



GAS BURNERS

TBG 1600 MC - ME



baltur
Energy for People

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АНКАС

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kW **1600 - 16000**SERIES **TBG**CONFORM TO: GAS DIRECTIVE EU/2016/426 | E.M.C. DIRECTIVE 2014/30/UE | L.V. DIRECTIVE 2014/35/UE |
MACHINERY DIRECTIVE 2006/42/CE | REFERENCE STANDARD EN676.

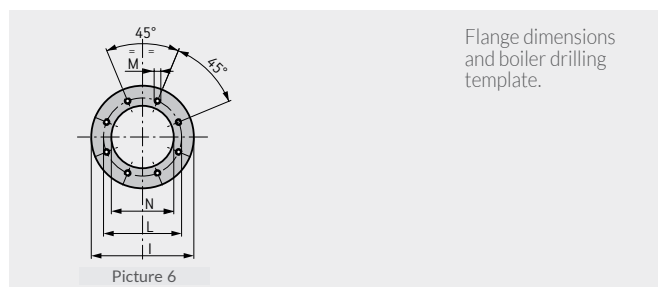
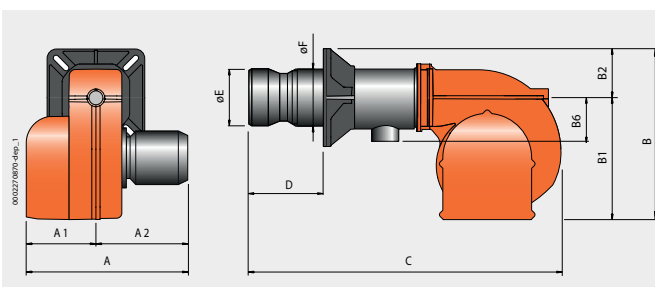
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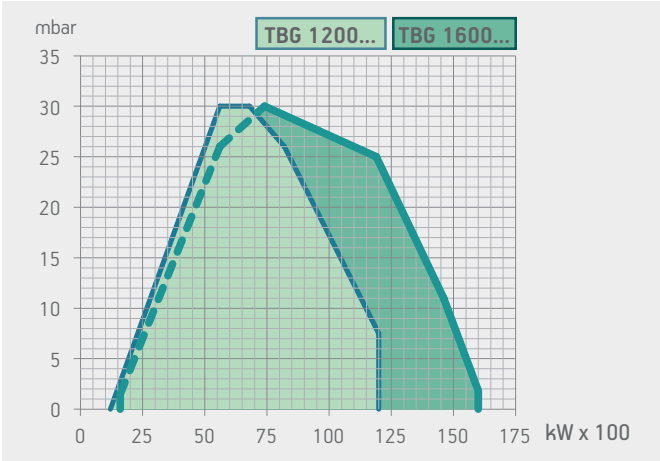
GAS

Gas burner compliant with European standard EN676. Operation:

	TBG 1600 MC	TBG 1600 ME	TBG 1600 ME V	TBG 1600 ME V O ₂	TBG 1600 ME V CO
	mechanical two-stage progressive	electronic two-stage progressive	modulating electronic	modulating electronic	modulating electronic
Continuous modulation operation by installing P.I.D. controller in the control panel (to be ordered separately with modulation probe)	•	•			
Modulation ratio:	1:10	1:10	1:10	1:10	1:10
Low NO _x 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



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	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 O ₂	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 mm	H	
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 O2	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	Motor kW	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 60Hz 380V	30	4)
				class 2	1600 ÷ 16000	TBG 1600 ME	67485410	3N AC 60Hz 380V	30	4)
				class 2	1600 ÷ 16000	TBG 1600 ME V	on request	3N AC 60Hz 380V	30	4) 10)
				class 2	1600 ÷ 16000	TBG 1600 ME V O2	on request	3N AC 60Hz 380V	30	4) 10)
				class 2	1600 ÷ 16000	TBG 1600 ME V CO	on request	3N AC 60Hz 380V	30	4) 10)

TO COMPLETE THE BURNER

DESCRIPTION
TBG 1600 ME V: modulating probe for LCM 100

MODULATING MODE

DESCRIPTION	PART NO.
TBG 1600 MC: modulation kit	98000055
TBG 1600 ME: modulation kit	98000059
TBG 1600 MC/1600 ME: modulating probe	

