

R_280-310-410-510

Gas and Dual Fuel Burners

Product Overview

R_280-310-410-510

NEW HIGH POWER ENHANCED DESIGN FOR GAS AND DUAL FUEL LOW NO_x APPLICATIONS

RS 280-310-410-510/E-/EV RLS 280-310-410-510/E-/EV

The high power Burners Series RS-RLS, are the result of intensive activities of technical research and considerable investment, carried out in recent years, which allowed the highest levels of technological development to be achieved in the Industrial Burners context, confirming the historical leadership of Riello in this important area of energy management.

The company's commitment to deliver performance, quality and reliability is once again demonstrated by the introduction of the new 280-310-410 and 510 high power R series burner models, in the 1.050 – 20.000 MBtu/hr capacity range, able to summarize and concentrate the best technological expertise of Riello.

The new models RS-RLS 280-310-410-510 characterized by Technology, Power and Design, are authentic 'little giants' in the burners scenario; little in size and weight, giants in performance.

This new addition to the R series family of burners is geared to meet the needs of our customer worldwide and specifically in the North American market. Parallel positioning fuel-air ratio control is at heart of the burner and can be enhanced by variable speed drive technology for maximum energy savings. These new models also maintain the Riello product line standards of low excess air operation throughout the firing range and minimal noise emission.

ADVANTAGES

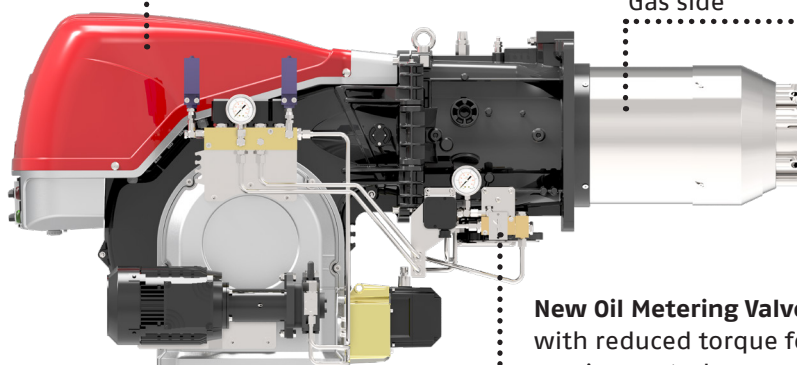
- Ease of installation and maintenance with controls and components on board
- Advanced head design provides Low NO_x emissions on Gas side
- Blower assembly and housing engineered for efficiency and low noise levels
- Modulating Operation with the installation of a PID logic regulator

... OTHER DISTINCTIVE DETAILS

- Excellent Output Control by parallel positioning system ensures precise fuel-air control and flexible set-up to meet a wide variety of application requirements
- Oil pump is driven by a dedicated motor to ensure energy savings and durability. Oil pump assembly is factory mounted, piped and wired on the burner for simplified, space saving installation
- Hinged housing allows fast access for inspection, maintenance and repairs

Design

Patented design (Patent n° 1312904)

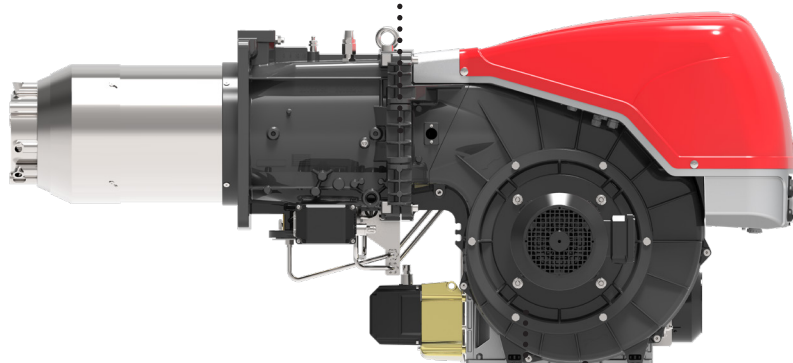


Low NOx Combustion Head

engineered for emissions reduction on Gas side

New Oil Metering Valve
with reduced torque for
precise control

Hinged Burner housing for Combustion
Head inspection and maintenance (can be
open to the left or to right)



