

Ecoflam

TECHNICAL CATALOGUE



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Ecoflam

CUSTOMIZED SOLUTIONS FOR ANY TYPE OF APPLICATION



Our Experience

Thanks to more than 40 years of experience in the design and production of burners, Ecoflam offers a full range of blown air pressure jet burners covering an extremely wide range of power, from small products for residential heating applications to high power burners dedicated to the industrial segment.

Ecoflam burners are renowned worldwide for providing high efficiency products with reliable operation, significant energy savings and extreme ease of installation, maintenance and flexible boiler-burner matching.

Our Mission

Following a philosophy of continuous improving, the R&D Laboratory is constantly working to produce better results, such as the reduced NOx level emissions.

The development of new advanced combustion technologies allow to propose solutions in respect of the most stringent environmental regulations and to create the perfect condition to face the new upcoming market requests, such as Ultra Low NOx performance and ErP-ready products.





Our Professional Team

Ability to design state-of-the-art burners, manage demands of products for specific applications, ability to solve problems in real time are just some of the characteristics of our technicians and engineers.

But not only: Ecoflam has a worldwide network of service technicians able to support the installation, the commissioning and the periodic maintenance activities of the burner.

Our International Approach

Our products are designed, developed and manufactured in Italy, combining quality, reliability and high performance. All these features are necessary for the end-user satisfaction, which is the first target for Ecoflam.

Reaching this outcome throughout its extensive worldwide network of distributors and customers has always been a challenging task for Ecoflam, which was achieved only by developing a close and personalized relationship with each customer, always taking into account the needs and the distinctive characteristics of each individual market.



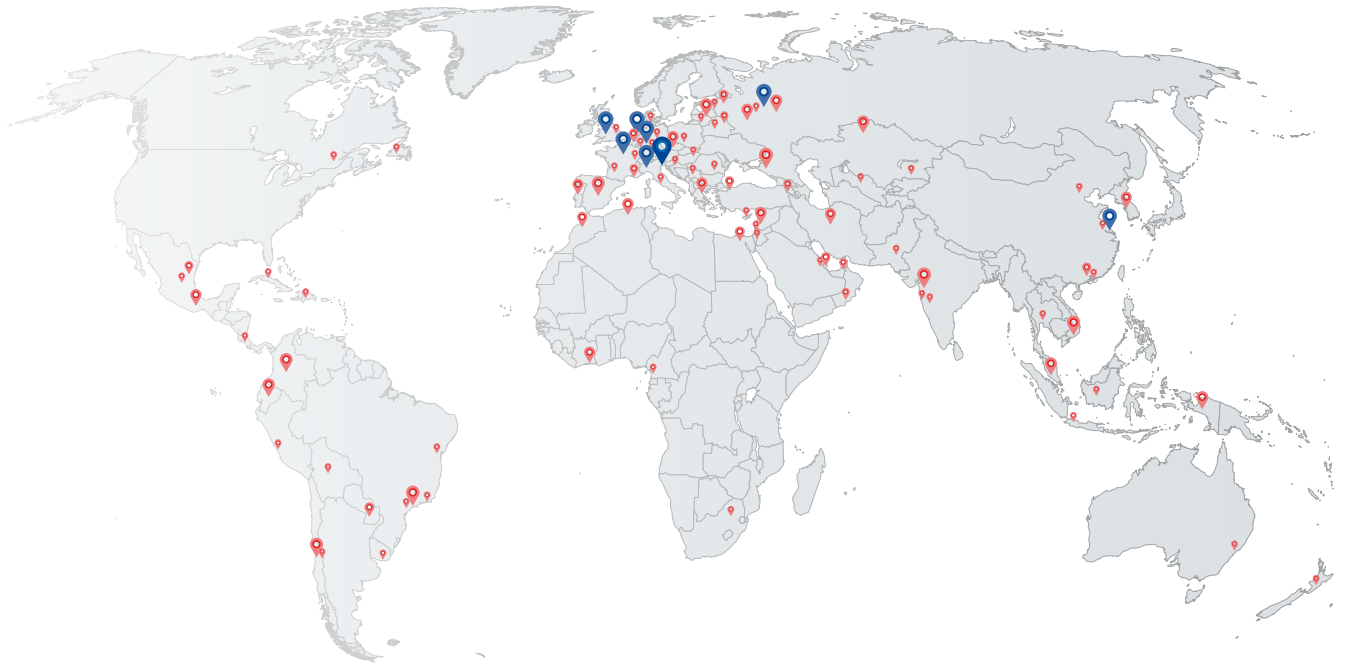
THE COMPANY

Our Commercial and Technical Network

Manufacturing is carried out in the factory of Resana (Treviso - Italy) and products are distributed worldwide thanks to a wide and highly qualified network of partners.

In more than 40 years, Ecoflam has been capable to build loyal partnerships and today can count on reliable partners in more than 100 Countries. They distribute Ecoflam products in their Countries of competence, they have good knowledge of the products, and can carry out commissioning and service by keeping constantly in touch with the headquarter.

Thanks to this international network Ecoflam is also able to offer original spare parts in order to guarantee reliability and safe continued operation of the end user installation.



Ecoflam Worldwide

Headquarters in Italy

Subsidiary in UK

Sales Representative Office in Cina e Russia

Strong presence thanks to dealers and partners

Distribution in more than 100 Countries



Time to Market

To promptly deal with the requests of an ever changing market, Ecoflam has adopted a finished products and spare parts warehouse of over 8000 square meters. Quick response to customer requests and consistent warehouse availability allow to reduce the delivery time and give a better support to the end user.



Thanks to its strong expertise in customization, Ecoflam boasts many different solutions for a wide range of applications. The flexibility of the Ecoflam range allows to grant quick response to each customer request, even the most demanding in term of technical specifications.



HEATING



INCINERATORS
& WASTE



AGRICULTURE



ASPHALT
& BUILDING



TEXTILE
DRYING



FOOD
PRODUCTION



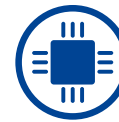
WOOD
BOILERS



CHEMICAL
PLANTS



ENGINEERING



PLANT
MODERNIZATION

Special Versions

Ecoflam is renowned for its ability to conceive and build flexible products and to propose customized solutions for any type of applications. Successful and satisfied customers, both from OEM or distribution fields, demonstrate throughout the years that Ecoflam is able to meet their requests offering a wide range of special products capable to satisfy even the most difficult ones.



THE COMPANY



Commissioning

For safe and efficient operation of the burner system it is very important that the burner is commissioned by an expert. The combustion will be optimally adjusted over the whole power range of the burner, and all the safeties will be tested. Ecoflam service technicians are able, like no other, in performing this job adequately and competently, to run the installation worry-free.

Maintenance and inspection

The burner is a crucial part of the installation. To keep the installation in good conditions, it is important to maintain the burner periodically. It is also very important to inspect all the safeties to ensure that the system operates safely. The professional services of Ecoflam can perfectly perform this service for any type of installation.

The Burner Academy

In order to respond to the needs of the customers Ecoflam created the Burner Academy, a real school where the know-how of the internal technicians is diffused to partners and customers.

It's an opportunity for boiler room personnel, operators and engineers to attend a series of training sessions carried out on test bench by highly qualified instructors, who held the courses in English, German, French, Italian and Dutch language.

The Burner Academy uses various training locations where boilers are installed and where people can be trained in theory and in practice. Courses are available in different levels and there is also the possibility to handle customer-specific training.



Worldwide Service Network

Ecoflam uses a worldwide network of partners, consisting of well-trained local engineers, to carry out its service operations.

These technicians are able to perform both commissioning and local service and they do it in a very professional way.

Reliable supply of spare parts

Spare parts have always had a great importance inside the Ecoflam world. Considering the high amount of parts involved in every single product, some of these parts might naturally need to be substituted. Ecoflam can count on an international network offering original spare parts in order to guarantee the highest quality, reliability and safe continued operation of the appliance.



WORLDWIDE REFERENCES



Irapuato (Mexico)

1x MAIOR P 150.1



Moscow (Russia)

4x MULTICALOR 600.1



Köln (Germany)

1x BLU 1500.1 LN



Arklow (Ireland)

1x MULTICALOR 800.1 PRE



Baku (Azerbaijan)

2x MULTICALOR 800.1 PR



Mexico City (Mexico)

156x MAX GAS 40



Beijing (China)

5x BLU 6000 FGR, 1x BLU 2000 FGR



Beijing (China)

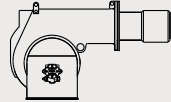
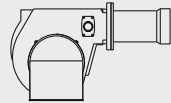
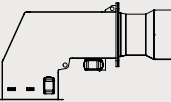
2x BLU 4000 FGR

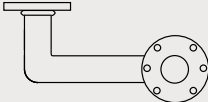
ULTRA
Low
NOx
30
mg/kWh

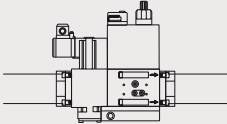
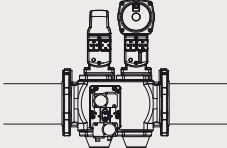
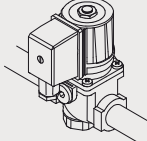
ULTRA
Low
NOx
30
mg/kWh

BURNER COMPOSITION



• BURNER BODY AND GAS TRAIN

BURNER BODY		Light oil range Heavy oil range	Burner body with built-in combustion head is delivered in one single box. Additional kits and accessories to be ordered and delivered separately.
		Gas range Dual fuel range	Burner body with built-in combustion head is delivered in one single box. Gas train and additional kits and accessories are delivered separately.
		Duoblock range	Burner body with built-in combustion head is delivered in one single box. Safety valve, gas train and additional kits and accessories are delivered separately.






GAS TRAIN CONNECTION PIPE			
---------------------------	--	--	--

GAS TRAIN		MB MultiBloc	MultiBloc Dungs: compact double solenoid valve with built-in filter, gas governor and gas pressure switch
		VGD Siemens	VGD Siemens: double gas valve with actuators, gas governor and gas pressure switch. Filter not included, to be ordered separately
		Export configuration	Configuration depending on the models, to be selected in compliance with local safety regulations

• MODULATION KIT

PID CONTROLLER		KITMD...	Load controller to transform progressive version burners into modulating burners
PROBES		PROBE...	Temperature and pressure probes

● MAIN KITS AND ACCESSORIES

DIAGNOSTIC TOOL		KITDT-TW	Diagnostic tool for Ariston BCU
TIGHTNESS CONTROL		KITTC-...	Tightness control device for gas train, available in different models depending on the type of gas train selected Note: according to the European Standard, for gas trains in EN676 Configuration a tightness control device must be included over 1200 kW
MAXIMUM GAS PRESSURE SWITCH		KITPRES...	Maximum gas pressure switch, to be installed in order to comply with local safety regulations
SILENCER		KITSIL...	Kit to be fitted to the air inlet
LPG KIT		KITLPG...	LPG transformation kit for gas burner (see related models and technical documentation for operating gas pressure)
ACCESSORIES	Gas governor		
	Filter		
	Antivibration joint		
	Ball valve		
	Manometer + Push button		
	Magnetic + Self-cleaning oil filter		
	Oil spill back nozzles		

For other kits and accessories see page 116

● SPECIAL CONFIGURATIONS AND OTHER SERVICES

SPECIAL CONFIGURATIONS*	Continuous ventilation
	Remote control panel
	Higher IP ratings
	Out of standard blast tube lengths
	Customized voltages
	Swirl system: swirls for blast tube that can reduce flame length
AFTER-SALE SERVICE**	The Service Department offers start-up service, after-sale maintenance and technical training courses
SPARE PARTS	ECOFLAM original spare parts

