

One Stage Gas Burners

GAS SERIES

The GAS series of burners cover a firing range from 130 to 1050 kW.

Operation is "one stage"; the combustion head, that can be set on the basis of required output, allows optimal performance ensuring good combustion and reducing fuel consumption.

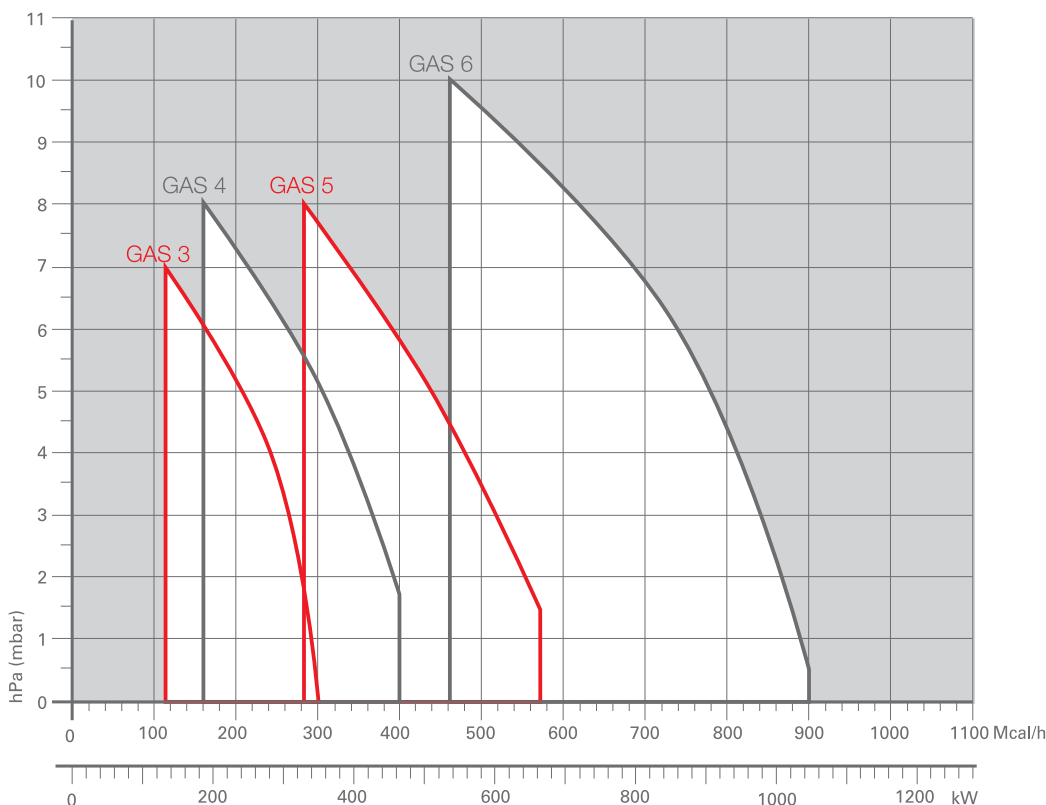
The GAS series are extremely reliable burners, featured by a simple use and an operation without particular maintenance intervention.

Simplified maintenance is achieved by the slide bar system, which allows easy access to all of the essential components of the combustion head. All electrical components are easily accessible only by dismounting a protection panel, thus guaranteeing a quick and simple intervention on components.



