

GM X5/2

Dual fuel gas/light-oil burners at 2 stages.

Composed by: die-cast aluminium body, high pressurisation air blower, protection cover with noise reduction plate and combustion head with adjustment at high efficiency and high flame stability.

Compact overall dimensions and disposition rationalized of the components with accessibility facilitated for operations of setting and maintenance.

Available in the versions METHANE (natural gas) or L.P.G. (to specify at the order) on demand specific versions for town gas, coal gas or biogas.

Gas train complete of: multiblock valve A class (1st stage + 2nd stage slow opening + safety), minimum gas pressure switch and stabiliser filter.

Complete of flange and gasket for installation on generator, two nozzles, flexible pipes and line filter, plug/socket 7 poles.



Fig. GM X5/2 TC



TECHNICAL DATA

| MODEL | GM X5/2 | | | | | | | |
|---|--|----------------------|--|--|--|--|--|--|
| Thermal power min. 1°st / min. 2°st - max. 2°st * | [Mcal/h] | Mcal/h] 64.5/130-300 | | | | | | |
| Thermal power min. 1°st / min. 2°st - max. 2°st * | [kW] | 75/151-350 | | | | | | |
| Gas flow G20 (NATURAL GAS) min. 1°st/min. 2°st - max. 2°st * | [Nm³/h] | 7.5/15.2-35 | | | | | | |
| Gas flow G31 (L.P.G.) min. 1°st / min. 2°st - max. 2°st * | [Nm³/h] | 3/5.8-13.5 | | | | | | |
| Fuel: NATURAL GAS (second family) - L.P.G. (third family) | | | | | | | | |
| Fuel category: | 12R,12H,12L,12E,12E+,12Er,12ELL,12E(R)B 13B/P,13+,13P,13B,13R | | | | | | | |
| Minimum pressure gas train D1" - S NATURAL GAS/LPG ** | [mbar] | 41.9/23 | | | | | | |
| Minimum pressure gas train D1"1/4 - S NATURAL GAS/LPG ** | [mbar] | 23.7-16 | | | | | | |
| Minimum pressure gas train D1"1/2 - S NATURAL GAS/LPG ** | [mbar] | 12.7-11.2 | | | | | | |
| Maximum pressure at the entry of valves (Pe. max) | | 360 mbar | | | | | | |
| LIGHT-OIL flow min. 1°st / min. 2°st - max. 2°st * | [kg/h] | 6.5/13-30 | | | | | | |
| Fuel: LIGHT-OIL 1,5°E at 20°C= 6,2 cSt = 35 sec Redwood N°1 | | | | | | | | |
| Intermitted working operation (min. 1 stop every 24 hours) 2 stages | | | | | | | | |
| Environmental conditions operation / storage: | -15+40°C / -20+70°C, rel. humidity max. 80% | | | | | | | |
| Max. temperature combustion air | [°C] | 50 | | | | | | |
| Nominal electric power | [W] | 600 | | | | | | |
| Fan motor | [W] | 450 | | | | | | |
| Nominal absorption fan motor | [A] | 3.9 | | | | | | |
| Power supply: | 1N~230V - 50Hz | | | | | | | |
| Electric protection degree: | | IP 40 | | | | | | |
| Noisiness *** min max. | [dB(A)] | [dB(A)] 68-72 | | | | | | |
| Burner weight | [kg] 30 | | | | | | | |

 $^{{}^{\}star}\ \text{Reference conditions: Environment temperature 20°C}\ -\ \text{Barometric pressure 1013 mbars}\ -\ \text{Altitude 0 metre (sea level)}.$

^{**} Minimal feeding-gas pressure to the gas train to get the maximum power of the burner, considering counter-pressure in combustion chamber of value 0 (zero).

^{***} Measured sonorous pressure in the laboratory combustion, with functional burner on beta boiler to 1 metre of distance (UNI EN ISO 3746 law).



