

GAS P130/2CE EVO - GAS P160/2CE

Gas burners two stages with: die-cast aluminum body, high pressurisation air blower 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 easy 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 completely assembled and tested; composed by two stages working valve with flow adjustment, safety valve, minimum gas pressure switch, valve proving system and gas filter + gas pressure stabiliser.

Complete of flange and gasket for installation on generator.



TECHNICAL DATA AND OPERATING RANGE DIAGRAM GAS P130/2CE EVO - GAS P160/2CE

MODEL		GAS P130/2CE EVO	GAS P160/2CE
Thermal power min. 1°st. / min. 2°st. - max. 2°st. *	[Mcal/h]	206/612-1324	258/765-1647
Thermal power min. 1°st. / min. 2°st. - max. 2°st. *	[kW]	240/712-1540	300/890-1915
Gas flow G20 (NATURAL GAS) min. 1°st. / min. 2°st. - max. 2°st. *	[Nm³/h]	24/71.5-155	30.2/89.5-192
Gas flow G31 (L.P.G.) min. 1°st. / min. 2°st. - max. 2°st. *	[Nm³/h]	9.3/27.6-59.8	11.6/34.5-74.2
Fuel: NATURAL GAS (second family) - L.P.G. (third family)			
Fuel category:	I2R,I2H,I2L,I2E,I2E+,I2Er,I2ELL,I2E(R),I3B/P,I3+,I3P,I3B,I3R		
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	60
Min. pressure gas train D2"-S NATURAL GAS/L.P.G. **	[mbar]	52.4/28.2	64.5/40.4
Maximum pressure at the entry of valves (Pe. max)	[mbar]	360	360
Nominal electric power	[kW]	2.4	4.2
Fan motor	[kW]	2.2	4
Nominal motor current absorption	[A]	4.35	7.45
Nominal auxiliary absorption	[A]	0.7	0.7
Power supply:	3~400V, 1/N~230V-50Hz		
Electric protection degree:	IP 40		
Noisiness *** min. - max	[dB(A)]	82-83	84.3-86.6

* Reference conditions: Environment temperature 20°C - Barometric pressure 1013 mbars - 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 - Control method Class 3 - The tolerance on the measured sound pressure can be assumed equal to ± 1 [dB (A)]).

