One stage light oil burners

RIELLO 40 G



- One stage light oil burners

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.

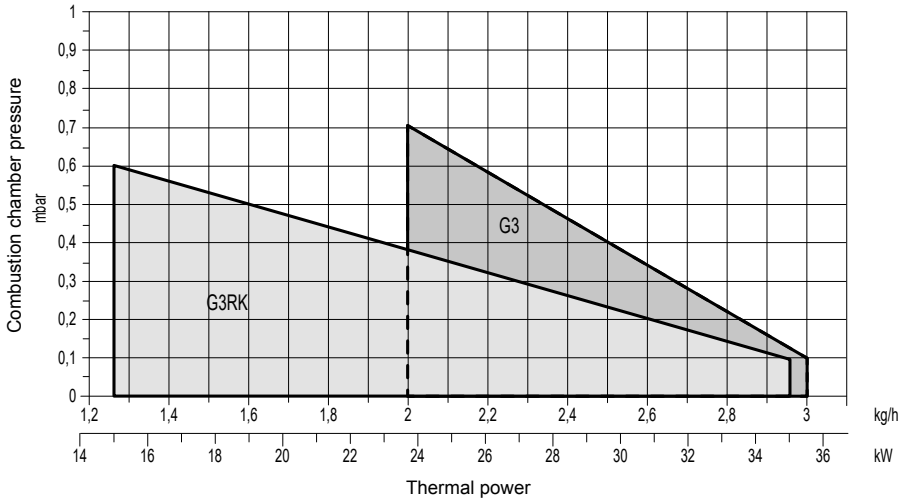
Guidelines for installation of burners in conformity to EU Regulation:
A RIELLO burner (Heat Generator), where it is matched with a water-based boiler (Heater Housing) with a nominal output ≤ 400 kW, providing heat for heating purposes and heat to deliver sanitary hot water, can be installed:
– With 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.

