

GAS X5/2 CE-LX

Gas burners two stages composed by: die-cast aluminum body, fan at high pressurisation, combustion head with adjustment at high efficiency and high flame stability and protection cover with noise reduction plate.

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

Gas train complete of one-block system composed by: 1st stage valve class A, 2nd stage valve slow opening class A, filter, stabilizer and minimum gas pressure switch.

Complete of connector plug / socket 7 poles, connector plug / socket 5 poles (for the 2nd stage modulation), flange and gasket for installation on generator.

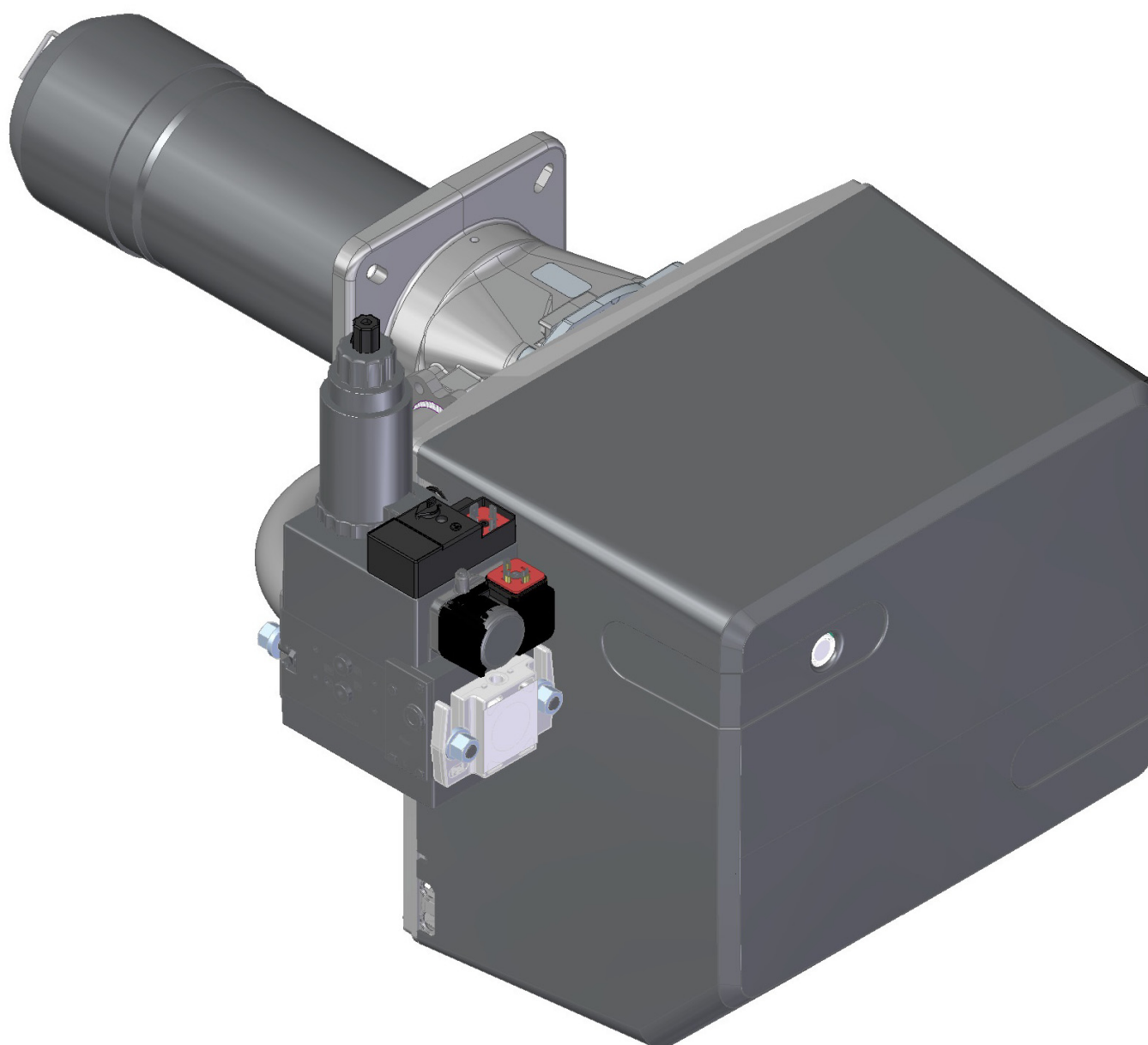


Fig. 1 GAS X5/2 CE-LX

TECHNICAL DATA AND OPERATING RANGE DIAGRAM

MODEL		GAS X5/2 CE-LX
Thermal power min. 1°st. / min. 2°st. - max. 2°st. *	[Mcal/h]	69.8/130-300
Thermal power min. 1°st. / min. 2°st. - max. 2°st. *	[kW]	81.2/151-349
Gas flow G20 (NATURAL GAS) min. 1°st. / min. 2°st. - max. 2°st. *	[Nm³/h]	8.2/15.2-35
Fuel: NATURAL GAS (second family)		
Fuel category: I2R,I2H,I2L,I2E,I2E+,I2Er,I2ELL,I2E(R)		
NO _x **	[mg/kWh]	<80: class 3 (EN 676)
Intermittent working operation (min. 1 stop every 24 hours) two stages		
Environmental conditions operation / storage:	-15...+40°C / -20...+70°C, rel. humidity max. 80%	
