

GULLIVER RGD SERIES

The Riello Gulliver RGD series of two stage light oil burners, is a complete range of products developed to respond to any request for home heating. The Gulliver RGD series is available in five different models, with an output ranging from 14 to 296 kW, divided in four different structures. All the models use the same components designed by Riello for the Gulliver series. The high quality level guarantees safe working.

In developing these burners, special attention was paid to reducing noise, to the ease of installation and adjustment, to obtaining the smallest size possible to fit into any sort of boiler available on the market.

The two stage operation guarantees high level of thermal unit efficiency.

All the models are approved by the EN 267 European Standard and conform to European Directives for EMC, Low Voltage, Machinery and Boiler Efficiency.

All the Gulliver RGD burners are fired before leaving the factory.

- 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, in conformity to Article 1, paragraph 2, point (G) of the EU Regulation No. 813/2013;
 - With boilers (heater housings) on a new installation, put on the market after 26th of September 2015;
 - With all new boilers (heater housings), where placed on the market before 26th of September 2015.

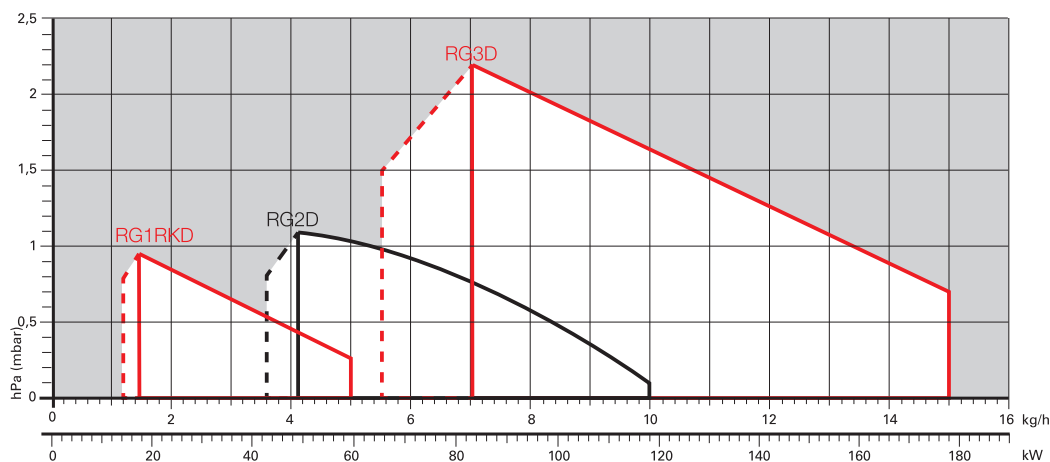


RG1RKD	14/17 ÷ 60 kW
RG2D	42/49 ÷ 118 kW
RG3D	65/83 ÷ 178 kW
RG4D	106/130 ÷ 237 kW
RG5D	95/142 ÷ 296 kW

Two Stage Light Oil Burners

GULLIVER RGD SERIES

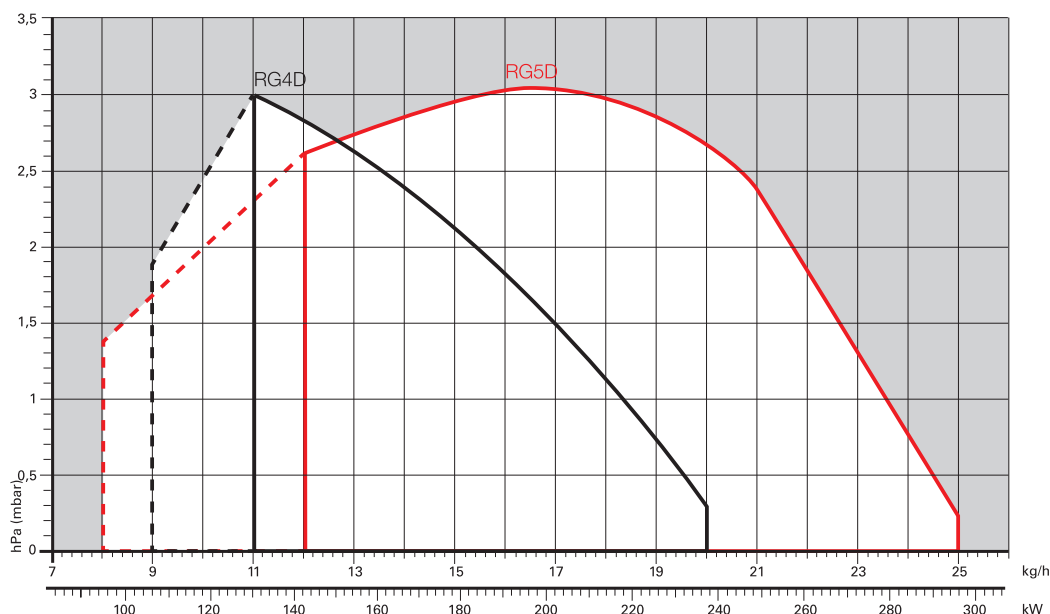
FIRING RATES



Useful working field for choosing the burner

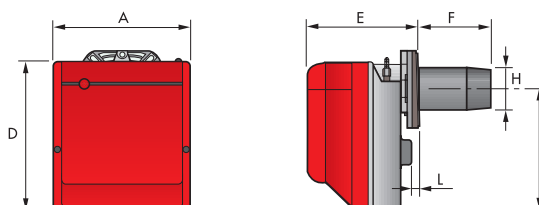
1st stage operation range

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



Overall dimensions (mm)

