

COMIST...DSPGM

From 1127 to 3878 kW

Conform to:
E.M.C. Directive 89/336/CEE
L.V. Directive 73/23/CEE
Reference standard: EN676



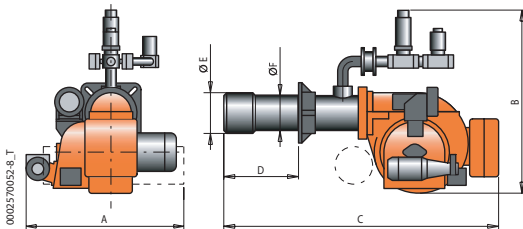
TECHNICAL AND FUNCTIONAL CHARACTERISTICS

- Alternate natural gas/light oil burner.
- Two-stage progressive output operation.
- Continuous modulation operation by installing P.I.D. controller on control panel (to be ordered separately with modulating kit).
- Air-gas mixing at blast-pipe and high pressure mechanical atomisation of fuel using nozzle.
- Ability to obtain optimal combustion values by regulating combustion air and blast-pipe.
- Maintenance facilitated by the fact that the mixing unit and the atomisation unit can be removed without having to remove the burner from the boiler.
- Minimum and maximum air flow regulation for first and second stage by means of electric servomotor with pause closure of gate to prevent any heat dispersion to flue.
- Valves tightness control device compliant with European standard EN676.
- Prepared for automatic fuel switching.
- Equipped with one flange and one insulating seal for boiler fastening, 2 flexible hoses, one line filter; nozzle not included, to be ordered separately depending on the required flow.

CONSTRUCTION CHARACTERISTICS

The burner consists of:

- Combustion air intake with air flow adjustment device.
- Sliding boiler coupling flange to adapt the head protrusion to the various types of boilers.
- Air pressure switch to ensure the presence of combustion air.
- Electric servomotor with mechanical cam for simultaneous regulation of combustion air and fuel.
- In the CE version the gas train is complete with regulator, operating, safety and pilot valves, valve tightness control, minimum pressure switch, pressure regulator and gas filter; in the EXPORT version gas train is complete with regulator, operating, safety device and pilot valves, valve tightness control and minimum pressure switch.
- Gear pump with pressure regulator.
- Atomisation unit with magnet to control the outlet/nozzle return pins.
- Automatic control and command equipment for the burner, compliant with European standard EN298.
- Flame detection by UV photo-electric cell.
- On-board control panel with stop/go switch, fuel change switch and operation, blok and fuel indicators.
- Terminal block for the electrical and thermostatic connections to the burner and to control the second stage of working or for the connection of the electronic output regulator.
- Electrical protection rating IP40.



Model	A mm	B mm	C mm	D mm	E mm	F mm
COMIST 250 DSPGM	1035	1260	1750	320 ÷ 500	320	273
COMIST 300 DSPGM	1035	1260	1750	320 ÷ 500	320	273