GAS 3	130 ÷ 350 kW
GAS 4	185 ÷ 465 kW
GAS 5	325 ÷ 660 kW
GAS 6	525 ÷ 1050 kW

FIRING RATES



Useful working field for choosing the burner

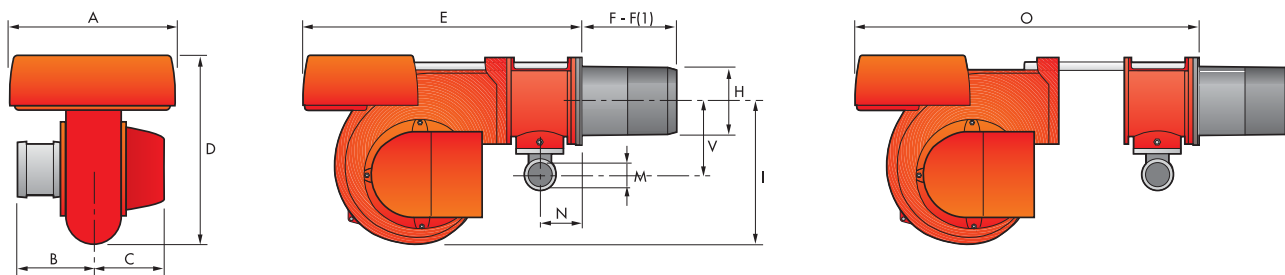
Test conditions conforming to EN676
 Temperature: 20°C
 Pressure: 1013,5 mbar
 Altitude: 0 m a.s.l.

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Overall dimensions (mm)

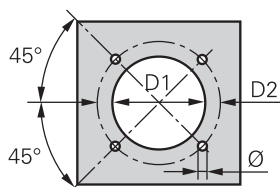
BURNER



MODEL	A	B	C	D	E	F - F (1)	H	I	M	N	O	V
▶ GAS 3	410	205	205	397	610	185 - 320	140	292	1"1/2	97	775	165
▶ GAS 4	410	205	205	397	610	187 - 320	150	292	1"1/2	97	775	165
▶ GAS 5	431	226	205	437	645	207 - 365	155	332	1"1/2	97	810	165
▶ GAS 6	463	258	205	485	770	227 - 360	175	370	2"	131	966	195

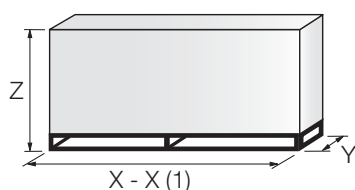
(1) Length with extended combustion head

BURNER - BOILER MOUNTING FLANGE



MODEL	D1	D2	Ø
▶ GAS 3	155	226	M10
▶ GAS 4	165	226	M10
▶ GAS 5	165	226	M10
▶ GAS 6	185	276	M12

PACKAGING



MODEL	X - X (1)	Y	Z	kg
▶ GAS 3	850	545	473	32
▶ GAS 4	850	545	473	38
▶ GAS 5	895	543	520	41
▶ GAS 6	1045	543	555	58

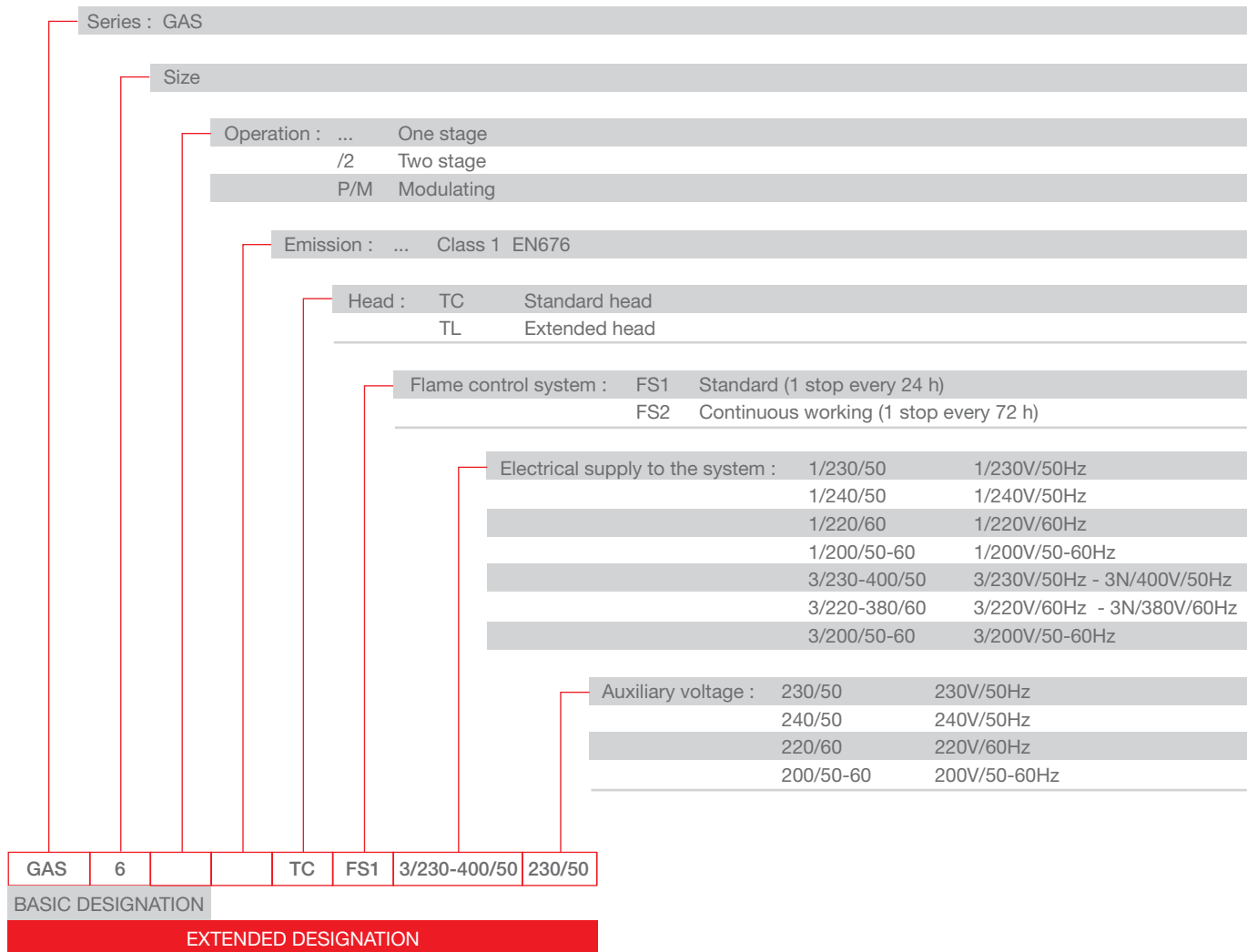
(1) Length with extended combustion head

