

RL/1 BLU SERIES

The new RL/1 BLU series represents Riello's last step of innovation in terms of Low NOx technology applied to light oil burners.

The series includes one model, with an output ranging from 115 to 260 kW. This new burner has been re-designed for use in hot or superheated water boilers, hot air, steam generators or diathermic oil boilers. The burners are fitted with a microprocessor-based control panel, which supplies indication of burner status and fault causes.

A new, more compact and handable case has been designed, keeping overall dimensions compact in order to ensure an easier servicing and maintenance.

The elevated performance of the forward-blades fan, together with a new innovative combustion head, guarantee flexibility of use and excellent working at all firing rates always with Low NOx emissions.



RL 25/1 BLU

115 ÷ 260 kW

Guidelines for installation of burners in conformity to EU Regulation:

A RIELLO burner (Heat Generator), where it is matched with a water-based boiler (Heater Housing) with a nominal output ≤ 400 kW, providing heat for heating purposes and heat to deliver sanitary hot water, can be installed:

- With boilers (heater housings) already in service in the field, for replacement of identical products, in conformity to Article 1, paragraph 2, point (G) of the EU Regulation No. 813/2013;
- With boilers (heater housings) on a new installation, if they have emissions complying with the requirement of Annex II, paragraph 4 of the EU regulation No. 813/2013.

FIRING RATE



Useful working field for choosing the burner

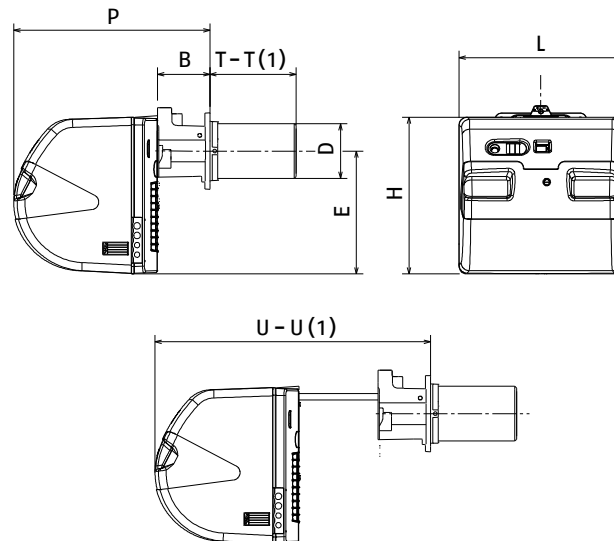
Test conditions conforming to EN267
 Temperature: 20°C
 Pressure: 1013,5 mbar
 Altitude: 0 m a.s.l.

Low NOx One Stage Light Oil Burners

RL/1 BLU SERIES

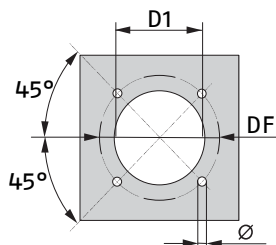
Overall dimensions (mm)

BURNER



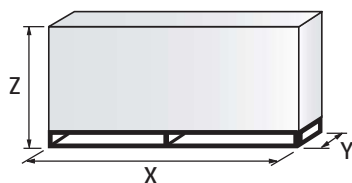
MODEL	B	D	E	L	H	P	U	T	T(1)	U(1)
▶ RL 25/1 BLU	130	140	305	442	416	508	788	200	280	788