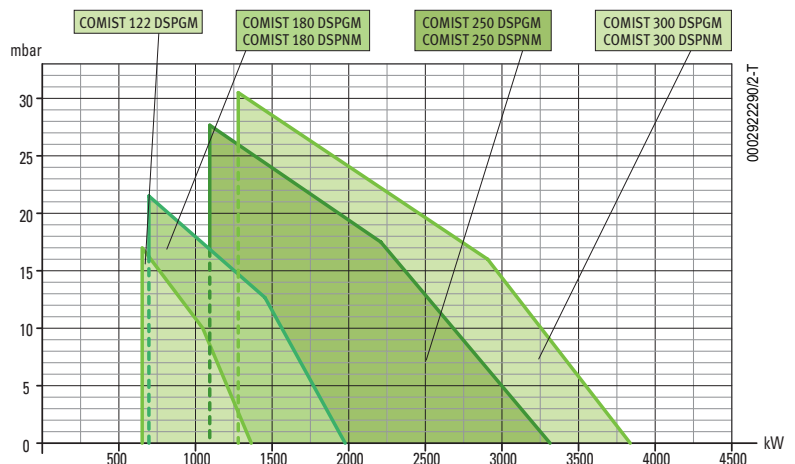
Thermal output kW	Model	Part no.	Max visc. °E at 20°C	Gas type	P.Gas** mbar	Regulator with incorporated filter Part no.	Pic.	Electrical supply	Motors kW	Size of packaging L x P x H mm	Weight kg	Notes
CE Version - Frequency 50 Hz												
1127 ÷ 3380	COMIST 250 DSPGM	5358050	1,5	N.G.	500	97390700	D5	3N AC 50Hz 400V	7,5 + 1,5	2030 x 1210 x 990	348	4) 8) 13)
1304 ÷ 3878	COMIST 300 DSPGM	5360050	1,5	N.G.	500	97390700	D5	3N AC 50Hz 400V	7,5 + 1,5	2030 x 1210 x 990	348	4) 8) 13)
CE Version - Frequency 60 Hz												
1127 ÷ 3380	COMIST 250 DSPGM	53585410	1,5	N.G.	500	97390700	D5	3N AC 60Hz 400V	9,0 + 1,3	2030 x 1210 x 990	348	4) 8) 13)
1304 ÷ 3878	COMIST 300 DSPGM	53605410	1,5	N.G.	500	97390700	D5	3N AC 60Hz 400V	9,0 + 1,7	2030 x 1210 x 990	348	4) 8) 13)
EXPORT Version - Frequency 50 Hz												
1127 ÷ 3380	COMIST 250 DSPGM	5358050	1,5	N.G.	140	-	DE5	3N AC 50Hz 400V	7,5 + 1,5	2030 x 1210 x 990	348	4) 8) 13)
1304 ÷ 3878	COMIST 300 DSPGM	5360050	1,5	N.G.	140	-	DE5	3N AC 50Hz 400V	7,5 + 1,5	2030 x 1210 x 990	348	4) 8) 13)
EXPORT Version - Frequency 60 Hz												
1127 ÷ 3380	COMIST 250 DSPGM	53585410	1,5	N.G.	140	-	DE5	3N AC 60Hz 400V	9,0 + 1,3	2030 x 1210 x 990	348	4) 8) 13)
1304 ÷ 3878	COMIST 300 DSPGM	53605410	1,5	N.G.	140	-	DE5	3N AC 60Hz 400V	9,0 + 1,7	2030 x 1210 x 990	348	4) 8) 13)

