

GULLIVER BS SERIES

The Riello Gulliver BS series of one stage gas burners, is a complete range of Low NOx emission products, developed to respond to any request for home heating, conforming to the most severe standards regarding the reduction of polluting emissions.

This series of burners is available in four different models with an output ranging from 16 to 250 kW, divided in four different structures.

All the models use the same components designed by Riello for the Gulliver series. The high quality level guarantees safe working. The burners are fitted with a microprocessor-based burner safety control box which supplies indication of operation and diagnosis of fault cause.

In developing these burners, special attention was paid to reducing noise, the ease of installation and adjustment, to obtaining the smallest size possible to fit into any sort of boiler available on the market.

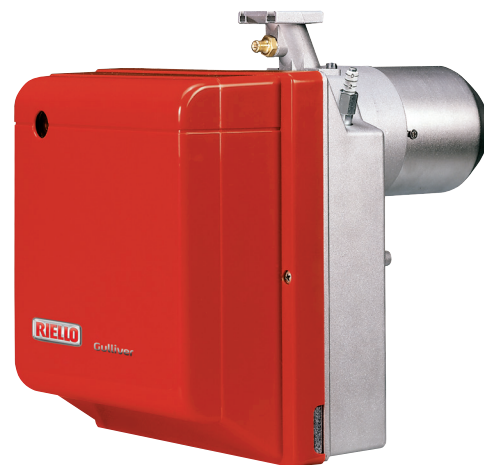
All the models are approved by the EN 676 European Standard and conform to European Directives, Gas Appliance, EMC, Low Voltage, Boiler Efficiency.

All the Gulliver BS burners are tested before leaving the factory.

Guidelines for installation of burners in conformity to EU Regulation:

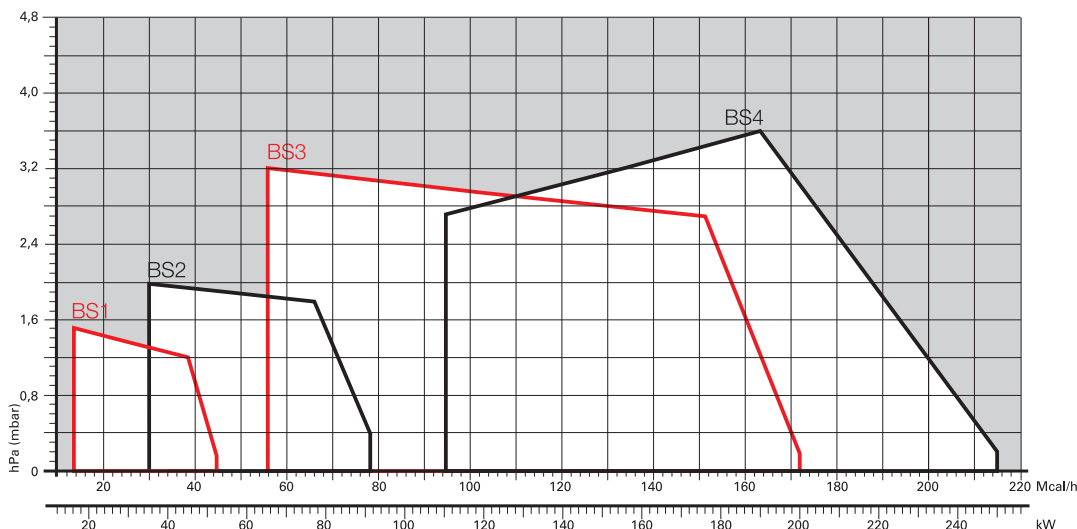
A RIELLO burner (Heat Generator), where it is matched with a water-based boiler (Heater Housing) with a nominal output ≤ 400 kW, providing heat for heating purposes and heat to deliver sanitary hot water, can be installed:

- With boilers (heater housings) already in service in the field, for replacement of identical products, in conformity to Article 1, paragraph 2, point (G) of the EU Regulation No. 813/2013;
- With boilers (heater housings) on a new installation, if they have emissions complying with the requirement of Annex II, paragraph 4 of the EU regulation No. 813/2013.



BS1	16 ÷ 52	kW
BS2	35 ÷ 92	kW
BS3	65 ÷ 197	kW
BS4	110 ÷ 249	kW

FIRING RATES



Useful working field for choosing the burner

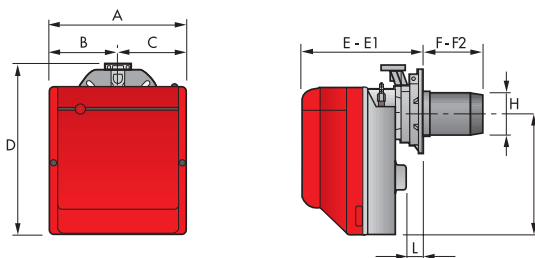
Test conditions conforming to EN676
 Temperature: 20°C
 Pressure: 1013,5 mbar
 Altitude: 0 m a.s.l.

