

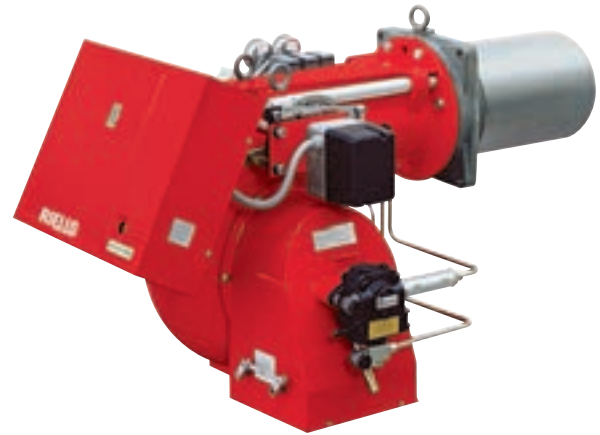
PRESS P/G SERIES

The PRESS P/G series of burners covers a firing range from 415 to 5340 kW.

Setting can be "two stage progressive" or, alternatively, "modulating" with the installation of a PID logic regulator and respective probes, which guarantees a turn down ratio of 3:1.

The versatility of this range makes the burner well suited for use on commercial or industrial applications where the load factor is subject to wide variations over a short period of time.

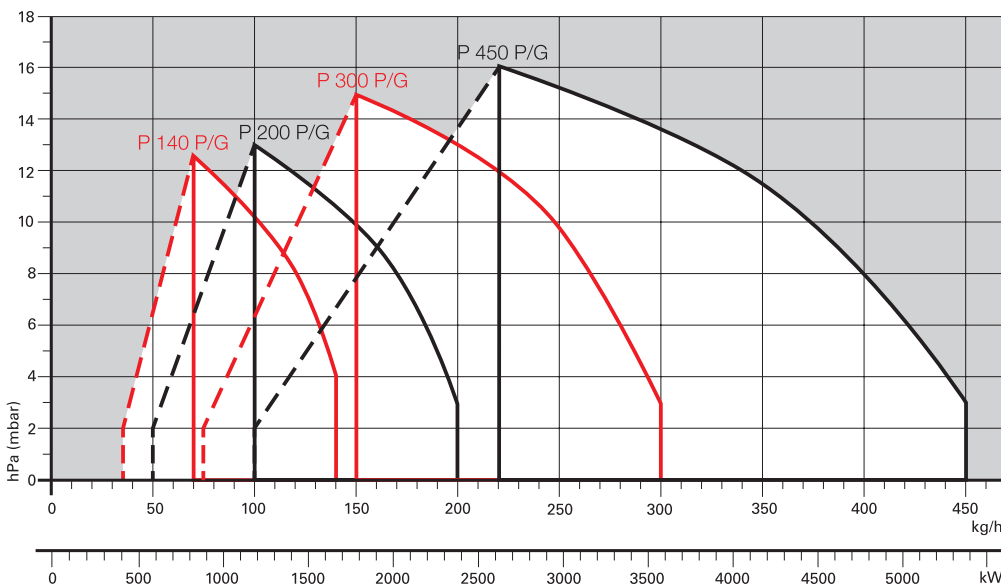
Simplified maintenance is achieved by Riello designed slide bar system, which allows easy access to all of the essential components of the combustion head.



LIGHT OIL

| | | | | |
|-----------|-----------|---|------|----|
| P 140 P/G | 415/830 | ÷ | 1660 | kW |
| P 200 P/G | 590/1185 | ÷ | 2370 | kW |
| P 300 P/G | 890/1780 | ÷ | 3560 | kW |
| P 450 P/G | 1190/2670 | ÷ | 5340 | kW |