One Stage Gas Burners

GAS SERIES

Specification

DESIGNATION OF SERIES



One Stage Gas Burners

GAS SERIES

Specification

STATE OF SUPPLY

Monoblock forced draught gas burner, one stage operation, made up of:

- Air suction circuit
- Fan with forward curved blades
- Air damper for air setting
- Combustion head, that can be set on the basis of required output, fitted with:
 - stainless steel end cone, resistant to corrosion and high temperatures
 - ignition electrodes
 - flame stability disk
 - Minimum air pressure switch
 - Single phase or three phases electrical motor
 - Microprocessor-based burner safety control box, with diagnostic function
 - Flame inspection window
 - Slide bars for easier installation and maintenance
 - Protection filter against radio interference
 - IP X0D (IP 40) protection level.

Standard equipment:

- 1 gas train flange
- 1 flange gasket
- 1 insulating screen
- 8 screws for fixing the burner flange to the boiler
- Instruction handbook for installation, use and maintenance
- Spare parts catalogue.

Available models

Burners

CODE	MODEL					HEAT OUTPUT		TOTAL ELECTRICAL POWER (kW)	CERTIFICATION	NOTE
						(kW)	NATURAL GAS (Nm ³ /h)			
3751987	GAS 3	TC	FS1	1/200/50-60	200/50-60	130-350	13-35	0,48-0,6	-	
3751982	GAS 3	TC	FS1	1/220/60	220/60	130-350	13-34	0,4	-	
3751918	GAS 3	TC	FS1	1/230/50	230/50	130-350	13-35	0,4	CE 0085AQ0707	
3751960	GAS 3	TC	FS1	1/240/50	240/50	130-350	13-35	0,4	-	
3751961	GAS 3	TL	FS1	1/240/50	240/50	130-350	13-36	0,4	-	
3751617	GAS 4	TC	FS1	1/230/50	230/50	185-465	18,5-46,5	0,54	-	
3751687	GAS 4	TC	FS1	3/200/50-60	200/50-60	180-470	18-47	0,6	-	
3751682	GAS 4	TC	FS1	3/220-380/60	220/60	180-470	18-47	0,6	-	
3751787	GAS 5	TC	FS1	3/200/50-60	200/50-60	320-660	32-66	0,85	-	
3751782	GAS 5	TC	FS1	3/220-380/60	220/60	320-660	32-66	1,1	-	
3751717	GAS 5	TC	FS1	3/230-400/50	230/50	325-660	32,5-66	0,85	-	
3751887	GAS 6	TC	FS1	3/200/50-60	200/50-60	525-1050	52-105	1,7	-	
3751882	GAS 6	TC	FS1	3/220-380/60	220/60	525-1050	52-105	1,7	-	
3751817	GAS 6	TC	FS1	3/230-400/50	230/50	525-1050	52,5-105	1,7	-	