ACCESSORIES AVAILABLE ON REQUEST

DESCRIPTION	PART NO.
Soundproof burner cover	97980061

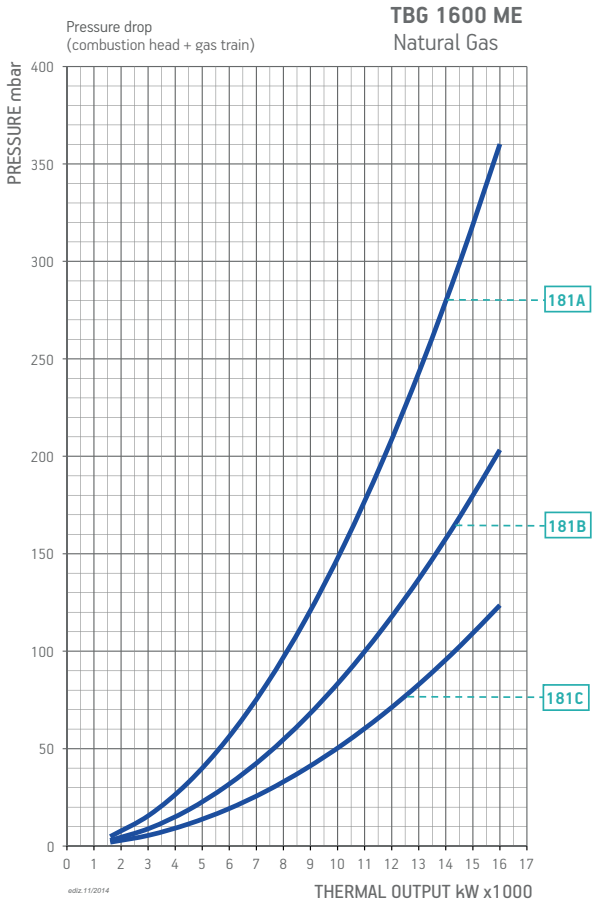
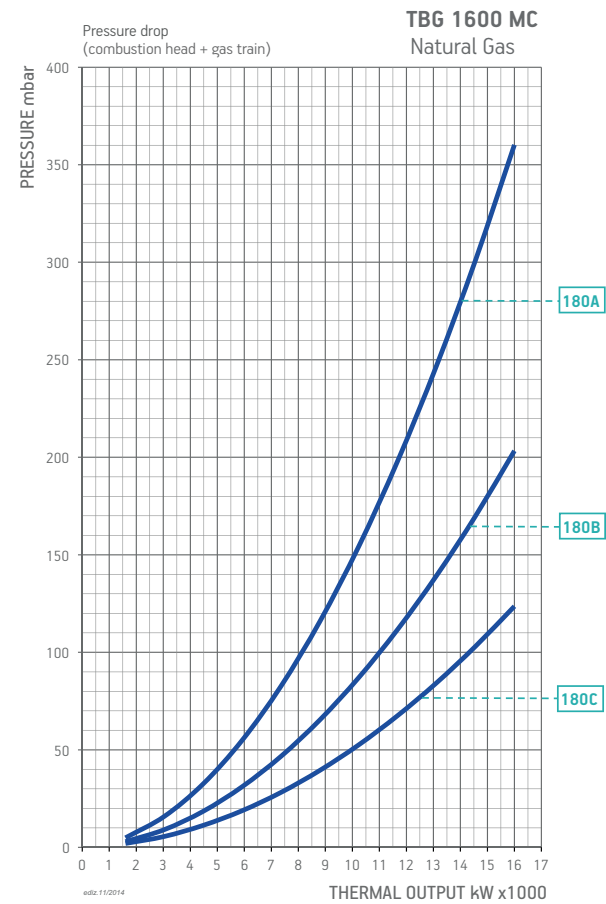
GAS BURNERS ACCESSORIES

Boiler coupling kit.

NOTE

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.

BURNER/GAS TRAIN MATCH



CE gas train version complies with EN676, EXP gas train version is for extra-European markets

Burner model	Gas type	Curve on graph	Version	P.Max ** mbar	Execution	Gas train	Regulator with incorporated filter	Burner/gas train adapter	Valve tightness control kit	Pic.	Notes
						Part no.	Part no.	Part no.	Part no.		
TBG 1600 MC	Natural gas	180A	CE/EXP	500	CTV	19990615	Included	-	Included	D8	
		180B	CE/EXP	500	CTV	19990616	Included	-	Included	D8	
		180C	CE/EXP	500	CTV	19990617	Included	-	Included	D8	
TBG 1600 ME/ME V	Natural gas	181A	CE/EXP	500	CTV	19990606	Included	-	Included	D4	
TBG 1600 ME V O2		181B	CE/EXP	500	CTV	19990607	Included	-	Included	D4	
TBG 1600 ME V CO		181C	CE/EXP	500	CTV	19990608	Included	-	Included	D4	

