

RLS 310-410-510-610 Series

Modulating Dual Fuel Burners

Product Overview

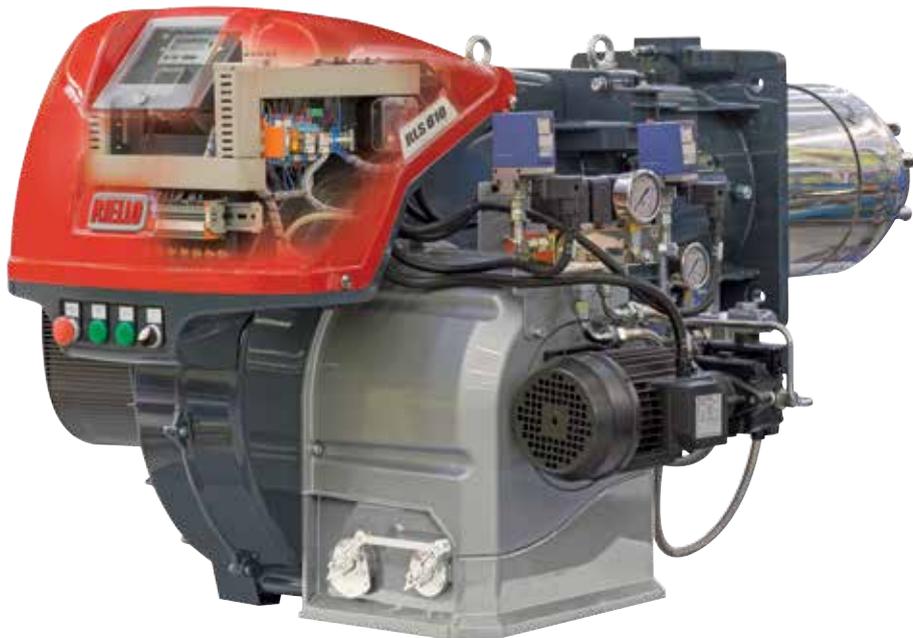
NEW HIGH POWER MONOBLOCK, DUAL FUEL LOW NO_x BURNERS RLS 310 - 410 - 510 - 610/M-/E MX

The high power monoblock Dual Fuel Burners Series, are the result of intensive activities of technical research and considerable investment, carried out in recent years, that 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 remarkable results of performance, quality and reliability, are now consolidated by the creation of new models in the 3-6 MW range, RLS 310-410-510-610, able to summarize and concentrate the best technological expertise of Riello.

The new models RLS 310-410-510-610 characterized by technology, power and design, are authentic 'little giants' in the burners scenario; little in size and weight, giants in performance provided and in capability to meet the market needs.

These new models are available in various air-fuel ratio control configurations; Modulating Operation can be managed through Mechanical Cam for a simple commissioning and through Electronic Cam for higher performance and efficiency.