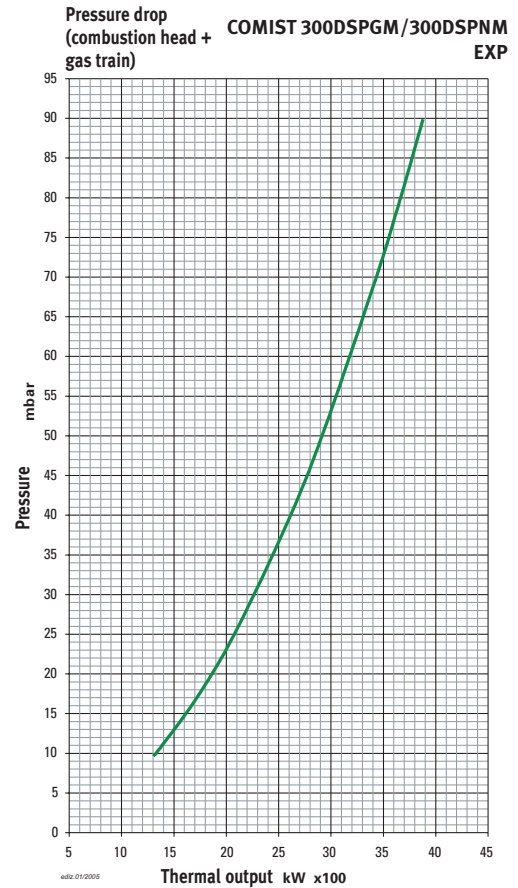
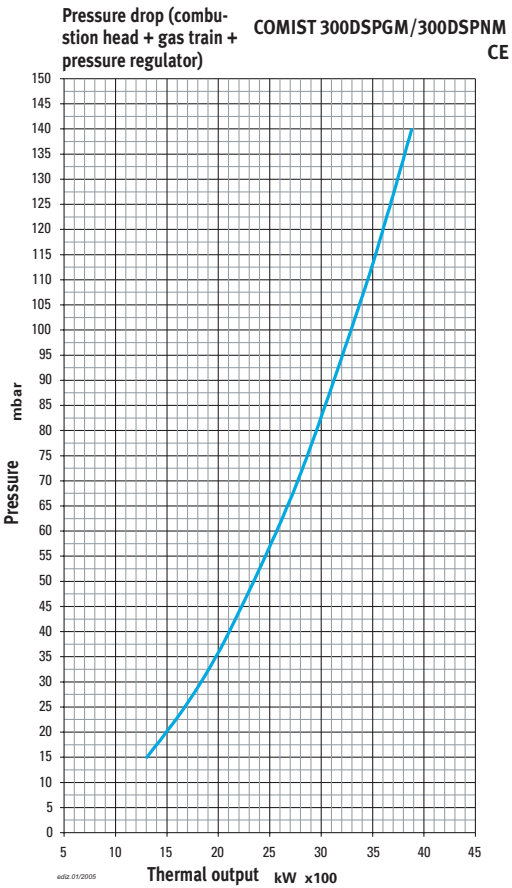
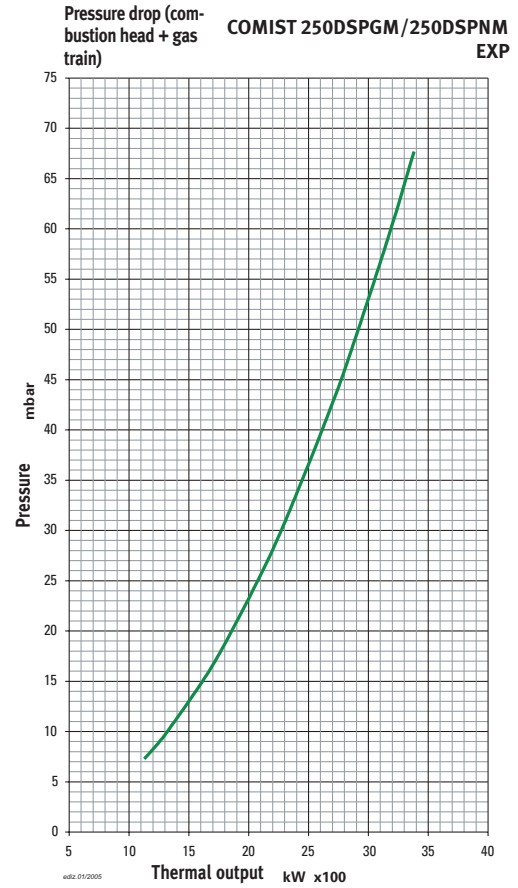
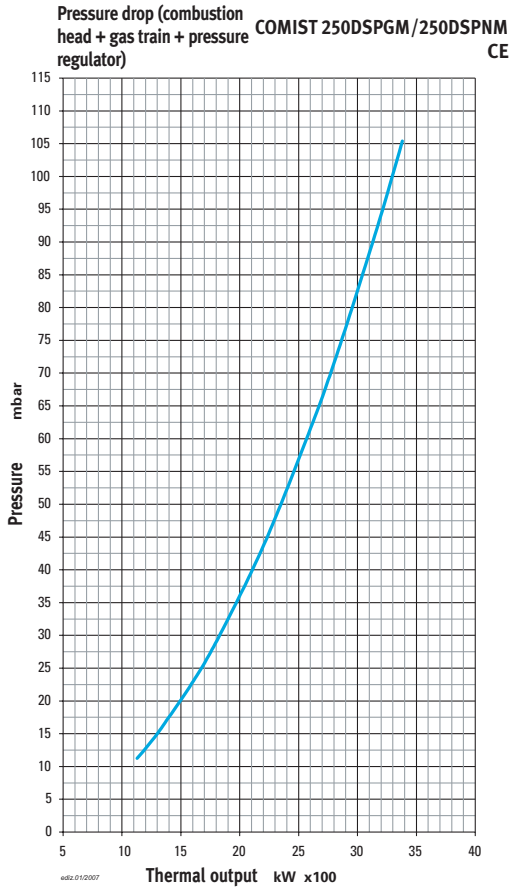
To complete the burner Nozzle with 1-3 ratio (see page 229)

Modulating mode

Part.no
98000055 Modulation kit (see page 228)
Modulating probe kit (see page 228)
Dual fuel burner accessories
Line filter - Flex hoses - Boiler coupling kit
Notes

- 4 Equipped with air closure device.
 - 8) Prepared for automatic fuel switching.
 - 13) Equipped with valve tightness control.
 - ***) Maximum gas inlet pressure at pressure regulator in CE version, at gas train for EXP version.
- Net calorific value:
Natural gas: $H_i = 35,80 \text{ MJ/m}^3 = 8550 \text{ kcal/m}^3$, at reference conditions of 0°C, 1013 mbar;
Light oil: $H_i = 42,70 \text{ MJ/kg} = 10200 \text{ kcal/kg}$.





To check the standard gas train output see page 10.
 For information on the structure, composition, and size of the gas train please refer to the diagrams on page 232.