

GI MIST 1000 DSPNM-D From 2500 to 10500 kW

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



TECHNICAL AND FUNCTIONAL CHARACTERISTICS

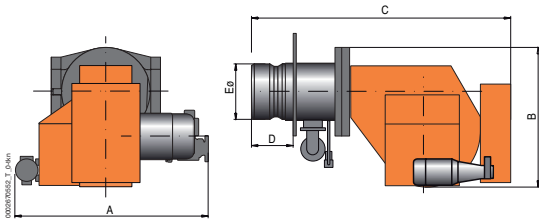


- Alternate natural gas/heavy oil burner.
- Two-stage progressive output operation.
- Continuous modulation operation by installing P.I.D. controller on control panel (to be ordered separately with modulating kit).
- Air-gas mixing at blast-pipe and high pressure mechanical atomisation of fuel using 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.
- On request it is possible to add to the burner a supplementary heavy oil pre-heater using steam, which means the fuel can be heated by the steam from the boiler to provide an energy saving.
- Valves tightness control device compliant with European standard EN676.
- Prepared for automatic fuel switching.
- Equipped with one insulating seal for boiler fastening, 2 flexible hoses and one self-cleaning line filter with resistance; nozzle not included, to be ordered separately depending on the required flow.
- On request: steam pre-heater.

CONSTRUCTION CHARACTERISTICS

The burner consists of:

- Combustion air intake with air flow adjustment device.
- Boiler coupling flange with hinge to facilitate dismantling of the atomising unit and deflector disk.
- 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.
- Ignition gas train complete with operation and safety valve, min. pressure switch, pressure regulator and gas filter.
- Gear pump with pressure regulator.
- Heating resistor for the pump, regulator valve and the atomisation unit.
- Atomisation unit with magnet to control the outlet/nozzle return pins.
- Two electrical preheaters in series and mounted on a frame comprising antigas valve, self-cleaning filter, thermometer, electronic temperature regulation and safety thermostats.
- Automatic control and command equipment for the burner, compliant with European standard EN298.
- Flame detection by UV photo-electric cell.
- On-board control panel comprising stop/go switch, automatic/manual and minimum/maximum selector, fuel change switch and operation, block, pre-heating resistors on 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
GI MIST 1000 DSPNM-D	1465	1260	2350	440	480	685

Thermal output kW	Model	Part no.	Max visc. °E at 50°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
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CE and EXPORT version - Frequency 50 Hz

2500 ÷ 10500	GI MIST 1000 DSPNM-D	6717010	50	N.G.	500	Included	D6	3N AC 50Hz 400V	22 + 4	2600 x 1710 x 1500	1120	4) 8) 13)
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CE and EXPORT version - Frequency 60 Hz

2500 ÷ 10500	GI MIST 1000 DSPNM-D	6715410	50	N.G.	500	Included	D6	3N AC 60Hz 400V	30 + 3,5	2600 x 1710 x 1500	1120	4) 8) 13)
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To complete the burner Nozzle with 1-5 ratio (see page 229).

Modulating mode

Part.no
98000055 Modulation kit (see page 228)
Modulating probe kit (see page 228)

Optionals

Description
Steam pre-heater

Dual fuel burner accessories

Line filter - Flex hoses - Boiler coupling kit
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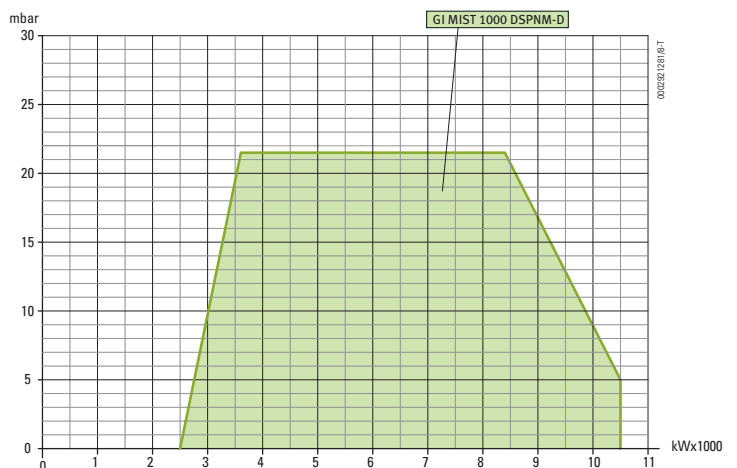
Notes

- 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:

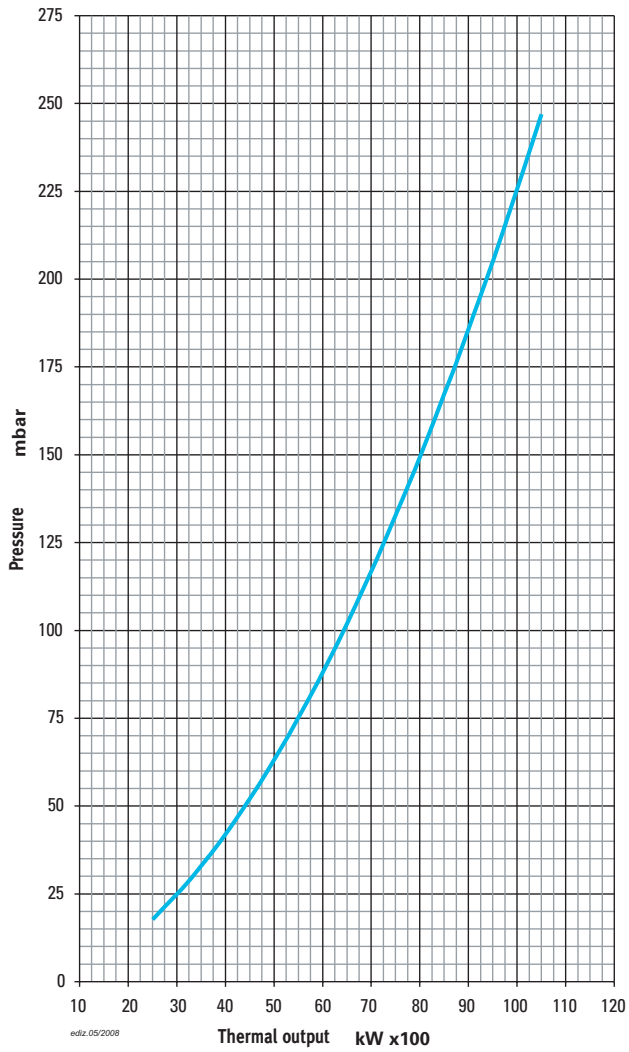
Natural gas: $H_i = 35,80 \text{ MJ/m}^3 = 8550 \text{ kcal/m}^3$,
at reference conditions of 0°C, 1013 mbar;

Heavy oil: $H_i = 40,19 \text{ MJ/kg} = 9600 \text{ kcal/kg}$.



Pressure drop (combustion head
+ gas train + pressure regulator)

GI MIST 1000DSPGM/DSPNM-D
CE / EXP



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.