*: All out of standard configurations will be evaluated on request

** : Contact our Sales Managers to know more about our after-sale service

DESIGNATION

BURNER

RANGE NAME BY FUEL TYPE		OPERATION MODE	OUT OF STANDARD CONFIGURATIONS	ELECTRICAL POWER SUPPLY
MAX GAS, BLU	Natural gas or LPG	- one stage	O Version for OEM	Standard configurations: 1 phase: 230 V - 50 Hz 3 phase: 400 V - 50 Hz
MAX, MAIOR	Light oil	R pre-heater (light oil)	S4 4-head configuration	
MAXFLAM, OILFLAM	Heavy oil	P soft-start	SW Blast tube with swirl	230V 50-60 230 V - 50-60 Hz
MULTICALOR	Dual fuel: gas/light oil	AB two stages	HT High temperature version	380-60 380 V - 60 Hz
MULTIFLAM	Dual fuel: gas/heavy oil	AB HS two stage with hydraulic jack	CV Continuous ventilation	460-60 460 V - 60 Hz
		PR progressive/modulating mechanical	FGR Flue gas recirculation	
		PR-AB progressive/modulating mechanical gas / two stages oil	S Out of standard burner	
		PRE progressive/modulating electronic		
		MD modulating with PID		

BLU TS 1500.1 LN PR TL HT LPG 380-60

BURNER STRUCTURE	SIZE (rough output)	EMISSIONS*	HEAD LENGTH	BURNER CONTROL	FUEL TYPE
- Monoblock	Gas: in kW	- Class 1 or 2	TC Short	TW Ariston BCU	BF Biofuel
TS Duoblock	Oil or dual fuel: in kg/h	LN Class 3 (EN676/EN267)	TM Medium	- other brand BCU	HV High viscosity oil
		*: not applicable to MAX GAS range	TL Long		LPG LPG
					K Kerosene

GAS TRAIN

MANUFACTURER	VALVE FEATURES	GAS PRESSURE SWITCH ARRANGEMENT	VOLTAGE
D Dungs	1 Valve with built-in pressure governor	PS1 Single gas pressure switch upstream of the first shutter	- 220 V or 230V; either 50 or 60 Hz
K Kromschroder	2 2-stage valve with built-in pressure governor	PS2 Single pressure switch between the two shutters	110 110 V (irrespective of the frequency)
S Siemens	3 Valve without built-in pressure governor	PS3 Two gas pressure switches, upstream of and between the shutters	120 120 V (irrespective of the frequency)
H Honeywell			
B Brahma			
U UNI-Geraete			

GT - S2 - VGD20503 - DN80 - PS2 - A - 110

VALVE MODEL (Examples)	VALVE NOMINAL DIAMETER	OTHER DEVICES (empty if not applicable)
MBDLE412 Dungs MultiBloc MBDLE412	RP15 Rp 1/2" Threaded connection	F Filter included (either as a component or included in the regulator)
MBZRDLE410 Dungs MultiBloc (2 stages) MBZRDLE410	...	G Governor
VGD20 Siemens VGD20	RP50 Rp 2" Threaded connection	A Anti-vibration joint
VGD40 Siemens VGD40	DN40 DN40 Flanged connection	M Manual valve
	...	V AGP
	DN150 DN150 Flanged connection	S Out of standard gas train

RANGE OVERVIEW

The flexibility of Ecoflam solutions allows the manufacturing of highly customized products covering a range from 12 kW to 34 MW:



MAX GAS
from 17 to 700 kW
.....
page 14



BLU
from 245 to 17000 kW
.....
page 24

GAS RANGE



MAX
Light oil
from 18 to 546 kW
.....
page 40



MAIOR
Light oil
from 415 to 17000 kW
.....
page 50



MAXFLAM/OILFLAM
Heavy oil
from 68 to 17000 kW
.....
page 62

OIL RANGE



MULTICALOR
(gas/light oil)
from 190 to 17000 kW
.....
page 74



MULTIFLAM
(gas/heavy oil)
from 414 to 17000 kW
.....
page 88

DUAL FUEL RANGE



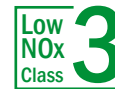
DUOBLOCK RANGE



TS RANGE
from 230 to 34000 kW
.....
page 98

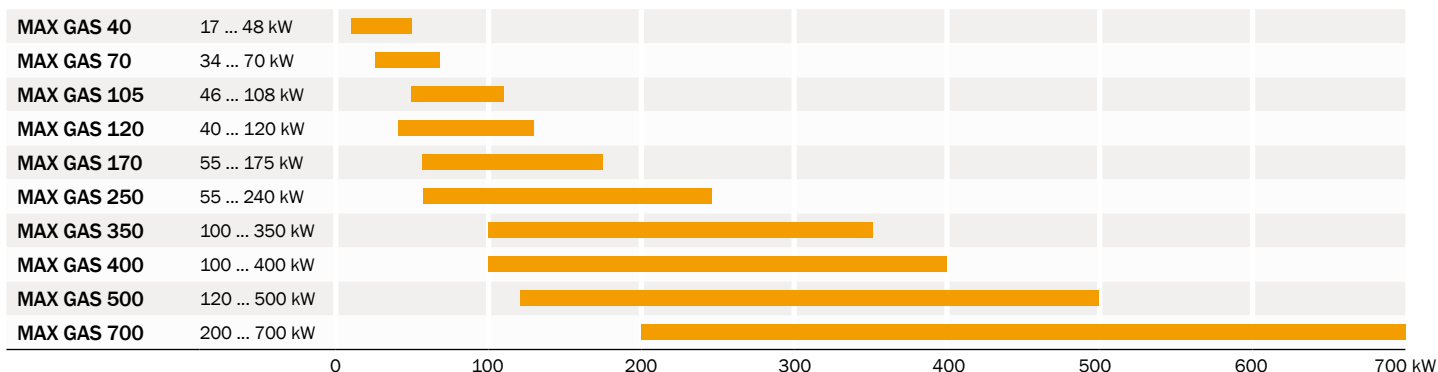
MAX GAS

MONOBLOCK GAS BURNERS FROM 17 TO 700 kW



RANGE OVERVIEW

Low NOx Class 3 (NOx ≤ 80 mg/kWh)

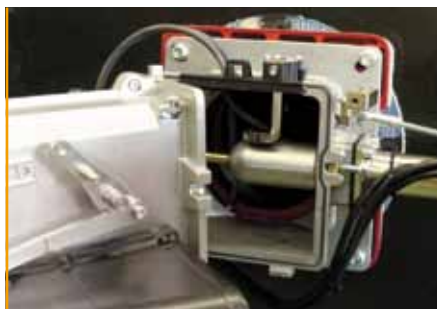


MAIN FEATURES

- Two stage PAB models available with different burner controllers, with or without digital informative display
- High efficiency fan ventilation system (HPV) allowing easy burner-boiler matching even with high combustion chamber pressure
- Combustion head easy to assemble and adjust
- The hinge flange allows easy access to the combustion head without losing the original settings (starting from MAX GAS 350)
- All models are available to work with 50 and 60 Hz electrical frequency
- All models up to MAX GAS 500 are available also in versions compliant with ErP Directive



High efficiency fan ventilation system (HPV)



CONFIGURATIONS

MAX GAS range is available in the following operation modes:

MAX GAS ... P
One stage, Low NOx Class 3
All models

MAX GAS ... PAB
Two stages Low, NOx Class 3
MAX GAS 120 ... 700

MAX GAS ... PR
Two stage progressive/modulating mechanical, Low NOx Class 3
MAX GAS 350 ... 700

Other available configurations:

- Progressive versions are available starting from MAX GAS 350 and can be transformed into modulating with an optional kit
- LPG versions
- Continuous ventilation versions
- High temperature versions
- OEM and other special versions on request according to feasibility

FUEL

- Natural gas (G20, G25 according to EN676)
- LPG

EMISSIONS

Class	NOx mg/kWh
1	170
2	120
3	80

All models are in compliance with EN 676 European Standard

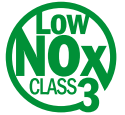
CONFORM TO

All products are in accordance with the following directives:

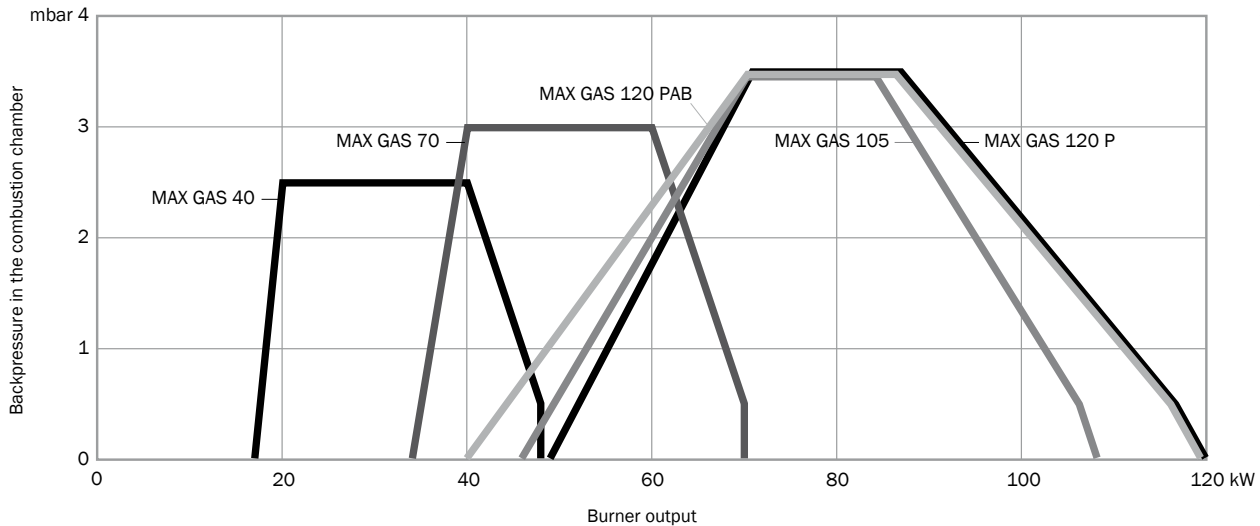
- 2014/35/EU Low Voltage Directive
- 2014/30/EU EMC Directive
- 2016/426/EU Gas Appliance Regulation
- 2006/42/EC Machine Directive



- Fuels: natural gas, LPG
- Operation: one stage; model MAX GAS 120 available also in two stage operation
- Emission class: Low NOx class 3 (≤ 80 mg/kWh) according to EN676



WORKING DIAGRAM



Test conditions conforming to EN676
 Temperature: 20 °C
 Pressure: 1013,5 mbar
 Altitude: 0 m a.s.l.