FIRING RATES



Useful working field for choosing the burner

Modulation range

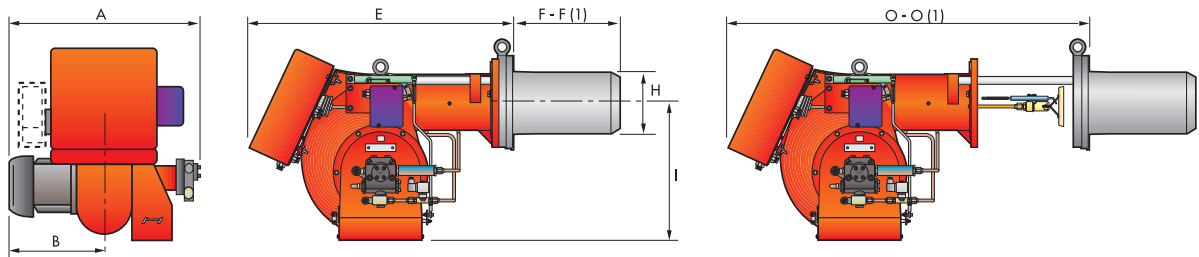
Test conditions conforming to EN267
 Temperature: 20°C
 Pressure: 1013,5 mbar
 Altitude: 0 m a.s.l.

Modulating Light Oil Burners

PRESS P/G SERIES

Overall dimensions (mm)

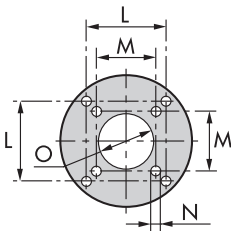
BURNER



| MODEL | A | B | E | F - F (1) | H | I | O - O (1) |
|-------------|-----|-----|------|-----------|-----|-----|-------------|
| ▶ P 140 P/G | 765 | 365 | 890 | 363 - 473 | 222 | 467 | 1250 - 1360 |
| ▶ P 200 P/G | 796 | 396 | 890 | 391 - 501 | 250 | 467 | 1280 - 1390 |
| ▶ P 300 P/G | 858 | 447 | 1000 | 444 - 574 | 295 | 496 | 1440 - 1570 |
| ▶ P 450 P/G | 950 | 508 | 1070 | 476 - 606 | 336 | 525 | 1546 - 1676 |

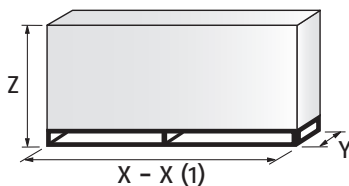
(1) Length with extended combustion head.

BURNER - BOILER MOUNTING FLANGE



| MODEL | L | M | N | O |
|-------------|-----|-----|-----|-----|
| ▶ P 140 P/G | 260 | 230 | M14 | 225 |
| ▶ P 200 P/G | 260 | - | M16 | 255 |
| ▶ P 300 P/G | 260 | - | M18 | 300 |
| ▶ P 450 P/G | 310 | - | M20 | 340 |

