

## RIELLO 40 G SERIES

The Riello 40 G series of one stage light oil burners, is a complete range of products developed to respond to any request for home heating. The Riello 40 G series is available in ten different models, with an output ranging from 12 to 240 kW, divided into four different structures.

All the models use the same components designed by Riello for the Riello 40 G 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, obtaining the smallest size possible to fit into any sort of boiler available on the market.

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 Riello 40 G burners are fired before leaving the factory.

### Guidelines for installation of burners in conformity to EU Regulation:

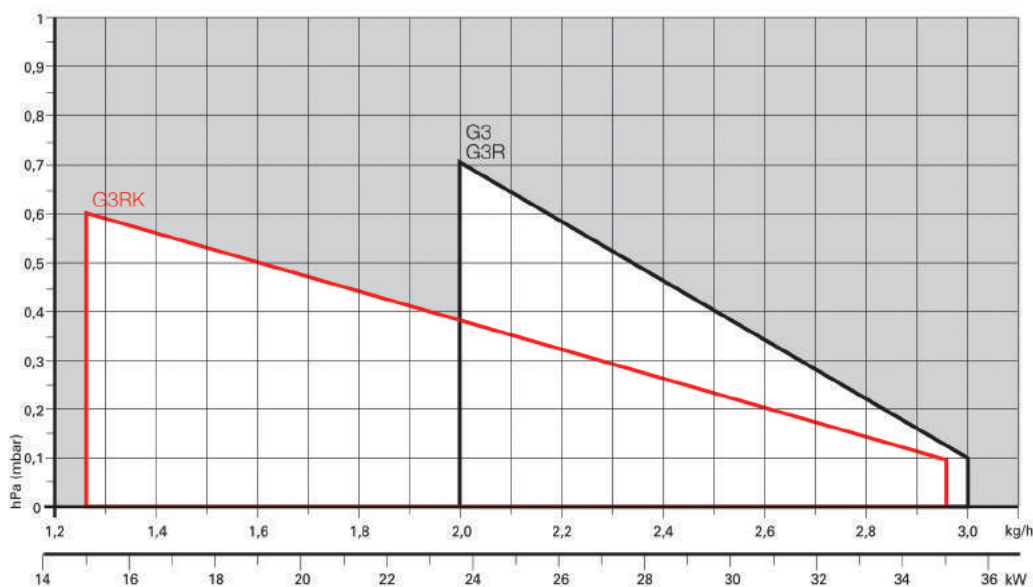
A RIELLO burner (Heat Generator), where it is matched with a water-based boiler (Heater Housing) with a nominal output  $\leq 400$  kW, providing heat for heating purposes and heat to deliver sanitary hot water, can be installed:

- 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.



G3	23,8 ÷ 35,5	kW
G3R	23,8 ÷ 35,5	kW
G3RK	15,0 ÷ 35,0	kW
G5	28,0 ÷ 60,0	kW
G5R	28,0 ÷ 60,0	kW
G5RK	12,0 ÷ 60,0	kW
G7	29,0 ÷ 69,0	kW
G10	54,0 ÷ 120,0	kW
G20	95,0 ÷ 213,0	kW
G20S	95,0 ÷ 240,0	kW

## FIRING RATES



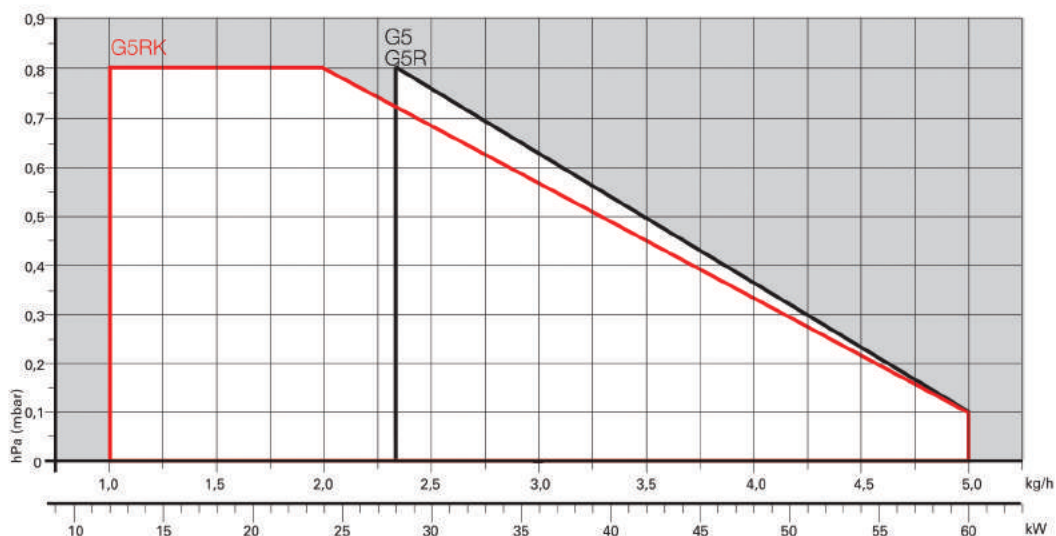
Useful working field for choosing the burner