Natural gas G20 net calorific value: 10 kWh/Nm³ - Density gas G20: 0,71 kg/Nm³
 The burners of GAS series are in according to 90/396 - 89/336 (2004/108) - 73/23 (2006/95) - 92/42 EC Directive and EN 676 Norm.

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Available models

Gas Trains

GAS TRAIN CODE*	GAS TRAIN MODEL	NATURAL GAS		LPG		NOTE
		BURNER (type)	ADAPTER (code)	BURNER (type)	ADAPTER (code)	
3970556	MBZRDLE 407	GAS 3	3000824	GAS 3	3000824	(1)
3970557	MBZRDLE 410	GAS 3	3000824	GAS 3	3000824	(1)
		GAS 4	3000824	GAS 4	3000824	
		GAS 5	3000824	GAS 5	3000824	
3970152	MBZRDLE 412	GAS 3	-	GAS 3	-	(1)
		GAS 4	-	GAS 4	-	
		GAS 5	-	GAS 5	-	
		GAS 6	3000843	GAS 6	3000843	
3970183	MBZRDLE 415	GAS 3	-	GAS 3	-	(1)
		GAS 4	-	GAS 4	-	
		GAS 5	-	GAS 5	-	
		GAS 6	3000843	GAS 6	3000843	
3970184	MBZRDLE 420	GAS 4	3000822	GAS 4	3000822	(1)
		GAS 5	3000822	GAS 5	3000822	
		GAS 6	-	GAS 6	-	
3970185	MBZRDLE 420 CT	GAS 4	3000822	GAS 4	3000822	(2)
		GAS 5	3000822	GAS 5	3000822	
		GAS 6	-	GAS 6	-	
3970153	CB 40/2	GAS 3	-	GAS 3	-	(1)
		GAS 4	-	GAS 4	-	
		GAS 5	-	GAS 5	-	
		GAS 6	3000843	GAS 6	3000843	
3970154	CB 50/2	GAS 4	3000822	GAS 4	3000822	(1)
		GAS 5	3000822	GAS 5	3000822	
		GAS 6	-	GAS 6	-	
3970166	CB 50/2 CT	GAS 4	3000822	GAS 4	3000822	(2)
		GAS 5	3000822	GAS 5	3000822	
		GAS 6	-	GAS 6	-	
3970155	CBF 65/2	GAS 6	3000825	-	-	(1)
3970167	CBF 65/2 CT	GAS 6	3000825	-	-	(2)

* gas train are 230V/50Hz - 220V/60Hz electrical supply

(1) Seal control accessory

(2) Seal control incorporated

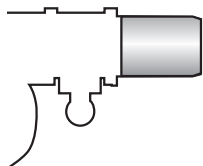
To select the gas train please refer to the technical data leaflet and/or instruction manual.

One Stage Gas Burners

GAS SERIES

Burner accessories

Extended head kit



“Standard head” burners can be transformed into “extended head” versions, by using the special kit.

BURNER	STANDARD HEAD LENGTH (mm)	EXTENDED HEAD LENGTH (mm)	KIT CODE
▶ GAS 3	185	320	3000605
▶ GAS 4	187	320	3000606
▶ GAS 5	207	365	3000607
▶ GAS 6	227	360	3000608

Spacer kit



If burner head penetration into the combustion chamber needs reducing, varying thickness spacers are available, as given in the following list.

BURNER	SPACER THICKNESS S (mm)	KIT CODE
▶ GAS 3 - 4 - 5 - 6	142	3000755

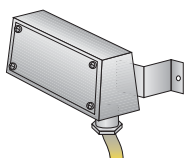
Continuous ventilation kit



If the burner requires continuous ventilation in the stages without flame, a special kit is available as given in the following table.