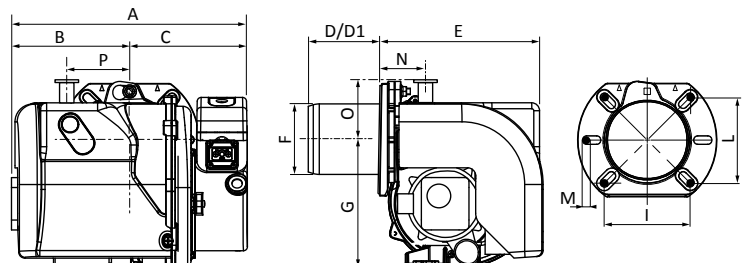
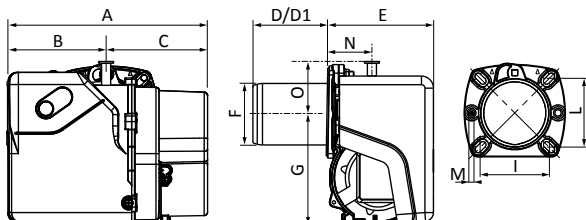
TECHNICAL DATA

	Burner output (kW)	Power supply	Motor (W)	NOx class	Operation
MAX GAS 40 P	17 - 48	1/230V/50-60Hz	75	Class 3	P
MAX GAS 70 P	34 - 70	1/230V/50-60Hz	75	Class 3	P
MAX GAS 105 P	46 - 108	1/230V/50-60Hz	75	Class 3	P
MAX GAS 120 P	49 - 120	1/230V/50-60Hz	75	Class 3	P
MAX GAS 120 PAB	40 - 120	1/230V/50-60Hz	75	Class 3	PAB

OVERALL DIMENSIONS

MAX GAS 40

MAX GAS 70 - 105 - 120



Dimensions in mm
 Head length: D short / D1 long

	A	B	C	D	D1	E	F	G	I	L	M	N	O	P
MAX GAS 40 P	288	143	145	85	185	153	89	160	92/107	92/107	M8	54	73	-
MAX GAS 70 P	303	155	148	85	185	204	89	160	100/120	100/120	M8	52	71	82
MAX GAS 105 P	317	169	148	140	220	204	89	160	100/120	100/120	M8	52	71	82
MAX GAS 120 P	317	169	148	160	240	204	98	160	100/120	100/120	M8	52	71	82
MAX GAS 120 PAB	317	169	148	160	240	282	98	160	100/120	100/120	M8	52	71	82

BURNERS

One stage, Low NOx class 3

Model	Head	Ariston BCU	Siemens BCU
MAX GAS 40 P	TC	3142741	3123932
	TL	3142742	3123933
MAX GAS 70 P	TC	3142743	3123934
	TL	3142744	3123935
MAX GAS 105 P	TC	3142745	3123936
	TL	3142746	3123937
MAX GAS 120 P	TC	3142747	3123938
	TL	3142748	3123939



MAX GAS 40 P

Two stages, Low NOx class 3

Model	Head	Siemens BCU
MAX GAS 120 PAB	TC	3123954
	TL	3123955

OTHER AVAILABLE CONFIGURATIONS

High Temperature (HT)	Continuous Ventilation (CV)	Post-purge	110 V
●	●	●	●

● Codes available on request

GAS TRAINS

● Natural gas (G20, G25):

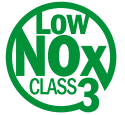
	Pressure (mbar)		Model	Size	Code
	min	max			
for MAX GAS 40 P	9	65	MBC 65 DLE	1/2"	3141885
	9	200	MB-DLE 403	1/2"	3123944
for MAX GAS 70 P	10	360	MB-DLE 405	3/4"	3123560
	11	360	MBC 120 DLE	3/4"	3141886
	16	65	MBC 65 DLE	1/2"	3141885
for MAX GAS 105 P	18	200	MB-DLE 403	1/2"	3123944
	16	360	MB-DLE 405	3/4"	3123560
	18	360	MBC 120 DLE	3/4"	3141886
for MAX GAS 120 P	34	65	MBC 65 DLE	1/2"	3141885
	36	200	MB-DLE 403	1/2"	3123944
	16	360	MB-DLE 405	3/4"	3123560
for MAX GAS 120 P	18	360	MBC 120 DLE	3/4"	3141886
	34	65	MBC 65 DLE	1/2"	3141885
	36	200	MB-DLE 403	1/2"	3123944
for MAX GAS 120 PAB	16	360	MB-ZRDLE 405	3/4"	3123960

● LPG (G31):

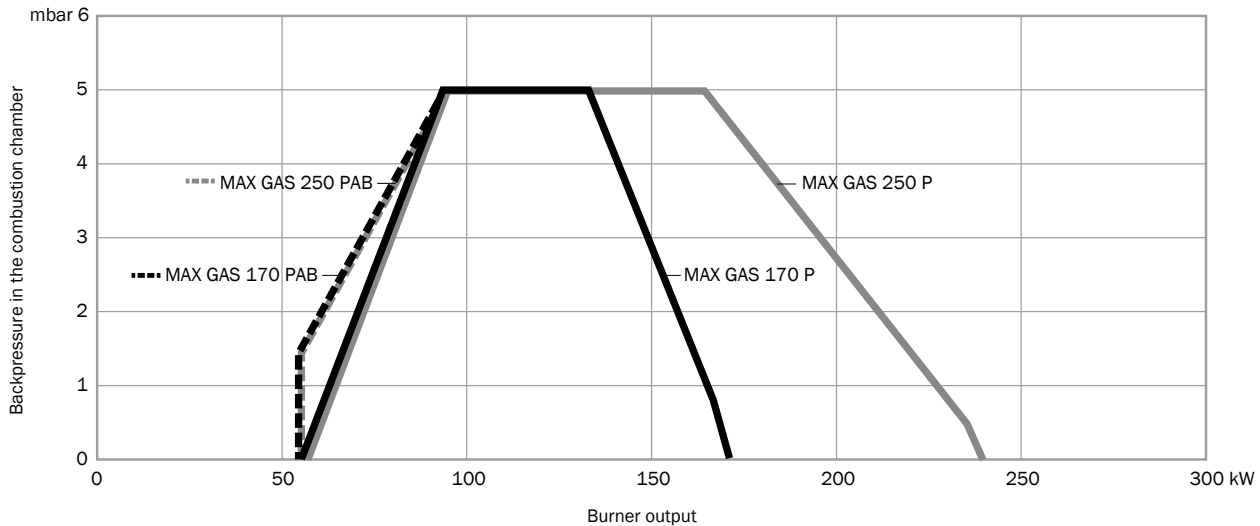
	Pressure (mbar)		Model	Size	Code	Kit LPG
	min	max				
for MAX GAS 40 P	7	65	MBC 65 DLE	1/2"	3141885	3122301
for MAX GAS 70 P	15	65	MBC 65 DLE	1/2"	3141885	3122301
for MAX GAS 105 P	24	65	MBC 65 DLE	1/2"	3141885	3122301
for MAX GAS 120 P	24	65	MBC 65 DLE	1/2"	3141885	3122301
for MAX GAS 120 PAB	15	360	MB-ZRDLE 405	3/4"	3123960	3122301

Gas governor and filter are included

- Fuels: natural gas, LPG
- Operation: one stage or two stages
- Emission class: Low NOx class 3 (≤ 80 mg/kWh) according to EN676



WORKING DIAGRAM



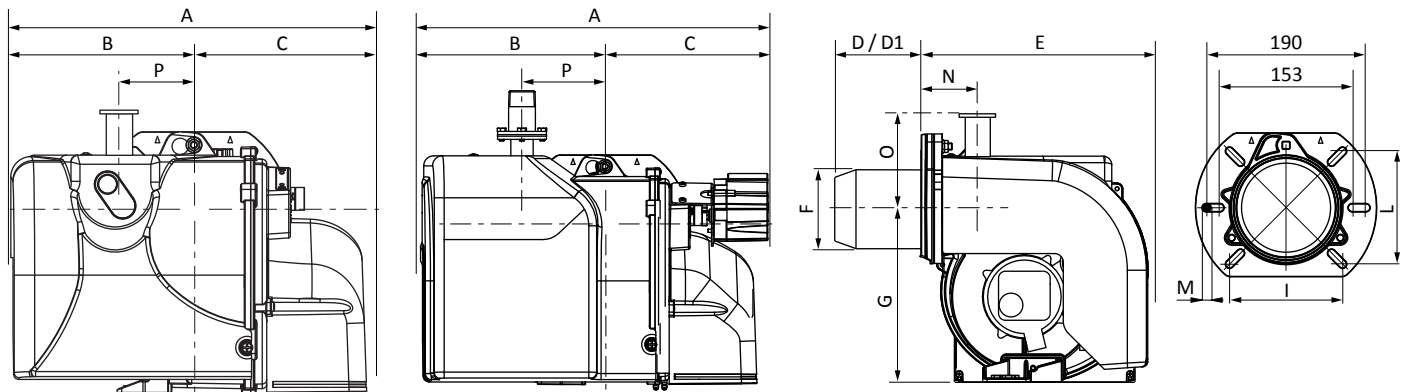
TECHNICAL DATA

	Burner output (kW)	Power supply (V)	Motor (W)	NOx class	Operation
MAX GAS 170	55 - 170	1/230V/50Hz	200	Class 3	P, PAB
MAX GAS 250	55 - 240	1/230V/50Hz	200	Class 3	P, PAB

OVERALL DIMENSIONS

MAX GAS 170/250 P

MAX GAS 170/250 PAB



Dimensions in mm
 Head length: D short / D1 long

	A	B	C	D	D1	E	F	G	I	L	M	N	O	P
MAX GAS 170/250 P	392	202	190	180	280	280	125	201	106/130	106/130	M8	73	110	104
MAX GAS 170/250 PAB	435	231	204	180	280	301	125	201	106/130	106/130	M8	73	110	104

BURNERS

One stage, Low NOx class 3

Model	Head	Ariston BCU	Siemens BCU
MAX GAS 170 P	TC	3142749	3123940
	TL	3142750	3123941
MAX GAS 250 P	TC	3142751	3123942
	TL	3142752	3123943

Two stages, Low NOx class 3

Model	Head	Ariston BCU	Siemens BCU
MAX GAS 170 PAB	TC	3142782	3123956
	TL	3142783	3123957
MAX GAS 250 PAB	TC	3142784	3123958
	TL	3142785	3123959



MAX GAS 250 PAB

OTHER AVAILABLE CONFIGURATIONS

60 Hz	High Temperature (HT)	Continuous Ventilation (CV)	Post-purge	110 V
●	●	●	●	●

● Codes available on request

GAS TRAINS

● Natural gas (G20, G25):

	Pressure (mbar)		Model	Size	Code	Adapter kit*
	min	max				
for MAX GAS 170 P	13	360	MB-DLE 410	1"	3123947	-
	17	360	MB-DLE 407	3/4"	3123525	-
	26	360	MB-DLE 405	3/4"	3123560	3122300
for MAX GAS 250 P	15	360	MB-DLE 412	1"1/4	3141899	-
	17	360	MB-DLE 410	1"	3123947	-
	26	360	MB-DLE 407	3/4"	3123525	-
	40	360	MB-DLE 405	3/4"	3123560	3122300
for MAX GAS 170 PAB	13	360	MB-ZRDLE 410	1"	3123962	-
	17	360	MB-ZRDLE 407	3/4"	3123961	-
	26	360	MB-ZRDLE 405	3/4"	3123960	3122300
for MAX GAS 250 PAB	15	360	MB-ZRDLE 412	1"1/4	3141901	-
	17	360	MB-ZRDLE 410	1"	3123962	-
	26	360	MB-ZRDLE 407	3/4"	3123961	-
	40	360	MB-ZRDLE 405	3/4"	3123960	3122300

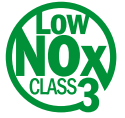
● LPG (G31):

	Pressure (mbar)		Model	Size	Code	LPG kit	Adapter kit*
	min	max					
for MAX GAS 170 P	23	360	MB-DLE 405	3/4"	3123560	3122302	3122300
for MAX GAS 250 P	34	360	MB-DLE 405	3/4"	3123560	3122302	3122300
for MAX GAS 170 PAB	23	360	MB-ZRDLE 405	3/4"	3123960	3122302	3122300
for MAX GAS 250 PAB	34	360	MB-ZRDLE 405	3/4"	3123960	3122302	3122300

