



GAS BURNERS

TBG 510 LX MC - LX ME

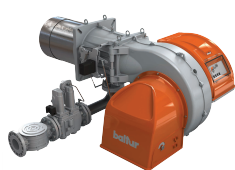


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Energy for People

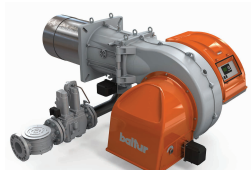
ООО Промэлектроника
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АНКАС

kW **600 - 5100**SERIES **TBG**
CE 0085

 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.


TBG 510 LX MC



TBG 510 LX ME

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

Device made of sound-absorbing material to reduce fan noise

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:

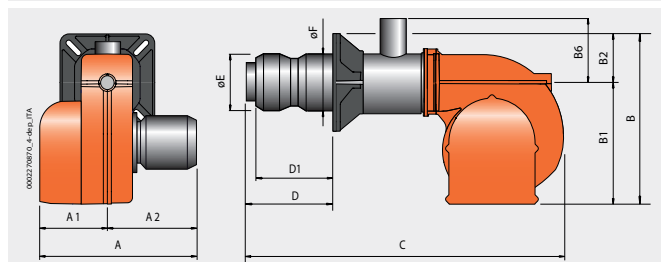
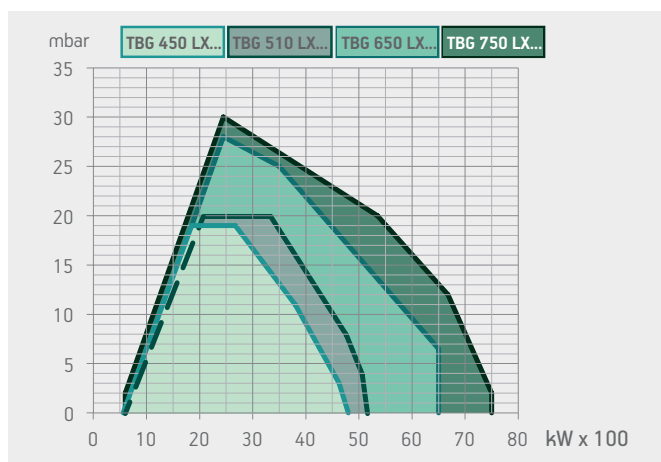
Flame detection by ionisation electrode with connector for microamperometer

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

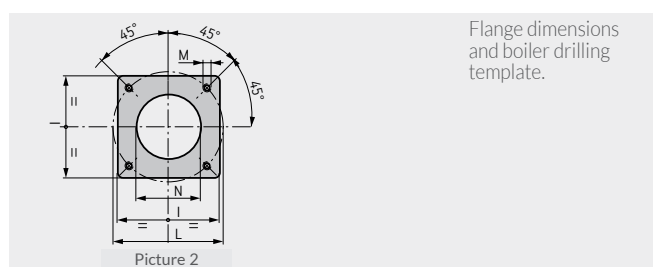
Control panel equipped either with display showing the working process and with the keyboard for the burner adjustment

Electric protection rating:

	TBG 510 LX MC	TBG 510 LX ME	TBG 510 LX ME V	TBG 510 LX ME VO ₂	TBG 510 LX ME VCO
	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:	1:8	1:8	1:8	1:8	1:8
Low NOx and CO emissions gas burner according to European standard EN676:	class 3	class 3	class 3	class 3	class 3
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	•	•	•	•	•
Device made of sound-absorbing material to reduce fan noise	•	•	•	•	•
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:	up/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	Size of packaging			Weight kg
	L	P	H	
	mm			
TBG 510 LX MC	1500	1150	970	265
TBG 510 LX ME	1500	1150	970	265
TBG 510 LX ME V	1950	1510	1210	280
TBG 510 LX ME V O2	1950	1510	1210	292
TBG 510 LX ME V CO	1950	1510	1210	304



Model	A mm	A1 mm	A2 mm	B mm	B1 mm	B2 mm	B6 mm	C mm	D mm	D1 mm	E mm	F mm	I mm	L mm	M	N mm	Pic.
TBG 510 LX MC	1060	530	530	810	525	285	295	1800	650	547 ÷ 597	397	410	480	520 ÷ 600	M20	415	2
TBG 510 LX ME	1060	530	530	810	525	285	295	1850	650	547 ÷ 597	397	410	480	520 ÷ 600	M20	415	2
TBG 510 LX ME V	1060	530	530	810	525	285	295	1850	650	547 ÷ 597	397	410	480	520 ÷ 600	M20	415	2
TBG 510 LX ME V O2	1060	530	530	810	525	285	295	1850	650	547 ÷ 597	397	410	480	520 ÷ 600	M20	415	2
TBG 510 LX ME V CO	1060	530	530	810	525	285	295	1850	650	547 ÷ 597	397	410	480	520 ÷ 600	M20	415	2

