

kW **1200 - 16000**SERIES **TBG**CONFORM TO: GAS DIRECTIVE 2009/142/CE | E.M.C. DIRECTIVE 2014/30/UE | L.V. DIRECTIVE 2014/35/UE |
MACHINERY DIRECTIVE 2006/42/CE | REFERENCE STANDARD EN676.

GAS

Gas burner compliant with European standard EN676. Operation:

Continuous modulation operation by installing P.I.D. controller in the control panel (to be ordered separately with modulation probe).

Modulation ratio:

Low NOx and CO emissions gas burner according to European standard EN676:

Adjusting the combustion head.

Maintenance facilitated by the possibility of removing the mixing unit without having to remove the burner from the boiler.

Fixed boiler coupling flange.

Easy maintenance thanks to the two-sides hinge which allows the removal of the combustion head without having to remove the burner from the boiler.

Combustion air intake with butterfly valve. Air flow adjustment:

Fully closing air damper on shutdown to avoid loss of heat through the chimney.

Adjustment of fan revolutions according to working stage by means of a frequency converter in order to reduce noise and electric consumption.

Residual oxygen (O₂) monitoring in the fumes in order to maintain an optimal air/fuel ratio and ensure increased performance.Residual oxygen (O₂) and carbon monoxide (CO) and monitoring of oxidizing components (H₂) in fumes to ensure increased performance and less atmospheric pollution.

CE version gas train is complete with butterfly valve, operation and safety valve with electromagnetic drive, valve tightness control, minimum and maximum pressure switch, pressure regulator and gas filter.

Fail proof connectors for burner/gas train connection.

Gas train outlet:

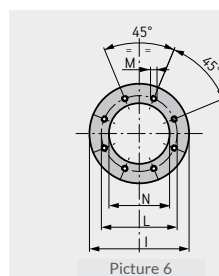
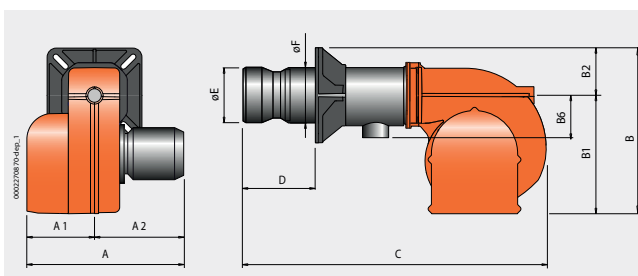
Flame detection by ionisation electrode with connector for microamperometer.

Control panel with display diagram for working mode with indication lights.

Control panel equipped either with display showing the working process and with the keyboard for the burner adjustment.

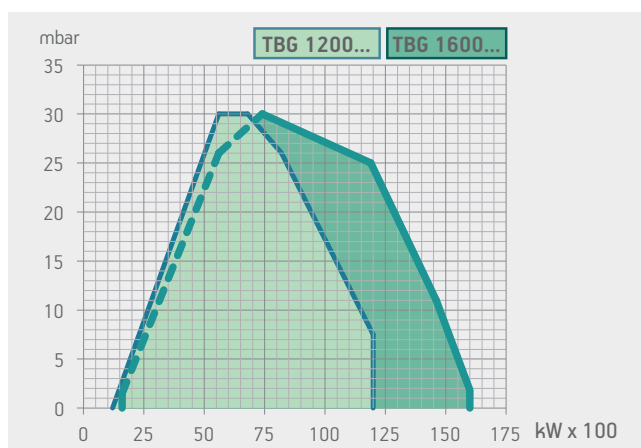
Electric protection rating:

	TBG 1600 MC	TBG 1600 ME	TBG 1600 ME V	TBG 1600 ME V O2	TBG 1600 ME V CO
	mechanical two-stage progressive	electronic two-stage progressive	modulating electronic	modulating electronic	modulating electronic
	•	•			
Modulation ratio:	1:10	1:10	1:10	1:10	1:10
Low NOx and CO emissions gas burner according to European standard EN676:	class 2	class 2	class 2	class 2	class 2
Adjusting the combustion head.	•	•	•	•	•
Maintenance facilitated by the possibility of removing the mixing unit without having to remove the burner from the boiler.	•	•	•	•	•
Fixed boiler coupling flange.	•	•	•	•	•
Easy maintenance thanks to the two-sides hinge which allows the removal of the combustion head without having to remove the burner from the boiler.	•	•	•	•	•
Combustion air intake with butterfly valve. Air flow adjustment:	mechanical cam	electric servomotor	electric servomotor	electric servomotor	electric servomotor
Fully closing air damper on shutdown to avoid loss of heat through the chimney.	•	•	•	•	•
Adjustment of fan revolutions according to working stage by means of a frequency converter in order to reduce noise and electric consumption.			•	•	•
Residual oxygen (O ₂) monitoring in the fumes in order to maintain an optimal air/fuel ratio and ensure increased performance.				•	
Residual oxygen (O ₂) and carbon monoxide (CO) and monitoring of oxidizing components (H ₂) in fumes to ensure increased performance and less atmospheric pollution.					•
CE version gas train is complete with butterfly valve, operation and safety valve with electromagnetic drive, valve tightness control, minimum and maximum pressure switch, pressure regulator and gas filter.	•	•	•	•	•
Fail proof connectors for burner/gas train connection.	•	•	•	•	•
Gas train outlet:	down	up/down	up/down	up/down	up/down
Flame detection by ionisation electrode with connector for microamperometer.	•	•	•	•	•
Control panel with display diagram for working mode with indication lights.	•				
Control panel equipped either with display showing the working process and with the keyboard for the burner adjustment.		•	•	•	•
Electric protection rating:	IP54	IP54	IP54	IP54	IP54



Flange dimensions and boiler drilling template.

Model	A mm	A1 mm	A2 mm	B mm	B1 mm	B2 mm	B6 mm	C mm	D mm	E mm	F mm	I mm	L mm	M mm	N mm	Pic.
TBG 1600 MC	1470	700	770	1130	780	350	360	2290	735	545	503	685	630	M20	555	6
TBG 1600 ME	1470	700	770	1130	780	350	360	2290	735	545	503	685	630	M20	555	6
TBG 1600 ME V	1470	700	770	1130	780	350	360	2290	735	545	503	685	630	M20	555	6
TBG 1600 ME V O2	1470	700	770	1130	780	350	360	2290	735	545	503	685	630	M20	555	6
TBG 1600 ME V CO	1470	700	770	1130	780	350	360	2290	735	545	503	685	630	M20	555	6



Model	Size of packaging			Weight kg
	L	P	H	
	mm			
TBG 1600 MC	1950	1680	1300	704
TBG 1600 ME	1950	1680	1300	704
TBG 1600 ME V	1950	1680	1300	730
TBG 1600 ME V O ₂	1950	1680	1300	742
TBG 1600 ME V CO	1950	1680	1300	754

		O ₂	CO	Emissions class	Thermal output kW	Model	Part no.	Electrical supply kW	Motor	Note	
Frequency 50 Hz											
					class 2	1600 ÷ 16000	TBG 1600 MC	67490020	3N AC 50Hz 400V	30	4)
					class 2	1600 ÷ 16000	TBG 1600 ME	67480010	3N AC 50Hz 400V	30	4)
					class 2	1600 ÷ 16000	TBG 1600 ME V	67480015	3N AC 50Hz 400V	30	4) 10)
					class 2	1600 ÷ 16000	TBG 1600 ME V O2	67480016	3N AC 50Hz 400V	30	4) 10)
					class 2	1600 ÷ 16000	TBG 1600 ME V CO	67480017	3N AC 50Hz 400V	30	4) 10)
Frequency 60 Hz											
					class 2	1600 ÷ 16000	TBG 1600 MC	67495420	3N AC 50Hz 400V	30	4)
					class 2	1600 ÷ 16000	TBG 1600 ME	67485410	3N AC 50Hz 400V	30	4)
					class 2	1600 ÷ 16000	TBG 1600 ME V	on request	3N AC 50Hz 400V	30	4) 10)
					class 2	1600 ÷ 16000	TBG 1600 ME V O2	on request	3N AC 50Hz 400V	30	4) 10)
					class 2	1600 ÷ 16000	TBG 1600 ME V CO	on request	3N AC 50Hz 400V	30	4) 10)

TO COMPLETE THE BURNER

DESCRIPTION

TBG 1600 ME V: modulating probe for LCM 100 (see page 294)

MODULATING MODE

DESCRIPTION	PART NO.
TBG 1600 MC: modulation kit	98000055
TBG 1600 ME: modulation kit	98000059
TBG 1600 MC/1600 ME: modulating probe (see page 294)	

ACCESSORIES AVAILABLE ON REQUEST

DESCRIPTION	PART NO.
Soundproof burner cover (see page 299)	97980061

GAS BURNERS ACCESSORIES

Boiler coupling kit.

NOTES

4 Equipped with air closure device.

10 Inverter supplied separately, not included on the machine.

Net calorific value at reference conditions of 0°C, 1013mbar:

Natural gas: Hi = 35,80 MJ/m³ = 8550 kcal/m³,

For different type of gas and pressure values, please get in contact with our commercial department.