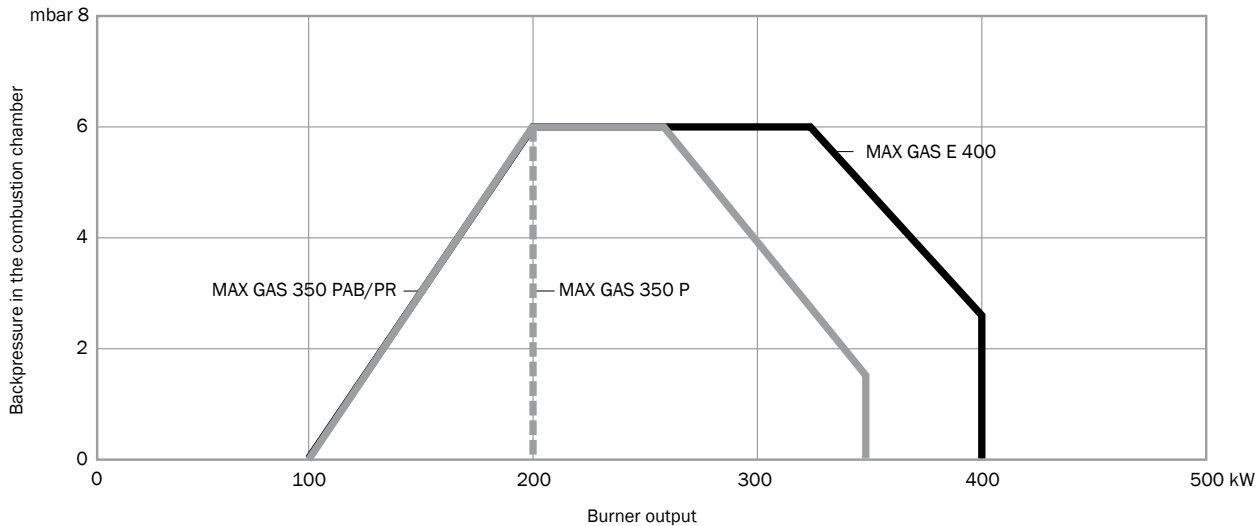
*: to be included in case of order

Gas governor and filter are included

- Fuels: natural gas, LPG
- Operation: one stage, two stages, two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)
- Emission class: Low NOx class 3 (≤ 80 mg/kWh) according to EN676



WORKING DIAGRAM

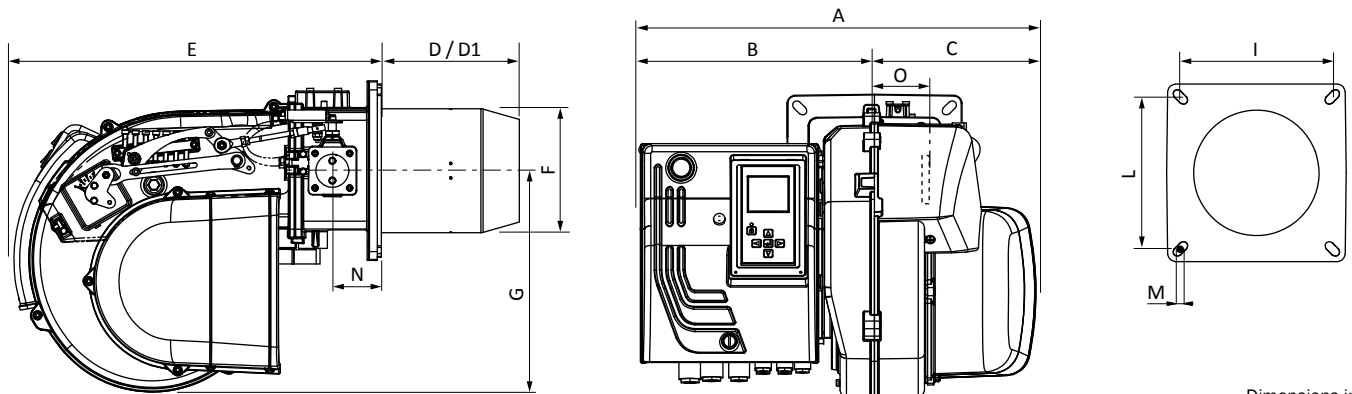


Test conditions conforming to EN676
 Temperature: 20 °C
 Pressure: 1013,5 mbar
 Altitude: 0 m a.s.l.

TECHNICAL DATA

	Burner output (kW)	Power supply	Motor (W)	NOx class	Operation
MAX GAS 350 P	205 - 350	1/230V/50Hz	300	Class 3	P
MAX GAS 400 E P	100 - 400	3/230-400V/50Hz	370	Class 3	P
MAX GAS 350 PAB	100 - 350	1/230V/50Hz	300	Class 3	PAB
MAX GAS 400 E PAB	100 - 400	3/230-400V/50Hz	370	Class 3	PAB
MAX GAS 350 PR	100 - 350	1/230V/50Hz	300	Class 3	PR
MAX GAS 400 E PR	100 - 400	3/230-400V/50Hz	370	Class 3	PR

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long

	A	B	C	D	D1	E	F	G	I	L	M	N	O
MAX GAS 350 P	485	277	208	175	335	466	157	280	185/200	185/200	M8	62	101
MAX GAS 350 PAB/PR	485	277	208	175	335	466	157	280	185/200	185/200	M8	62	101
MAX GAS 400 E P	485	277	208	175	335	466	157	280	185/200	185/200	M8	62	101
MAX GAS 400 E PAB/PR	510	302	208	175	335	510	157	280	185/200	185/200	M8	62	101

BURNERS

One stage, Low NOx class 3

Model	Head	Ariston BCU	Siemens BCU
MAX GAS 350 P	TC	3143283	3142283
	TL	3143284	3142284
MAX GAS 400 E P	TC	3146261	3146263
	TL	3146262	3146264

Two stages, Low NOx class 3

Model	Head	Ariston BCU	Siemens BCU
MAX GAS 350 PAB	TC	3143287	3142285
	TL	3143288	3142286
MAX GAS 400 E PAB	TC	3146298	3146300
	TL	3146299	3146301

Two stage progressive/modulating mechanical, Low NOx class 3

Model	Head	Ariston BCU	Siemens BCU
MAX GAS 350 PR	TC	3140047	3142287
	TL	3140048	3142288
MAX GAS 400 E PR	TC	-	3146336
	TL	-	3146337



MAX GAS 350 P

OTHER AVAILABLE CONFIGURATIONS

60 Hz	High Temperature (HT)	Continuous Ventilation (CV)	Post-purge	110 V
●	●	●	●	●

● Codes available on request

GAS TRAINS

● Natural gas (G20, G25):

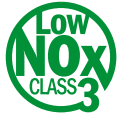
	Pressure (mbar)		Model	Size	Code
	min	max			
for MAX GAS 350	17	360	MB-DLE 415 350/500	1"1/2	3142296
	20	360	MB-DLE 412 350/500	1"1/4	3142295
	37	360	MB-DLE 410 350/500	1"	3142665
	60	360	MB-DLE 407 350/500	3/4"	3142392
for MAX GAS E 400	17	360	MB-DLE 415 350/500	1"1/2	3142296
	20	360	MB-DLE 412 350/500	1"1/4	3142295
	37	360	MB-DLE 410 350/500	1"	3142665
	60	360	MB-DLE 407 350/500	3/4"	3142392

● LPG (G31):

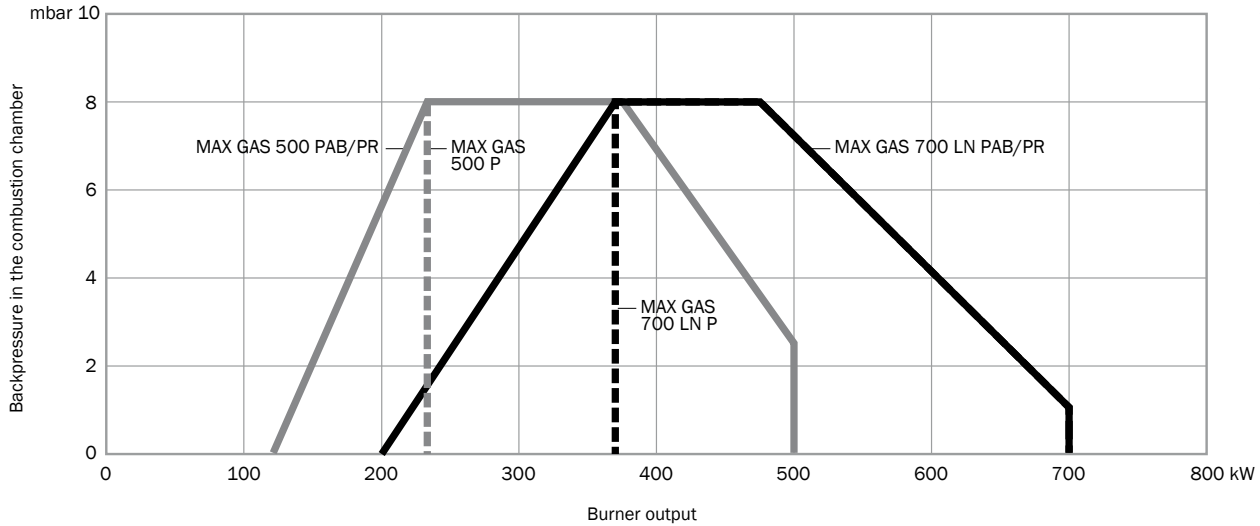
	Pressure (mbar)		Model	Size	Code	Kit LPG
	min	max				
for MAX GAS 350	33	360	MB-DLE 407 350/500	3/4"	3142392	3142431
for MAX GAS E 400	33	360	MB-DLE 407 350/500	3/4"	3142392	3142431

Gas governor and filter are included

- Fuels: natural gas, LPG
- Operation: one stage, two stages, two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)
- Emission class: Low NOx class 3 (≤ 80 mg/kWh) according to EN676



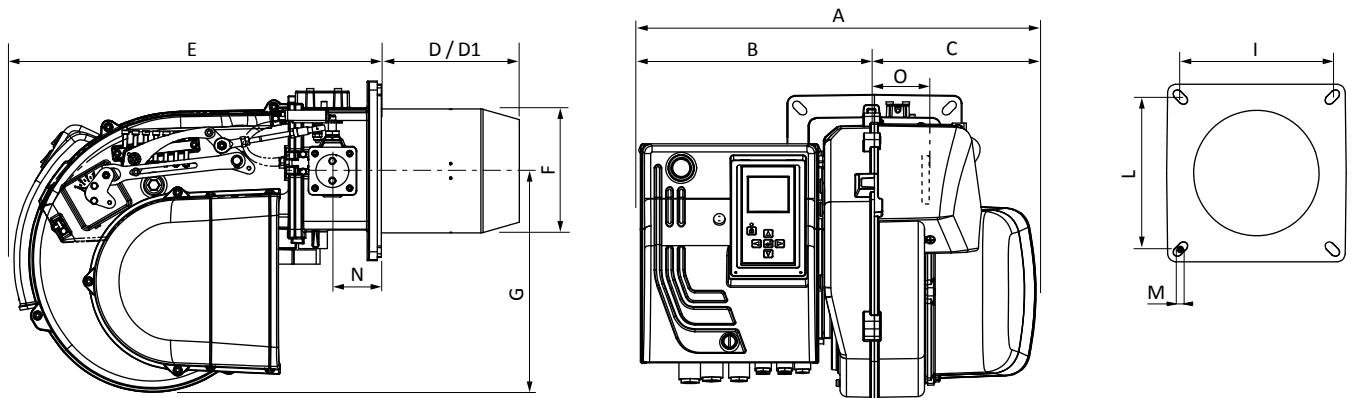
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Power supply	Motor (W)	NOx class	Operation
MAX GAS 500 P	240 - 500	3/230-400V/50Hz	550	Class 3	P
MAX GAS 700 LN P	380 - 700	3/230-400V/50Hz	750	Class 3	P
MAX GAS 500 PAB	120 - 500	3/230-400V/50Hz	550	Class 3	PAB
MAX GAS 700 LN PAB	200 - 700	3/230-400V/50Hz	750	Class 3	PAB
MAX GAS 500 PR	120 - 500	3/230-400V/50Hz	550	Class 3	PR
MAX GAS 700 LN PR	200 - 700	3/230-400V/50Hz	750	Class 3	PR

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long

	A	B	C	D	D1	E	F	G	I	L	M	N	O
MAX GAS 500 P	485	277	208	175	335	466	157	280	185/200	185/200	M8	62	101
MAX GAS 500 PAB/PR	510	302	208	175	335	500	157	280	185/200	185/200	M8	62	101
MAX GAS 700 LN P	485	277	208	250	390	466	190	280	185/200	185/200	M8	62	101
MAX GAS 700 LN PAB/PR	510	302	208	250	390	510	190	280	185/200	185/200	M8	62	101

