One stage gas burners

GULLIVER RS



- One stage gas burners

Riello Gulliver RS5 is a new model of the series of one stage gas burners, characterized for its small dimensions in spite of its high combustion performance. It has been developed to respond to any request for home heating, conforming to current regulations in force.
This model uses 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 this burner, 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.
This model is approved by the EN 676 European Standard and European Directives, Gas Appliance, EMC, Low Voltage, Boiler Efficiency.
The Gulliver RS5 burner is tested before leaving the factory.

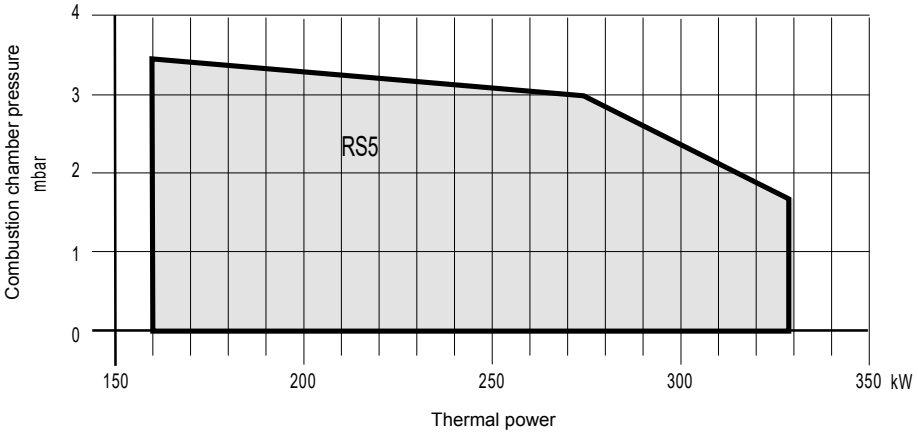
Guidelines for installation of burners in conformity to EU Regulation:
A RIELLO burner (Heat Generator), where it is matched with a water-based boiler (Heater Housing) with a nominal output ≤ 400 kW, providing heat for heating purposes and heat to deliver sanitary hot water, can be installed:
– With 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.

TECHNICAL DATA

Description	Heat output natural gas		Total electrical power	Electric power supply	Certification	Note	Code
	kW	Nm^3/h	kW	Ph/V/Hz			
RS5	160-330	16-33	1/230/50	0,43	CE-0085BM0114	(1)	**3761958**
RS5 TL	160-330	16-33	1/230/50	0,43	CE-0085BM0114	(1)	**20052614**

Net calorific value of natural gas (G20): 10 kWh/Nm^3.
The burners comply with 2016/426/EU Regulation, 2014/30/EU - 2014/35/EU - 2006/42/EC Directives and EN 676 Standard.
(1) Model with plug and socket.

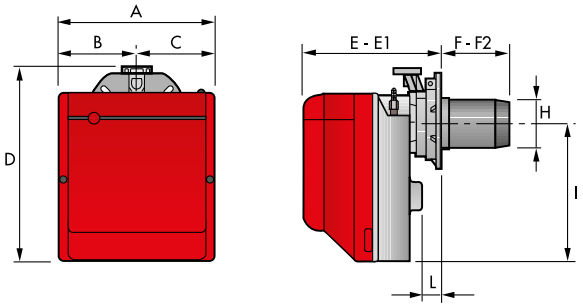
FIRING RATES



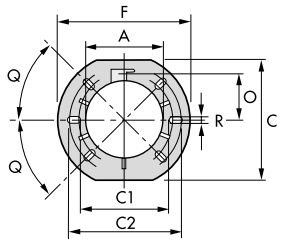
Useful firing rates for choosing the burner

Test conditions conforming to EN676
Temperature: 20 °C
Pressure: 1013.5 mbar
Altitude: 0 m a.s.l.

