

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:

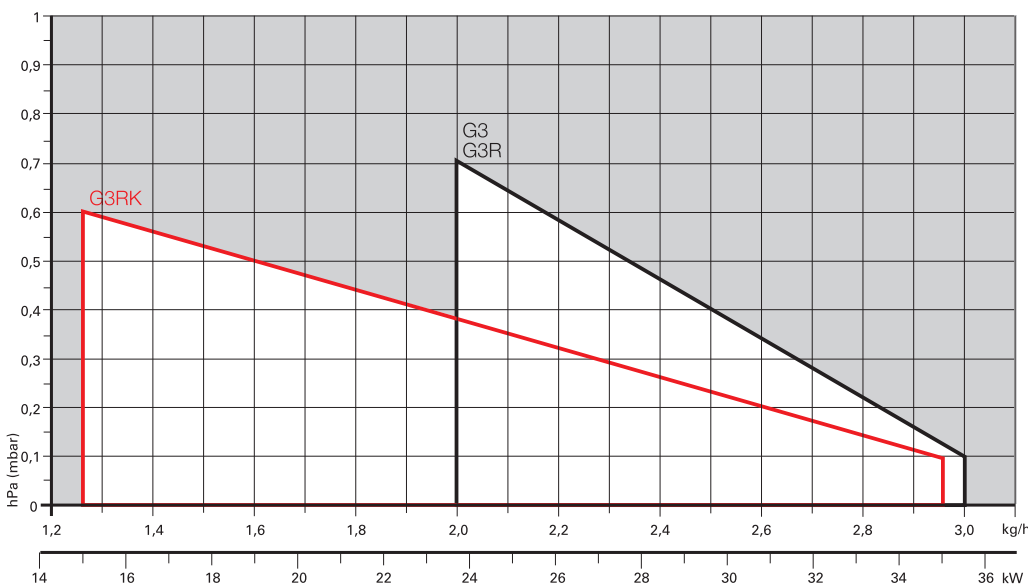
A RIELLO burner (Heat Generator), where it is matched with a water-based boiler (Heater Housing) with a nominal output ≤ 400 kW, providing heat for heating purposes and heat to deliver sanitary hot water, can be installed:

- 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



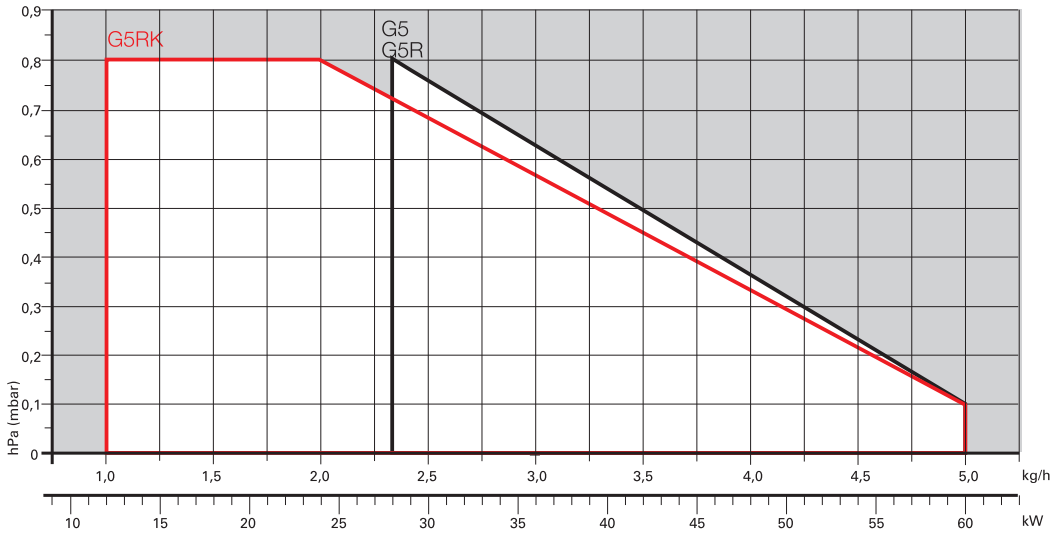
Useful working field for choosing the burner

