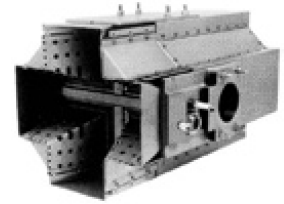


EGX air duct burner module



The **(cross module)** gas burner represents a new concept of direct heating air for industrial process optimizing mixing velocity of warm gases produced by combustion, with process air.

They are properly classified as “head mixing burner”.

For their suitable working, they need low pressure of air and gas.

The basis unit include housing burner with ignition probe, pilot burner and integrated ionization electrode, or UV detection cell.

Three different construction modes are available depending on working process air temperature:

B	Low Working Temp.	T max (upstream burner) = 360 °C
		T max (downstream burner) = 800 °C
M	Average Working Temp.	T max (upstream burner) = 600 °C
		T max (downstream burner) = 800 °C
A	High Working Temp.	T max (upstream burner) = 700 °C
		T max (downstream burner) = 900 °C

MODEL	Output max. (kW)
40	1.160
60	1.740
80	2.320
100	2.900
120	3.480
140	4.060
160	4.650
180	5.230
200	5.800
220	6.380
240	6.960
260	7.540
280	8.120
300	8.700
320	9.280
340	9.860
360	10.440
380	11.020
400	11.600

Combustion air may be supplied directly from the process or from a blower (depending on installation type).

In case that air of combustion is supplied by the process, the burner is called **OPEN-BACK**. Process air must have a minimum oxygen tenor of 17% with a flow speed of 20 m/s; the pressure drop in this application is 2,5 mbar.

If combustion air is supplied by a blower, burner module will be equipped with a connection flange; in this case low oxygen tenor won't prevent burner to have a good combustion. Anyway in order to have a good thermal distribution, it will be necessary to have process air speed between 10 m/s and 20 m/s.

In order to allow a good firing operation, a straight duct section of about 1 m, before and after the burner, should be provided.

Burner thermal capacity depends on linear dimensions and may be easily calculated with the help of the following table:

(Cross Module) with size 12"x12" = 305x305 mm: 1.160 kW

Turndown rate depends on regulation type as follow:

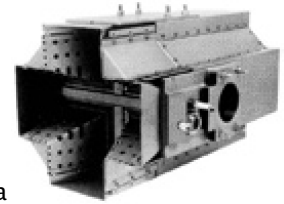
-Gas/Air regulation (constant combustion ratio): 20:1
 -Gas regulation (constant air flow): 10:1

Materials used in burner construction may vary depending on the kind of use it is designed for and are generally made of refractory steel and/or Nickel-Chrome alloys.

AIR DUCT BURNERS

SUNTEC

EGX air duct burner module



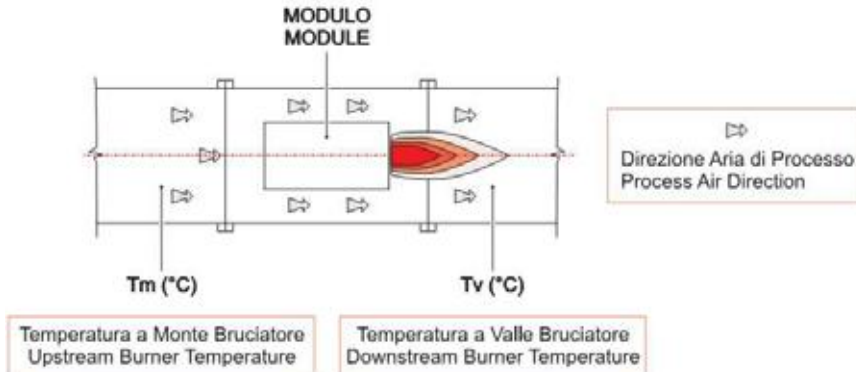
Features

- Main module direct electrical ignition thanks to electrode; or indirect thanks to a incorporated in burner structure.
- Flame detection with ionization electrode or UV cell.
- Standard executions for Methane gas and LPG, other gaseous fuel on request.

Applications

- All types of application in which a large exchange surface between combustion gas and process air is required, and it's necessary a fast and uniform mixing.
- Ceramic, Bricks, Refractory: Intermittent and continuous dryers.
- Surfaces treatment: Painting kilns, enamelling kilns and dryers.
- Printing and Packing: Air Heaters for Rotogravures, Flexographic and Coupling and adhesive coating Machines.
- Food: Cereal, fodder and tobacco dryers, roasters.
- Moreover for all those applications in which a gas burner at large regulation and automatic working is required.

Working temperature scheme

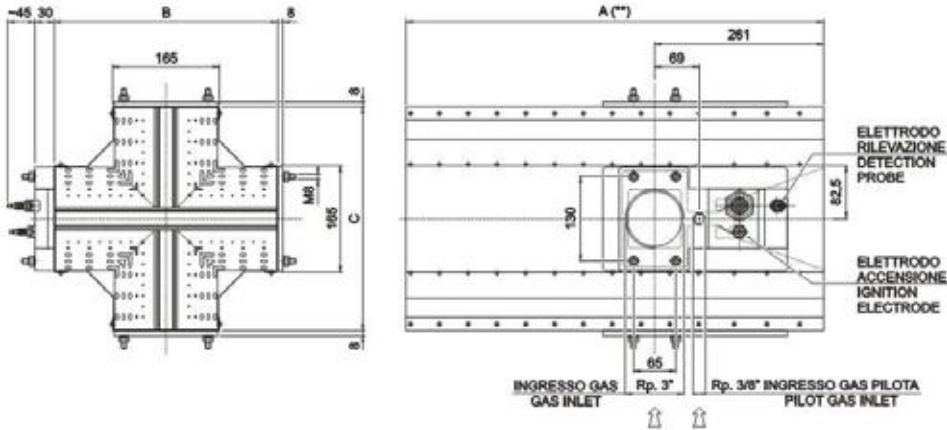
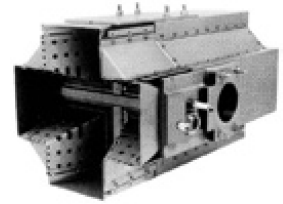


AIR DUCT BURNERS

SUNTEC

EGX air duct burner module

Overall dimensions (mm), output and configuration type



Mod.	Potenzialità max. Output max.		Dimensioni [mm] Dimensions [mm]			Configurazione Configuration	Mod.	Potenzialità max. Output max.		Dimensioni [mm] Dimensions [mm]			Configurazione Configuration
	kW	kcal/h	A	B	C			kW	kcal/h	A	B	C	
40	1.160	1.000.000	645	345	345		240	6.960	6.000.000	798	955	955	
60	1.740	1.500.000	645	345	650		260	7.540	6.500.000	798	1.100	955	
80	2.320	2.000.000	798	345	650		280	8.120	7.000.000	798	1.100	1.100	
100	2.900	2.500.000	798	345	955		300	8.700	7.500.000	798	1.260	1.100	
120	3.480	3.000.000	798	650	650		320	9.280	8.000.000	798	1.565	955	
140	4.060	3.500.000	798	650	955		340	9.860	8.500.000	798	1.260	955	
160	4.650	4.000.000	798	650	1.260		360	10.440	9.000.000	798	1.260	955	
180	5.230	4.500.000	798	650	955		380	11.020	9.500.000	798	1.565	955	
200	5.800	5.000.000	798	805	805		400	11.600	10.000.000	798	1.260	1.260	
220	6.380	5.500.000	798	955	805								

(**) Nella versione "OPEN BACK" A= 386 mm.
For the "OPEN BACK" version A= 386 mm.