	Inverter	O ₂	CO	Emissions class	Thermal output kW	Model	Part no.	Electrical supply	Motor kW	Note
Frequency 50 Hz										
				class 3	600 ÷ 5100	TBG 510 LX MC	18130010	3N AC 50Hz 400V	11	4)
				class 3	600 ÷ 5100	TBG 510 LX ME	18140010	3N AC 50Hz 400V	11	4)
				class 3	600 ÷ 5100	TBG 510 LX ME V	18140015	3N AC 50Hz 400V	11	4) 10)
				class 3	600 ÷ 5100	TBG 510 LX ME V O2	18140016	3N AC 50Hz 400V	11	4) 10)
				class 3	600 ÷ 5100	TBG 510 LX ME V CO	18140017	3N AC 50Hz 400V	11	4) 10)
Frequency 60 Hz										
				class 3	600 ÷ 5100	TBG 510 LX MC	on request	3N AC 60Hz 380V	13	4)
				class 3	600 ÷ 5100	TBG 510 LX ME	on request	3N AC 60Hz 380V	13	4)
				class 3	600 ÷ 5100	TBG 510 LX ME V	on request	3N AC 60Hz 380V	13	4) 10)
				class 3	600 ÷ 5100	TBG 510 LX ME V O2	on request	3N AC 60Hz 380V	13	4) 10)
				class 3	600 ÷ 5100	TBG 510 LX ME V CO	on request	3N AC 60Hz 380V	13	4) 10)

TO COMPLETE THE BURNER

DESCRIPTION

TBG 510 ME V: modulating probe for LCM 100

MODULATING MODE

DESCRIPTION

PART NO.

TBG 510 MC: modulation kit	98000055
TBG 510 ME: modulation kit	98000059
TBG 510 MC/510 ME: modulating probe	

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.

ACCESSORIES AVAILABLE ON REQUEST

DESCRIPTION

PART NO.

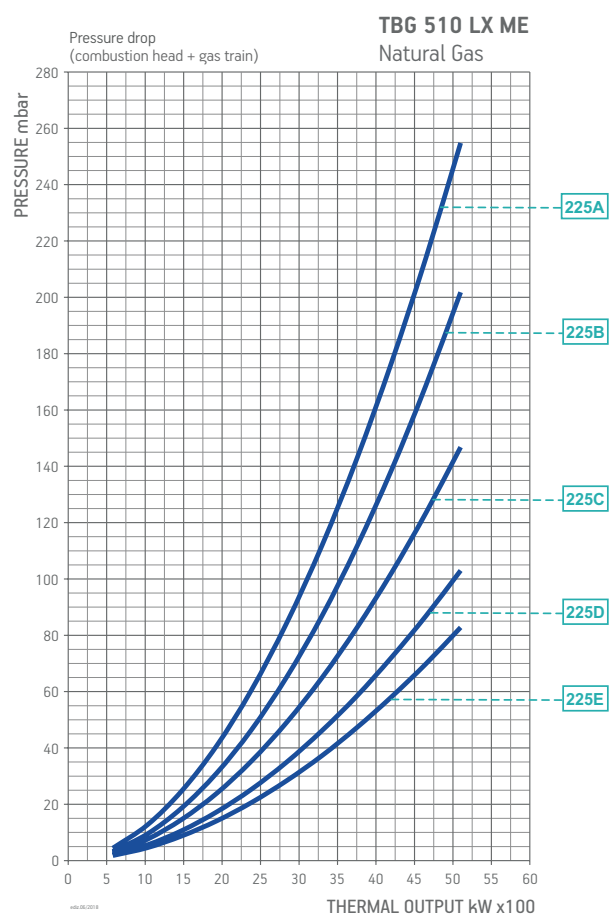
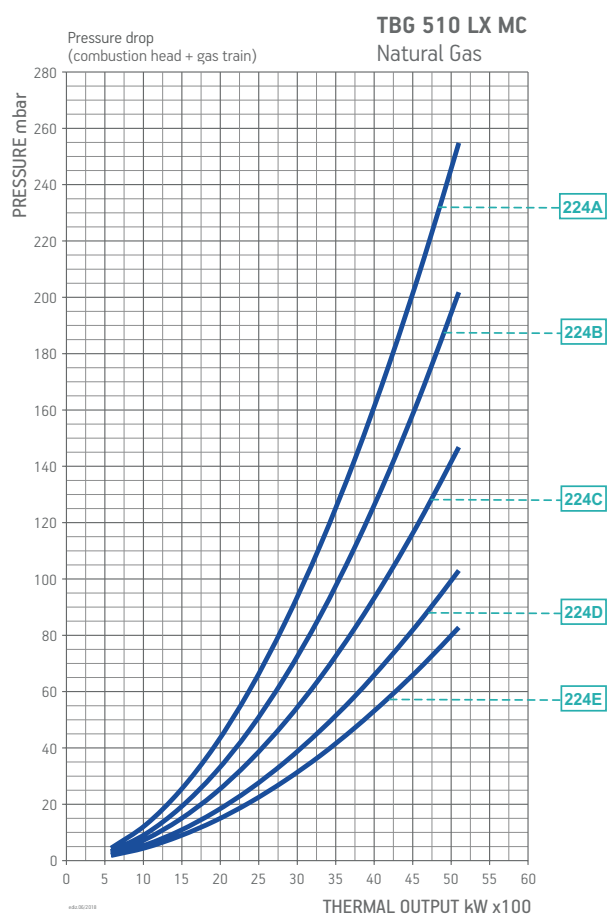
Soundproof burner cover 97980058