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

One Stage Light Oil Burners

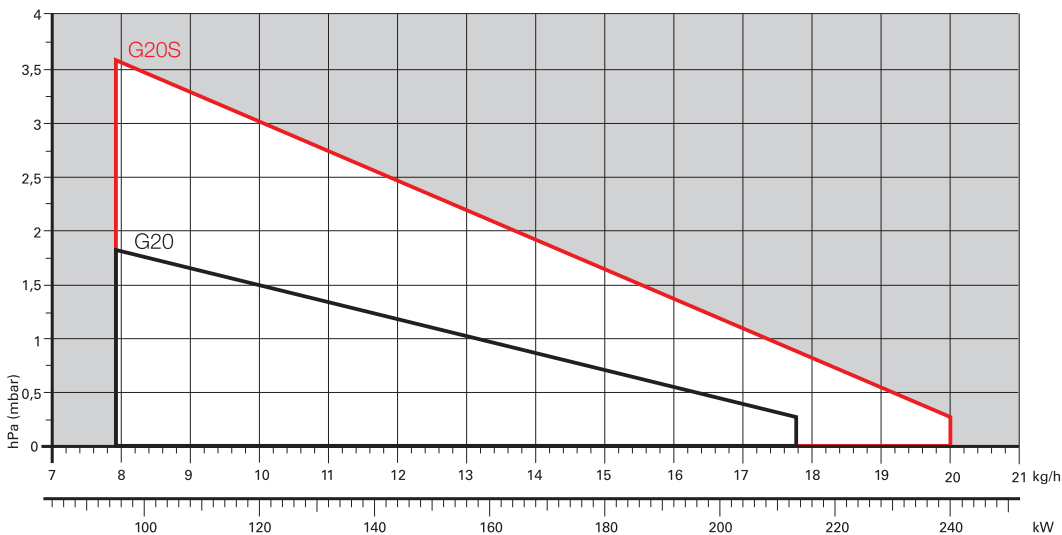
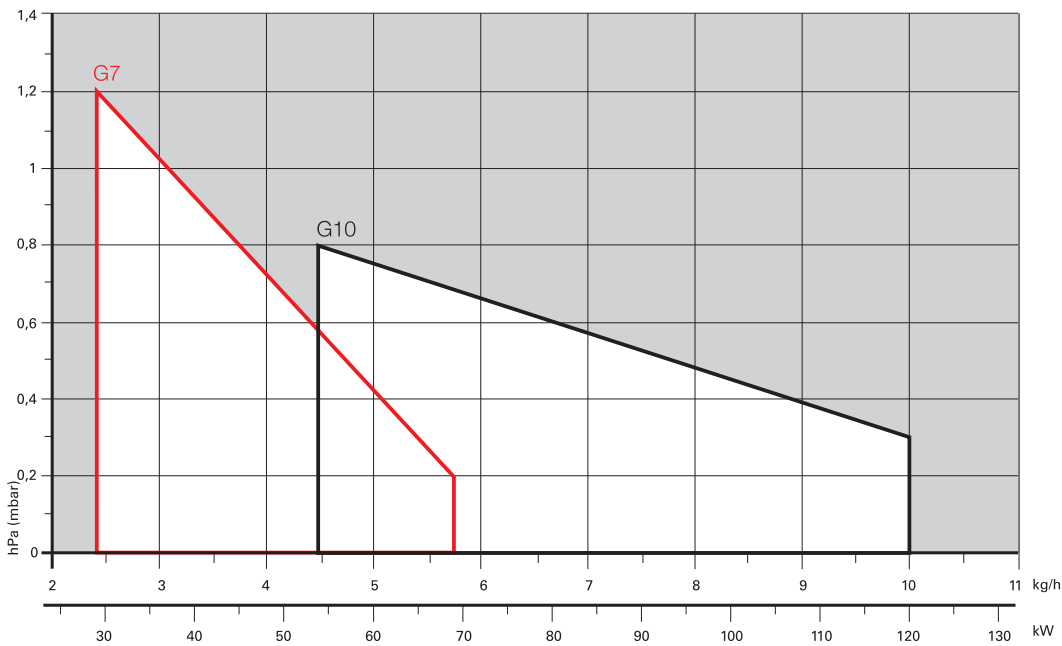
RIELLO 40 G SERIES

FIRING RATES



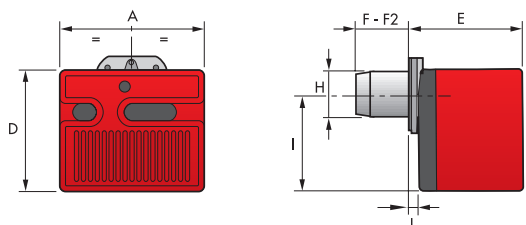
□ Useful working field for choosing the burner

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



Overall dimensions (mm)

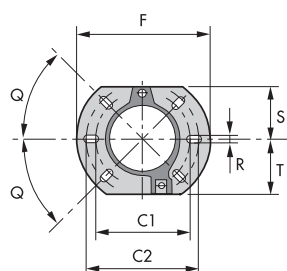
BURNER



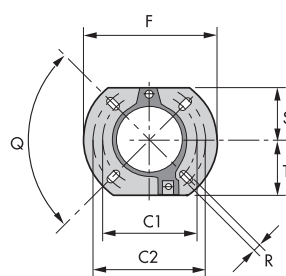
| MODEL | A | D | E | F | F2 | H | I | L |
|--------|-----|-----|-----|-----------|-----|-----|-----|----|
| ▶ G3 | 252 | 215 | 203 | 86 | - | 89 | 164 | 19 |
| ▶ G3R | 252 | 215 | 203 | 86 | - | 89 | 164 | 19 |
| ▶ G3RK | 252 | 215 | 203 | 97 | 115 | 89 | 164 | 19 |
| ▶ G5 | 272 | 233 | 236 | 107 - 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