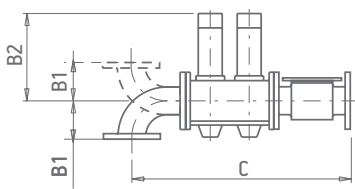
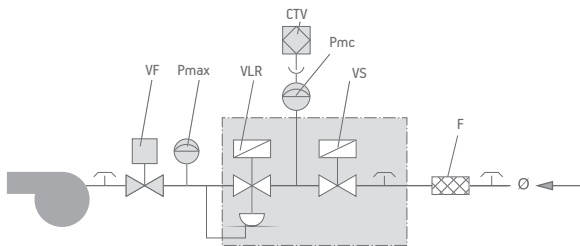
To choose the correct gas train please refer to the information on Burners Catalogue.

NOTES

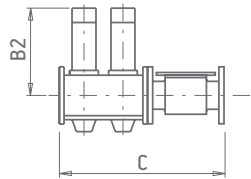
CTV Gas train with Valve Tightness Control.
**) Maximum gas inlet pressure at pressure regulator.

GAS TRAIN STRUCTURE AND COMPOSITION

D4



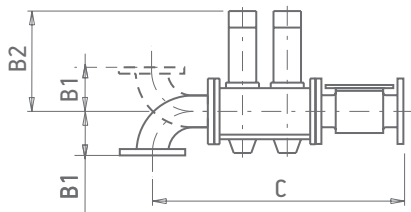
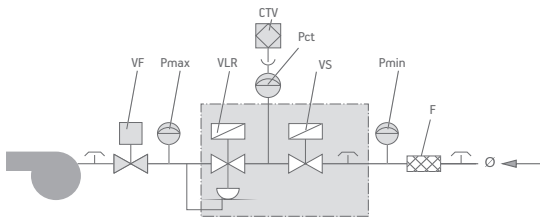
Pic. 1



Pic. 2

Gas train Part no.	Position								Gas train dimensions mm			Size of packaging mm	Weight	Pic.
	CTV	F	Pmax	Pmc	VF	VLR	VS	Ø	B1	B2	C	L x P x H	kg	
19990606 (VGD40.080 - 3")	●	DN80	●	●	◆	●	●	DN80	165	325	1015	1380 x 430 x 700	38	1
19990607 (VGD40.100 - 4")	●	DN100	●	●	◆	●	●	DN100	175	330	1100	1380 x 430 x 700	44	1
19990608 (VGD40.125 - 5")	●	DN125	●	●	◆	●	●	DN125	170	350	1275	1580 x 430 x 720	60	1

D8



Gas train Part no.	Position									Gas train dimensions mm			Size of packaging mm	Weight
	CTV	F	Pct	Pmax	Pmin	VF	VLR	VS	Ø	B1	B2	C	L x P x H	kg
19990615 (VGD40.080 - 3")	●	DN80	●	●	●	◆	●	●	DN80	165	325	1015	1380 x 430 x 700	38
19990616 (VGD40.100 - 4")	●	DN100	●	●	●	◆	●	●	DN100	175	330	1100	1380 x 430 x 700	44
19990617 (VGD40.125 - 5")	●	DN125	●	●	●	◆	●	●	DN125	170	350	1275	1580 x 430 x 720	60

- CTV Valve tightness control.
F Filter.
LDU LDU valve tightness control.
Pct Pressure switch for gas control.
Pmax Maximum pressure switch.
Pmc Minimum and control pressure switch gas leaks.
Pmin Minimum pressure switch.
R Pressure regulator.
RF Pressure regulator with filter.

- RFP Pressure regulator with filter for pilot gas train.
RM Manual flow rate regulator.
RP Pneumatic regulator.
VF Regulator throttle valve.
VL Operating valve.
VL2 Two-stage operating valve.
VLP Operating pilot valve.
VLR Operating valve with pressure regulator.

- VP Pilot valve.
VPS VPS valve tightness control.
VS Safety valve.
VSP Safety pilot valve.
Ø Gas train diameter.
Ø1 Main gas train diameter.
Ø2 Pilot gas train diameter.

- As standard.
▲ As standard for burners with an output of more than 1200 kW, on request for burners with an output of less than 1200 kW.
■ On request.
◆ Mounted on burner.