OPERATING RANGE DIAGRAM

[mbar]

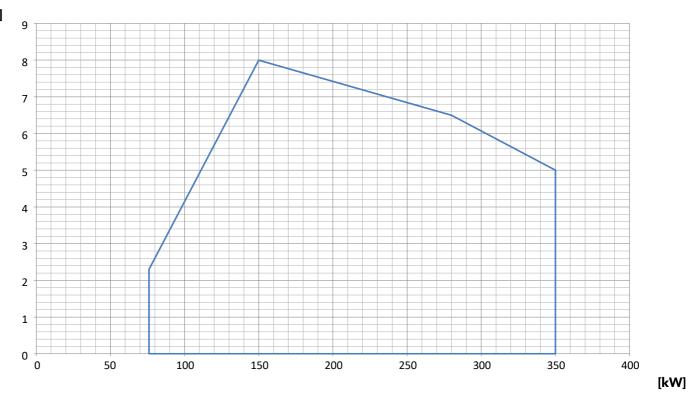
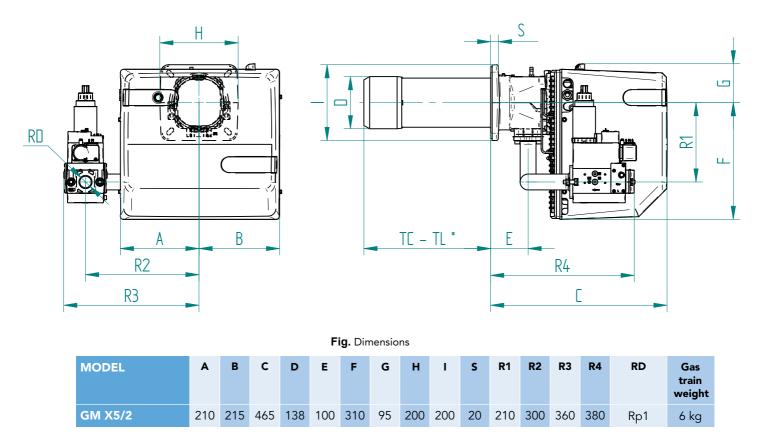


Fig. X = Thermal power Y = pressure in combustion chamber

The firing rates has been obtained based on test boilers in accordance with EN676 standards and are indicative of matching the burner to the boiler. For the correct operation of the burner, combustion chamber dimensions must be in accordance with current regulation. In case of non-compliance, contact the manufacturer.





TC-TL*: see chapter "FLAME TUBE LENGTH"

BOILER PLATE

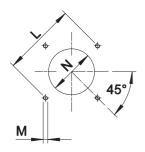


Fig. Boiler plate

* Suggested dimension of connection between burner and generator.

| MODEL | | L min | L * | L max | М | N min | N * | N max |
|---------|----|-------|-----|-------|-----|-------|-----|----------|
| GM X5/2 | mm | 205 | 220 | 226 | M10 | 140 | 150 | 180 |

FLAME TUBE LENGTH

Flame tube length must be selected based on the specifications supplied by boiler manufacturer and, in any case, it must be greater than the thickness of the boiler door included its insulation. In case of boilers with flame inversion or front flue combustion chambers, it is necessary to insulate the area between the flame tube and front door with refractory material. This protection material must not impede flame tube extraction.

| MODEL | | TC | TL ** |
|---------|----|-----|-------|
| GM X5/2 | mm | 250 | 335 |

^{**} For different flame tube lengths, please contact our Technical-Sales Department.



PRODUCT SPECIFICATION

SHORT DESCRIPTION

Dual fuel gas/light-oil burners at 2 stages.

DETAILED SPECIFICATION

Dual fuel gas/light-oil burners at 2 stages, composed by:

- Die-cast aluminum body;
- High pressurization air blower;
- Combustion head with adjustment at high performance and elevated flame stability equipped with blast tube and flame disc;
- Flange and insulating gasket for fixing at boiler;
- Single-phase power supply;
- Manual switch for the fuel selection gas/light-oil;
- · Safety air pressure switch to stop the burner in lock-out in case of failed or anomalous fan operation;
- Equipped with gas train with multiblock valve A class (1st stage + 2nd stage slow opening + safety), minimum gas pressure switch and stabiliser filter;
- Servomotor for air shutter and for the consent of the 2nd stage gas valve;
- UV probe for flame detection;
- IP 40 electric protection level.

CONFORMING TO:

- CE rules;
- 2014/30/UE Directive E.M.C.;
- 2014/35/UE Directive L.V.;
- 2014/68/EU Directive M.D.;
- 97/23/CE Directive P.E.D.;
- 2009/142/CE Directive GAS;
- Reference rules: EN676 (gas) EN267 (liquid fuel) EN746-2 (industrial thermoprocessing equipment).

STANDARD EQUIPMENT

- Flexible pipes;
- Line filter;
- Isomart gasket;
- Two nozzles;
- · Flange with insulating gasket;
- Burner nameplate;
- Warranty;
- Instruction handbook for installation, use and maintenance.

OPTIONAL

- Noise protection;
- Antivibration couplings;
- Handle gas taps.