

## PRESS G SERIES

The PRESS G series of burners covers a firing range from 107 to 1660 kW and they have been designed for use in civil installations of average dimensions, like building areas and large apartment groups or for use in industrial applications, like small or medium plants.

Operation is two stage; the burners are fitted with a microprocessor-based burner safety control box which supplies indication of operation and diagnosis of fault cause. The combustion head, that can be set on the basis of required output, allows optimal performance ensuring good combustion and reducing fuel consumption. The main feature of these burners is their reliability due to a simple and strong construction, that permits operation without particular maintenance intervention.

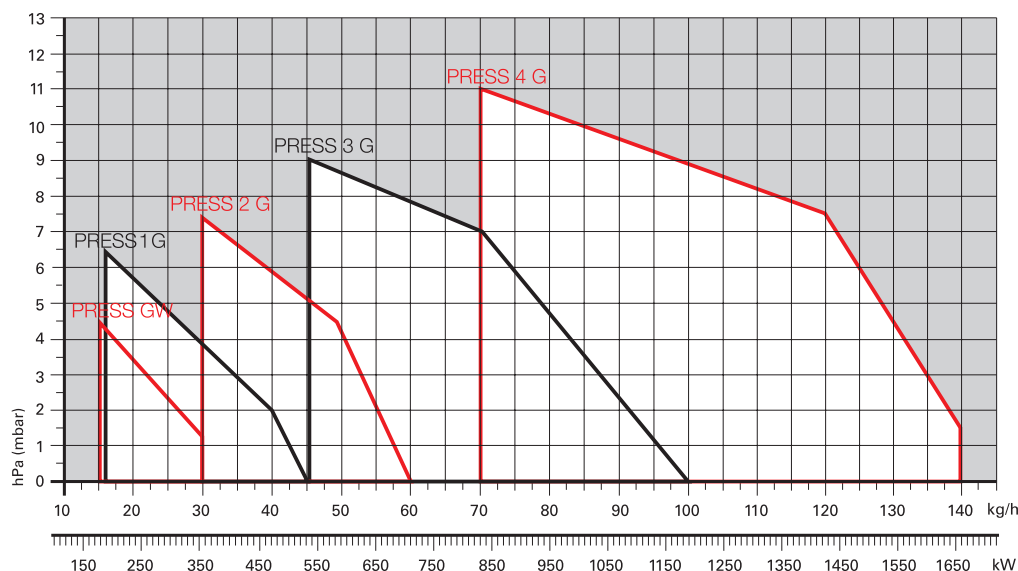
Simplified maintenance is achieved by the slide bar system, which allows easy access to all of the essential components of the combustion head. All electrical components are easily accessible only by dismounting a protection panel, thus guaranteeing a quick and simple intervention on components.



LIGHT OIL

PRESS GW	107/178 ÷ 356 kW
PRESS 1G	130/190 ÷ 534 kW
PRESS 2G	214/356 ÷ 712 kW
PRESS 3G	273/534 ÷ 1168 kW
PRESS 4G	415/830 ÷ 1660 kW

## FIRING RATES



Useful working field for choosing the burner

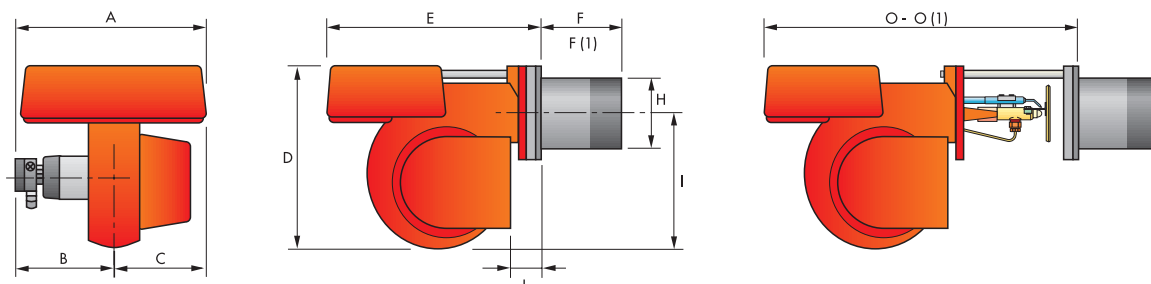
Test conditions conforming to EN267  
 Temperature: 20°C  
 Pressure: 1013,5 mbar  
 Altitude: 0 m a.s.l.