BURNERS

One stage, Low NOx class 3

Model	Head	Ariston BCU	Siemens BCU
MAX GAS 500 P	TC	3143285	3142289
	TL	3143286	3142290
MAX GAS 700 LN P	TC	3146269	3146271
	TL	3146270	3146272

Two stages, Low NOx class 3

Model	Head	Ariston BCU	Siemens BCU
MAX GAS 500 PAB	TC	3143289	3142291
	TL	3143290	3142292
MAX GAS 700 LN PAB	TC	3146306	3146308
	TL	3146307	3146309

Two stage progressive/modulating mechanical, Low NOx class 3

Model	Head	Siemens BCU
MAX GAS 500 PR	TC	3142293
	TL	3142294
MAX GAS 700 LN PR	TC	3146345
	TL	3146346



MAX GAS 700 P

OTHER AVAILABLE CONFIGURATIONS

60 Hz	High Temperature (HT)	Continuous Ventilation (CV)	Post-purge	110 V
●	●	●	●	●

● Codes available on request

GAS TRAINS

● Natural gas (G20, G25):

	Pressure (mbar)		Model	Size	Code
	min	max			
for MAX GAS 500	20	360	MB-DLE 415 350/500	1"1/2	3142296
	35	360	MB-DLE 412 350/500	1"1/4	3142295
	55	360	MB-DLE 410 350/500	1"	3142665
	90	360	MB-DLE 407 350/500	3/4"	3142392
for MAX GAS LN 700	25	360	MB-DLE 415 350/500	1"1/2	3142296
	40	360	MB-DLE 412 350/500	1"1/4	3142295
	60	360	MB-DLE 410 350/500	1"	3142665
	95	360	MB-DLE 407 350/500	3/4"	3142392

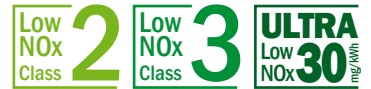
● LPG (G31):

	Pressure (mbar)		Model	Size	Code	Kit LPG
	min	max				
for MAX GAS 500	52	360	MB-DLE 407 350/500	3/4"	3142392	3142431
for MAX GAS LN 700	52	360	MB-DLE 407 350/500	3/4"	3142392	3142431

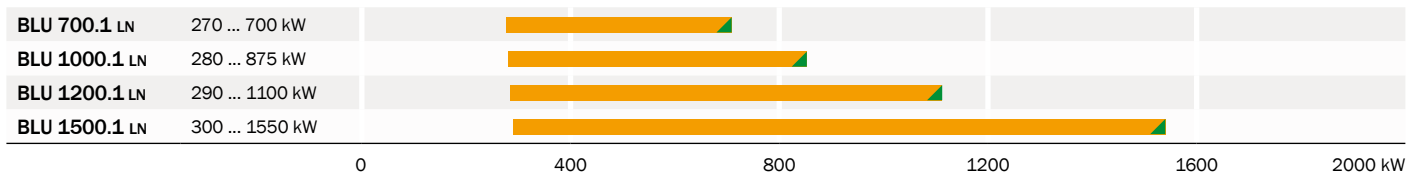
Gas governor and filter are included

MONOBLOCK GAS BURNERS FROM 245 TO 17000 kW

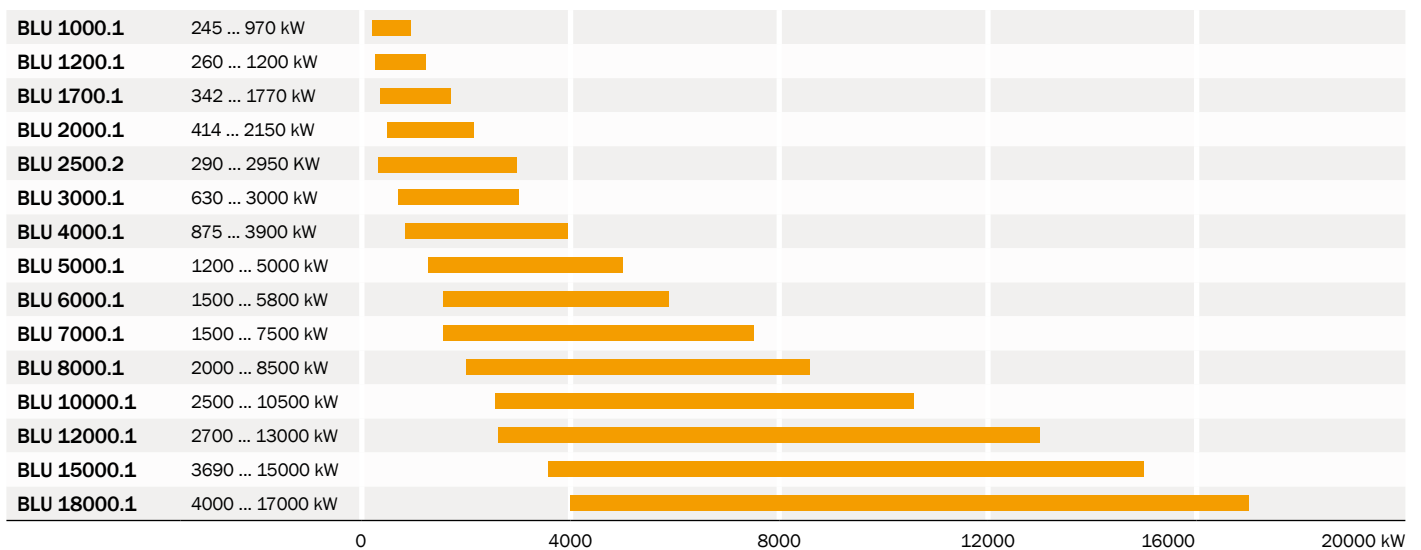
RANGE OVERVIEW



Low NOx Classe 3 (NOx ≤ 80 mg/kWh)



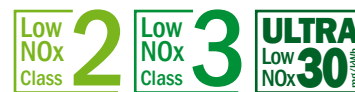
Low NOx Classe 2 (NOx ≤ 120 mg/kWh)



MAIN FEATURES

- Modulating version with PID controller with digital set point display and real time value
- Version with fully electronic Burner Management System available for all models
- Adjustable combustion head for easy regulation and matching with different combustion chambers
- High turndown ratio up to 1:8
- All models are available in Low NOx class 2 or Low NOx class 3 versions
- Versions with FGR System (Flue Gas Recirculation) are available and allow to reach NOx emissions below 30 mg/kWh
- Configured and special versions on request according to feasibility





CONFIGURATIONS

BLU range is available in the following operation modes:

BLU ... PAB	BLU ... PR	BLU ... PRE
Two stages	Two stage progressive/modulating mechanical	Two stage progressive/modulating electronic
BLU 700.1 ... 2000.1	All models	All models

Other available configurations:

- Continuous ventilation versions
- Swirl system for flame geometry customization
- Version with FGR System to reach Ultra Low NOx emissions ($\text{NOx} \leq 30 \text{ mg/kWh}$)
- OEM and other special versions on request according to feasibility

FUEL

- Natural gas (G20, G25 according to EN676)
- LPG

EMISSIONS

Class	NOx mg/kWh
1	170
2	120
3	80

All models are in compliance with EN 676 European Standard

CONFORM TO

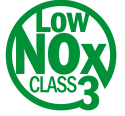
All products are in accordance with the following directives:

- 2006/42/EC Machinery Directive
- 2014/30/UE EMC Directive
- 2014/35/UE Low Voltage Directive
- 2009/142/CEE Gas Appliances Directive

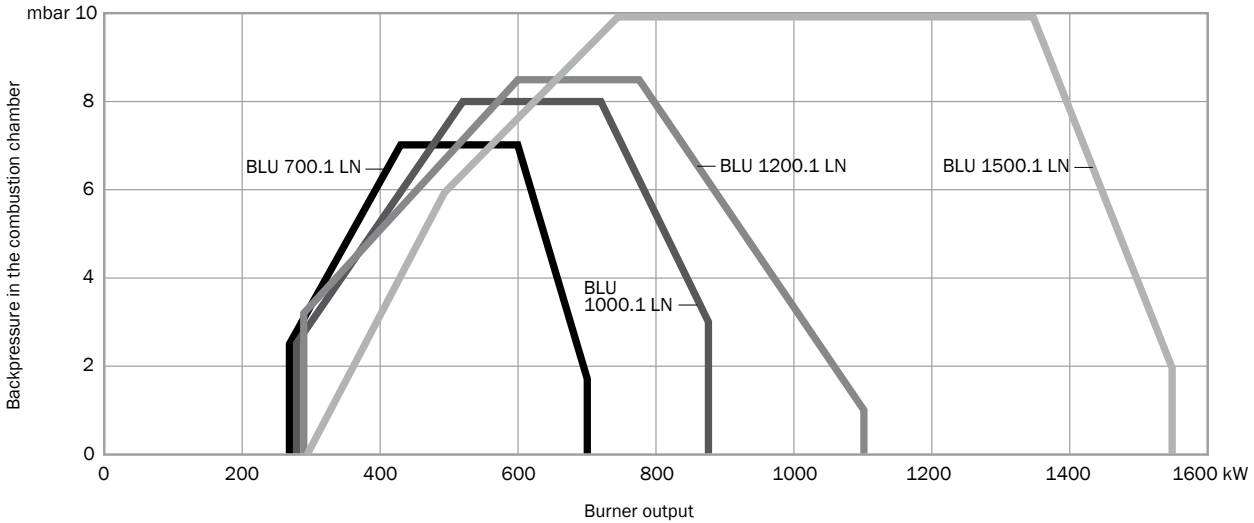


BLU 700.1 LN - 1000.1 LN - 1200.1 LN - 1500.1 LN

- Fuels: natural gas, LPG
- Operation: two stages, two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)
- Emission class: Low NOx class 3 (≤ 80 mg/kWh) according to EN676



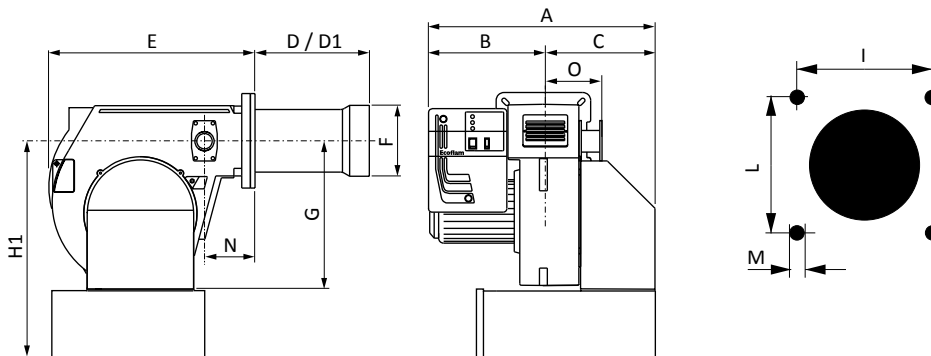
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Power supply	Motor (kW)	NOx class	Operation
BLU 700.1 LN	270 - 700	3/230-400/50Hz	1,1	Class 3	PAB, PR, PRE
BLU 1000.1 LN	280 - 875	3/230-400/50Hz	1,1	Class 3	PAB, PR, PRE
BLU 1200.1 LN	290 - 1100	3/230-400/50Hz	2,2	Class 3	PAB, PR, PRE
BLU 1500.1 LN	300 - 1550	3/230-400/50Hz	3	Class 3	PAB, PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	H1*	I	L	M	N	O
BLU 700.1 LN	650	330	320	175	395	555	170	390	600	190	190	M10	140	165
BLU 1000.1 LN	650	330	320	175	395	555	190	390	600	190	190	M10	140	165
BLU 1200.1 LN	670	350	320	310	460	555	200	390	600	190	190	M10	140	165
BLU 1500.1 LN	712	364	348	340	540	730	215	420	680	240	240	M14	138	187

