

SSDBD

SELF STANDING AIR DUCT BURNER

Dual line

The air duct burners series “SSDBD” is utilized in all applications where it is required the direct heating of ducted air in every types of industrial processes.

The package is composed by a modular burner properly dimensioned and assembled in order to guarantee the best heat exchange between the process air and the combustion products.

In the bottom part of the burner body it will be created an air box that will compose the structure of burner. The air box, also with a modular structure like the burner itself is made in reinforced stainless or carbon steel and will house the special combustion air fans dimensioned for the duct burner feeding.

The gas train is fixed to the burner structure below the air box and it's housed in all the length of the burner; the derivation box containing the transformer igniter and the terminal board are fixed on a side of the burner structure.

The control panel is supplied separately from the burner (not assembled to the structure) and complete with the multi-polar wire for the connection to the derivation box (standard cable length 5 m, other lengths on demand). The ignition of the duct burner is preferentially done with a pilot burner; the two main steps, ignition and operation, will be managed by the flame control installed inside the control panel.

The burner unit is supplied with supporting feet for a vertical installation.



i Capacity developed on two parallel burners

REGULATION TYPE

Gas Modulant: provides for the adjustment of the fuel only via floating or analog (optional) motorized valve, while the flow rate of the process air is calibrated to allow the combustion at maximum capacity.
Max. ÷ min. ratio 10:1

High Low Flame: provides for an “ON/OFF” adjusting type for fuel, instead comburent capacity is calibrated in order to allow the combustion at maximum capacity.
Max. ÷ min. ratio 7:1

FEATURES

- Ignition of the main burner through integrated pilot
- Flame detection with ionization electrode (one for length up to 1200 mm, two for higher burner lengths) or with UV cell (optional)
- Standard executions for methane (LPG and other fuels on request)
- Regulation: gas modulant, with by-pass for discharge procedures of the dryer
- Thermoregulator (optional) floating or analog positionable on the control board
- Complete version with gas train according to EN 746-2 (other regulations if required) and control panel
- Max inlet comburent air: 70°C

APPLICATIONS

- All types of application in which a large exchange surface between exhaust gases and process air is required and to have a fast and uniform mixing, in particular cereals dryers
- All those applications in which a direct exchange gas burner at large regulation and automatic working is required

TECHNICAL DATA

Model	SSDBD 3000	SSDBD 4000	SSDBD 5000	SSDBD 6000	SSDBD 7000
Maximum output	3,0 MW	4,0 MW	5,0 MW	6,0 MW	7,0 MW
Fuel	CH ₄ / LPG				
Gas supply pressure	300 ÷ 350 mbar				
Gas inlet	2"	DN65	DN65	DN80	DN80
Burner length	1249 mm	1857 mm	2465 mm	3073 mm	3681 mm
Burner width	890 mm	890 mm	890 mm	890 mm	890 mm
Burner height	2000 mm	2000 mm	2000 mm	2000 mm	2000 mm
Electrical supply	400 V / 50 Hz + N + Ground				
Motor	2 x 2,2 kW	2 x 3,0 kW	2 x 3,0 kW	4 x 2,2 kW	4 x 3,0 kW

Model	SSDBD 8000	SSDBD 9000	SSDBD 10000	SSDBD 11000	SSDBD 14000
Maximum output	8,0 MW	9,0 MW	10,0 MW	11,0 MW	14,0 MW
Fuel	CH ₄ / LPG				
Gas supply pressure	300 ÷ 350 mbar				
Gas inlet	DN80	DN100	DN100
Burner length	3681 mm	4593 mm	4593 mm
Burner width	890 mm	890 mm	890 mm	890 mm	890 mm
Burner height	2000 mm	2000 mm	2000 mm	2000 mm	2000 mm
Electrical supply	400 V / 50 Hz + N + Ground				
Motor	4 x 3,0 kW	6 x 3,0 kW	6 x 3,0 kW

Performance data and dimensions are guidelines only.