

## SSDBS

### SELF STANDING AIR DUCT BURNER

#### Single line

The air duct burners series “SSDBS” 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 single burner only

## 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	SSDBS 400	SSDBS 600	SSDBS 800	SSDBS 1000	SSDBS 1200	SSDBS 1500	SSDBS 1750	SSDBS 2000
Maximum output	0,4 MW	0,6 MW	0,8 MW	1,0 MW	1,2 MW	1,5 MW	1,75 MW	2,0 MW
Fuel	CH <sub>4</sub> / LPG							
Gas supply pressure	300 ÷ 350 mbar							
Gas inlet	1"	1"1/2	1"1/2	1"1/2	1"1/2	1"1/2	2"	2"
Burner length	640 mm	795 mm	945 mm	945 mm	945 mm	1249 mm	1249 mm	1553 mm
Burner width	270 mm	270 mm	270 mm	270 mm	270 mm	270 mm	270 mm	270 mm
Burner height	1500 mm	1500 mm	1500 mm	1500 mm	1500 mm	2000 mm	2000 mm	2000 mm
Electrical supply	400 V / 50 Hz + N + Ground							
Motor	1 x 1,1 kW	1 x 1,5 kW	1 x 1,5 kW	1 x 1,5 kW	1 x 2,2 kW	1 x 2,2 kW	1 x 2,2 kW	1 x 3 kW

Model	SSDBS 2500	SSDBST 2500	SSDBS 3000	SSDBS 3200	SSDBS 3500	SSDBS 4000	SSDBS 5000	SSDBS 6000
Maximum output	2,5 MW	2,5 MW	3,0 MW	3,2 MW	3,5 MW	4,0 MW	5,0 MW	6,0 MW
Fuel	CH <sub>4</sub> / LPG							
Gas supply pressure	300 ÷ 350 mbar							
Gas inlet	2"	2"	2"	DN65	DN65	DN65	DN65	DN80
Burner length	1857 mm	1486 mm	2465 mm	2465 mm	3073 mm	3681 mm	3681 mm	4593 mm
Burner width	270 mm	337 mm	270 mm	270 mm	270 mm	270 mm	270 mm	270 mm
Burner height	2000 mm	2000 mm	2000 mm	2000 mm	2000 mm	2000 mm	2000 mm	2000 mm
Electrical supply	400 V / 50 Hz + N + Ground							
Motor	1 x 3 kW	1 x 3 kW	2 x 2,2 kW	2 x 2,2 kW	2 x 2,2 kW	2 x 3 kW	2 x 3 kW	3 x 3 kW

Performance data and dimensions are guidelines only.