GAS BURNERS ACCESSORIES

Boiler coupling kit.

BURNER/GAS TRAIN MATCH

GAS



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 510 LX MC	Natural gas	224A	CE/EXP	500	CTV	19990599	Included	–	Included	D8	
		224B	CE/EXP	500	CTV	19990665	Included	–	Included	D8	
		224C	CE/EXP	500	CTV	19990600	Included	–	Included	D8	
		224D	CE/EXP	500	CTV	19990601	Included	–	Included	D8	
		224E	CE/EXP	500	CTV	19990602	Included	–	Included	D8	
TBG 510 LX ME TBG 510 LX ME V TBG 510 LX ME V O2 TBG 510 LX ME V CO	Natural gas	225A	CE/EXP	500	CTV	19990541	Included	–	Included	D4	
		225B	CE/EXP	500	CTV	19990666	Included	–	Included	D4	
		225C	CE/EXP	500	CTV	19990542	Included	–	Included	D4	
		225D	CE/EXP	500	CTV	19990543	Included	–	Included	D4	
		225E	CE/EXP	500	CTV	19990544	Included	–	Included	D4	

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

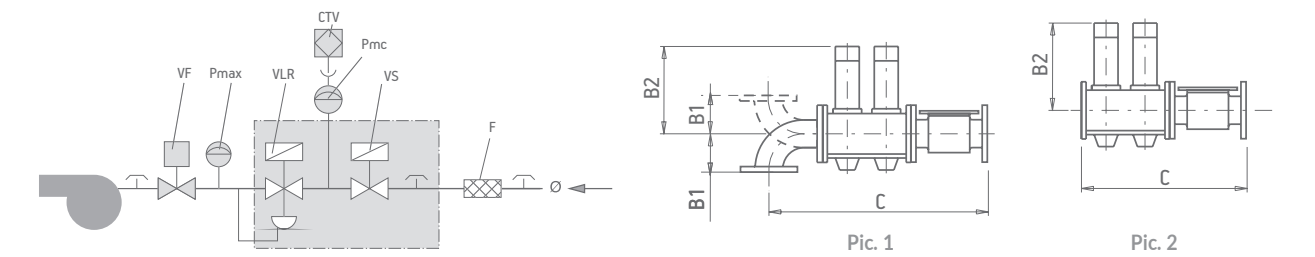
NOTES

CTV Gas train with Valve Tightness Control.

**) Maximum gas inlet pressure at pressure regulator.

GAS TRAIN STRUCTURE AND COMPOSITION

D4



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	
19990541 (VGD20.503 - 2")	●	2"	●	●	◆	●	●	2"	145	285	890	990 x 300 x 500	23	1
19990542 (VGD40.065 - 2"1/2)	●	DN65	●	●	◆	●	●	DN65	135	320	970	1380 x 430 x 700	36	1
19990543 (VGD40.080 - 3")	●	DN80	●	●	◆	●	●	DN80	135	325	1010	1380 x 430 x 700	38	1
19990544 (VGD40.100 - 4")	●	DN100	●	●	◆	●	●	DN100	175	330	1100	1380 x 430 x 700	44	1
19990666 (VGD2.065 - 2"1/2)	●	DN65	●	●	◆	●	●	DN65	135	285	1120	1380 x 430 x 700	45	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
19990599 (VGD20.503 - 2")	●	2"	●	●	●	◆	●	●	2"	145	285	890	990 x 300 x 500	23
19990600 (VGD40.065 - 2"1/2)	●	DN65	●	●	●	◆	●	●	DN65	135	320	970	1380 x 430 x 700	36
19990601 (VGD40.080 - 3")	●	DN80	●	●	●	◆	●	●	DN80	135	325	1010	1380 x 430 x 700	38
19990602 (VGD40.100 - 4")	●	DN100	●	●	●	◆	●	●	DN100	175	330	1100	1380 x 430 x 700	44
19990665 (VGD20.065 - 2"1/2)	●	DN65	●	●	●	◆	●	●	DN65	135	285	1120	1380 x 430 x 700	45

- 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.