GAS X1CE-LX - GAS X2CE-LX - GAS X3CE-LX - GAS X4CE-LX

Burners single stage 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 valve A class (1st stage slow opening + safety), minimum gas pressure switch and filter stabilizer.
Complete of connector plug / socket 7 poles, flange and gasket for installation on generator.

Fig. GAS X1CE-LX - GAS X2CE-LX

Fig. GAS X3CE-LX

Fig. GAS X4CE-LX

TECHNICAL DATA

MODEL		GAS X1CE-LX	GAS X2CE-LX
Thermal power min. - max. *	[Mcal/h]	22.3-50	35-80
Thermal power min. - max. *	[kW]	26-58.1	40.7-93
Gas flow G20 (NATURAL GAS) min. - max. *	[Nm³/h]	2.6-5.8	4-9.3
Gas flow G31 (L.P.G.) min. - max. *	[Nm³/h]	1-2.2	1.6-3.6
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		
Intermitted working operation (min. 1 stop every 24 hours) single stage			
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 D1/2"-S NATURAL GAS **	[mbar]	14.5	-
Min. pressure gas train D3/4"-S NATURAL GAS **	[mbar]	-	14.5
Min. pressure gas train D1"-S NATURAL GAS **	[mbar]	-	11.7
Max. pressure at the entry of valves (Pe. max)	[mbar]	360	360
Nominal electric power	[W]	110	130
Fan motor	[W]	75	75
Nominal motor current absorption	[A]	0.6	0.6
Power supply:	1N~230V - 50Hz		
Electric protection degree:		IP 40	IP 40
NOx***	[mg/kWh]	< 80 : clase 3 (EN676)	
Noisiness **** min. - max.	[dB(A)]	59-60	61-62
Burner weight *****	[kg]	10	10

* 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).
*** 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 then 1,1 MW/m³
**** Measured sonorous pressure in the laboratory combustion, with functional burner on beta boiler to 1 metre of distance (UNI EN ISO 3746 law).
***** For burner with cover in steel (F) add 2 kg to the weight.

TECHNICAL DATA

MODEL		GAS X3CE-LX	GAS X4CE-LX
Thermal power min. - max. *	[Mcal/h]	60-150	90-211
Thermal power min. - max. *	[kW]	69.8-174	104-245
Gas flow G20 (NATURAL GAS) min. - max. *	[Nm³/h]	7-17.5	10.5-24.6
Fuel: NATURAL GAS (second family)			
Fuel category: I2R,I2H,I2L,I2E,I2E+,I2Er,I2ELL,I2E(R)B			
NOx **	[mg/kWh]	< 80: class 3 (EN 676)	
Intermitted working operation (min. 1 stop every 24 hours) single stage			
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 D1"-S NATURAL GAS ***	[mbar]	15.5	26
Min. pressure gas train D1"1/4-S NATURAL GAS ***	[mbar]	13.5	19.5
Min. pressure gas train D1"1/2-S NATURAL GAS ***	[mbar]	13	16.5
Max. pressure at the entry of valves (Pe. max)	[mbar]	360	360
Nominal electric power	[W]	260	260
Fan motor	[W]	200	200
Nominal motor current absorption	[A]	1.1	1.1
Power supply:		1/N~230V-50Hz	
Electric protection degree:		IP 40	
Noisiness **** min. - max.	[dB(A)]	66-68	66-68
Burner weight	[kg]	13	15

* 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 then 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).

OPERATING RANGE DIAGRAM

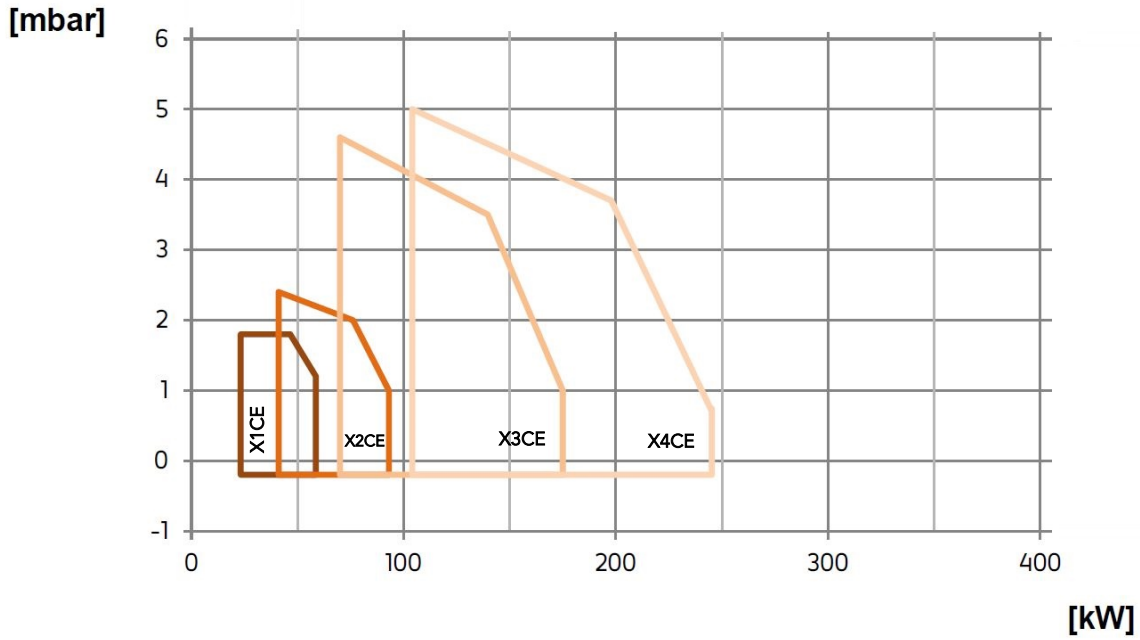


Fig. X = Thermal power Y = Pression in the combustion chamber

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.