Low NOx One Stage Gas Burners

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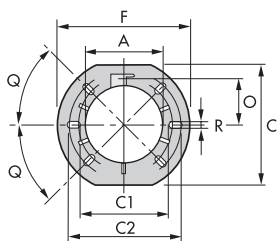
Overall dimensions (mm)

BURNER



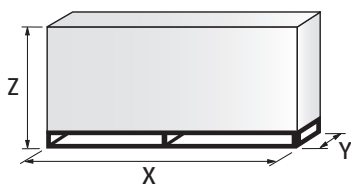
MODEL	A	B	C	D	E	E1	F	F2	H	I	L
▶ BS1	234	122	112	295	230	276	116	70	89	210	41
▶ BS2	255	125,5	125,5	325	238	252	114	100	106	230	45
▶ BS2 TL	255	125,5	125,5	325	238	252	184	170	106	230	45
▶ BS3	300	150	150	391	262	280	128	110	129	285	45
▶ BS3 TL	300	150	150	391	262	280	285	267	129	285	45
▶ BS4	300	150	150	392	278	301	168	145	137	286	45
▶ BS4 TL	300	150	150	392	278	301	325	302	137	286	45

BURNER - BOILER MOUNTING FLANGE



MODEL	A	C	C1	C2	F	O	Q	R
▶ BS1	89	167	140	170	192	66	45°	11
▶ BS2 - BS2 TL	106	167	140	170	192	66	45°	11
▶ BS3 - BS3 TL	129	201	160	190	216	76,5	45°	11
▶ BS4 - BS4 TL	137	203	170	200	218	80,5	45°	11