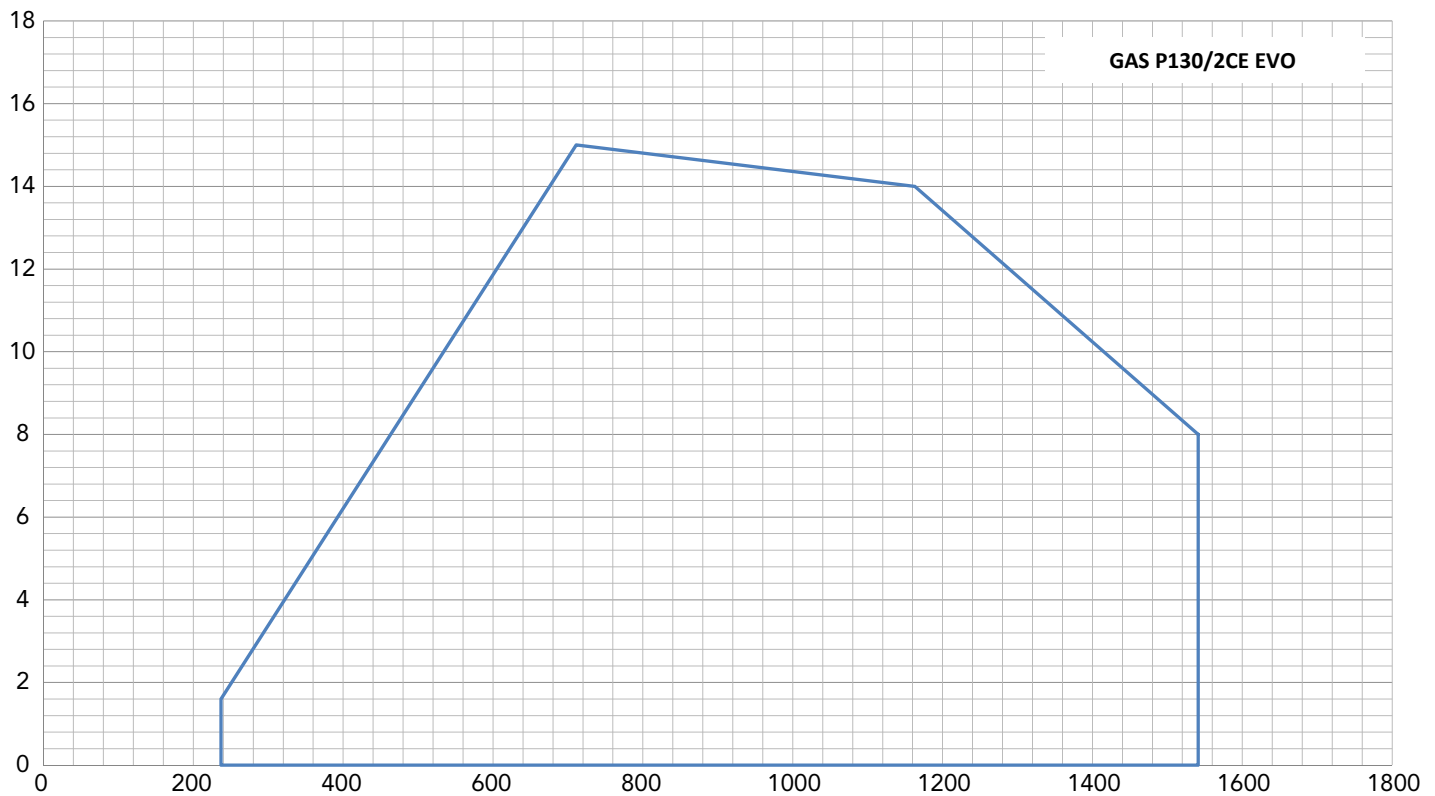


Fig. X = Thermal power [kW] Y = Pression in the combustion chamber [mbar]

GAS P130/2CE EVO

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.

