the best class in terms of NOx according to UNI EN 676.

The electronic control panel can be implemented to manage, in addition to the boiler, cascades of generators and systems.

Maintenance is facilitated by the large access doors to the combustion chamber and the tube bundle. The position of the burner considerably reduces dust extraction.

RS SERIES

- LOW NOx COMBUSTION CONFORMING THE CLASS III OF EN 676 EUROPEAN STANDARD
- AVAILABLE WITH ONE STAGE, TWO STAGE OR MODULATING OPERATION
- A WIDE RANGE OF ACCESSORIES ALLOWS ELEVATED WORKING FLEXIBILITY

LOW NOx

Low flame temperature combustion to prevent the formation of NOx. Riello excels in producing burners which perform well with minimal excess air; this enhances system efficiency and reduces greenhouse gas emissions such as CO2.

The models of RS BLU series allow a friendly use and maintenance; they are fitted with a microprocessor control panel which supplies indication of operation and diagnosis of fault cause.

The ventilation unit comes with a sound proofing system.
The air flow and sound-deadening materials used in the construction are designed to reduce sound emissions to the minimum and guarantee high levels of performance in terms of output and air pressure.

Elevated performance of the fan and combustion head, provides efficiency and care for the environment. Riello experience in combustion technology assures smooth ignition, safe operation and environmentally friendly emissions.

PREMIX SERIES

- REDUCED VENTILATION NOISE AND COMBUSTION NOISE TO THE CHIMNEY
- WIDE MODULATION RANGE, WITHOUT THE NEED OF A MOVABLE COMBUSTION HEAD MECHANISM
- VERY COMPACT FLAME
- THERMAL EXCHANGE INCREASING FROM IRRADIATION, PARTICULARLY AT MINIMUM OUTPUT
- POSSIBILITY TO OBTAIN HIGH COMBUSTION INTENSITY WITH REDUCED COMBUSTION HEAD DIMENSIONS

ULTRA LOW NOx

"State of the art" technological solution able to satisfy the requirements of high modulating turn down ratios and low polluting emissions. High electrical absorption efficiency (70%) Brushless motor; (for RX S/PV models)

In reliability tests, the material resistance and manufacturing processes have been confirmed.
- high intensity combustion;
- high turn-down ratio;
- high thermal stress;
- matching with combustion chambers at high and medium temperature.

The ventilation unit comes with a sound proofing system.
The air flow and sound-deadening materials used in the construction are designed to reduce sound emissions to the minimum and guarantee high levels of performance in terms of output and air pressure.

Elevated performance of the fan and combustion head, provides efficiency and care for the environment. Riello experience in combustion technology assures smooth ignition, safe operation and environmentally friendly emissions.

RL SERIES

- LIGHT OIL LOW NOx COMBUSTION COMPLIAN TO THE CLASS III OF EN 267 EUROPEAN STANDARD
- AVAILABLE WITH ONE STAGE, TWO STAGE OR MODULATING OPERATION
- DESIGNED FOR USE IN HOT OR SUPERHEATED WATER BOILERS, HOT AIR, STEAM GENERATORS OR DIATHERMIC OIL BOILERS

LOW NOx

The combustion head has been designed to create partial smoke recirculation; this way, thanks to lower temperatures reached, NOx emissions are reduced, taking the value below the level allowed by the strictest norms.

Easy maintenance thanks to easy to access components, even with burner installed. Electric protection IP X4D (IP 44). Compact case, reducing overall dimensions in order to ensure an easier servicing and maintenance.

Low Noise Ventilation system. Sound emissions optimization is guaranteed by the use of high performance fans and sound-proofing materials.

A wide range of accessories allows elevated working flexibility.

RLS SERIES

- DESIGNED FOR LOW NOx APPLICATIONS. REDUCED FUEL CONSUMPTION AND RUNNING COST
- OPERATION "TWO STAGE / TWO STAGE PROGRESSIVE" OR ALTERNATIVELY "MODULATING"
- IDEAL WHEN A DUAL / BACK UP FUEL SUPPLY IS REQUIRED

LOW NOx

RLS burners can supply the demanded power with precision, guaranteeing an high efficiency system level and stable settings, reducing fuel consumption and operating costs.

All necessary components combined in a single unit thus making installation easier, faster and, above all, more flexible.

Optimisation of sound emissions is guaranteed by the special design of the air suction circuit and by incorporated sound proofing material.

Wide range of available power output, for use in low / medium temperature, hot and overheated water boilers, hot air or steam boilers, diathermic oil boilers.