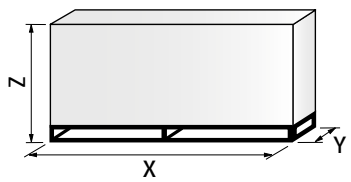
OVERALL DIMENSIONS



Description	A mm	B mm	C mm	D mm	E mm	E1 mm	F mm	F2 mm	H mm	I mm	L mm
RS5	300	150	150	392	278	300	225	203	137	286	45
RS5 TL	300	150	150	392	278	300	382	360	137	286	45



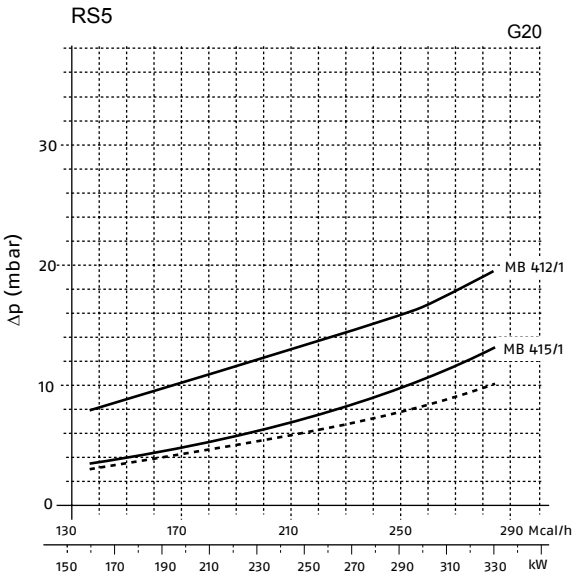
Description	A mm	C mm	C1 mm	C2 mm	F mm	O mm	Q mm	R mm
RS5	137	203	170	200	218	80.5	45°	11
RS5 TL	137	203	170	200	218	80.5	45°	11



Description	X mm	Y mm	Z mm	Net weight kg
RS5	600	345	430	18
RS5 TL	703	335	435	20

PRESSURE LOSS DIAGRAMS

MB SERIES GAS TRAIN



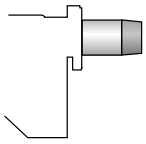
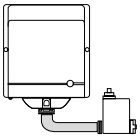
Please note: the diagrams indicate the minimum gas pressure drops of the burners equipped with the gas trains to be used (approved according to the EN 676 standard); in order to obtain the minimum pressure required at gas train inlet, combustion chamber counterpressure (expressed in mbar) must be added to this value.
——— Combustion head + gas train
- - - - Combustion head

GAS TRAINS

Description (1)	Code	Note	Ø Gas train	Valve seal control (2)	Burner
MB SERIES ONE STAGE GAS TRAIN					
MB 412/1-F3SD 20*	**3970550**	(3)(5)	Rp 1" ¼	3010123	RS5
MB 415/1-F3SD 30*	**3970558**	(3)	Rp 1" ½	3010123	RS5

(1) Please refer to "GAS TRAIN DESIGNATION".
(2) The valve seal control device is compulsory (conforming to EN 676) on gas trains to burners with a maximum output over 1200 kW.
(3) Model with installed plug.
(4) RS5 ≤ 200 kW with natural gas.
(5) RS5 ≤ 300 kW with natural gas.
* 230V/50Hz - 220V/60Hz electrical supply.
NOTE: for further information, refer to section “GAS TRAINS FOR BURNERS”.

ACCESSORIES

Drawing	Burner model	Specification	Note	Code
	RS5	EXTENDED HEAD KIT Burners standard head can be transformed into “extended head” versions by using the special kit. Standard head length = 203-225 mm - Extended head length = 357-372 mm		**3001016**
	RS5	LPG KIT For burning LPG gas, a special kit is available to be fitted to the combustion head on the burner		
		Kit code for standard and extended head head.		**3001011**
		Kit for LPG with butane amount over 30%.	(1)	**3002737**
	RS5	GROUND FAULT INTERRUPTER KIT A ground fault interrupter kit is available as a safety device in case of electrical system fault. It is supplied with burners with pin plug.		**3001180**
	RS5	MULTIBLOC ROTATION KIT There is a special kit available that can be used to install the burner turned 180°. This kit is designed to ensure the gas train valve properly.		**3001178**
	RS5	7-PIN PLUG KIT If necessary a 7-pin plug kit is available (in packaging of n. 5 pieces).		**3000945**

(1) Kit without CE certification.

STATE OF SUPPLY

Monoblock, gas burner, 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