ADVANTAGES AT A GLANCE

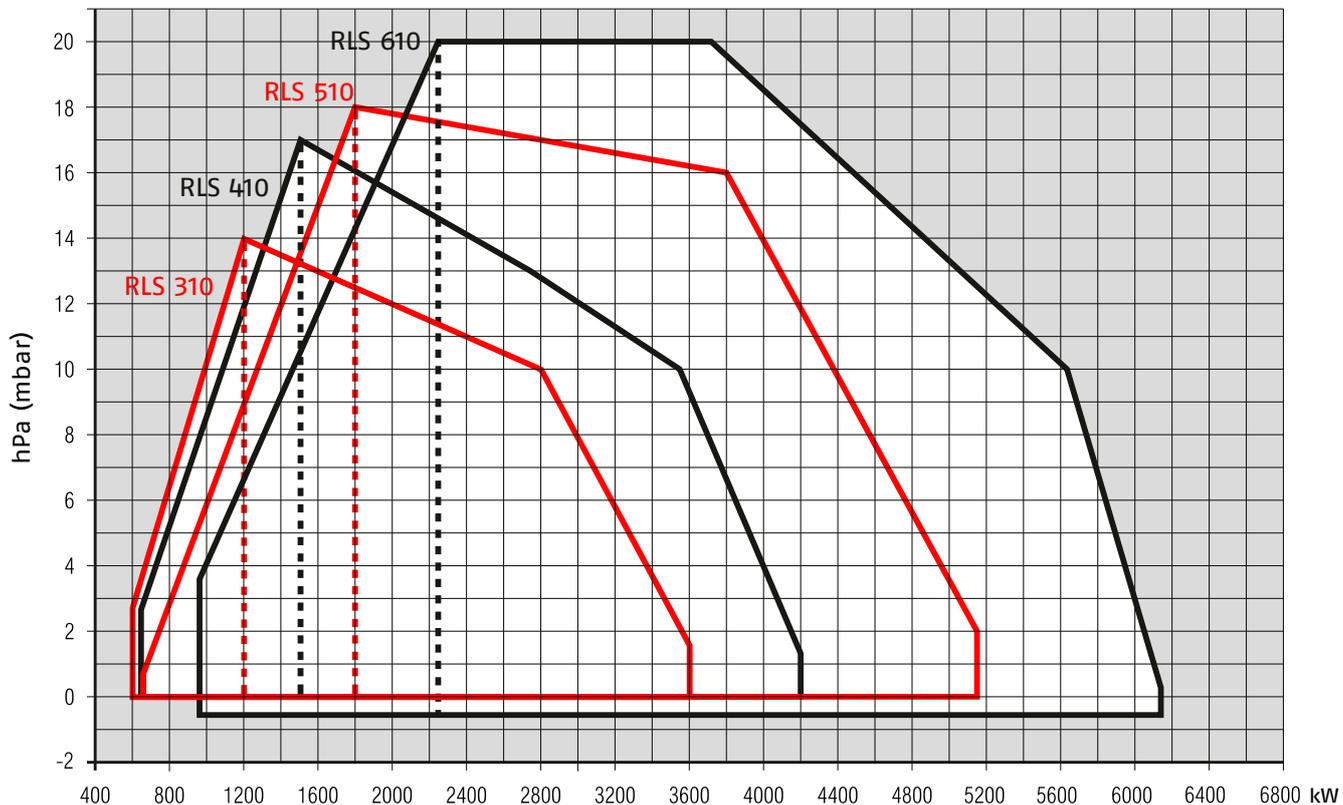
- Easy installation and servicing thanks the monoblock configuration
- Low NO_x emissions conforming to Class 3 EN 676
- Low noise emissions thanks to the efficient ventilation circuit and sound proofing solutions
- Modulating Operation with the installation of a PID logic controller

... OTHER DISTINCTIVE DETAILS

- Various configuration available for Dual Fuel combustion
- Excellent Output Control by Digital Burner Management Systems
- Energy saving and long life of oil pump assured by a dedicated pump motor
- Easy access to internal components by burner opening hinge

Firing Rates

RLS 310-410-510-610/M - /E MX



Useful working field for choosing the burner

Modulation range

Test conditions
 conforming to EN676
 Temperature: 20°C
 Pressure: 1013,5 mbar
 Altitude: 0 m a.s.l.

Operation

BURNER OPERATION MODE

The RLS 310-410-510-610/M series of burners can have "two-stage progressive" or "modulating" operation on both fuels, light oil and natural gas.