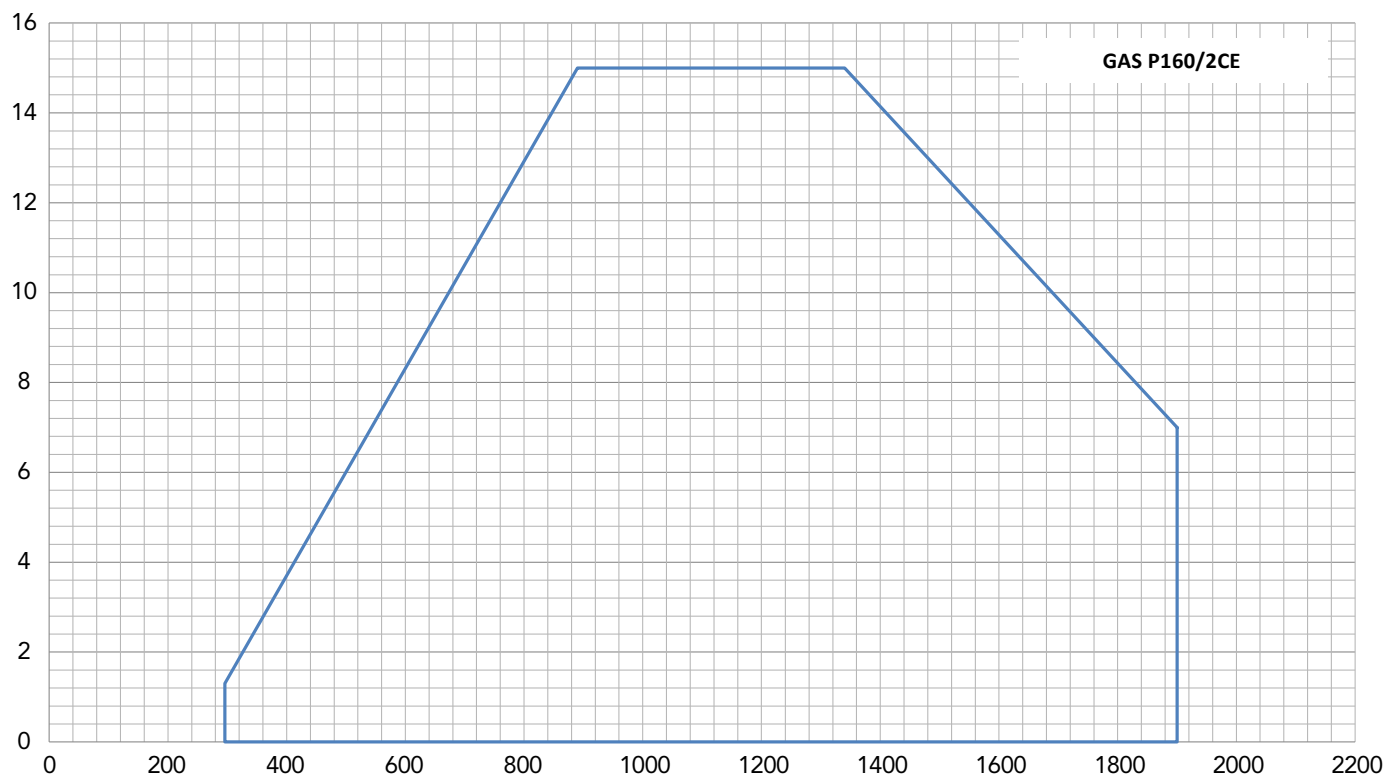


Fig. X = Thermal power [kW] Y = Pression in the combustion chamber [mbar]

GAS P160/2CE

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.

DIMENSIONS [MM]