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

# One Stage Light Oil Burners

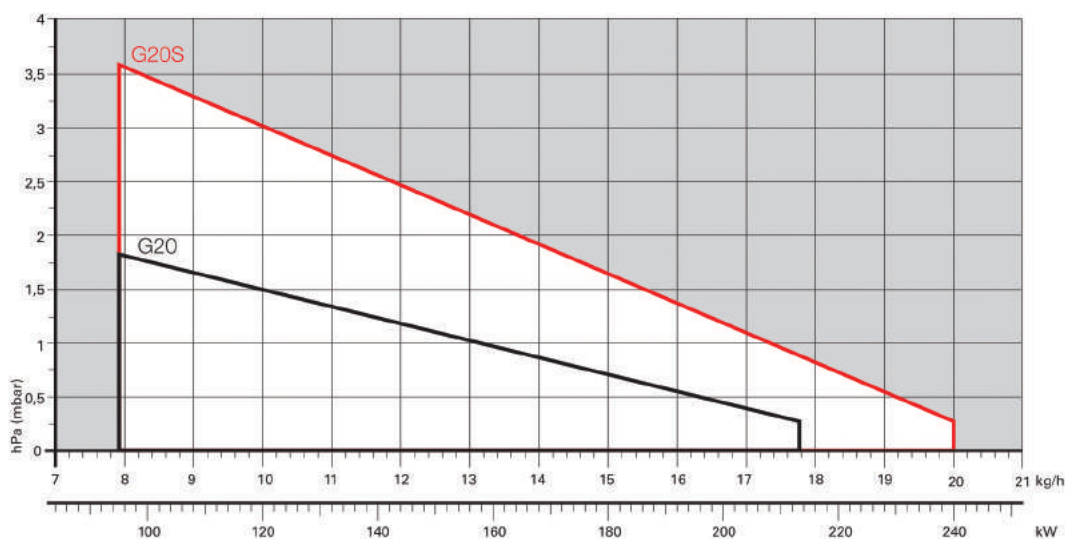
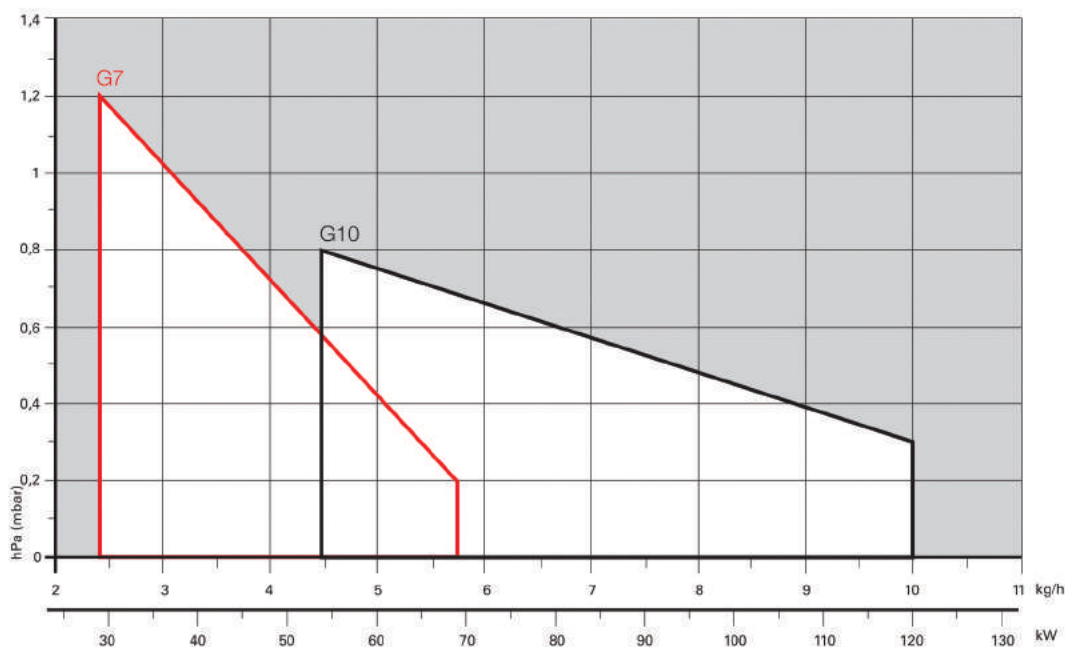
## RIELLO 40 G SERIES