# Two Stage Light Oil Burners

## PRESS G SERIES

### Overall dimensions (mm)

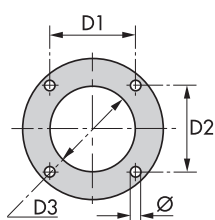
#### BURNER



MODEL	A	B	C	D	E	F -	F (1)	H	I	L	O -	O (1)
► PRESS GW	439	234	205	397	473	185 -	320	140	292	59	745 -	880
► PRESS 1G	475	270	205	397	473	237 -	370	150	292	59	745 -	880
► PRESS 2G	475	270	205	437	506	245 -	403	155	332	89	785 -	945
► PRESS 3G	611	406	205	485	570	254 -	412	175	370	88	846 -	1006
► PRESS 4G	675	354	316	590	720	266 -	426	205	445	175	999 -	1159

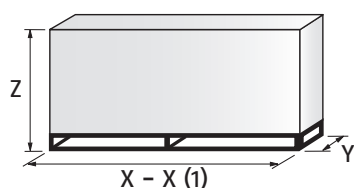
(1) Length with extended combustion head.

#### BURNER - BOILER MOUNTING FLANGE



MODEL	D1	D2	D3	Ø
► PRESS GW	160	160	155	M10
► PRESS 1G	160	160	165	M10
► PRESS 2G	160	160	165	M10
► PRESS 3G	195	195	185	M12
► PRESS 4G	230	230	210	M12

#### PACKAGING



MODEL	X - X (1)	Y	Z	kg
► PRESS GW	695	542	468	37
► PRESS 1G	745	542	468	44
► PRESS 2G	800	542	515	44
► PRESS 3G	1000	790	550	55
► PRESS 4G	1200	790	650	95

(1) Length with extended combustion head.

# Two Stage Light Oil Burners

## PRESS G SERIES

**RIELLO**

## Specification

### DESIGNATION OF SERIES

LIGHT OIL

Series : PRESS							
Operation : GV or G24	One stage						
GW or 1-2-3-4G	Two stage						
Emission : ...	Class 1 EN267						
Head : TC	Standard head						
TL	Extended head						
Flame control system : FS1	Standard (1 stop every 24 h)						
FS2	Continuous working (1 stop every 72 h)						
Electrical supply to the system : 1/230/50	1/230V/50Hz						
1/210/60	1/210V/60Hz						
1/220/60	1/220V/60Hz						
1/200/50-60	1/200V/50-60Hz						
3/230-400/50	3/230V/50Hz - 3N/400V/50Hz						
3/210/60	3/210V/60Hz						
3/220-380/60	3/220V/60Hz - 3N/380V/60Hz						
3/200/50-60	3/200V/50-60Hz						
Auxiliary voltage : 230/50	230V/50Hz						
120/60	120V/60Hz						
220/60	220V/60Hz						
200/50-60	200V/50-60Hz						
PRESS	4G		TC	FS1	3/230-400/50	230/50	
BASIC DESIGNATION							
EXTENDED DESIGNATION							

# Two Stage Light Oil Burners

## PRESS G SERIES

### Specification

#### STATE OF SUPPLY

Monoblock forced draught oil burner with two stage operation, fully automatic, made up of:

- Air suction circuit lined with sound-proofing material
- Fan with forward curve blades with high performance concerning pressure and air delivery
- Air damper for air setting
- Hydraulic ram for air damper control
- Starting motor at 2800 rpm, three-phase 400V with neutral, 50Hz (single-phase, 230V and 50Hz for the PRESS GW model)
- Combustion head, that can be set on the basis of required output, fitted with:
  - stainless steel end cone, resistant to corrosion and high temperatures
  - ignition electrodes
  - flame stability disk
- Fan pressure test point
- 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 two delivery oil valves on the output circuit
- Photocell for flame detection
- Microprocessor-based burner safety control box, with diagnostic function
- Slide bars for easier installation and maintenance
- Protection filter against radio interference
- IP 44 electric protection level.