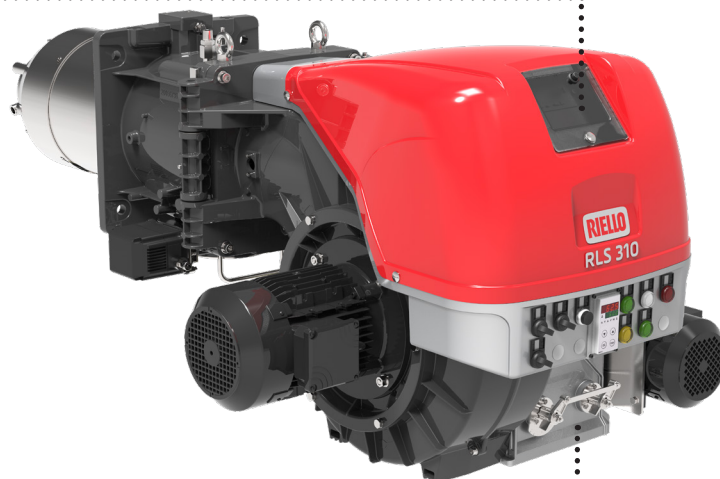
Simplified Maintenance for motor and fan
by direct extraction through opening flange

New Blower Assembly

reduces overall dimensions and weight

Programming Display

Removable viewing panel protects programming display
module while allowing quick access to keypad



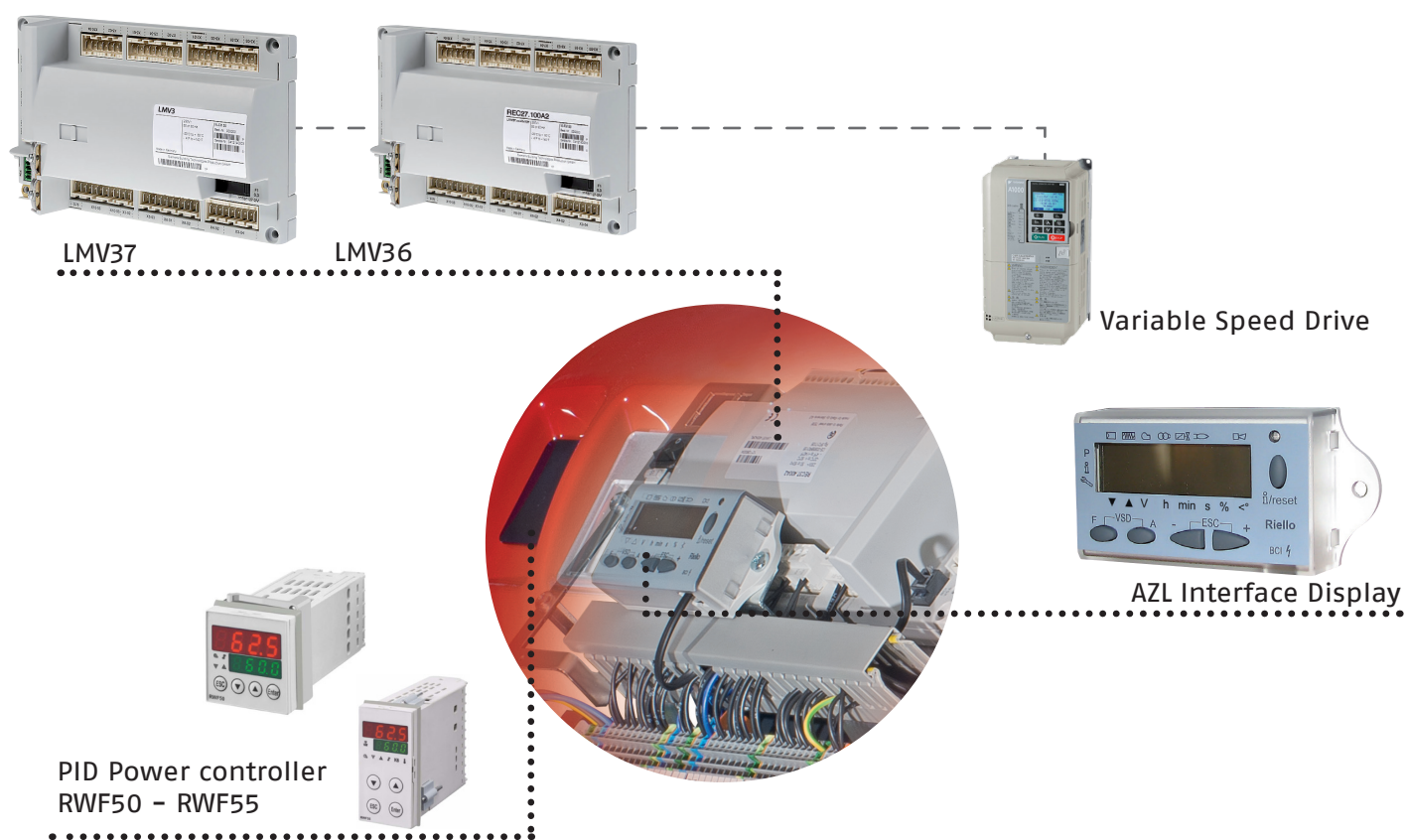
Air dampers louvers are bearing
mounted for enhanced accuracy

LMV37 and LMV36 – Digital Burner Management System

Combustion systems are in continuous evolution and high tech solutions related to electronic systems are today utilized to obtain better performances and efficiencies.

