kW **400 - 3600**

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.







TBG 360 MC

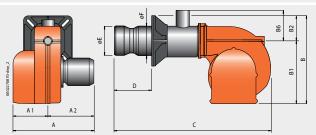
TBG 360 ME

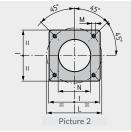
	TBG 360 MC	TBG 360 ME	TBG 360 ME V	TBG 360 ME V O2	TBG 360 ME V CO
Gas burner compliant with European standard EN676. Operation:	mechanical two-stage progressive	electronic two-stage progressive	modulating electronic	modulating electronic	modulating electronic
Continuous modulation operation by installing P.I.D. controller in the control panel (to be ordered separately with modulation probe).	•	•			
Modulation ratio:	1:7	1:7	1:7	1:7	1:7
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.	•	•	•	•	•
High ventilation efficiency, low electrical input, low noise.	•	•	•	•	•
Sliding boiler coupling flange to adapt the blast-pipe to the various types of boilers.	•	•	•	•	•
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 (${\rm O_2}$) and carbon monoxide (CO) and monitoring of oxidizing components (${\rm H_2}$) 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 pressure switch, pressure regulator and gas filter.	•	•	•	•	•
Fail proof connectors for burner/gas train connection.	•	•	•	•	•
Gas train outlet:	up	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:	IP44	IP40	IP40	IP40	IP40





	Size	Weight		
Model	L	Р	H	vveigiit
		mm		kg
TBG 360 MC	1070	870	810	118
TBG 360 ME	1070	870	810	118
TBG 360 ME V	1730	1030	880	135
TBG 360 ME V O2	1730	1030	880	147
TBG 360 ME V CO	1730	1030	880	159





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	l mm	L mm	M mm	N mm	Pic.
TBG 360 MC	820	400	420	610	390	220	200	1250	200 ÷ 450	270	219	320	310 ÷ 370	M12	275	2
TBG 360 ME	820	400	420	590	390	160	200	1350	200 ÷ 450	270	219	320	310 ÷ 370	M12	275	2
TBG 360 ME V	850	400	450	590	390	160	200	1350	200 ÷ 450	270	219	320	310 ÷ 370	M12	275	2
TBG 360 ME V O2	850	400	450	590	390	160	200	1350	200 ÷ 450	270	219	320	310 ÷ 370	M12	275	2
TBG 360 ME V CO	850	400	450	590	390	160	200	1350	200 ÷ 450	270	219	320	310 ÷ 370	M12	275	2

	Inverter	O ₂	со	Emissions class	Thermal output kW	Model	Part no.	Electrical supply kW	Motor	Note
						Frequency 50 Hz				
NEW				class 2	500 ÷ 3600	TBG 360 MC	17790010	3N AC 50Hz 400V	7,5	3) 4)
NEW				class 2	500 ÷ 3600	TBG 360 ME	17800010	3N AC 50Hz 400V	7,5	3) 4)
NEW	•			class 2	500 ÷ 3600	TBG 360 ME V	17800015	3N AC 50Hz 400V	7,5	3) 4)
NEW	•	•		class 2	500 ÷ 3600	TBG 360 ME V O2	17800016	3N AC 50Hz 400V	7,5	3) 4)
NEW	•	•	•	class 2	500 ÷ 3600	TBG 360 ME V CO	17800017	3N AC 50Hz 400V	7,5	3) 4)
						Frequency 60 Hz				
NEW				class 2	500 ÷ 3600	TBG 360 MC	17795410	3N AC 60Hz 380V	9,0	3) 4)
NEW				class 2	500 ÷ 3600	TBG 360 ME	17805410	3N AC 60Hz 380V	9,0	3) 4)
NEW	•			class 2	500 ÷ 3600	TBG 360 ME V	on request	3N AC 60Hz 380V	9,0	3) 4)
NEW	•	•		class 2	500 ÷ 3600	TBG 360 ME V O2	on request	3N AC 60Hz 380V	9,0	3) 4)
NEW	•	•	•	class 2	500 ÷ 3600	TBG 360 ME V CO	on request	3N AC 60Hz 380V	9,0	3) 4)

TO COMPLETE THE BURNER

DESCRIPTION	
TBG 360 ME V: modulating probe kit LCM 100 (see page 288)	

MODULATING MODE

DESCRIPTION	PART NO.
TBG 360 MC: modulation kit	98000057
TBG 360 ME: modulation kit	98000059
TBG 360 MC/360 ME: modulating probe kit (see page 288)	

NOTES

- 3 Sound proof lid on burner air intake.
- 4 Equipped with air closure device.

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

Natural gas: $Hi = 35,80 \text{ MJ/m}^3 = 8550 \text{ kcal/m}^3$,

LPG: Hi = 92 MJ/m³ = 22000 kcal/m³.