Output regulator

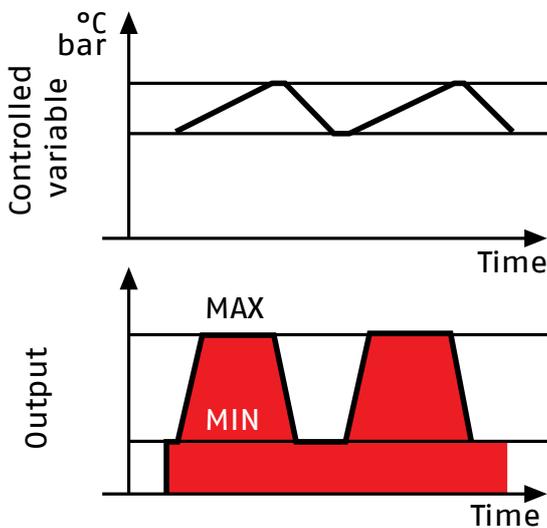


Analog 4-20 mA or 0 - 10V converter for remote modulation

On "two-stage progressive" operation, the burner gradually adapts the output to the requested level, by varying between two pre-set levels (see picture A).

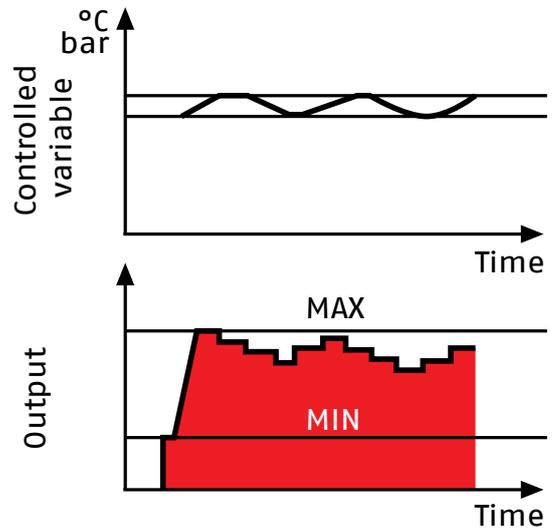
On "modulating" operation, normally required in steam generators, in superheater boilers or diathermic oil burners, a specific regulator and probes are required. These are supplied as accessories that must be ordered separately. The burner can work for long periods at intermediate output levels (see picture B).