DIMENSIONS [MM]

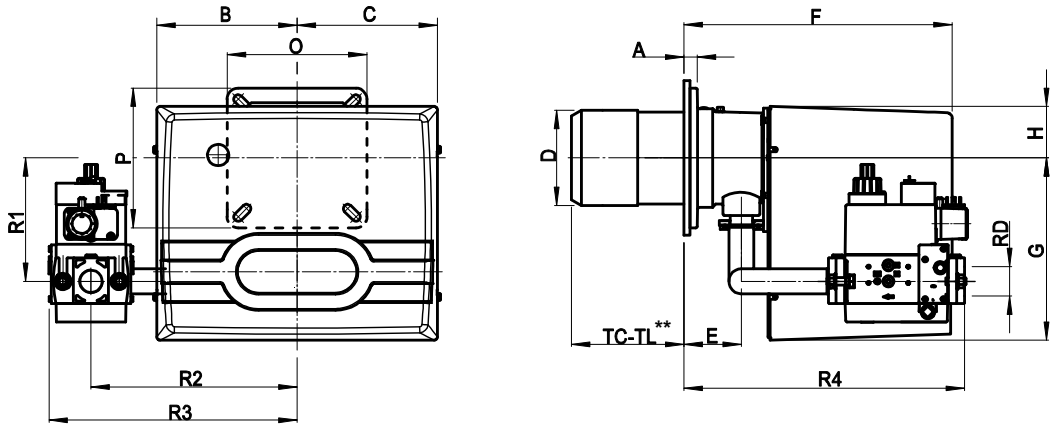
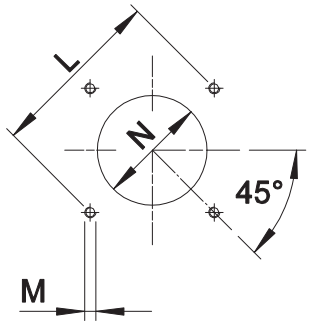


Fig. Dimensions

MODEL	A	B	C	D	E	F	G	H	O	P	R1	R2	R3	R4	RD	Gas train weight
GAS X1CE-LX D1/2"-S	15	162	175	90	45	305	210	65	150	150	132	200	254	240	Rp 1/2	2 kg
GAS X2CE-LX D3/4"-S	15	162	175	90	45	305	210	65	150	150	138	220	262	275	Rp 3/4	4 kg
GAS X2CE-LX D1"-S	15	162	175	90	45	305	210	65	150	150	138	220	262	275	Rp 1	4 kg
GAS X3CE-LX D1"-S	20	185	195	107	54	340	248	70	200	160	152	280	337	300	Rp 1	6 kg
GAS X3CE-LX D1"1/4-S	20	185	195	107	54	340	248	70	200	160	152	280	337	300	Rp 1"1/4	6 kg
GAS X3CE-LX D1"1/2-S	20	185	195	107	54	340	248	70	200	160	152	280	330	443	Rp 1"1/2	9 kg
GAS X4CE-LX D1"-S	20	185	195	129	78	368	248	70	200	200	158	280	337	319	Rp 1	6 kg
GAS X4CE-LX D1"1/4-S	20	185	195	129	78	368	248	70	200	200	158	280	337	319	Rp 1"1/4	6 kg
GAS X4CE-LX D1"1/2-S	20	185	195	129	78	368	248	70	200	200	158	280	330	467	Rp 1"1/2	9 kg

BOILER FIXING PLATE



* Suggested dimension of connection between burner and generator.

Fig. Boiler plate

MODEL		L min	L *	L max	M	N min	N *	N max
GAS X1CE-LX	mm	130	150	170	M8	100	110	130
GAS X2CE-LX	mm	130	150	170	M8	100	110	130
GAS X3CE-LX	mm	150	170	170	M8	120	130	140
GAS X4CE-LX	mm	170	205	226	M10	135	140	160

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 X1CE-LX	mm	90	150
GAS X2CE-LX	mm	90	150
GAS X3CE-LX	mm	130	250
GAS X4CE-LX	mm	160	280

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

PRODUCT SPECIFICATION

SHORT DESCRIPTION

Gas burners one stage low emissions certified in conformity with CE 676 class 3 (NOx < 80 mg/kWh).

DETAILED SPECIFICATION

Gas burners one stage low emissions certified in conformity with CE 676 class 3 (NOx < 80 mg/kWh); composed by:

- Die-cast 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 completely assembled and tested; complete of one-block valve A class (1st stage slow opening + safety), minimum gas pressure switch and filter stabilizer;
- Ionisation 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.;
- 2006/42/CE - 2006/42/EG - 2006/42/EC Directive MAC;
- 2016/426/UE Rules GAS;
- Reference rules: EN676 (gas) - EN746-2 (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.

The illustrations and data here shown are indicative. F.B.R. Bruciatori S.r.l. reserves the right to bring, without any obligation of warning, any changes that would be appropriate to the continuing development of their products.