PACKAGING

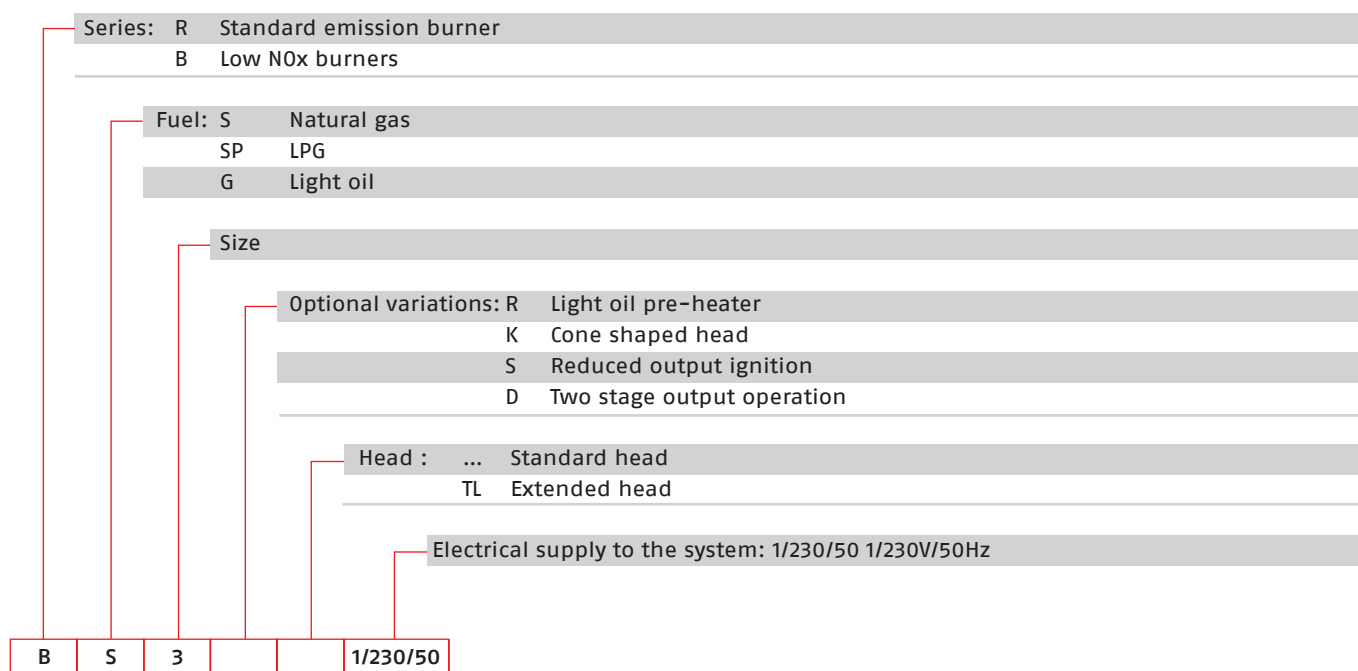


MODEL	X	Y	Z	kg
BS1	395	278	350	10
BS2	405	298	375	11
BS2 TL	583	290	370	11 - 13
BS3	450	345	440	15
BS3 TL	703	335	435	15 - 17
BS4	510	345	440	16,5
BS4 TL	703	335	435	16,5 - 18,5

GULLIVER BS SERIES

Specification

DESIGNATION OF SERIES



STATE OF SUPPLY

Monoblock, gas burners, completely automatic, one stage operation, made up of:

- Fan with forward curve blades
- Cover lined with sound-proofing material
- Air damper, completely closed in stand by, with external adjustment, with no need to remove the cover
- Single phase electric motor 230 V, 50 Hz
- Combustion head fitted with:
 - stainless steel head cone, resistant to high temperatures
 - ignition electrodes
 - ionisation probe
 - gas distributor
 - flame stability disk
- Flame inspection window
- Adjustable air pressure switch, with graduated selector, to guarantee burner lock out in the case of insufficient combustible air
- Microprocessor-based burner safety control box, with diagnostic and remote reset functions
- Protection filter against radio interference (included into burner safety control box)
- IP X0D (IP 40) electric protection level.

Standard equipment:

- Sliding flange
- Flange insulation screen
- Screws and nuts for fixing the flange to the boiler
- 7-pin plug
- Remote control release kit
- Instruction handbook for installation, use and maintenance
- Spare parts catalogue.

Low NOx One Stage Gas Burners

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Available models

Burners

CODE	MODEL	HEAT OUTPUT		TOTAL ELECTRICAL POWER (kW)	CERTIFICATION	NOTE
		(kW)	NATURAL GAS (Nm ³ /h)			
3761158	BS1 1/230/50	16 - 52	1,6 - 5,2	0,150	CE - 0085 AQ0409	(1)
3761258	BS2 1/230/50	35 - 92	3,5 - 9,1	0,180	CE - 0085 AQ0409	(1)
20052601	BS2 TL 1/230/50	35 - 92	3,5 - 9,1	0,180	CE - 0085 AQ0409	(1)
3761358	BS3 1/230/50	65 - 197	6,5 - 20	0,350	CE - 0085 AQ0409	(1)
20052611	BS3 TL 1/230/50	65 - 197	6,5 - 20	0,350	CE - 0085 AQ0409	(1)
3761458	BS4 1/230/50	110 - 249	11 - 25	0,530	CE - 0085 AQ0409	(1)
20052612	BS4 TL 1/230/50	110 - 249	11 - 25	0,530	CE - 0085 AQ0409	(1)

Net calorific value G20: 10 kWh/Nm³ - Density: 0,71 kg/Nm³.

The burners of BS series are in according to 2016/426/EU - 2014/30/EU - 2014/35/EU - 2006/42 EC Directive and EN 676.

(1) With plug and socket.

Gas Trains

	GAS TRAIN	GAS TRAIN	NATURAL GAS		LPG		NOTE
	CODE *	MODEL	BURNER (TYPE)	ADAPTER (CODE)	BURNER (TYPE)	ADAPTER (CODE)	
MULTIBLOC	3970570	MBC 65/1 - F1SD 20	BS1		BS1		(1)
	3970546	MB 405/1 - F1SD 20	BS1		BS1		(1)
	3970547	MB 405/1 - F2SD 20	BS2		BS2		(1)
	3970544	MB 407/1 - F2SD 20	BS2		BS2		(1)
	3970548	MB 407/1 - F3SD 20	BS3 - BS4		BS3 - BS4		(1)
	3970549	MB 410/1 - F3SD 20	BS3 - BS4		BS3 - BS4		(1)
	3970550	MB 412/1 - F3SD 20	BS3 - BS4		BS3 - BS4		(1)

Please see Designation of Gas Train Series in the page before the Catalogue index.

* Gas trains are 230V/50Hz - 220V/60Hz electrical supply.

(1) With installed plug.

The valve seal control device is compulsory (conforming to EN 676) on gas trains to burners with a maximum output over 1200 kW.

To select the gas train please refer to the technical data leaflet and/or instruction manual.