BURNERS

Two stages, Low NOx class 3

Model	Head	Code
BLU 700.1 LN PAB	TC	3143977
	TL	3143978
BLU 1000.1 LN PAB	TC	3143988
	TL	3143989
BLU 1200.1 LN PAB	TC	3143994
	TL	3143995
BLU 1500.1 LN PAB	TC	3144001
	TL	3144002



BLU 700.1 LN PR

Two stage progressive/modulating mechanical, Low NOx class 3

Model	Head	Code
BLU 700.1 LN PR	TC	3143984
	TL	3143985
BLU 1000.1 LN PR	TC	3143990
	TL	3143991
BLU 1200.1 LN PR	TC	3143996
	TL	3143997
BLU 1500.1 LN PR	TC	3144003
	TL	3144004

Two stage progressive/modulating electronic, Low NOx class 3

Model	Head	Code
BLU 700.1 LN PRE	TC	3145108
	TL	3145109
BLU 1000.1 LN PRE	TC	3145110
	TL	3145111
BLU 1200.1 LN PRE	TC	3145112
	TL	3145113
BLU 1500.1 LN PRE	TC	3145114
	TL	3145115

OTHER AVAILABLE CONFIGURATIONS

60 Hz	LPG	Continuous Ventilation (CV)	Post-purge
●	○	●	●

● Codes available on request

○ Conversion kit from natural gas to LPG: see pag. 116

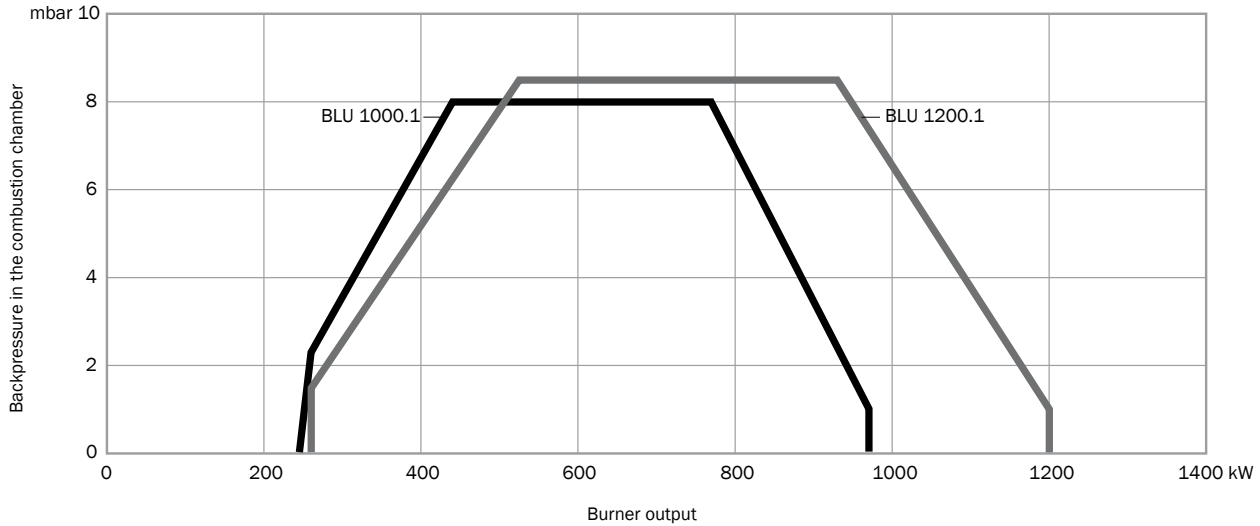
GAS TRAINS

	Pressure (mbar)		Model	Size	Codes for PAB and PR	Connection pipe	Codes for PRE	Connection pipe	Filter
	min	max							
for BLU 700.1 LN	17	360	MB-DLE 420	2"	3141847	-	3145934	-	included
	25	360	MB-DLE 415	1"1/2	3141846	-	3145933	-	included
	75	360	MB-DLE 410	1"	3142022	-	3145931	-	included
for BLU 1000.1 LN	35	360	MB-DLE 420	2"	3141847	-	3145934	-	included
	40	360	MB-DLE 415	1"1/2	3141846	-	3145933	-	included
	75	360	MB-DLE 412	1"1/4	3141845	-	3145932	-	included
for BLU 1200.1 LN	20	500	VDG 20.503	2"	3123860	-	3145934	-	3121384
	35	360	MB-DLE 420	2"	3141847	-	3145933	-	included
	45	360	MB-DLE 415	1"1/2	3141846	-	3145932	-	included
	85	360	MB-DLE 412	1"1/4	3141845	-	3145790	-	included
for BLU 1500.1 LN	30	500	VDG 40.065	DN65	3124110	3141842	3145934	3145798	3124111
	40	500	VDG 20.503	2"	3123860	3142076	3145933	3142076	3121384
	60	360	MB-DLE 420	2"	3141847	3142076	3145793	3142076	included
	70	360	MB-DLE 415	1"1/2	3141846	3142076	3145790	3142076	included

! For minimum inlet pressures higher than 250 mbar, choose the pressure switch GW500 (to be fitted during installation on site) - see page 109
 For gas trains in EN676 Configuration a tightness control device must be included over 1200 kW (already included on PRE burners) - see page 116

- Fuel: natural gas
- Operation: two stages, two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)
- Emission class: Low NOx class 2 (≤ 120 mg/kWh) according to EN676

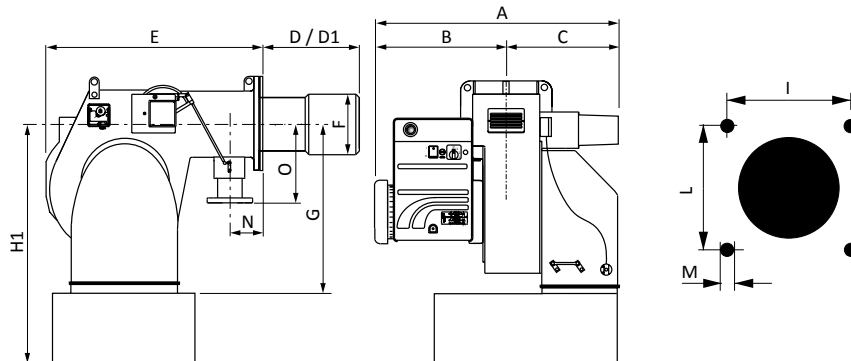
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Power supply	Motor (kW)	NOx class	Operation
BLU 1000.1	245 - 970	3/230-400/50Hz	1,1	Class 2	PAB, PR, PRE
BLU 1200.1	260 - 1200	3/230-400/50Hz	2,2	Class 2	PAB, PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	H1*	I	L	M	N	O
BLU 1000.1 PAB	608	328	280	174	394	543	190	401	601	185/200	185/200	M10	138	168
BLU 1200.1 PAB	608	328	280	309	459	543	200	401	601	185/200	185/200	M10	138	168
BLU 1000.1 PR	657	328	329	174	394	543	190	401	601	185/200	185/200	M10	138	420
BLU 1200.1 PR	657	328	329	309	459	543	200	401	601	185/200	185/200	M10	138	420
BLU 1000.1 PRE	702	422	280	174	394	651	190	401	601	185/200	185/200	M10	138	168
BLU 1200.1 PRE	702	422	280	309	459	651	200	401	601	185/200	185/200	M10	138	168

BURNERS

Two stages

Model	Head	Code
BLU 1000.1 PAB	TC	3144040
	TL	3144041
BLU 1200.1 PAB	TC	3144043
	TL	3144044

Two stage progressive/modulating mechanical

Model	Head	Code
BLU 1000.1 PR	TC	3144045
	TL	3144046
BLU 1200.1 PR	TC	3144047
	TL	3144048

Two stage progressive/modulating electronic

Model	Head	Code
BLU 1000.1 PRE	TC	3145116
	TL	3145117
BLU 1200.1 PRE	TC	3145118
	TL	3145119



BLU 1000.1 PAB

OTHER AVAILABLE CONFIGURATIONS

60 Hz	LPG	Continuous Ventilation (CV)	Post-purge
●	○	●	●

- Codes available on request
- Conversion kit from natural gas to LPG: see pag. 116

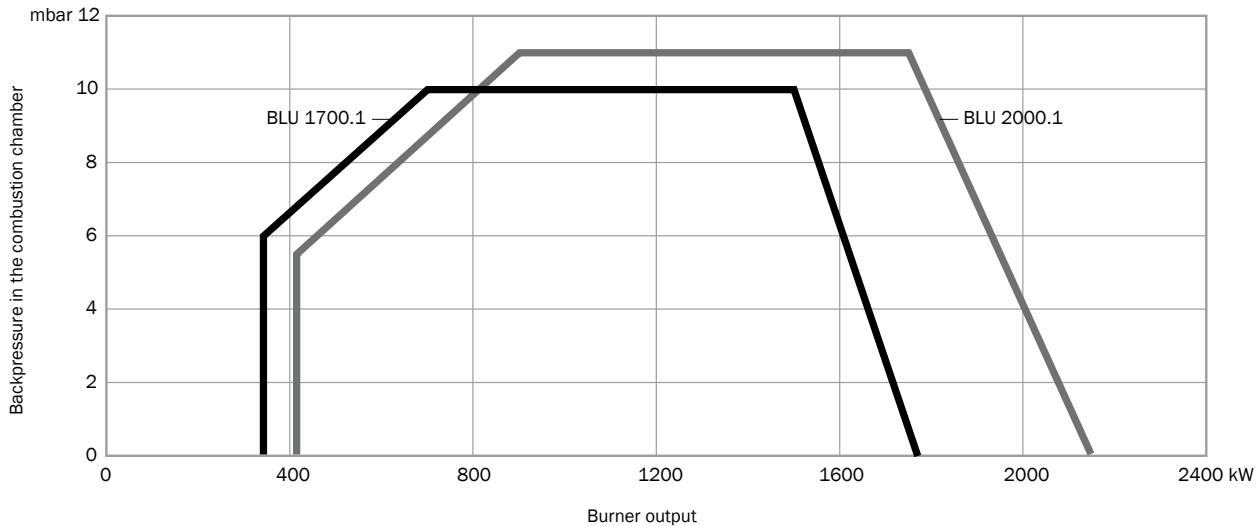
GAS TRAINS

	Pressure (mbar)		Model	Size	Codes for PAB and PR	Codes for PRE versions	Filter
	min	max					
for BLU 1000.1	27	360	MB-DLE 420	2"	3141847	3145934	included
	35	360	MB-DLE 415	1"1/2	3141846	3145933	included
	75	360	MB-DLE 412	1"1/4	3141845	3145932	included
for BLU 1200.1	25	500	VGD 20.503	2"	3123860	3145790	3121384
	40	360	MB-DLE 420	2"	3141847	3145934	included
	50	360	MB-DLE 415	1"1/2	3141846	3145933	included
	100	360	MB-DLE 412	1"1/4	3141845	3145932	included

! For minimum inlet pressures higher than 250 mbar, choose the pressure switch GW500 (to be fitted during installation on site) - see page 109

- Fuels: natural gas, LPG
- Operation: two stages, two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)
- Emission class: Low NOx class 2 (≤ 120 mg/kWh) according to EN676