BURNER	KIT CODE
▶ GAS 3 - 4 - 5 - 6	3010030

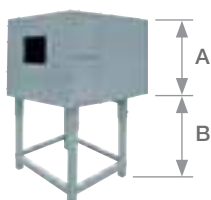
Post-ventilation kit



To prolong ventilation for approximately 5 seconds after opening of thermostats chain, a special kit is available.

BURNER	KIT CODE
▶ GAS 3 - 4 - 5 - 6	3010004

Sound proofing box



If noise emission needs reducing even further, sound-proofing boxes are available.

BURNER	BOX TYPE	A (mm)	B (mm) min-max	[dB(A)] (*)	BOX CODE
▶ GAS 3 - 4 - 5 - 6	C1/3	650	372 - 980	10	3010403

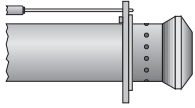
(*) Average noise reduction according to EN 15036-1 standard

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Burner accessories

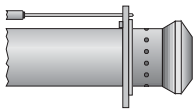
LPG kit



For burning LPG gas, a special kit is available.

BURNER	KIT CODE FOR STANDARD HEAD	KIT CODE FOR EXTENDED HEAD
▶ GAS 3	3000657	3000807
▶ GAS 4	3000658	3000808
▶ GAS 5	3000659	3000809
▶ GAS 6	3000753	3000810

Town Gas kit



For burning Town Gas, a special kit is available.

BURNER	KIT CODE FOR STANDARD HEAD (*)	KIT CODE FOR EXTENDED HEAD(*)
▶ GAS 3	3000742	-
▶ GAS 4	3000754	-
▶ GAS 5	3000759	-
▶ GAS 6	3000768	-

(*) Without CE certification

PC Interface kit



To connect the control box to a personal computer for the transmission of operation, fault signals and detailed service information, an interface adapter with PC software are available.

BURNER	KIT CODE
▶ GAS 3 - 4 - 5 - 6	3002719

Protection kit (electromagnetic interferences)

When the burner is installed in a room particularly subject to electromagnetic interference (signals emitted over 10 V/m) due for example to INVERTER presence or in systems where the lengths of the thermostat connections is over 20 meters, this specific protection kit is available as an interface between the thermostatic controls and the burner.

BURNER	KIT CODE
▶ All models	3010386

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










GAS SERIES

Gas train accessories

Adapters



When the diameter of the gas train is different from the set diameter of the burners, an adapter must be fitted between the gas train and the burner.

BURNER	GAS TRAIN	DIMENSIONS	ADAPTER CODE
▶ GAS 3	MBZRDLE 407 - 410	3/4"  1" 1/2	3000824
▶ GAS 4	MBZRDLE 410	3/4"  1" 1/2	3000824
	MBZRDLE 420 - CB 50/2	2"  1" 1/2	3000822
▶ GAS 5	MBZRDLE 410	3/4"  1" 1/2	3000824
	MBZRDLE 420 - CB 50/2	2"  1" 1/2	3000822
▶ GAS 6	MBZRDLE 410	3/4"  1" 1/2	3000824
		1" 1/2  2"	3000843
	MBZRDLE 412-415 - CB 40/2	1" 1/2  2"	3000843
	CBF 65/2	DN 65  2" 1/2  1" 1/2  2"	3000825

Seal control kit



To test the valve seals on the gas train, a special "seal control kit" is available.

BURNER	GAS TRAIN	KIT CODE
▶ GAS 3	MBZRDLE 407 - 410 - 412 - 415	3010123
	CB 40/2	3010125
▶ GAS 4	MBZRDLE 410 - 412 - 415 - 420	3010123
	CB 40/2 - 50/2	3010125
▶ GAS 5	MBZRDLE 410 - 412 - 415 - 420	3010123
	CB 40/2 - 50/2	3010125
▶ GAS 6	MBZRDLE 410 - 412 - 415 - 420	3010123
	CB 40/2 - 50/2 - 65/2	3010125

Stabiliser spring



Accessory springs are available to vary the pressure range of the gas train stabilisers.

GAS TRAIN	SPRING	CODE
▶ CBF 65/2	Red from 25 to 55 mbar	3010133
▶ CBF 65/2	Black from 60 to 110 mbar	3010135
▶ CBF 65/2	Pink from 100 to 150 mbar	3090456