SBJ Series packaged gas burner

Blower, burner, gas train and controls in one unit, for ovens, dryers, air heaters and deodorising systems. 116 to 1,396 kW per burner.



Features

- **Compact.** Gas control, flame monitoring and ignition modules are assembled on the burner body.
- **Stable flame.** Nozzle-mix design: gas and air meet at the burner nozzle, so the flame cannot flash back, and stays stable over a wide firing range.
- **Wide turndown** with proportional air/gas control (modulating motor and butterfly valve).
- **Easy to set up.** Air and gas are adjusted against pressure gauges on the burner.
- **Easy to service.** Nozzle, igniter, flame rod and mixing head come out from the outside.
- **Tested before shipping.** Every burner is fired with its gas train and control box in our Shenzhen workshop.

Operating conditions

Fuel	Natural gas or LPG
Process air temperature	up to 450 °C
Combustion air temperature	up to 60 °C
Chamber pressure	−1 to +2 kPa
Control	Modulating or high/low
Flame tube	SUS 310S stainless steel

Applications

- Paint and powder-coating curing ovens
- Conveyor, belt and tunnel dryers
- Food baking and drying ovens
- Hot-air generators and indirect air heaters
- Deodorising and fume treatment
- Replacement for packaged burners of similar rating

To size a burner, send us

Heat input or air flow and temperature rise, fuel and gas supply pressure, chamber pressure, and the mounting opening. For a replacement, a photo of the old burner's nameplate is enough to start.

Models and outputs

Model	Output, kW	Output, kcal/h	Width, mm	Height, mm	Depth, mm
SBJ-20	116 – 233	100,000 – 200,000	650	900	700
SBJ-30	291 – 407	250,000 – 350,000	650	1,050	850
SBJ-40	465 – 814	400,000 – 700,000	650	1,050	950
SBJ-60	872 – 1,396	750,000 – 1,200,000	650	1,300	1,020

Outputs are maximum ratings for the size range; each burner is set to the duty of the job. Other sizes are built to order.

Mounting flange

Model	Flange plate, mm	Bolt pitch, mm	Flame tube, Ø mm	Wall opening, Ø mm
SBJ-20	—	160 × 160	130	140
SBJ-30	228.5 square	190 × 190	160	170
SBJ-40	280 square	230 × 230	210	220
SBJ-60	330 square	285 × 285	261	271

Cut the wall opening 10 mm larger than the flame tube. Four bolt holes on the square pitch shown.

Standard components (selectable to customer requirements)

Part	Model
Combustion air blower	CX-75A
Air pressure switch	C6097A0110
Proportional butterfly valve	SVP-32
Modulating motor	M7284
Flame detector	C7027 UV
Gas ball valve	DN32
Control box, gauges, air filter	SENNISI

Part	Model
Gas pressure switch	C6097A0210
Main safety shut-off valve	VE4025
High-fire solenoid valve	VE4025
Pilot solenoid valve	VE4015
Ignition transformer	TRK2-30PVD
Needle valve	DN15
Ignition electrode	Ø10 mm

Gas train size and components are matched to the gas supply pressure, firing rate and the safety standard at site. Original Honeywell, Siemens and Kromschröder components can be specified.

Spare parts

Burner bodies, mixing heads, flame tubes, electrodes and controls for SBJ burners are kept in stock in Shenzhen. Send the model or nameplate photo for a same-day quotation.