### FIRING RATES



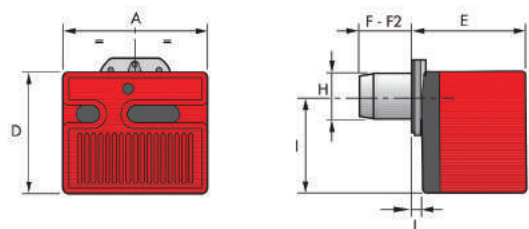
Useful working field  
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Test conditions  
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Temperature: 20°C  
Pressure: 1013,5  
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Altitude: 0 m a.s.l.



## Overall dimensions (mm)

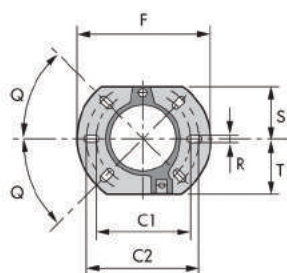
### BURNER



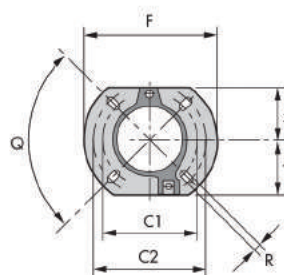
MODEL	A	D	E	F	F2	H	I	L
► G3	252	215	203	86	-	89	164	19
► G3R	252	215	203	86	-	89	164	19
► G3RK	252	215	203	97	115	89	164	19
► G5	272	233	236	107 - 180	-	89	180	37
► G5R	272	233	236	107	-	89	180	37
► G5RK	272	233	236	94	112	89	180	37
► G7	305	262	261	73	-	89	204	40
► G10	305	262	261	108 - 250	-	105	204	40
► G20	350	298	295	118 - 260	-	125	230	41
► G20S	350	298	295	118	-	125	230	41

### BURNER - BOILER MOUNTING FLANGE

G3 - G3R - G3RK - G5 - G5R - G5RK - G7 - G10

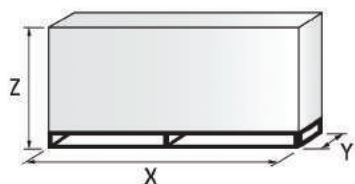


G20 - G20S



MODEL	C1	C2	F	Q	R	S	T
► G3 - G3R - G3RK - G5 - G5R - G5RK	130	150	180	45°	11	72	75
► G7 - G10	140	170	189	45°	11	83	83
► G20 - G20S	160	190	213	90°	11	99	99

### PACKAGING



MODEL	X	Y	Z	kg
► G3	363	295	310	10
► G3R	363	295	310	10
► G3RK	363	295	310	10,5
► G5	383	315	325	12
► G5R	383	315	325	12
► G5RK	383	315	325	12
► G7	423	348	340	13
► G10	423	348	340	13
► G20	483	393	377	16
► G20S	483	393	377	17,5



# One Stage Light Oil Burners

## RIELLO 40 G SERIES

### Specification

#### DESIGNATION OF SERIES

Series : G	
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
	1/220/60 1/220V/60Hz

G	5	RK		1/230/50
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#### STATE OF SUPPLY

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

- Fan with forward curve blades
- Metallic cover lined with sound-proofing material
- Air damper, completely closed in stand by, with adjustment
- 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
- Fuel pre-heater (optional)
- Reduced output ignition mechanism (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 gasket
- 7-pin plug (on request)
- Maintenance assembly
- Instruction handbook for installation, use and maintenance
- Spare parts catalogue.