BURNER - BOILER MOUNTING FLANGE



MODEL	D1	DF	Ø
▶ RL 25/1 BLU	160	224	M8

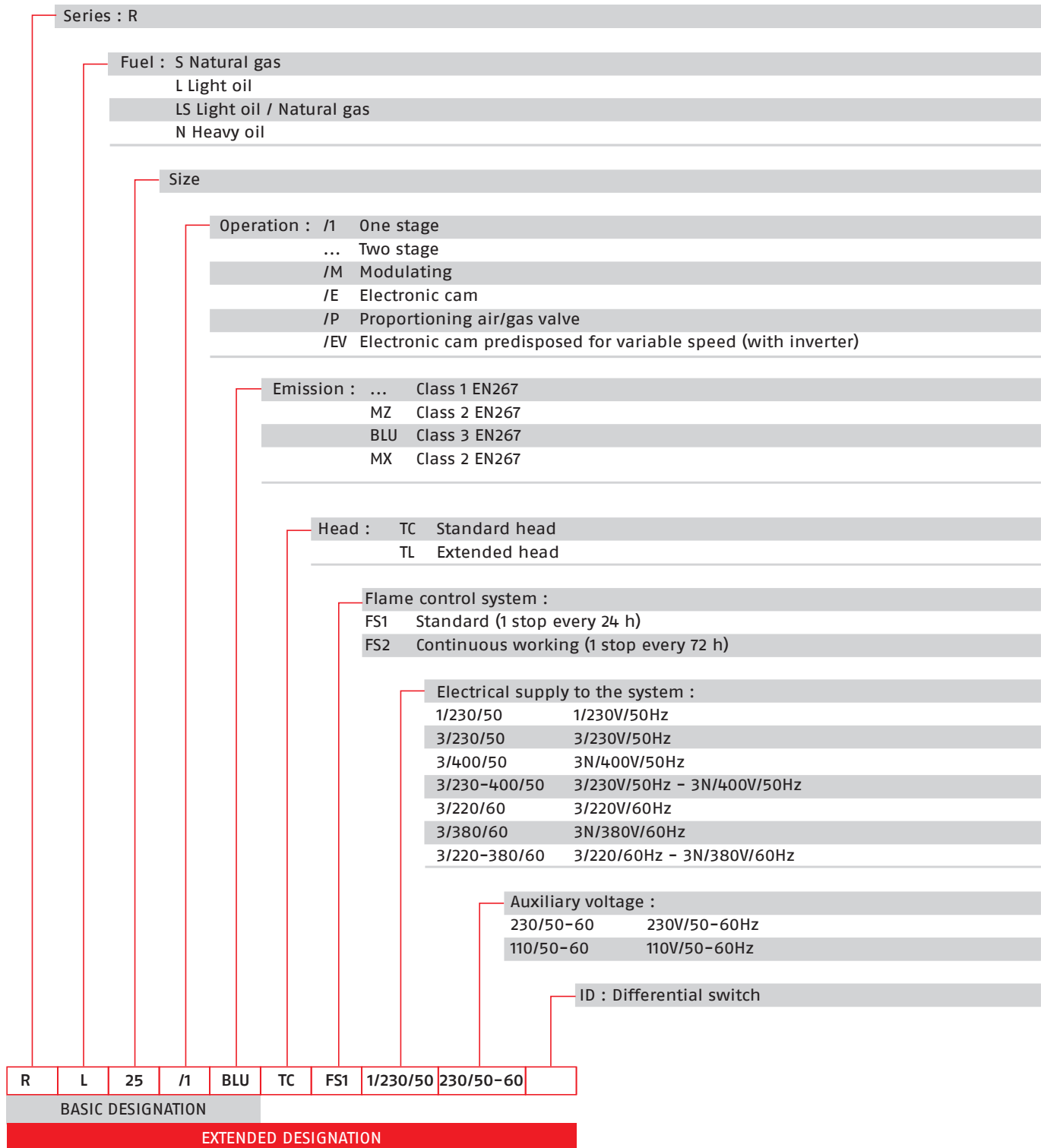
PACKAGING



MODEL	X	Y	Z	kg
▶ RL 25/1 BLU	1190	492	510	40

Specification

DESIGNATION OF SERIES



Low NOx One Stage Light Oil Burners

RL/1 BLU SERIES

Specification

STATE OF SUPPLY

Monoblock forced draught Low NOx oil burner with one stage operation, made up of:

- Air suction circuit lined with sound-proofing material
- High performance fan with forward blades
- New Low NOx combustion head technology
- Gears pump for high pressure fuel supply
- UV sensor for flame detection
- Microprocessor-based burner safety control box, with diagnostic function
- Burner on/off switch
- Flame inspection window
- Slide bars for easier installation and maintenance
- Protection filter against radio interference
- IP X0D (IP 40) electric protection level.

Standard equipment:

- 2 flexible pipes for connection to the oil supply network
- 2 gaskets for the flexible pipes
- 2 nipples for connection to the pump
- 1 thermal screen
- 4 screws for fixing the burner flange to the boiler
- Wiring loom fittings for electrical connections
- Instruction handbook for installation, use and maintenance
- Spare parts catalogue.