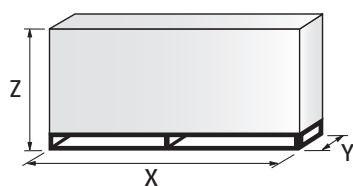


G20 - G20S



| 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



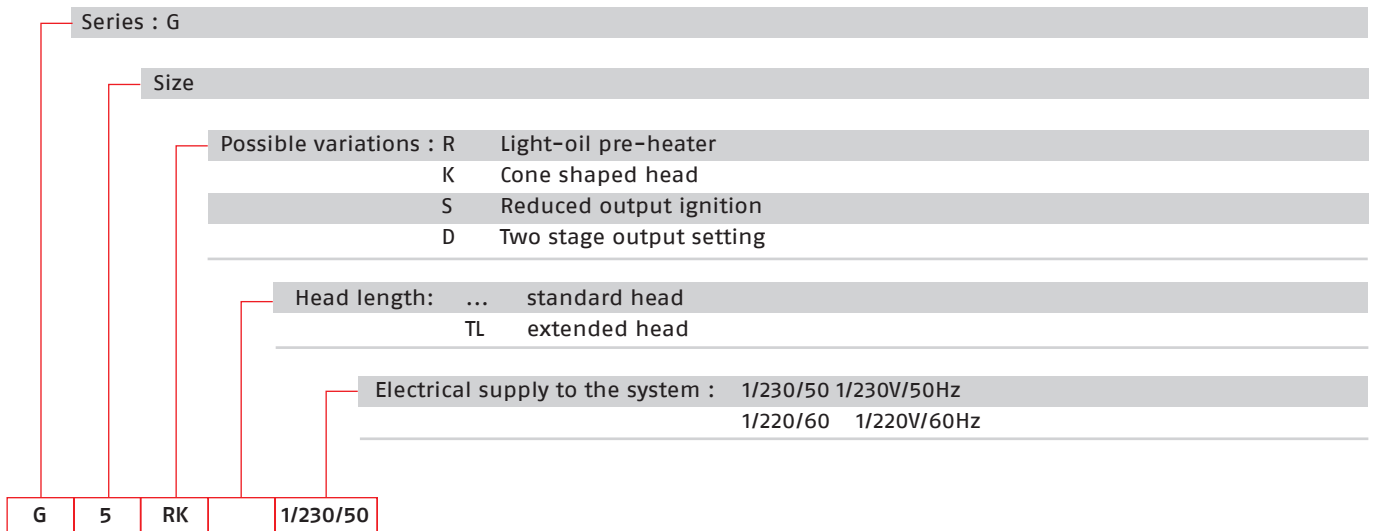
| MODEL | X | Y | Z | kg |
|--------|-----|-----|-----|------|
| ▶ G3 | 363 | 295 | 310 | 10 |
| ▶ G3R | 363 | 295 | 310 | 10 |
| ▶ G3RK | 363 | 295 | 310 | 10,5 |
| ▶ G5 | 383 | 315 | 325 | 12 |
| ▶ G5R | 383 | 315 | 325 | 12 |
| ▶ G5RK | 383 | 315 | 325 | 12 |
| ▶ G7 | 423 | 348 | 340 | 13 |
| ▶ G10 | 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



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.

RIELLO 40 G SERIES

Available models Burners

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

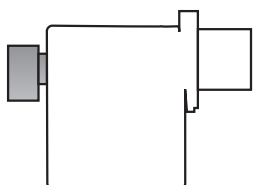
The burners of G series are in according to 2014/30/EU - 2014/35/EU - 2006/42 EC Directive and EN 267.

One Stage Light Oil Burners

RIELLO 40 G SERIES

Burner accessories

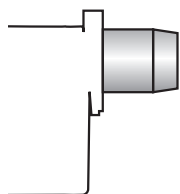
Remote control release kit for 530-531 control boxes



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 |

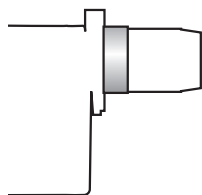
Extended head kit



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 |

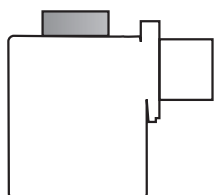
Spacer kit



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.

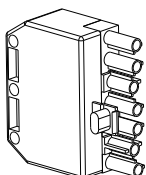
Light oil filter/degassing unit



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 |