The Riello Gulliver RG5DF is a new model of one stage light oil burner, developed to respond to any request for light industrial processes like bakery ovens, spray painting ovens, small steam or thermal boilers and all applications which require a reliable, user-friendly industrial product with enhanced performance and specific functions.

This model uses the same components designed by Riello for the Gulliver series and has the same ventilation system and overall dimensions as the previous two stage light oil

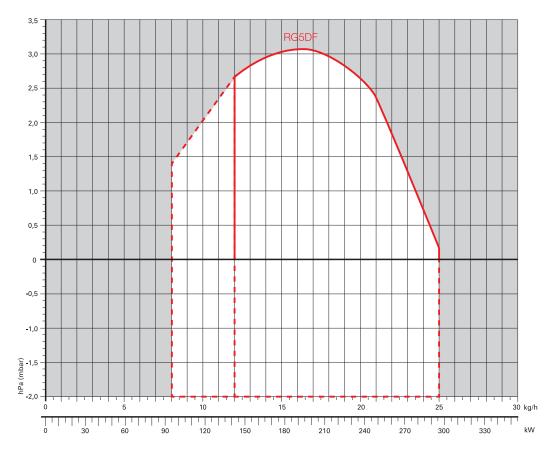
This new burner can operates on 50 or 60 Hz and a Voltage 220 - 230 Volt (dual frequency). It is conform to the EN 267 Standard (Forced draught oil burners) and to European Directives for EMC, Low Voltage and Machinery. For depressurised working field see EN 746-2 Standard.

The Gulliver RG5DF burner is fired before leaving the factory.



RG5DF 95/142 ÷ 296 kW

#### **FIRING RATES**



Useful working field for choosing the hurner

L = J1st stage operation range

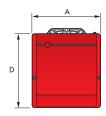
Test conditions conforming to FN267 Temperature: 20°C Pressure: 1013,5 mbar Altitude: 0 m a.s.l.

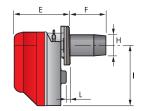
#### IMPORTANT: For the part of the working field that is depressurised. refer to EN 746-2

Standard.

# **Overall dimensions (mm)**

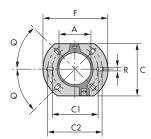
### **BURNER**





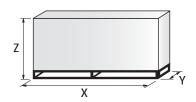
MODEL	Α	D	Е	F	Н	1	L
▶ RG5DF	300	345	247	159	125	285	12,5

### **BURNER - BOILER MOUNTING FLANGE**



MODEL	Α	С	C1	C2	F	Q	R
► RG5DF	127	198	160	190	213	45°	11

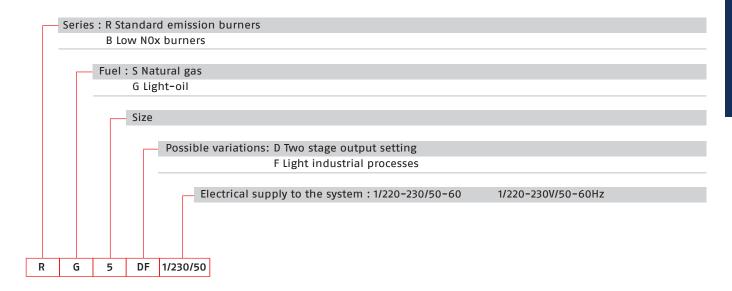
### **PACKAGING**



MODEL	X	Υ	Z	kg
► RG5DF	510	345	440	18

# **Specification**

#### **DESIGNATION OF SERIES**



#### **STATE OF SUPPLY**

Completely automatic monobloc light oil burners, with two stage operation fitted with:

- Fan with forward curve blades
- Cover lined with sound-proofing material
- Air damper always open in stand-by
- Air damper, with 1st and 2nd stage adjustment (2nd stage adjustment without removing the casing)
- Single phase electric motor 220 230 V/ 50 60 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 XOD (IP 40) protection level.

#### Standard equipment

- Flange with insulating gasket
- Screw and nuts for flange
- Screws and nuts for flange to be fixed to the heat generator
- Flexible oil pipes with nipples
- 7-pin plug
- 4-pin plug
- Instruction handbook for installation, use and maintenance
- Spare parts catalogue.

## **Available models**

CODE	MODEL		HEAT OUTPUT		TOTAL ELECTRICAL POWER	CERTIFICATION	NOTE
			(kW)	(kg/h)	(kW)		
3739870	RG5DF 1/	/220-230/50-60	95/142 - 296	8/12 - 25	0,400 (at 50 Hz) - 0,575 (at 60 Hz)	CE - 0036 0325/01	

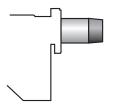
Net calorific value: 11,8 kWh/kg; 10200 kcal/kg – Viscosity at 20°C:  $4\div6~mm^2/s$  (cSt). The burners of RGDF series are in according to EN 267 and 746–2.

#### Kerosene and ULSD

Gulliver RGDF 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.

## **Burner accessories**

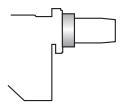
#### **Extended head kit**



Kits of extended heads are available.

BURNER	STANDARD HEAD LENGTH (mm)	EXTENDED HEAD LENGTH (mm)	KIT CODE
▶ RG5DF	159	300	3000981

#### **Spacer kit**



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

BURNER	SPACER THICKNESS S (mm)	KIT CODE
▶ RG5DF	25	3000673

#### **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
► RG5DF	60	3006561

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

BURNER	FILTERING DEGREE (µm)	KIT CODE
► RG5DF	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
▶ RG5DF	100	3000926

## **Burner accessories**

### 7-pin plug kit

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

BURNER	KIT CODE
▶ RG5DF	3000945

#### Control box MO 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 MO 550 accessory)
- Recycling for 3 attemps 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
▶ RG5DF	3001168+3007492+3007792