"TWO-STAGE PROGRESSIVE" OPERATION



Picture A

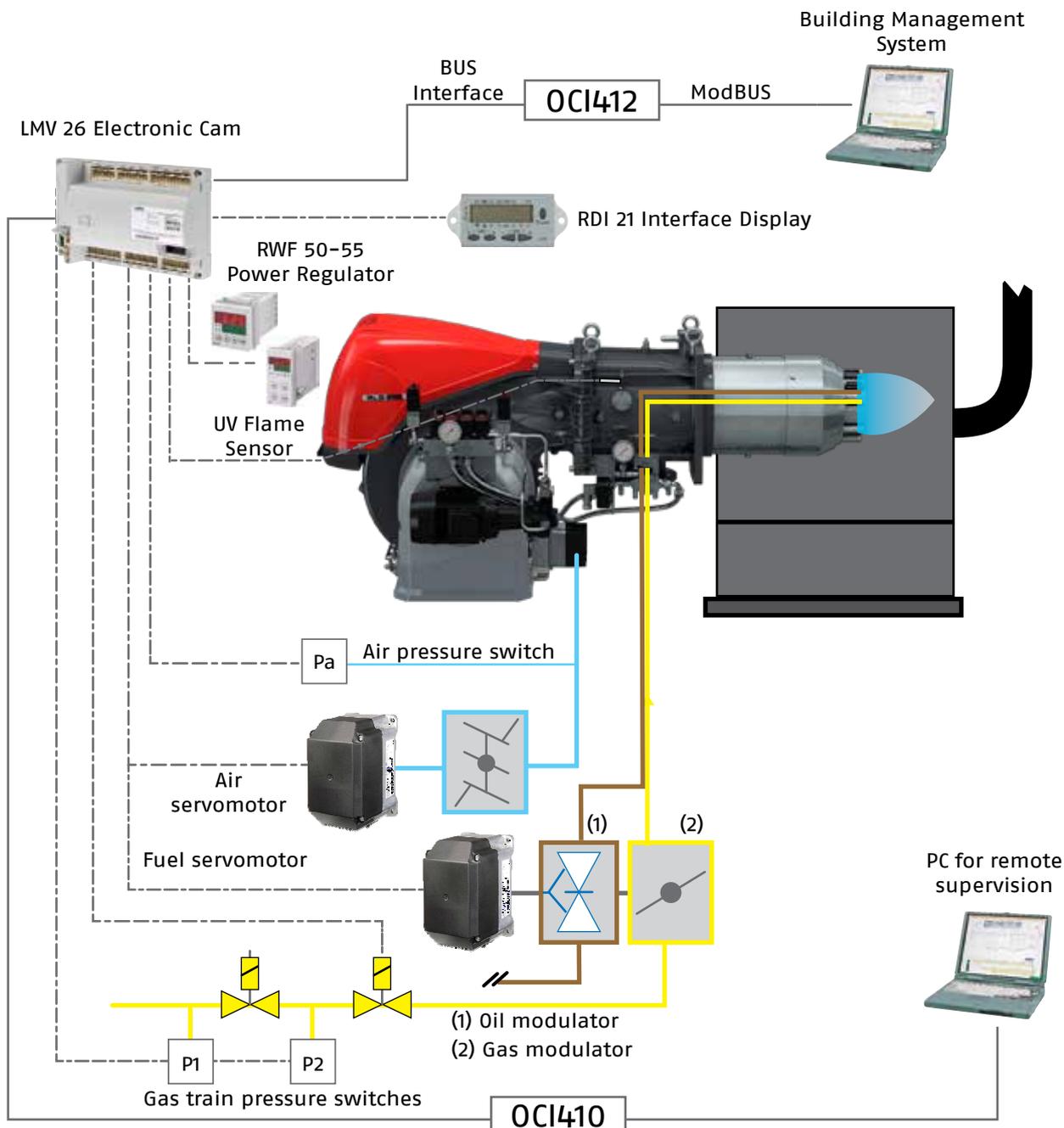
"MODULATING" OPERATION



Picture B

LMV 26 – DIGITAL BURNER MANAGEMENT SYSTEM

Combustion systems are in continuous evolution and high tech solutions, in particular connected to electronic systems, are today applied in order to obtain better performances and efficiencies. The Burner is one of the most important component of the combustion system and its evolution is in the direction of the perfect control of operation and more efficiency. Following this evolution trend RIELLO RLS 310-410-510-610/E MX gas burner series has been upgraded with the introduction of new models with modulating operation obtained by Electronic Cam. The new models are based on the Digital Burner Management Systems RIELLO LMV 26, which is able to manage the air-fuel ratio by independent servomotors in order to obtain a perfect output control and to assure a correct combustion and safe operation on all modulation range. The standard RLS/E burners are equipped with Siemens LMV 26 and, on demand, with Siemens LMV51-52 or Lamtec BT 340 system.



STANDARD BURNER MODELS

EMISSIONS	MODELS	OPERATION (*)	
		/M	/E
Class 3 EN 676 Gas Class 2 EN 267 Oil	RLS 310 MX	●	●
	RLS 410 MX	●	●
	RLS 510 MX	●	●
	RLS 610 MX	●	●

(*) /M = Two stage progressive - Modulating mechanical cam
 /E = Two stage progressive - Modulating electronic cam

Modulating electronic cam models with Variable Speed Drive technology are available on demand.

MODELS	FIRING RATES - MX		
	(kW)		
• RLS 310	600/1200	÷	3600
• RLS 410	640/1500	÷	4200
• RLS 510	680/1800	÷	5170
• RLS 610	1000/2200	÷	6155

The new models RLS 310-410-510-610 are excellently covering the 3-6 MW power range, providing the ideal solution for matching to Heating Boilers, Steam Generators and Industrial Process Plants.

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

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

With burner capacity from 5 kW to 48 MW, 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 year. 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.



[2]

[1] BURNERS PRODUCTION PLANT
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