Available models

Burners

CODE	MODEL	HEAT OUTPUT		TOTAL ELECTRICAL POWER (kW)	NOTE
		(kW)	(kg/h)		
20156024	RL 25/1 BLU TC FS1 1/230/50 230/50-60	115 - 260	10 - 22	0,6	
20157095	RL 25/1 BLU TL FS1 1/230/50 230/50-60	115 - 260	10 - 22	0,6	

Net calorific value: 11,8 kWh/kg - 10200 kcal/kg - Viscosity at 20°C: 4-6 mm²/s (cSt)

The burners of RL/1 BLU series are in according to 2014/30/EU - 2014/35/EU - 2006/42 EC Directive and EN 267.

Burner accessories

Nozzles

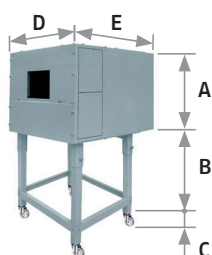


The nozzles of RL 25/1 BLU burners are chosen on the basis of the maximum output required from the application.

NOTE: each burner needs N° 1 nozzle.

GPH	RATED DELIVERY [kg/h] AT 8 bar	RATED DELIVERY [kg/h] AT 20 bar	DELAVAN 60°A CODE	MONARCH 60°PLP CODE
2.25	7.4	11.9	3042134	3041132
2.50	8.2	13.4	3042144	3041142
3.00	9.9	16.1	3042148	3041152
3.50	11.5	18.8	3042164	3041162
4.00	13.2	21.5	3042174	3041172
4.50	14.8	24.0	3042184	3041182
5.00	16.5	26.8	3042194	3041192
5.50	18.1	29.5	3042204	3041202
6.00	19.8	32.2	3042214	3041212

Sound proofing box



If noise emission needs reducing even further, sound-proofing boxes are available. When a lower "B" dimension is required, it is available the Box Support Kit code 20065135 which allows to reduce it at the fixed dimension of 55 mm. The sound-proofing boxes are not suitable for outdoor use.

BURNER	BOX TYPE	A (mm)	B (mm) min-max	C (mm)	D (mm)	E (mm)	[dB(A)] (*)	BOX CODE
► RL 25/1 BLU	C1/3	650	372 - 980	110	690	770	10	3010403

(*) Average noise reduction according to EN 15036-1 standard

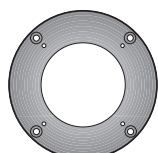
Degasing unit



To solve problem of air in the oil sucked, a degasing unit are available.

BURNER	FILTER	FILTERING DEGREE (µm)	DEGASING UNIT CODE
► RL 25/1 BLU	With filter	50 - 75	3010055

Connection flange kit



A kit is available for use where the burner opening on the boiler is of excessive diameter.

BURNER	(mm)	KIT CODE
► RL 25/1 BLU	170 (internal diameter) 300 (external diameter)	3010138

PC Interface kit



To connect the control box to a personal computer for the transmission of operation, fault signals and detailed service information, an interface adapter with PC software are available.

BURNER	KIT CODE
► RL 25/1 BLU	3002719

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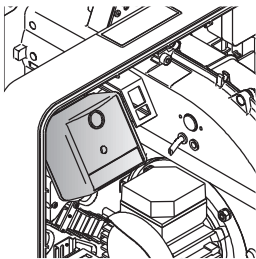
Volt free contact kit



A volt free contact kit is available for installation onto the burner. It can be used for a remote interface between burner operating signals. Every burner can be equipped with a single kit to remote the flame presence signal and the burner lockout indication.

BURNER	KIT CODE
► RL 25/1 BLU	3010419

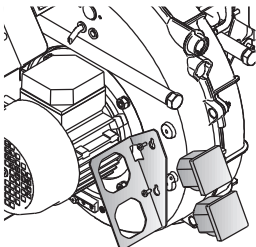
Post-ventilation kit



To have 20 s ventilation after opening of thermostats chain, a special kit is available.

BURNER	KIT CODE
► RL 25/1 BLU	3010453

Hours counter kit



To measure the burner working time a hours counter kit is available.

BURNER	KIT CODE
► RL 25/1 BLU	3010450

Ground fault interrupter kit



A "Ground fault interrupter kit" is available as a safety device for electrical system fault.

BURNER	KIT CODE
► RL 25/1 BLU	3010448

Protection kit (electromagnetic interferences)

When the burner is installed in a room particularly subject to electromagnetic interference (signals emitted over 10 V/m) due for example to INVERTER presence or in systems where the lengths of the thermostat connections is over 20 meters, this specific protection kit is available as an interface between the thermostatic controls and the burner.

BURNER	KIT CODE
► RL 25/1 BLU	3010386