The Burner is one of the most important components of the combustion system and its evolution is oriented towards the perfect control of operation.

Riello R_280-310-410-510/E and /EV burners utilize the LMV37 (gas models) and LMV36 (dual fuel models) digital burner management systems providing precise fuel-air ratio control with independent servomotors for modulating fuel valve(s) and air damper. The LMV3x controls are user friendly and provide maximum safety and reliability.



WIDE PRODUCT VARIANTS

The new models RS- RLS 280-310-410-510 cover a range from a low fire rate of 1.050 Mbtu/hr to a maximum of 20.000 Mbtu/hr, providing the ideal solution for matching to Heating Boilers, Steam Generators and Industrial Process Plants. All models are approved and conform to the applicable North American standards.

The table below shows the various models of the new burner series.

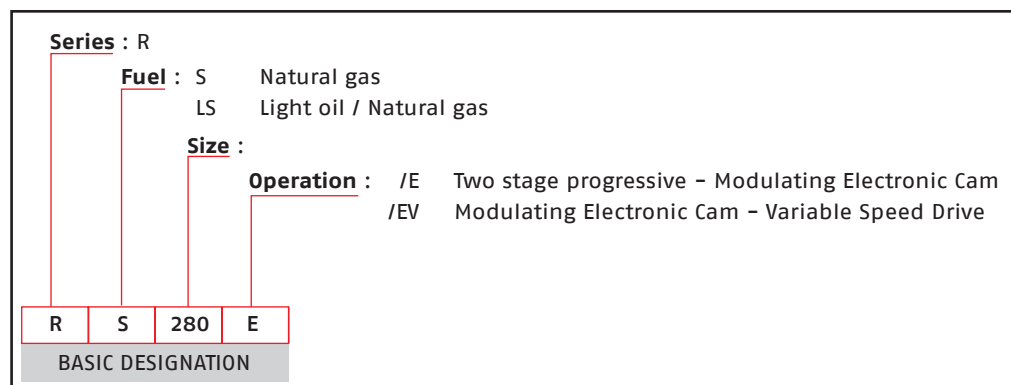
MODELS	FUEL		OPERATION (*)	
	Gas	Light Oil	/E	/EV
RS 280/E	•		•	
RS 310/E	•		•	
RS 410/E	•		•	
RS 510/E	•		•	
RS 280/EV	•			•
RS 310/EV	•			•
RS 410/EV	•			•
RS 510/EV	•			•
RLS 280/E	•	•	•	
RLS 310/E	•	•	•	
RLS 410/E	•	•	•	
RLS 510/E	•	•	•	
RLS 280/EV	•	•		•
RLS 310/EV	•	•		•
RLS 410/EV	•	•		•
RLS 510/EV	•	•		•

(*) /E = Two stage progressive - Modulating electronic cam
 /EV = Modulating electronic cam, Variable Speed Drive

FIRING RATES

MODELS	FIRING RATES (MBtu/hr)
• RS/RLS_280	1.050 - 10.500
• RS/RLS_310	1.375 - 13.750
• RS/RLS_410	1.635 - 16.700
• RS/RLS_510	2.000 - 20.000

DESIGNATION OF SERIES



Riello Burners – a world of experience in every burner we sell.

06/2018

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[1]



[2]

[1] BURNERS PRODUCTION PLANT
S. PIETRO, LEGNAGO (VERONA) – ITALIA

[2] HEADQUARTER BURNERS DIVISION
S. PIETRO, LEGNAGO (VERONA) – ITALIA

Across the world, Riello sets the standard in reliable and high efficiency burner technology.

With burner capacity from 17 thousand to 163 million Btu/hr, Riello gas, oil, dual fuel and Low Nox burners deliver unbeatable performance across the full range of residential and commercial heating applications, as well as in industrial processes.

With headquarter in Legnago, Italy, Riello has been manufacturing premium quality burners for over 90 years. The manufacturing plant is equipped with the most innovative systems of assembling lines and modern manufacturing cells for a quick and flexible response to the market.

Besides, the Riello Combustion Research Centre, located in Angiari, Italy, represents one of the most modern facility in Europe and one of the most advanced in the world for the development of the combustion technology.

Today, the company's presence on worldwide markets is distinguished by a well-constructed and efficient sales network, alongside many important Training Centres located in various countries to meet its customers' needs. Riello has 13 operational branches abroad (in Europe, America and Asia), with customers in over 60 countries.

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