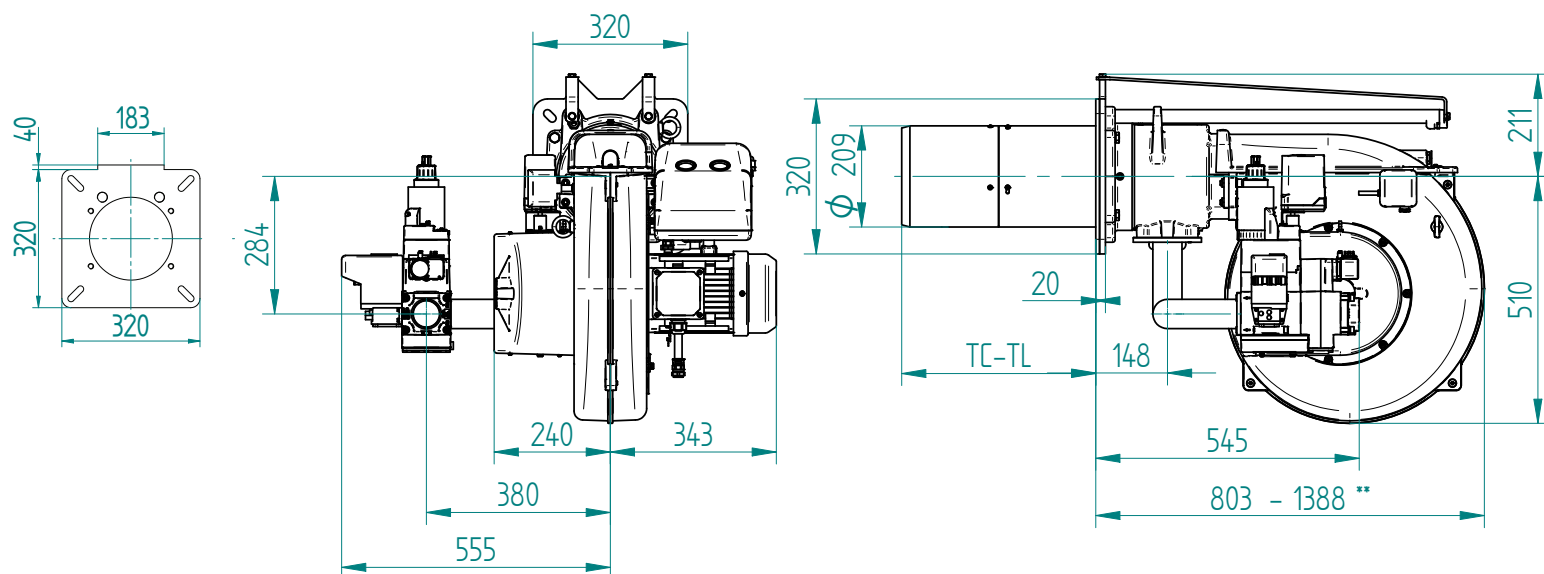


Fig. Dimensions GAS P130/2CE EVO

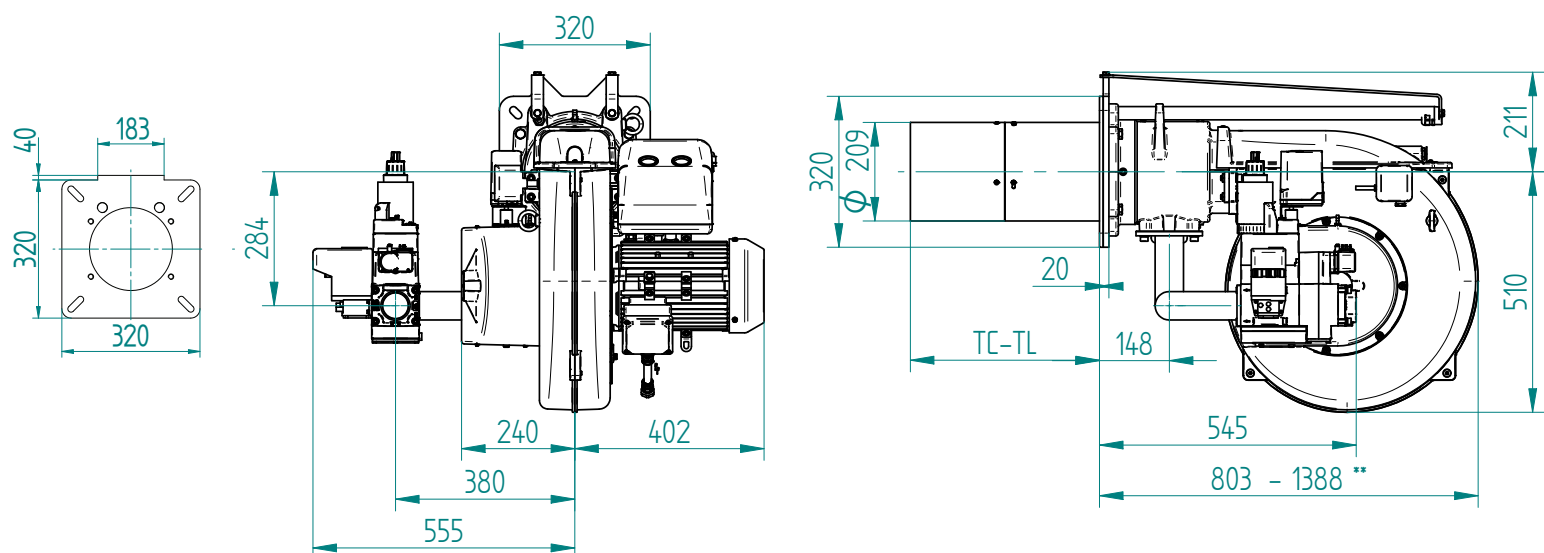
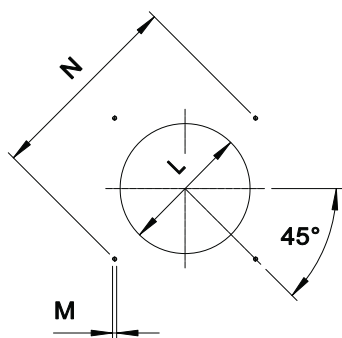


Fig. Dimensions GAS P160/2CE

** Overall dimension with the burner out in position of maintenance.

TC - TL: See "FLAME TUBE LENGTH"

BOILER PLATE



The dimensions of the burner fixing flange (holes threaded or studded) must be as per the drawing.

*** Recommended hole diameter on the generator.

MODEL		L min	L***	L max	M	N min	N max
GAS P130/2CE EVO	mm	220	220	250	M14	340	368
GAS P160/2CE	mm	220	220	250	M14	340	368

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.

FLAME TUBE LENGTH		
TC	mm	280
TL	mm	400 ****

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

BURNER SIGNAL DESCRIPTION

In the picture below there are indicated all the signalation present on the burner:

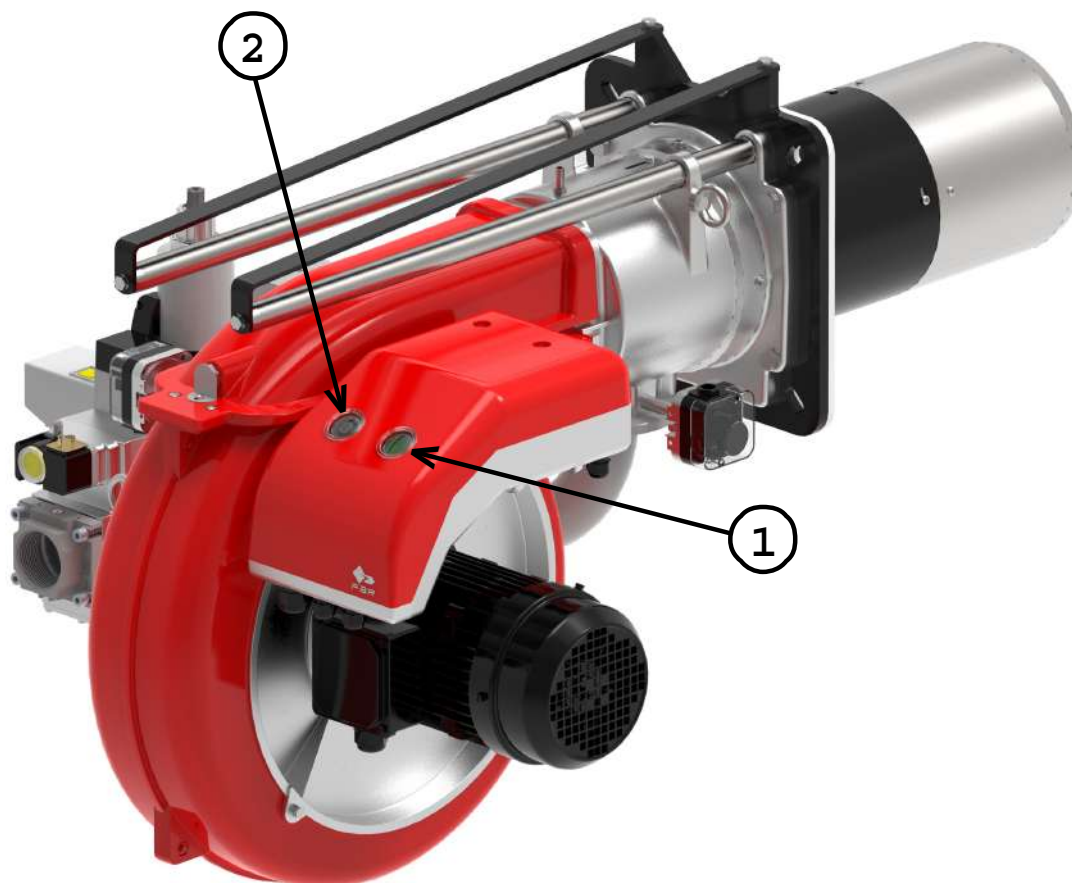


Fig. Burner signal description

LEGEND

- 1) ON/OFF button
- 2) Reset from lockout button + status lamp

💡 The multicolor signal lamp in the lockout reset button (pos.2) is the key indicating element for visual diagnostics and interface diagnostics.
In normal operation, the different operating states are indicated in the form of color codes; please refer to electrical device handbook supplied with the present instructions.

💡 After a non-alterable lockout, the red signal lamp in the lockout reset button (pos.2) lights up.
By pressing the lockout reset button (pos.2) for more than 3 seconds, the visual diagnostics of the cause of fault can be activated; please refer to electrical device handbook supplied with the present instructions.

For close the diagnostics mode and for switch on the burner again, it is necessary to reset the burner control.
Press the lockout reset button (pos.2) for about 1 second (<3 seconds).

💡 After a non-alterable lockout, the red signal lamp in the lockout reset button (pos.2) lights up.
For reset the control box press the lockout reset button (pos.2) for about 1 second (<3 seconds).

PRODUCT SPECIFICATION

SHORT DESCRIPTION

Gas burners two stages.

DETAILED SPECIFICATION

Gas burner two stages composed by:

- Die-cast aluminum body;
- High pressurisation air blower, with reverse blades for model GAS P130/2 CE EVO;
- Combustion head with adjustment at high performance and elevated flame stability equipped with inox steel blast tube and inox steel flame disc;
- Flange and insulating gasket for fixing at boiler;
- Three-phase power supply;
- Safety air pressure switch to stop the burner in lock-out in case of failed or anomalous fan operation;
- Gas train with safety valve class A, adjustment two stages valve class A and valve proving system;
- 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;
- Supports and tierods for burner extraction;
- Easy extraction of combustion head without get off the burners by bolier;
- Maximum gas pressure switch to stop the burner in lock-out in case of the gas pressure is higher then the set point value.

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

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