BURNER



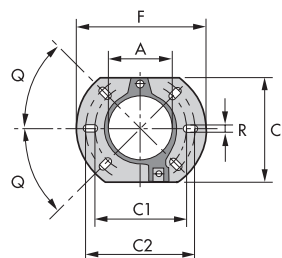
MODEL	A	D	E	F	H	I	L
▶ RG1RKD	234	254	196	111	84	210	4
▶ RG2D	255	280	202	115 - 185	95	230	10
▶ RG3D	300	345	228	142 - 212	123	285	12
▶ RG4D	300	345	228	142 - 212	123	285	12
▶ RG5D	300	345	247	154 - 294	125	285	12,5

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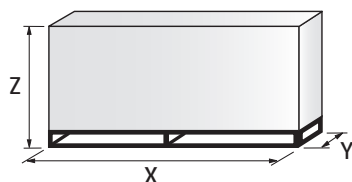
RIELLO

BURNER - BOILER MOUNTING FLANGE



MODEL	A	C	C1	C2	F	Q	R
► RG1RKD	91	144	130	150	180	45°	11
► RG2D	106	166	140	168	189	45°	11
► RG3D	127	198	160	190	213	45°	11
► RG4D	127	198	160	190	213	45°	11
► RG5D	127	198	160	190	213	45°	11

PACKAGING



MODEL	X	Y	Z	kg
► RG1RKD	353	278	320	12
► RG2D	363	298	350	13
► RG3D	430	345	430	13
► RG4D	430	345	430	13
► RG5D	510	345	440	18

Specification

DESIGNATION OF SERIES

Series : R Standard emission burners	
B Low NOx burners	
Fuel : S Natural gas	
G Light-oil	
Size	
Possible variations: R Light-oil pre-heater	
K Cone shaped head	
S Reduced output ignition	
D Two stage output setting	
Head length: ... standard head	
TL extended head	
Electrical supply to the system : 1/230/50 1/230V/50Hz	

R	G	1	RKD		1/230/50
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LIGHT OIL

Two Stage Light Oil Burners

GULLIVER RGD SERIES

Specification

STATE OF SUPPLY

Completely automatic monobloc light oil burners, two stage operation, made up of:

- Fan with forward curve blades
- Cover lined with sound-proofing material
- Air damper completely closed in stand by
- Air damper, with 1st and 2nd stage adjustment (2nd stage adjustment without removing the casing)
- Single phase electric motor 230 V, 50 Hz
- Combustion head fitted with:
 - stainless steel head cone, resistant to high temperatures
 - ignition electrodes
 - flame stability disk
- Geared pump for fuel supply, fitted with:
 - filter
 - pressure regulator
 - attachments for fitting a pressure gauge and vacuum meter
 - internal by-pass for preparing for single-pipe installations
- Fuel feed solenoid valve incorporated in the pump
- Photocell for flame detection
- Electronic flame control equipment
- Light oil nozzle
- IP X0D (IP 40) protection level
- PTC fuel pre-heater (optional).

Standard equipment:

- Two flexible pipes for connection to the light oil supply line
- Two nipples for connection to the pump
- Flange, screws and nuts for fixing
- Thermal screen
- 7-pin plug (not included in models with digital control box M0 550)
- 4-pin plug
- Instruction handbook for installation, use and maintenance
- Spare parts catalogue.

Available models

CODE	MODEL	HEAT OUTPUT		TOTAL ELECTRICAL POWER (kW)	CERTIFICATION	NOTE
		(kW)	(kg/h)			

MODELS WITH ANALOGIC CONTROL BOX

3736650	RG1RKD	1/230/50	14/17 - 60	1,2/1,45 - 5	0,290	CE - 0036 0347/04	
3738050	RG2D	1/230/50	42/49 - 118	3,6/4,1 - 10	0,180	CE - 0036 0348/04	
20052620	RG2D TL	1/230/50	42/49 - 118	3,6/4,1 - 10	0,180	CE - 0036 0348/04	
3739450	RG3D	1/230/50	65/83 - 178	5,5/7 - 15	0,390	CE - 0036 0298/00	
20052622	RG3D TL	1/230/50	65/83 - 178	5,5/7 - 15	0,390	CE - 0036 0298/00	
20066335	RG3D TL	1/230/50	65/83 - 178	5,5/7 - 15	0,390	CE - 0036 0298/00	
3739750	RG4D	1/230/50	106/130 - 237	9/11 - 20	0,390	CE - 0036 0348/04	
20052624	RG4D TL	1/230/50	106/130 - 237	9/11 - 20	0,390	CE - 0036 0348/04	
3739850	RG5D	1/230/50	95/142 - 296	8/12 - 25	0,470	CE - 0036 0325/01	
20052626	RG5D TL	1/230/50	95/142 - 296	8/12 - 25	0,470	CE - 0036 0325/01	

Net calorific value: 11,8 kWh/kg; 10200 kcal/kg - Viscosity at 20°C: 4+6 mm²/s (cSt).
The burners of RGD series are in according to EN 267.

