

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.

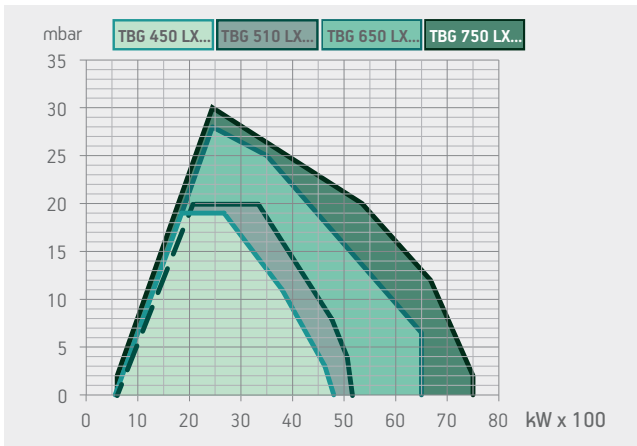


TBG 450 LX MC

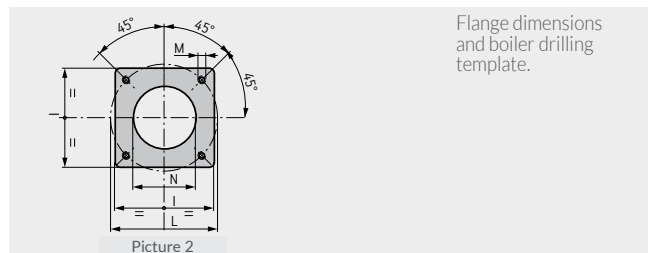
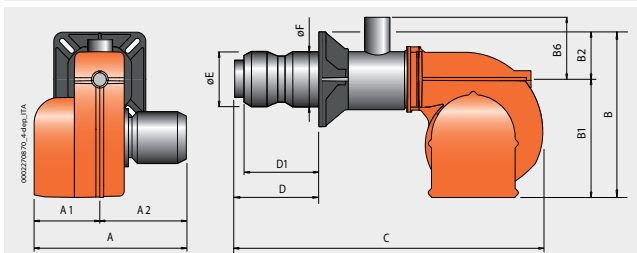


TBG 450 LX ME

	TBG 450 LX MC	TBG 450 LX ME	TBG 450 LX ME V	TBG 450 LX ME V O2	TBG 450 LX ME V CO
<b>Gas burner compliant with European standard EN676. Operation:</b>	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 <sub>2</sub> ) monitoring in the fumes in order to maintain an optimal air/fuel ratio and ensure increased performance.				•	
Residual oxygen (O <sub>2</sub> ) and carbon monoxide (CO) and monitoring of oxidizing components (H <sub>2</sub> ) 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	
TBG 450 LX MC	1500	1150	970	260
TBG 450 LX ME	1500	1150	970	260
TBG 450 LX ME V	1500	1150	970	275
TBG 450 LX ME V O2	1500	1150	970	287
TBG 450 LX ME V CO	1500	1150	970	299



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 mm	N mm	Pic.
TBG 450 LX MC	1060	530	530	810	525	285	295	1800	650	547 ÷ 597	397	410	480	520 ÷ 600	M20	415	2
TBG 450 LX ME	1060	530	530	810	525	285	295	1850	650	547 ÷ 597	397	410	480	520 ÷ 600	M20	415	2
TBG 450 LX ME V	1060	530	530	810	525	285	295	1850	650	547 ÷ 597	397	410	480	520 ÷ 600	M20	415	2
TBG 450 LX ME V O2	1060	530	530	810	525	285	295	1850	650	547 ÷ 597	397	410	480	520 ÷ 600	M20	415	2
TBG 450 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 <sub>2</sub>	CO	Emissions class	Thermal output kW	Model	Part no.	Electrical supply kW	Motor	Note
Frequency 50 Hz										
NEW				class 3	560 ÷ 4800	<b>TBG 450 LX MC</b>	<b>18100010</b>	3N AC 50Hz 400V	9,2	4)
NEW				class 3	560 ÷ 4800	<b>TBG 450 LX ME</b>	<b>18110010</b>	3N AC 50Hz 400V	9,2	4)
NEW	•			class 3	560 ÷ 4800	<b>TBG 450 LX ME V</b>	<b>18110015</b>	3N AC 50Hz 400V	9,2	4) 10)
NEW	•	•		class 3	560 ÷ 4800	<b>TBG 450 LX ME V O2</b>	<b>18110016</b>	3N AC 50Hz 400V	9,2	4) 10)
NEW	•	•	•	class 3	560 ÷ 4800	<b>TBG 450 LX ME V CO</b>	<b>18110017</b>	3N AC 50Hz 400V	9,2	4) 10)
Frequency 60 Hz										
NEW				class 3	560 ÷ 4800	<b>TBG 450 LX MC</b>	<b>on request</b>	3N AC 60Hz 380V	11,0	4)
NEW				class 3	560 ÷ 4800	<b>TBG 450 LX ME</b>	<b>on request</b>	3N AC 60Hz 380V	11,0	4)
NEW	•			class 3	560 ÷ 4800	<b>TBG 450 LX ME V</b>	<b>on request</b>	3N AC 60Hz 380V	11,0	4) 10)
NEW	•	•		class 3	560 ÷ 4800	<b>TBG 450 LX ME V O2</b>	<b>on request</b>	3N AC 60Hz 380V	11,0	4) 10)
NEW	•	•	•	class 3	560 ÷ 4800	<b>TBG 450 LX ME V CO</b>	<b>on request</b>	3N AC 60Hz 380V	11,0	4) 10)

### TO COMPLETE THE BURNER

DESCRIPTION
TBG 450 ME V: modulating probe for LCM 100 (see page 294)

### MODULATING MODE

DESCRIPTION	PART NO.
TBG 450 MC: modulation kit	98000055
TBG 450 ME: modulation kit	98000059
TBG 450 MC/450 ME: modulating probe (see page 294)	

### 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/m<sup>3</sup> = 8550 kcal/m<sup>3</sup>,
- 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 (see page 299)	97980058

### GAS BURNERS ACCESSORIES

Boiler coupling kit.