PACKAGING



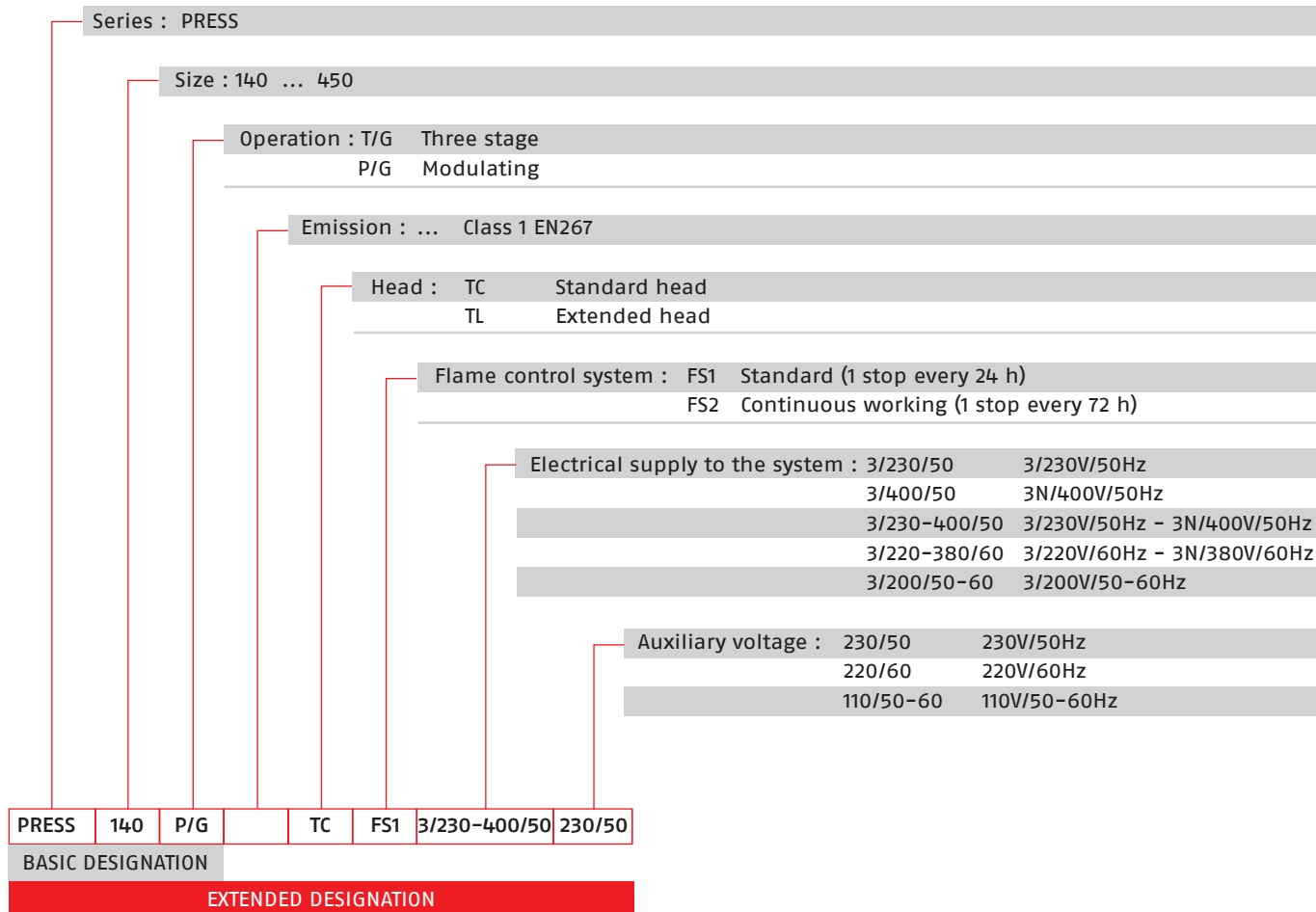
| MODEL | X - X (1) | Y | Z | kg |
|-------------|-----------|------|------|-----|
| ▶ P 140 P/G | 1740 | 990 | 950 | 130 |
| ▶ P 200 P/G | 1740 | 990 | 950 | 220 |
| ▶ P 300 P/G | 2040 | 1180 | 1125 | 238 |
| ▶ P 450 P/G | 2040 | 1180 | 1125 | 300 |

(1) Length with extended combustion head.

PRESS P/G SERIES

Specification

DESIGNATION OF SERIES



Specification

STATE OF SUPPLY

Monoblock forced draught oil burner, two stage progressive or modulating operation, with a kit, fully automatic, made up of:

- Air suction circuit
- Fan with forward curved blades high performance pressure levels
- Air damper for air setting and automatic oil output regulator controlled by a servomotor with variable cam
- Starting motor at 2850rpm, three-phase 400V with neutral, 50Hz
- Combustion head, that can be set on the basis of the required output, fitted with:
 - stainless steel end cone, resistant to corrosion and high temperatures
 - ignition electrodes
 - flame stability disk
- Gears pump for high pressure fuel supply, fitted with:
 - filter
 - pressure regulator
 - connections for installing a pressure gauge and vacuumeter
 - internal by-pass for single pipe installation
- Valve unit with a double oil safety valve on the output circuit and double safety valve on the return circuit
- Safety oil pressure switch for stop the burner in the case of problems on return circuit
- Photocell for flame detection
- Burner safety control box, fitted with control functions for the correct positioning of the servomotor and possibility of post-ventilation by just changing the electric wiring
- Flame inspection window
- Slide bars for easier installation and maintenance
- Protection filter against radio interference
- IP X0D (IP 40) electric protection level.

Standard equipment:

- 2 flexible pipes for connection to the oil supply network
- 2 nipples for the connection to the pump
- wiring looms fittings for electrical connections
- 4 screws for fixing the burner flange to the boiler
- 2 slide bar extensions (for the extended head models of P 300 P/G e P 450 P/G)
- 1 star delta starter (on models where provided)
- Instruction handbook for installation, use and maintenance
- Spare parts catalogue.