Max. temperature combustion air	[°C]	60
Min. pressure gas train D1"-S NATURAL GAS ***	[mbar]	32
Min. pressure gas train D1"1/4-S NATURAL GAS ***	[mbar]	21
Min. pressure gas train D1"1/2-S NATURAL GAS ***	[mbar]	18
Max. pressure at the entry of valves (Pe. max)	[mbar]	360
Nominal electric power	[W]	540
Fan motor	[W]	370
Nominal motor current absorption	[A]	2.5
Power supply:	1/N~230V-50Hz	
Electric protection degree:	IP 40	
Noisiness **** min. - max.	[dB(A)]	67-71
Burner weight*****	[kg]	27

* Reference conditions: Environment temperature 20°C - Barometric pressure 1013 mbars - Altitude 0 metre (sea level).

** To obtain this low Nox emission like in the declaration, it's necessary to couple the burner to the proper boiler for this application: boilers with 3 turns for the exhaust gas, condensing boilers and any generator with direct exhaust outlet and the thermal load isn't higher than 1,1 MW/m³.

*** 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 - method of control Class 3 - The tolerance of the measured pressure can be taken equal to ± 1 [dB(A)]).

***** For burner with cover in steel (F) add 2 kg to the weight.

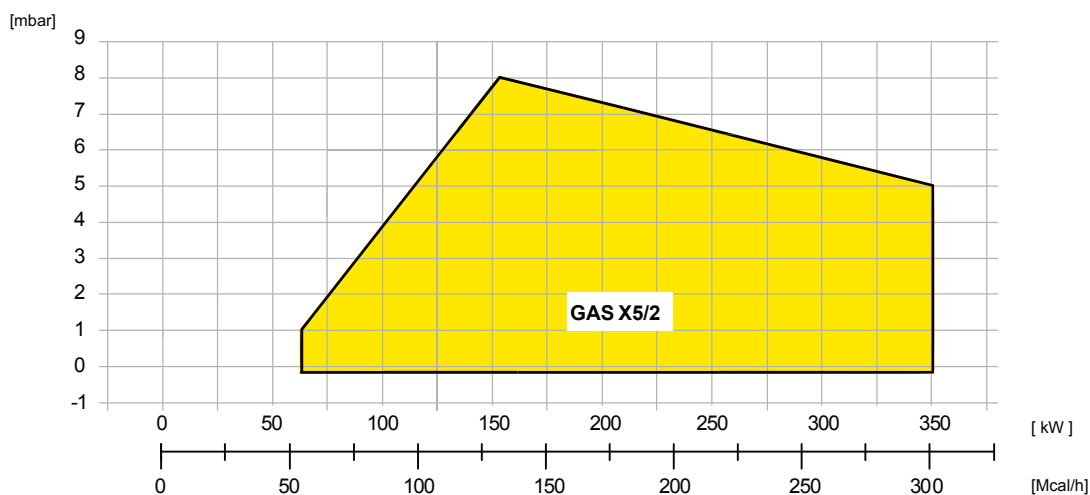
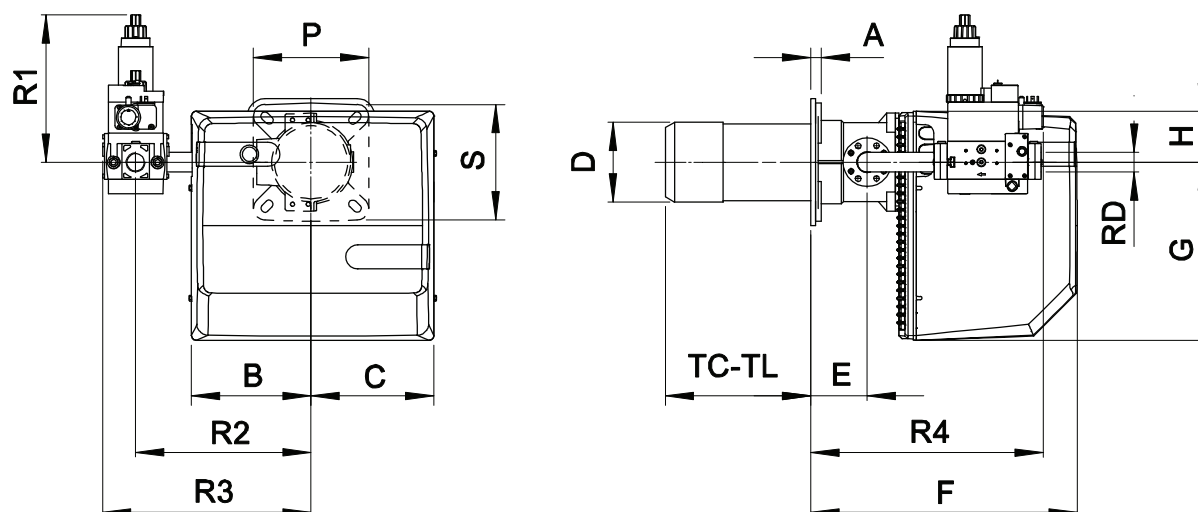