**Standard equipment:**

- 2 flexible pipes for connection to the oil supply network
- 2 gaskets for the flexible pipes
- 2 nipples for connection to the pump
- 4 screws for fixing the burner flange to the boiler
- 1 thermal screen
- Instruction handbook for installation, use and maintenance
- Spare parts catalogue.

# Two Stage Light Oil Burners

## PRESS G SERIES

**RIELLO**

## Available models

CODE	MODEL					HEAT OUTPUT		TOTAL ELECTRICAL POWER (kW)	CERTIFICATION	NOTE
						(kW)	(kg/h)			
3473754	PRESS GBW	TC	FS1	1/230/50	230/50	107/178-356	9/15-30	0,43	-	(1)
3473787	PRESS GW	TC	FS1	1/200/50-60	200/50-60	107/178-356	9/15-30	0,6	-	(1)
3473784	PRESS GW	TC	FS1	1/220/60	220/60	107/178-356	9/15-30	0,4	-	(1)
3473720	PRESS GW	TC	FS1	1/230/50	230/50	107/178-356	9/15-30	0,43	-	(1)
3474587	PRESS 1G	TC	FS1	3/200/50-60	200/50-60	130/190-534	11/16-45	0,6	-	(1)
3474582	PRESS 1G	TC	FS1	3/220-380/60	220/60	130/190-534	11/16-45	0,6	-	(1)
3474520	PRESS 1G	TC	FS1	3/230-400/50	230/50	130/190-534	11/16-45	0,6	-	(1)
3474987	PRESS 2G	TC	FS1	3/200/50-60	200/50-60	214/356-712	18/30-60	0,85	-	(1)
3474982	PRESS 2G	TC	FS1	3/220-380/60	220/60	214/356-712	18/30-60	0,85	-	(1)
3474920	PRESS 2G	TC	FS1	3/230-400/50	230/50	214/356-712	18/30-60	1,1	-	(1)
3475987	PRESS 3G	TC	FS1	3/200/50-60	200/50-60	273/534-1186	23/45-100	2,05	-	(1)
3475982	PRESS 3G	TC	FS1	3/220-380/60	220/60	273/534-1186	23/45-100	2,05	-	(1)
3475920	PRESS 3G	TC	FS1	3/230-400/50	230/50	273/534-1186	23/45-100	2,05	-	(1)
3476587	PRESS 4G	TC	FS1	3/200/50-60	200/50-60	415/830-1660	35/70-140	3,8	-	(1)
3476582	PRESS 4G	TC	FS1	3/220-380/60	220/60	415/830-1660	35/70-140	3,8	-	(1)
3476520	PRESS 4G	TC	FS1	3/230-400/50	230/50	415/830-1660	35/70-140	3,8	-	(1)

(1) Air damper open during stop

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.

# Two Stage Light Oil Burners

## PRESS G SERIES

### Burner accessories

#### Nozzles type 60°B

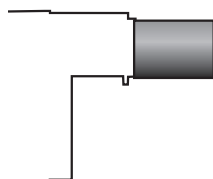


The nozzles must be ordered separately. The following table shows the features and codes on the basis of the maximum required fuel output.

NOTE: each burner is equipped with N° 2 nozzles.