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

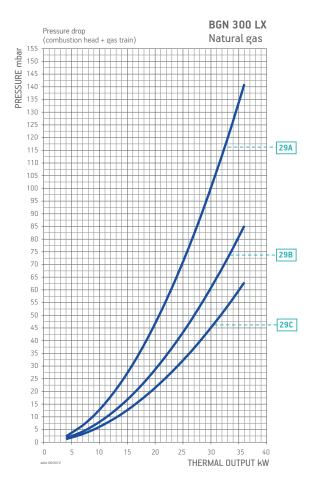
ACCESSORIES AVAILABLE ON REQUEST

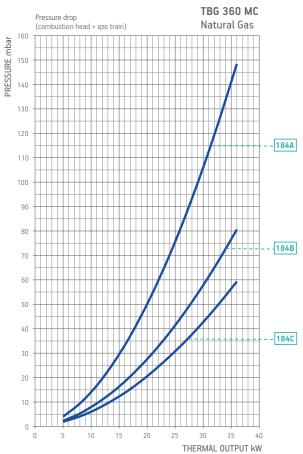
DESCRIPTION	PART NO.
Soundproof burner cover (see page. 293)	97980053

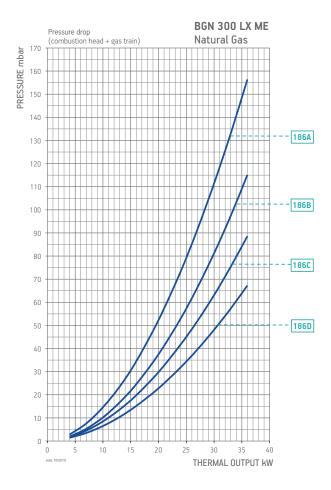
GAS BURNERS ACCESSORIES

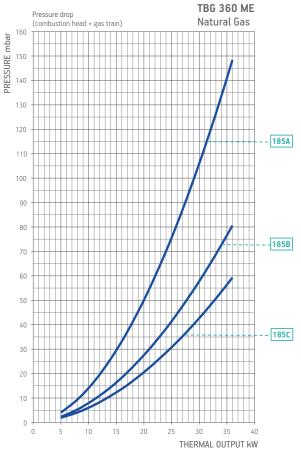
Boiler coupling kit, plug for wiring.

BURNER/GAS TRAIN MATCH









kW 400 - 3600

SERIES **BGN - TBG**

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
model	2,60	8				Part no.	Part no.	Part no.	Part no.		
			CE	500	CTV	19990530	Included	96000012	98000102	D3	11)
		29A	EXP	500		19990530	Included	96000012	-	DE3	
			EAP	300	CTV	19990530	Included	96000012	98000102	DE3	
DCNIGOOLY			CE	500	CTV	19990539	Included	96005003	98000101	D3	11)
BGN 300 LX BGN 300 LX V		29B	EXP	500		19990539	Included	96005003	-	DE3	
DGIN 300 LX V			EXP	500	CTV	19990539	Included	96005003	98000101	DE3	
			CE	500	CTV	19990485	Included	96005004	98000101	D3	11)
		29C	EXP	500		19990485	Included	96005004	-	DE3	
			EAP	300	CTV	19990485	Included	96005004	98000101	DE3	
BGN 300 LX ME	Natural gas	186A	CE/EXP	500	CTV	19990524	Included	96000035	Included	D2	
BGN 300 LX MEV		186B	CE/EXP	500	CTV	19990614	Included	-	Included	D2	
BGN 300 LX ME V 02		186C	CE/EXP	500	CTV	19990577	Included	_	Included	D2	
BGN 300 LX ME V CO		186D	CE/EXP	500	CTV	19990578	Included	_	Included	D2	
			CE	500	CTV	19990550	Included	_	98000102	В7	11)
		184A	EXP	500		19990550	Included	_		BE7	
			LAF	300	CTV	19990550	Included	_	98000102	BE7	
	NI (I		CE	500	CTV	19990563	Included	-	98000101	В7	11)
TBG 360 MC	Natural gas	184B	EXP	500		19990563	Included	-	_	BE7	
	gus		EAP	300	CTV	19990563	Included	-	98000101	BE7	
			CE	500	CTV	19990564	Included	-	98000101	В7	11)
		184C	EXP	500		19990564	Included	_	_	BE7	
			EAP	300	CTV	19990564	Included	_	98000101	BE7	
TBG 360 ME/ME V	NI (185A	CE/EXP	500	CTV	19990524	Included	_	Included	D2	
TBG 360 ME V O2	Natural gas	185B	CE/EXP	500	CTV	19990525	Included	-	Included	D2	
TBG 360 ME V CO		185C	CE/EXP	500	CTV	19990526	Included	_	Included	D2	

Burner model	Gas type				Version _i	Version _i	Version	Version	Version	Version	Version _i	Version	Version	Version _i	Version	Version	Version	Version	P.Max ** mbar	Execution	Gas train	Regulator with incorporated filter	Burner/gas train adapter	Valve tightness control kit	Kit LPG	Pic.	Notes
			IIIDai		Part no.	Part no.	Part no.	Part no.	Part no.	no.																	
TBG 360 MC	LPG	CE	500	CTV	19990550	Included	-	98000102	98000366	В7	11)																
		EXP	500		19990550	Included	-	-	98000366	BE7																	
				CTV	19990550	Included	-	98000102	98000366	BE7																	
TBG 360 ME/ME V TBG 360 ME V O2 TBG 360 ME V CO	LPG	CE/EXP	500	CTV	19990524	Included	-	Included	98000366	D2																	

To choose the correct gas train please refer to the information on page 20.

For information on the structure, composition, and size of the gas train please refer to the diagrams on page 294.

NOTES

- 9 The min feeding gas pressure at the inlet of the gas train can not be lower than 100 mbar.
- 11 The train must be always completed with the VPS kit to comply with the EN676 regulations. CTV Gas train with Valve Tightness Control.
- **) Maximum gas inlet pressure at pressure regulator.