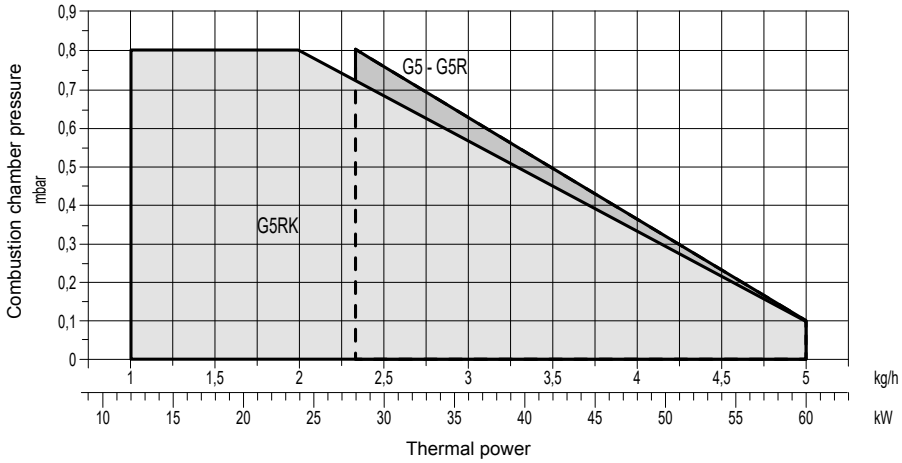
TECHNICAL DATA

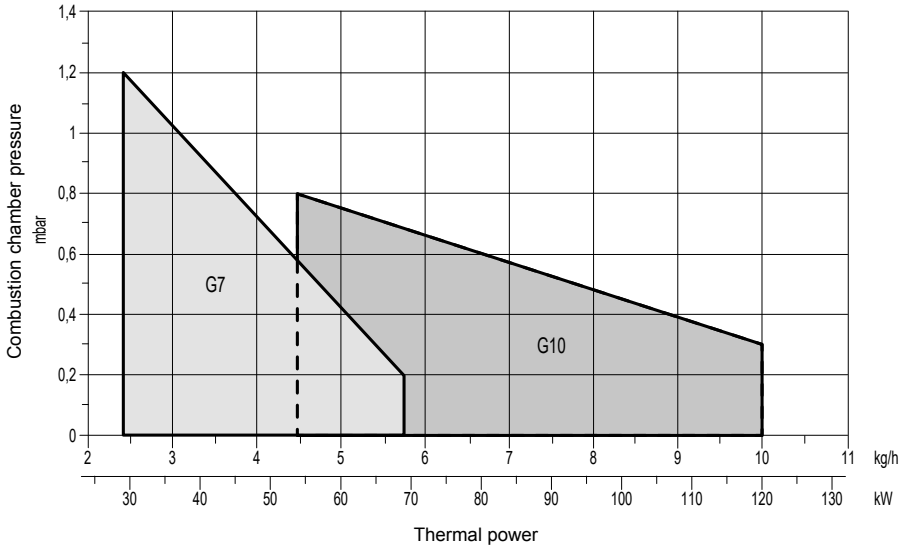
Description	Heat output		Total electrical power	Electric power supply	Note	Code
	kW	kg/h	kW	Ph/V/Hz		
G3	23.8-35.5	2-3	0.115	1/230/50		**3743125**
G5	28-60	2.3-5	0.130	1/230/50		**3744512**
G5R	28-60	2.3-5	0.185	1/230/50		**3744612**
G7	29-69	2.5-5.8	0.160	1/230/50	(1)	**3745959**
G10	54-120	4.5-10	0.170	1/230/50		**3746412**
G10	54-120	4.5-10	0.200	1/220/60		**3746464**
G10 TL	54-120	4.5-10	0.200	1/220/50		**20062977**
G20	95-213	8-18	0.320	1/230/50		**3747412**
G20	95-213	8-18	0.400	1/220/60		**3747459**
G20 TL	95-213	8-18	0.400	1/220/50		**20063100**
G20S	95-240	8-20	0.330	1/230/50		**3748212**
MODELS WITH 24V DC ELECTRICAL SUPPLY						
G7	29-69	2.45-5.8	0.3	24V DC		**20030878**
G10	54-120	4.5-10	0.3	24V DC		**20045709**
G20	95-201	8-17	0.3	24V DC		**20030873**

Net calorific value of light oil: 11.86 kWh/kg - Viscosity at 20 °C: 4-6 mm^2/s (cSt).
The burners comply with 2014/30/EU - 2014/35/EU - 2006/42/EC Directives and EN 267 Standard.
(1) UK version.

FIRING RATES

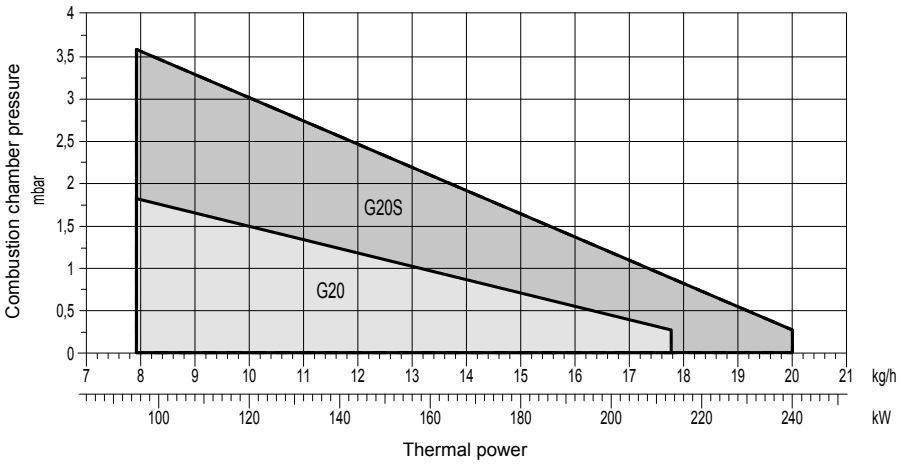






Useful working field for choosing the burner

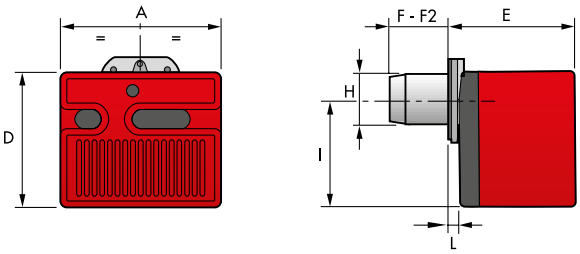
Test conditions conforming to EN267
Temperature: 20 °C
Pressure: 1013,5 mbar
Altitude: 0 m a.s.l.