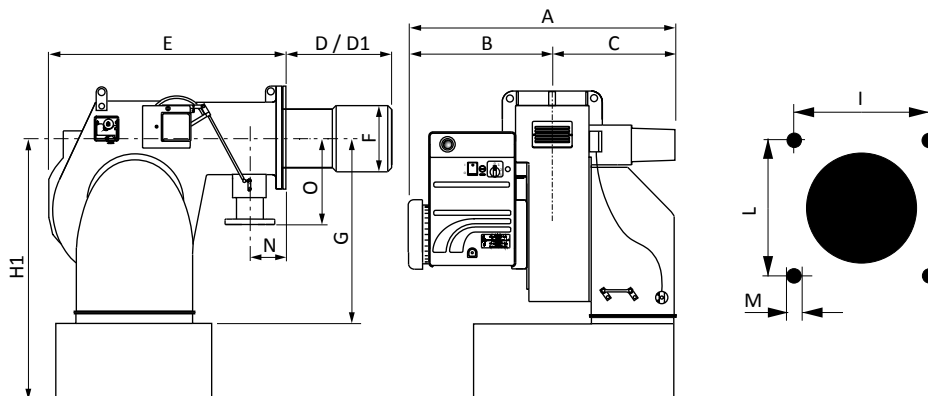
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Power supply	Motor (kW)	NOx class	Operation
BLU 1700.1	342 - 1770	3/230-400/50Hz	3	Class 2	PAB, PR, PRE
BLU 2000.1	414 - 2150	3/400/50Hz	4	Class 2	PAB, PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	H1*	I	L	M	N	O
BLU 1700.1	710	385	325	340	540	660	250	398	681	240	240	M14	125	250
BLU 2000.1	730	405	325	345	545	660	270	398	681	240	240	M14	125	250

BURNERS

Two stages

Model	Head	Code
BLU 1700.1 PAB	TC	3140326
	TL	3140327
BLU 2000.1 PAB	TC	3140330
	TL	3140331



BLU 2000.1 PAB

Two stage progressive/modulating mechanical

Model	Head	Code
BLU 1700.1 PR	TC	3140401
	TL	3140402
BLU 2000.1 PR	TC	3140403
	TL	3140404

Two stage progressive/modulating electronic

Model	Head	Code
BLU 1700.1 PRE	TC	3145120
	TL	3145121
BLU 2000.1 PRE	TC	3145122
	TL	3145123

OTHER AVAILABLE CONFIGURATIONS

60 Hz	LPG	Continuous Ventilation (CV)	Post-purge
●	●	●	●

● Codes available on request

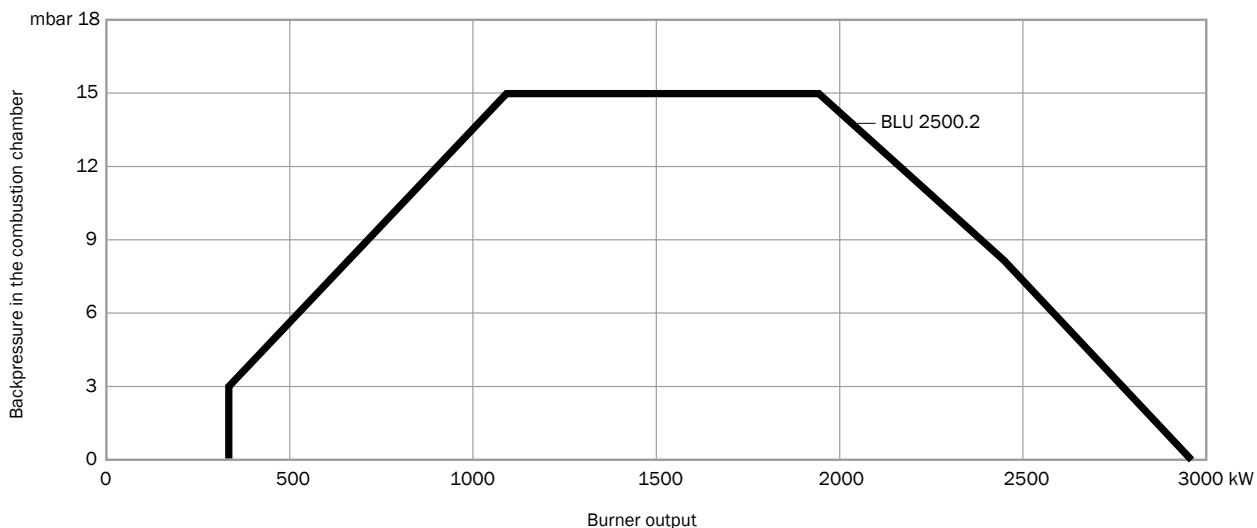
GAS TRAINS

	Pressure (mbar)		Model	Size	Codes for PAB and PR	Connection pipe	Codes for PRE	Connection pipe	Filter
	min	max							
for BLU 1700.1	20	500	VGD 40.080	DN80	3142026	3142069	3145814	3145815	3142088
	45	500	VGD 20.503	2"	3123860	3142074	3145790	3142074	3121384
	60	360	MB-DLE 420	2"	3141847	3142074	3145934	3142074	included
	85	360	MB-DLE 415	1"1/2	3141846	3142074	3145933	3142074	included
for BLU 2000.1	23	500	VGD 40.080	DN80	3142026	3142069	3145814	3145815	3142088
	35	500	VGD 40.065	DN65	3124110	3142197	3145793	3145800	3124111
	60	500	VGD 20.503	2"	3123860	3142074	3145790	3142074	3121384
	75	360	MB-DLE 420	2"	3141847	3142074	3145934	3142074	included
	100	360	MB-DLE 415	1"1/2	3141846	3142074	3145933	3142074	included

! For minimum inlet pressures higher than 250 mbar, choose the pressure switch GW500 (to be fitted during installation on site) - see page 109
 For gas trains in EN676 Configuration a tightness control device must be included over 1200 kW (already included on PRE burners) - see page 116

- Fuels: natural gas, LPG
- Operation: two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)
- Emission class: Low NOx class 2 (≤ 120 mg/kWh) according to EN676

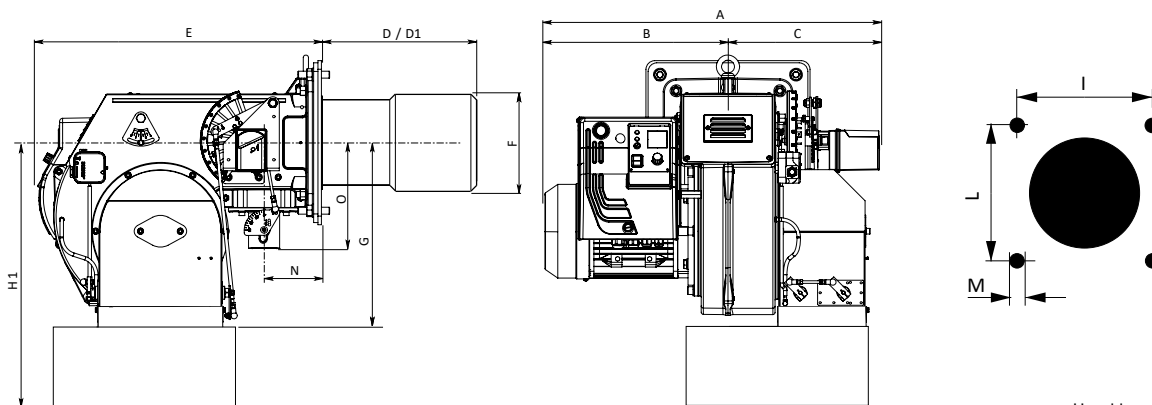
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Power supply	Motor (kW)	NOx class	Operation
BLU 2500.2	290 - 2950	3/230-400/50Hz	4	Class 2	PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	H1*	I	L	M	N	O
BLU 2500.2 PR	775	424	351	380	580	657	300	420	680	315	315	M16	133	245
BLU 2500.2 PRE	753	424	329	380	580	692	300	420	680	315	315	M16	133	245

BURNERS

Two stage progressive/modulating mechanical

Model	Head	Code
BLU 2500.2 PAB	TC	3147093
	TL	3147096

Two stage progressive/modulating electronic

Model	Head	Code
BLU 2500.2 PRE	TC	3147670
	TL	3147671



BLU 2500.2 PR

OTHER AVAILABLE CONFIGURATIONS

60 Hz	Continuous Ventilation (CV)	Post-purge
●	●	●

● Codes available on request

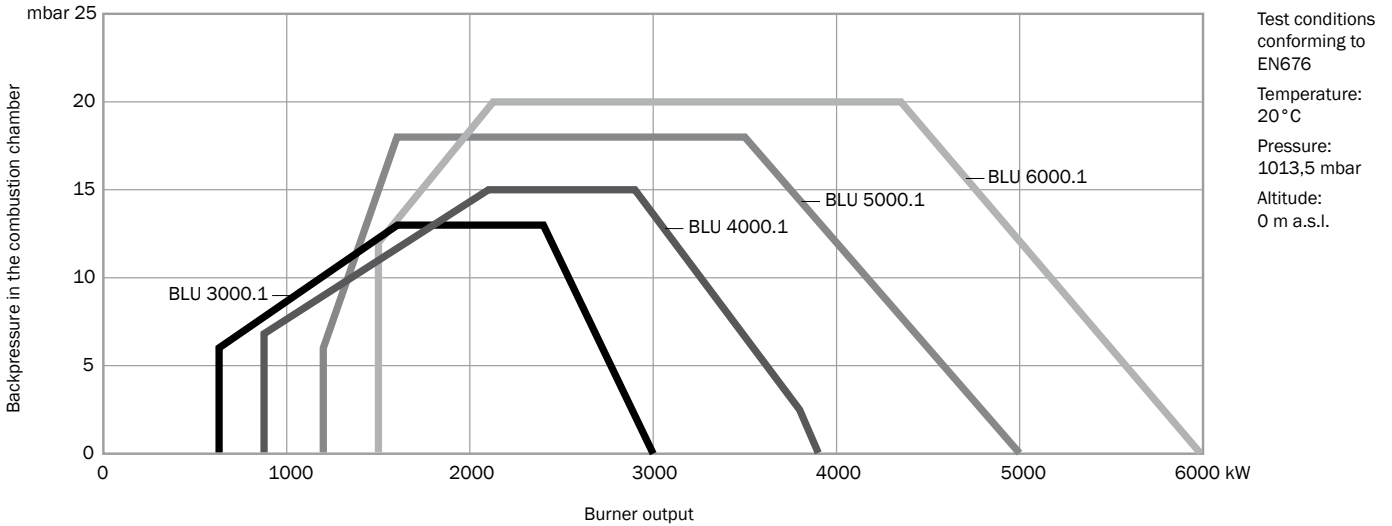
GAS TRAINS

	Pressure (mbar)		Model	Size	Codes for PR	Codes for PRE	Connection pipe	Filter
	min	max						
for BLU 2500.2	35	500	VDG 40.080	DN80	3147132	3147674	3144686 + 3147160	3142088
	55	500	VDG 40.065	DN65	3147131	3147673	3144686 + 3147159	3124111
	100	500	VDG 20.5011	2"	3147130	3147672	3144686	3121384

! For minimum inlet pressures higher than 250 mbar, choose the pressure switch GW500 (to be fitted during installation on site) - see page 109
 For gas trains in EN676 Configuration a tightness control device must be included over 1200 kW (already included on PRE burners) - see page 116

- Fuels: natural gas, LPG
- Operation: two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)
- Emission class: Low NOx class 2 (≤ 120 mg/kWh) according to EN676

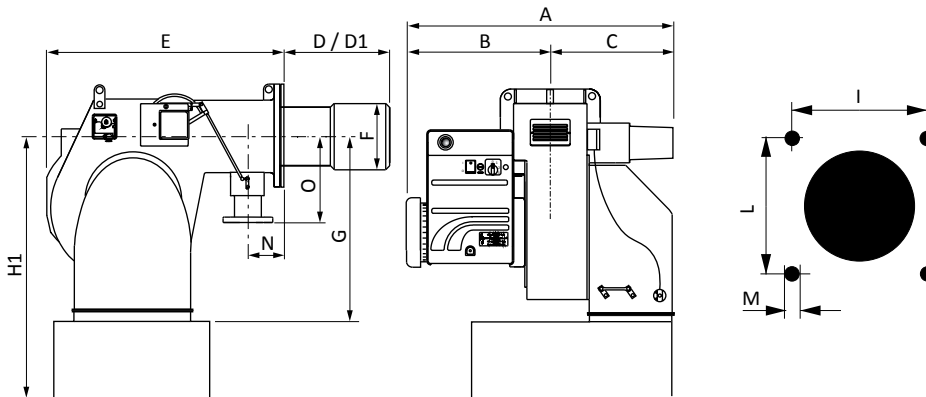
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Power supply	Motor (kW)	NOx class	Operation
BLU 3000.1	630 - 3000	3/400/50Hz	5,5	Class 2	PR, PRE
BLU 4000.1	875 - 3900	3/400/50Hz	7,5	Class 2	PR, PRE
BLU 5000.1	1200 - 5000	3/400/50Hz	11	Class 2	PR, PRE
BLU 6000.1	1500 - 6000	3/400/50Hz	15	Class 2	PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	H1*	I	L	M	N	O
BLU 3000.1	941	448	493	330	530	780	290	471	746	315	315	M16	195	250
BLU 4000.1	941	448	493	365	565	780	320	471	746	315	315	M16	195	250
BLU 5000.1	1019	495	524	375	575	970	320	570	965	330	330	M16	195	250
BLU 6000.1	1069	545	524	375	575	970	360	570	965	330	330	M16	195	250