BURNER	RATED DELIVERY [kg/h] at 12 bar	GPH	NOZZLE CODE
► PRESS GW – 1G	8,5	2,00	3042126
► PRESS GW – 1G	10,6	2,50	3042140
► PRESS GW – 1G	12,7	3,00	3042158
► PRESS GW – 1G	14,8	3,50	3042162
► PRESS GW – 1G – 2G	17	4,00	3042172
► PRESS 1G – 2G	19,1	4,50	3042182
► PRESS 1G – 2G	21,2	5,00	3042192
► PRESS 1G – 2G	23,3	5,50	3042202
► PRESS 2G – 3G	25,5	6,00	3042212
► PRESS 2G – 3G	27,6	6,50	3042222
► PRESS 2G – 3G	29,7	7,00	3042232
► PRESS 3G	31,8	7,50	3042242
► PRESS 3G	33,9	8,00	3042252
► PRESS 3G	36,1	8,50	3042262
► PRESS 3G – 4G	40,3	9,50	3042282
► PRESS 3G – 4G	42,4	10,00	3042292
► PRESS 3G – 4G	46,7	11,00	3042312
► PRESS 3G – 4G	50,9	12,00	3042322
► PRESS 4G	55,1	13,00	3042332
► PRESS 4G	59,4	14,00	3042352
► PRESS 4G	63,6	15,00	3042362
► PRESS 4G	67,9	16,00	3042382
► PRESS 4G	72,1	17,00	3042392
► PRESS 4G	76,4	18,00	3042412

#### Extended head kit



“Standard head” burners can be transformed into “extended head” versions, by using the special kit.

BURNER	STANDARD HEAD LENGTH (mm)	EXTENDED HEAD LENGTH (mm)	KIT CODE
► PRESS GW	185	320	3000581
► PRESS 1G	237	370	3000537
► PRESS 2G	245	403	3000538
► PRESS 3G	254	412	3000851
► PRESS 4G	266	426	3000555

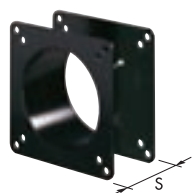
# Two Stage Light Oil Burners

## PRESS G SERIES

**RIELLO**

## Burner accessories

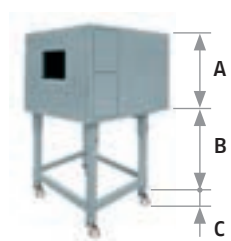
### Spacer kit



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
► All models	142	3000755

### 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
► PRESS GW - 1G - 2G - 3G	C1/3	650	372 - 980	110	10	3010403
► PRESS 4G	C4/5	850	160 - 980	110	10	3010404

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

### Degasing unit



To solve problem of air in the oil sucked, two versions of degasing unit are available.

BURNER	FILTER	FILTERING DEGREE (µm)	DEGASING UNIT CODE
► PRESS GW PRESS 1G - 2G - 3G(*) - 4G(*)	With filter	50 - 75	3010055
► PRESS GW PRESS 1G - 2G - 3G(*) - 4G(*)	Without filter	-	3010054

(\*) For oil flow larger than 80 kg/h install two degasing units in parallel in the oil supply line.

### Air damper complete closure kit



To minimize thermal dispersion caused by the stack draught sucking air from the fan's suction opening, an "air damper complete closure kit" is available. This is composed by a hydraulic ram, which closes the air damper completely when the burner shuts down.

BURNER	KIT CODE
► PRESS GW	3000853
► PRESS 1G	3000854
► PRESS 2G	3000855
► PRESS 3G	3000856
► PRESS 4G	3000857

### PC Interface kit



To connect the control box to a personal computer for the transmission of operation, fault signals and detailed service information, an interface adapter with PC software are available.

BURNER	KIT CODE
► All models	3002719

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## Burner accessories

### Protection kit (electromagnetic interferences)

When the burner is installed in a room particularly subject to electromagnetic interference (signals emitted over 10 V/m) due for example to INVERTER presence or in systems where the lengths of the thermostat connections is over 20 meters, this specific protection kit is available as an interface between the thermostatic controls and the burner.

BURNER	KIT CODE
► All models	3010386