# One Stage Light Oil Burners

## RIELLO 40 G SERIES

**RIELLO**

### Available models

#### Burners

CODE	MODEL		HEAT OUTPUT		TOTAL ELECTRICAL POWER	NOTE
			(kW)	(kg/h)	(kW)	
3743125	G3	1/230/50	23,8 - 35,5	2 - 3	0,115	
3743831	G3R	1/230/50	23,8 - 35,5	2 - 3	0,165	
3744512	G5	1/230/50	28 - 60	2,3 - 5	0,130	
3744612	G5R	1/230/50	28 - 60	2,3 - 5	0,185	
3745959	G7	1/230/50	29 - 69	2,5 - 5,8	0,160	(1)
3746412	G10	1/230/50	54 - 120	4,5 - 10	0,170	
3746464	G10	1/220/60	54 - 120	4,5 - 10	0,200	
20062977	G10 TL	1/220/50	54 - 120	4,5 - 10	0,200	
3747412	G20	1/230/50	95 - 213	8 - 18	0,320	
3747459	G20	1/220/60	95 - 213	8 - 18	0,400	
20063100	G20 TL	1/220/50	95 - 213	8 - 18	0,400	
3748212	G20S	1/230/50	95 - 240	8 - 20	0,330	
3748259	G20S	1/220/60	95 - 240	8 - 20	0,410	

#### MODELS WITH 24V DC ELECTRICAL SUPPLY

3452030	G7	24V DC	29 - 69	2,45 - 5,8	0,3	
20006157	G10	24V DC	54 - 120	4,5 - 10	0,3	
3452736	G20	24V DC	95 - 201	8 - 17	0,3	

(1) UK version

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

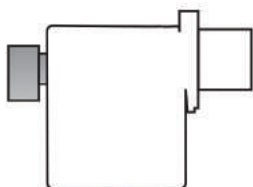
The burners of G series are in according to 2014/30/EU - 2014/35/EU - 2006/42 EC Directive and EN 267.

# One Stage Light Oil Burners

## RIELLO 40 G SERIES

### Burner accessories

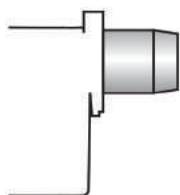
#### Remote control release kit for 530-531 control boxes



The 530-531 control boxes can be remotely released using an electric command kit. This kit must be installed in conformity with current regulations in force.

BURNER	KIT CODE
► All models	3001030

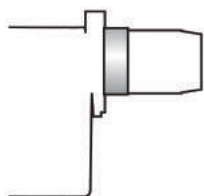
#### Extended head kit



Kits of extended heads are available.

BURNER	STANDARD HEAD LENGTH (mm)	EXTENDED HEAD LENGTH (mm)	KIT CODE
► G3 - G3R	107	121	3000686
► G3 - G3R	107	121 inox	3000687
► G5 - G5R	107	121	3000686
► G5 - G5R	107	121 inox	3000687
► G10	108	168	3000643
► G10	108	250	3000770
► G20 - G20S	118	178	3000644
► G20 - G20S	118	260	3000771

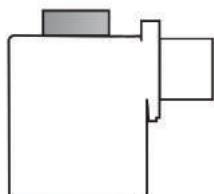
#### Spacer kit



Using the special accessories, the burner can be pulled back to reduce head penetration into the combustion chamber.

BURNER	SPACER THICKNESS S (mm)	KIT CODE
► G3 - G3R - G3RK - G5 - G5R - G5RK - G7	25	3000642
► G10	25	3000672
► G20 - G20S	15	20103452

#### Inlet air aspiration kit



This kit allows to channel the external air directly into the burner and is available as accessory for models:

BURNER	KIT CODE
► G3 - G3R - G3RK	20027471
► G5 - G5R - G5RK	20027574
► G7 - G10	20027577
► G20 - G20S	20027580

## 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.

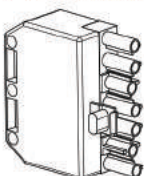
### Light oil filter/degassing unit



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

### Hour counter kit for 530 SE and 531 SE control boxes



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

BURNER	KIT CODE
► All models	3000904

### 7-pole socket kit for 530 SE and 531 SE control boxes

For burner without pre installed socket a 7-pole socket kit with cable is available.

BURNER	KIT CODE
► All models	3001065