Fig. 2 X = Thermal power Y = Pression in the combustion chamber

The firing rates has been obtained based on test boilers in accordance with EN267 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.

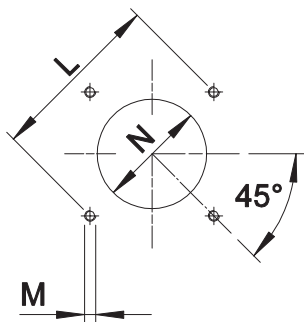
**FBR****DIMENSIONS [MM]****GAS BURNERS 2 STAGES LOW NOX**

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**Fig. 3** Dimensions GAS X5/2 CE-LX

MODEL	A	B	C	D	E	F	G	H	P	S	R1	R2	R3	R4	RD	Gas train weight
GAS X5/2 CE-LX - D1"-S	18	207	213	138	98	462	310	90	200	205	255	305	362	363	Rp 1	6 kg
GAS X5/2 CE-LX - D1"1/4-S	18	207	213	138	98	462	310	90	200	205	255	305	362	363	Rp 1 1/4	6 kg
GAS X5/2 CE-LX - D1"1/2-S	18	207	213	138	98	462	310	90	200	205	265	305	353	511	Rp 1 1/2	9 kg

TC-TL: see "flame tube length"

BOILER PLATE

* Suggested dimension of connection between burner and generator.

Fig. 4 Boiler plate

MODEL		L min	L *	L max	M	N min	N *	N max
GAS X5/2 CE-LX	mm	205	-	226	M10	150	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 **
GAS X5/2 CE-LX	mm	250	335

** For different flame lengths, please contact our Technical-Sales Department.

**FBR****PRODUCT SPECIFICATION****GAS BURNERS 2 STAGES LOW NOX**

SK071071_A_en_X5/2

SHORT DESCRIPTION

Burners for gas two stages low emissions certified in conformity with CE 676 class 3 (NO_x < 80 mg/kWh).

DETAILED SPECIFICATION

Burner for gas two stages low emissions certified in conformity with CE 676 class 3 (NO_x < 80 mg/kWh); composed by:

- Aluminum body;
- Fan at high pressurisation;
- Combustion head with adjustment at high performance and elevated flame stability equipped with steel blast tube and steel flame disc;
- Protection cover with noise reduction plate;
- Flange and insulating gasket for fixing at boiler;
- Single phase power supply;
- Safety air pressure switch to stop the burner in lock-out in case of failed or anomalous fan operation;
- Gas train complete of one-block system composed by: 1st stage valve class A, 2nd stage valve slow opening class A, filter, stabilizer and minimum gas pressure switch;
- Ionisation probe for flame detection;
- IP 40 electric protection level;
- Servomotor for air shutter and for the consent of the 2nd stage gas valve;
- Moving shutter with total closure when idle in order to reduce at the least energy losses related to boiler cooling down.

CONFORMING TO:

- CE rules;
- 2014/30/UE Directive E.M.C.;
- 2014/35/UE Directive L.V.;
- 2006/42/CE - 2006/42/EG - 2006/42/EC Directive M.D.;
- GAS 2016/426/UE Regulation;
- Reference rules: EN676 (gas) – EN 746-2 (industrial thermoprocessing equipment).

STANDARD EQUIPMENT

- Isomart gasket;
- Flange with insulating gasket;
- Burner nameplate;
- Warranty;
- Instruction handbook for installation, use and maintenance.

OPTIONAL

- Antivibration couplings;
- Handle gas taps.

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