PRESS P/G SERIES

Available models

| CODE | MODEL | HEAT OUTPUT | | TOTAL ELECTRICAL POWER (kW) | CERTIFICATION | NOTE |
|---------|--|----------------|-------------|-----------------------------|---------------|------|
| | | (kW) | (kg/h) | | | |
| 3476867 | PRESS 140 P/G TC FS1 3/230-400/50 230/50 | 415/830÷1660 | 35/70÷140 | 4,5 | CE-0441/B | |
| 3476868 | PRESS 140 P/G TL FS1 3/230-400/50 230/50 | 415/830÷1660 | 35/70÷140 | 4,5 | CE-0441/B | |
| 3477767 | PRESS 200 P/G TC FS1 3/230-400/50 230/50 | 590/1185÷2370 | 50/100÷200 | 5,5 | CE-0441/B | |
| 3477768 | PRESS 200 P/G TL FS1 3/230-400/50 230/50 | 590/1185÷2370 | 50/100÷200 | 5,5 | CE-0441/B | |
| 3478941 | PRESS 300 P/G TC FS1 3/230-400/50 230/50 | 890/1780÷3560 | 75/150÷300 | 10 | CE-0441/B | |
| 3478942 | PRESS 300 P/G TL FS1 3/230-400/50 230/50 | 890/1780÷3560 | 75/150÷300 | 10 | CE-0441/B | |
| 3478943 | PRESS 300 P/G TC FS1 3/230/50 230/50 | 890/1780÷3560 | 75/150÷300 | 10 | CE-0441/B | (1) |
| 3478944 | PRESS 300 P/G TL FS1 3/230/50 230/50 | 890/1780÷3560 | 75/150÷300 | 10 | CE-0441/B | (1) |
| 3478945 | PRESS 300 P/G TC FS1 3/400/50 230/50 | 890/1780÷3560 | 75/150÷300 | 10 | CE-0441/B | (1) |
| 3478946 | PRESS 300 P/G TL FS1 3/400/50 230/50 | 890/1780÷3560 | 75/150÷300 | 10 | CE-0441/B | (1) |
| 3479369 | PRESS 450 P/G TC FS1 3/230/50 230/50 | 1190/2670÷5340 | 100/225÷450 | 15 | CE-0441/B | (1) |
| 3479370 | PRESS 450 P/G TL FS1 3/230/50 230/50 | 1190/2670÷5340 | 100/225÷450 | 15 | CE-0441/B | (1) |
| 3479371 | PRESS 450 P/G TC FS1 3/400/50 230/50 | 1190/2670÷5340 | 100/225÷450 | 15 | CE-0441/B | (1) |
| 3479372 | PRESS 450 P/G TL FS1 3/400/50 230/50 | 1190/2670÷5340 | 100/225÷450 | 15 | CE-0441/B | (1) |

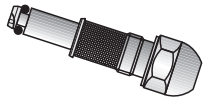
(1) Star-delta starting, as standard equipment

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

The burners of PRESS series are in according to 2004/108 - 2006/95) - 2006/42 EC Directive and EN 267 Norm.

Burner accessories

Return nozzles



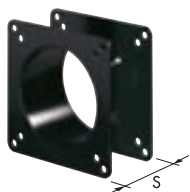
The following list shows the features and codes on the basis of the maximum required fuel output.

NOTE: each burner needs N° 1 nozzle.

| BURNER | RATED OUTPUT kg/h (*) | NOZZLES BERGONZO B5 45° WITHOUT "SA" NEEDLE CODE | NOZZLES FLUIDICS N2 45° WITHOUT NEEDLE CODE |
|-------------------|--------------------------|--|---|
| ▶ P 140 P/G | 70 | 3009303 | 3045471 |
| ▶ P 140 P/G | 80 | 3009305 | 3045472 |
| ▶ P 140 P/G | 90 | 3009307 | 3045473 |
| ▶ P 140 - 200 P/G | 100 | 3009310 | 3045475 |
| ▶ P 140 - 200 P/G | 125 | 3009312 | 3045477 |
| ▶ P 200 - 300 P/G | 150 | 3009314 | 3045479 |
| ▶ P 200 - 300 P/G | 175 | 3009316 | 3045481 |
| ▶ P 200 - 300 P/G | 200 | 3009318 | 3045483 |
| ▶ P 300 - 400 P/G | 225 | 3009320 | 3045485 |
| ▶ P 300 - 400 P/G | 250 | 3009322 | 3045487 |
| ▶ P 300 - 400 P/G | 275 | 3009324 | 3045489 |
| ▶ P 300 - 400 P/G | 300 | 3009326 | 3045491 |
| ▶ P 450 P/G | 325 | 3009328 | 3045493 |
| ▶ P 450 P/G | 350 | 3009330 | 3045495 |
| ▶ P 450 P/G | 375 | 3009332 | 3045497 |
| ▶ P 450 P/G | 400 | 3009334 | 3045499 |
| ▶ P 450 P/G | 425 | 3009336 | 3045500 |
| ▶ P 450 P/G | 450 | 3009338 | 3045501 |