Useful working field for choosing the burner

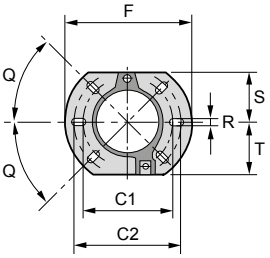
Test conditions conforming to EN267
Temperature: 20 °C
Pressure: 1013,5 mbar
Altitude: 0 m a.s.l.

OVERALL DIMENSIONS

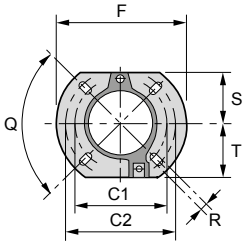


Description	A mm	D mm	E mm	F mm	F2 mm	H mm	I mm	L mm
G3	252	215	203	86	-	89	164	19
G3RK	252	215	203	97	115	89	164	19
G5	272	233	236	107-180	-	89	180	37
G5R	272	233	236	107	-	89	180	37
G5RK	272	233	236	94	112	89	180	37
G7	305	262	261	73	-	89	204	40
G10	305	262	261	108-250	-	105	204	40
G20	350	298	295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

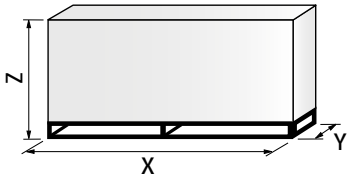
G3 - G3RK - G5 - G5R
G5RK - G7 - G10



G20 - G20S

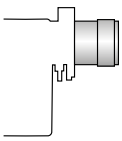
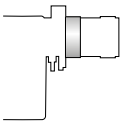


Description	C1 mm	C2 mm	F mm	Q mm	R mm	S mm	T mm
G3 - G3RK **G5 - G5R - G5RK**	130	150	180	45°	11	72	75
G7 - G10	140	170	189	45°	11	83	83
G20 - G20S	160	190	213	90°	11	99	99



Description	X mm	Y mm	Z mm	Net weight kg
G3	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

ACCESSORIES

Drawing	Burner model	Specification	Note	Code
		EXTENDED HEAD KIT Kits of extended heads are available.		
	G3	Standard head length = 107 mm - Extended head length = 121 mm		**3000686**
	G3	Standard head length = 107 mm - Extended head length = 121 mm	(1)	**3000687**
	G5-G5R	Standard head length = 107 mm - Extended head length = 121 mm		**3000686**
	G5-G5R	Standard head length = 107 mm - Extended head length = 121 mm	(1)	**3000687**
	G10	Standard head length = 108 mm - Extended head length = 168 mm		**3000643**
	G10	Standard head length = 108 mm - Extended head length = 250 mm		**3000770**
	G20-G20S	Standard head length = 118 mm - Extended head length = 178 mm		**3000644**
	G20-G20S	Standard head length = 118 mm - Extended head length = 260 mm		**3000771**
		**SPACER KIT** Using the special accessories, the burner can be pulled back to reduce head penetration into the combustion chamber.		
	G3-G3RK-G5 G5R-G5RK-G7	Spacer thickness S = 25 mm		**3000642**
	G20 - G20S	Spacer thickness S = 15 mm		**20103452**
		**INLET AIR ASPIRATION KIT** This kit allows to channel the external air directly into the burner and is available as accessory for models:		
	G3-G3RK	Inlet air aspiration kit is available.		**20027471**
	G5-G5R-G5RK	Inlet air aspiration kit is available.		**20027574**
	G7-G10	Inlet air aspiration kit is available.		**20027577**
	G20-G20S	Inlet air aspiration kit is available.		**20027580**
		**LIGHT OIL FILTER** For cleaning light oil from dirty particles and impurities filters with the following features are available.		
	All models	Filtering degree 60 µm (filter made up of aluminium body and stainless steel filtering cartridge).	(2)	**3006561**
	All models	Filtering degree 60 µm (filter made up of aluminium cover, plastic tank and nylon filtering cartridge).	(3)	**3075011**
	All models	**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. Filtering degree 100 µm.		**3000926**
	All models	**HOUR COUNTER KIT FOR 530 SE AND 531 SE CONTROL BOXES** To measure the burner working time a hour counter kit is available.		**3000904**
	All models	**7-PIN PLUG KIT** If necessary a 7-pin plug kit is available (in packaging of n. 5 pieces).		**3000945**
	All models	**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.		**3001065**

(1) Made up stainless steel.
(2) Available singularly.
(3) Available in packaging of 50 pieces.

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