Kerosene and ULSD

Gulliver RGD series burners can be supplied, on demand, suitable for applications where combustion of Kerosene, Low Sulphur Kerosene and Ultra Low Sulphur Diesel Oil (ULSD) is the chosen fuel.

GULLIVER RGD SERIES

Available models

CODE	MODEL	HEAT OUTPUT		TOTAL ELECTRICAL POWER (kW)	CERTIFICATION	NOTE
		(kW)	(kg/h)			
MODELS WITH DIGITAL CONTROL BOX MO 550						
3736654	RG1RKD	1/230/50	14/17-60	1,2/1,45-5	0,290	CE - 0036 0347/04
3738054	RG2D	1/230/50	42/49-118	3,6/4,1-10	0,180	CE - 0036 0348/04
3738058	RG2D TL	1/230/50	42/49-118	3,6/4,1-10	0,180	CE - 0036 0348/04
3739454	RG3D	1/230/50	65/83-178	5,5/7-15	0,390	CE - 0036 0298/00
3739458	RG3D TL	1/230/50	65/83-178	5,5/7-15	0,390	CE - 0036 0298/00
3739754	RG4D	1/230/50	106/130-237	9/11-20	0,390	CE - 0036 0348/04
3739758	RG4D TL	1/230/50	106/130-237	9/11-20	0,390	CE - 0036 0348/04
3739854	RG5D	1/230/50	95/142-296	8/12-25	0,470	CE - 0036 0325/01
3739858	RG5D TL	1/230/50	95/142-296	8/12-25	0,470	CE - 0036 0325/01

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

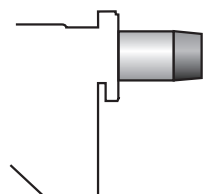
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Burner accessories

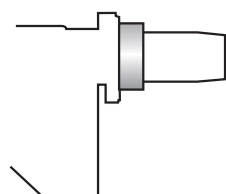
Extended head kit



Kits of extended heads are available.

BURNER	STANDARD HEAD LENGTH (mm)	EXTENDED HEAD LENGTH (mm)	KIT CODE
► RG1RKD	111	181	3000982
► RG2D	115	180	3000964
► RG2D	115	300	3000967
► RG3D	142	210	3000965
► RG3D	142	300	3000968
► RG4D	142	210	3000966
► RG4D	142	300	3000969
► RG5D	159	300	3000981

Spacer kit



By using the special accessories, the burner can be withdrawn to reduce head penetration into the combustion chamber.

BURNER	SPACER THICKNESS S (mm)	KIT CODE
► RG1RKD	15	3007931
► RG2D	25	3000672
► RG3D - RG4D - RG5D	15	20103452

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Burner accessories

Light oil filter



For cleaning light oil from dirty particles and impurities filters with the following features are available:

BURNER	FILTERING DEGREE (µm)	KIT CODE
► All models	60	3006561

Filter made up of aluminium body and stainless steel filtering cartridge; available singularly.

BURNER	FILTERING DEGREE (µm)	KIT CODE
► All models	60	3075011

Filter made up of aluminium cover, plastic tank and nylon filtering cartridge; available in packaging of 50 pieces.

Light oil filter/degassing unit



To solve problems of air or water in the oil circuit a special filter/degassing unit is available, made up of aluminium cover, plastic tank, stainless steel filtering cartridge, air release cap and water purge valve. It is available singularly.

BURNER	FILTERING DEGREE (µm)	KIT CODE
► All models	100	3000926

7-pin plug kit

If necessary a 7-pin plug kit is available (in packaging of n. 5 pieces).

BURNER	KIT CODE
► All models	3000945

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
► RG1RKD - RG2D - RG3D - RG4D - RG5D	3002731

Control box M0 550, sensor flame and short circuit plug



On request, we can supply a more efficient control box with following features:

- Digital technology
- Post-ignition of 3 seconds after safety time (total ignition time of 8 seconds)
- Multi-color LED signalling the various working stage
- Visual or PC interface diagnostic functions through multi-color LED device
- Remote lock-out reset (the connection is supplied with the M0 550 accessory)
- Recycling for 3 attempts if there is flame failure during operation
- Programmable post-purge (up to 6 minutes), continuous purge, long pre-purge (2 minutes)
- Post-combustion lock-out
- Logging of burner operation parameters (for example operating time, number and type of lock-outs)

BURNER	KIT CODE
► RG1RKD	3001168+3007492
► RG2D - RG3D - RG4D - RG5D	3001168+3007492+3007792