(*) Nozzle rated delivery is referred to atomised pressure

Spacer kit

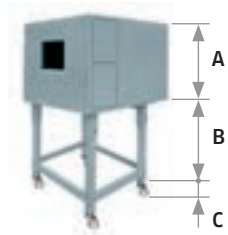


If burner head penetration into the combustion chamber needs reducing, varying thickness spacers are available, as given in the following list.

| BURNER | SPACER THICKNESS S (mm) | KIT CODE |
|-------------|----------------------------|----------|
| ▶ P 140 P/G | 102 | 3000722 |
| ▶ P 200 P/G | 102 | 3000722 |
| ▶ P 300 P/G | 130 | 3000723 |
| ▶ P 450 P/G | 130 | 3000751 |

Burner accessories

Sound proofing box



If noise emission needs reducing even further, sound-proofing boxes are available. In case of generator heights, where a lower dimension "B" is required, ask for the Box Support Kit code 20065135.

| BURNER | BOX TYPE | A (mm) | B (mm) min-max | C (mm) | [dB(A)] (*) | BOX CODE |
|-------------------------|----------|--------|----------------|--------|-------------|----------|
| ► P 140 P/G – P 200 P/G | C4/5 | 850 | 160 – 980 | 110 | 10 | 3010404 |
| ► P 300 P/G – P 450 P/G | C7 | 1255 | 160 – 980 | 110 | 10 | 3010376 |

(*) Average noise reduction according to EN 15036-1 standard

Accessories for modulating operation



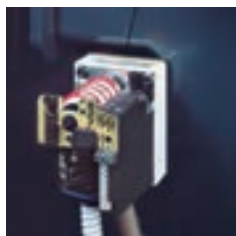
To obtain modulating operation, the PRESS P/G series of burners requires a regulator.

| BURNER | REGULATOR TYPE | REGULATOR CODE |
|-------------------------------|----------------|----------------|
| ► P 140 – 200 – 300 – 450 P/G | RWF 40 | 3010211 |



The relative temperature or pressure probes fitted to the regulator, must be chosen on the basis of the application.

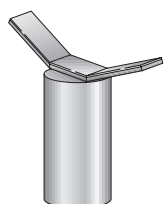
| BURNER | PROBE TYPE | RANGE (°C) (bar) | PROBE CODE |
|-------------------------------|--------------------|------------------|------------|
| ► P 140 – 200 – 300 – 450 P/G | Temperature PT 100 | -100 ÷ 500°C | 3010110 |
| ► P 140 – 200 – 300 – 450 P/G | Pressure 4 ÷ 20 mA | 0 ÷ 2,5 bar | 3010213 |
| ► P 140 – 200 – 300 – 450 P/G | Pressure 4 ÷ 20 mA | 0 ÷ 16 bar | 3010214 |
| ► P 140 – 200 – 300 – 450 P/G | Pressure 4 ÷ 20 mA | 0 ÷ 25 bar | 3090873 |



Depending on the servomotor fitted to the burner, a three-pole potentiometer (1000 Ω) can be installed to check the position of the servomotor.

| BURNER | POTENTIOMETER KIT CODE |
|-------------------------------|------------------------|
| ► P 140 – 200 – 300 – 450 P/G | 3010021 |

Burner support



For easier maintenance, a mobile burner support has been designed, which means the burner can be dismantled without the need of forklift trucks.

| BURNER | SUPPORT CODE |
|-------------------------|--------------|
| ► P 300 P/G – P 450 P/G | 3000731 |