

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.



 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 combustion air is calibrated to allow the combustion at maximum capacity.
Max. ÷ min. ratio 10:1
- **High Low Flame:** provides for an "all or few" 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 burners length) or with UV cell (optional)
- Standard executions for Methane and LPG, other fuels on request
- Regulation: gas modulant, with by-pass, high-low flame.
- 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, fodders dryers, tobacco dryers
- Moreover for 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 |
|---------------------|----------------------------|------------|------------|------------|------------|------------|------------|------------|
| Output max. | 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 ₄ / 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 3,0 kW |

| Model | SSDBS 2500 | SSDBST 2500 | SSDBS 3000 | SSDBS 3200 | SSDBS 3500 | SSDBS 4000 | SSDBS 5000 | SSDBS 6000 |
|---------------------|----------------------------|-------------|------------|------------|------------|------------|------------|------------|
| Output max. | 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 ₄ / 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.