BURNERS

Two stage progressive/modulating mechanical

Model	Head	Code
BLU 3000.1 PR	TC	3141753
	TL	3141754
BLU 4000.1 PR	TC	3141756
	TL	3141757
BLU 5000.1 PR	TC	3141758
	TL	3141759
BLU 6000.1 PR	TC	3141761
	TL	3141762



BLU 6000.1 PR

Two stage progressive/modulating electronic

Model	Head	Code
BLU 3000.1 PRE	TC	3145124
	TL	3145125
BLU 4000.1 PRE	TC	3145126
	TL	3145127
BLU 5000.1 PRE	TC	3145128
	TL	3145129
BLU 6000.1 PRE	TC	3145130
	TL	3145131

OTHER AVAILABLE CONFIGURATIONS

60 Hz	Continuous Ventilation (CV)	Post-purge
●	●	●

● Codes available on request

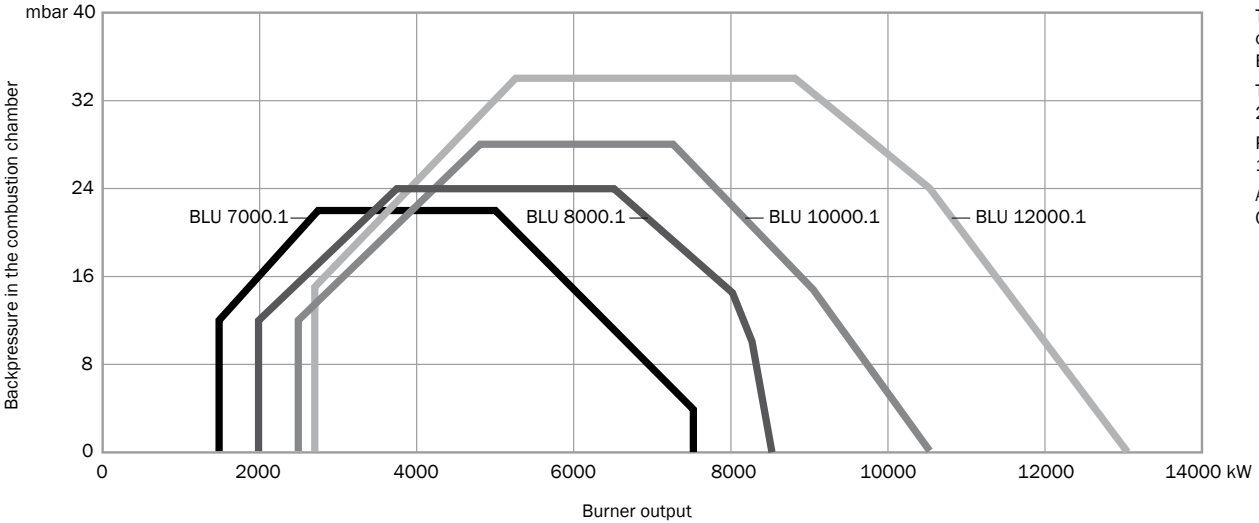
GAS TRAINS

	Pressure (mbar)		Model	Size	Codes for PR versions	Codes for PRE versions	Connection pipe	Filter
	min	max						
for BLU 3000.1	22	500	VDG 40.100	DN100	3141869	3145817	3145820	3142205
	35	500	VDG 40.080	DN80	3142026	3145814	3145815	3142088
	55	500	VDG 40.065	DN65	3124110	3145793	3145800	3124111
	100	500	VDG 20.503	2"	3123860	3145790	3142075	3121384
for BLU 4000.1	30	500	VDG 40.100	DN100	3141869	3145817	3145820	3142205
	50	500	VDG 40.080	DN80	3142026	3145814	3145815	3142088
	90	500	VDG 40.065	DN65	3124110	3145793	3145800	3124111
	170	500	VDG 20.503	2"	3123860	3145790	3142075	3121384
for BLU 5000.1	35	500	VDG 40.125	DN125	3142666	3145823	3145830	3142206
	45	500	VDG 40.100	DN100	3141869	3145817	3145821	3142205
	75	500	VDG 40.080	DN80	3142026	3145814	3145864	3142088
	140	500	VDG 40.065	DN65	3124110	3145793	3145997	3124111
for BLU 6000.1	250	500	VDG 20.503	2"	3123860	3145790	3142075	3121384
	50	500	VDG 40.125	DN125	3142666	3145823	3145830	3142206
	60	500	VDG 40.100	DN100	3141869	3145817	3145821	3142205
	100	500	VDG 40.080	DN80	3142026	3145814	3145864	3142088
	180	500	VDG 40.065	DN65	3124110	3145793	3145997	3124111
	340	500	VDG 20.503	2"	3123860	3145790	3142075	3121384

! Default blank spring: head pressure 0...22 mbar; choose and change spring and damping (to be fitted during installation on site) - see page 109
 For minimum inlet pressures higher than 250 mbar, choose the pressure switch GW500 (to be fitted during installation on site) - see page 109
 For gas trains in EN676 Configuration a tightness control device must be included over 1200 kW (already included on PRE burners) - see page 116

- Fuels: natural gas, LPG
- Operation: two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)
- Emission class: Low NOx class 2 (≤ 120 mg/kWh) according to EN676

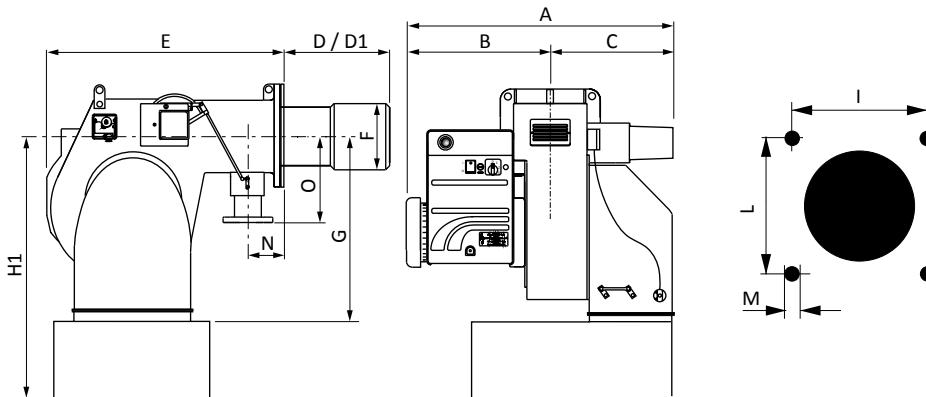
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Power supply	Motor (kW)	NOx class	Operation
BLU 7000.1	1500 - 7500	3/400/50Hz	15	Class 2	PR, PRE
BLU 8000.1	2000 - 8500	3/400/50Hz	18,5	Class 2	PR, PRE
BLU 10000.1	2500 - 10500	3/400/50Hz	22	Class 2	PR, PRE
BLU 12000.1	2700 - 13000	3/400/50Hz	37	Class 2	PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	H1*	I	L	M	N	O
BLU 7000.1	1210	585	625	470	-	1212	420	775	1270	460	460	M20	195	232
BLU 8000.1	1280	655	625	470	-	1212	420	775	1270	460	460	M20	195	232
BLU 10000.1	1310	685	625	470	-	1212	420	775	1270	460	460	M20	195	232
BLU 12000.1	1420	795	625	470	-	1212	450	775	1270	460	460	M20	195	232

BURNERS

Two stage progressive/modulating mechanical

Model	Head	Code
BLU 7000.1 PR	TC	3143747
BLU 8000.1 PR	TC	3143748
BLU 10000.1 PR	TC	3143749
BLU 12000.1 PR	TC	3143750

Two stage progressive/modulating electronic

Model	Head	Code
BLU 7000.1 PRE	TC	3145132
BLU 8000.1 PRE	TC	3145133
BLU 10000.1 PRE	TC	3145134
BLU 12000.1 PRE	TC	3145135



BLU 8000.1 PR

OTHER AVAILABLE CONFIGURATIONS

60 Hz	Continuous Ventilation (CV)	Post-purge
●	●	●

● Codes available on request

GAS TRAINS

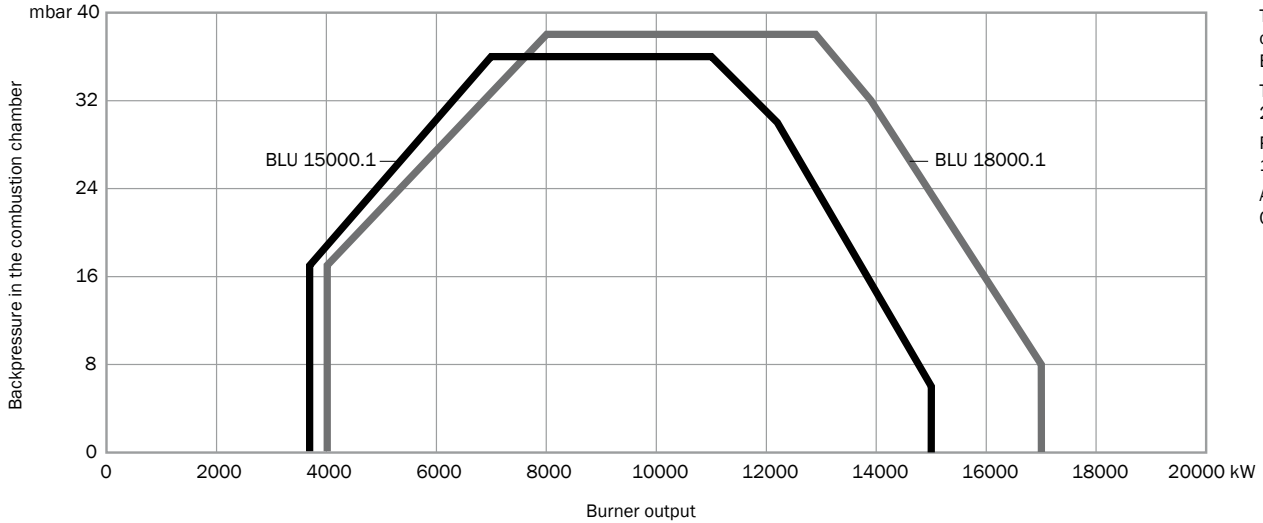
	Pressure (mbar)		Model	Size	Codes for PR versions	Codes for PRE versions	Connection pipe	Filter
	min	max						
for BLU 7000.1	60	500	VGD 40.125	DN125	3142666	3145823	3145829	3142206
	75	500	VGD 40.100	DN100	3141869	3145817	3145822	3142205
	140	500	VGD 40.080	DN80	3142026	3145814	3145816	3142088
	280	500	VGD 40.065	DN65	3124110	3145793	3145801	3124111
for BLU 8000.1	85	500	VGD 40.125	DN125	3142666	3145823	3145829	3142206
	110	500	VGD 40.100	DN100	3141869	3145817	3145822	3142205
	210	500	VGD 40.080	DN80	3142026	3145814	3145816	3142088
	410	500	VGD 40.065	DN65	3124110	3145793	3145801	3124111
for BLU 10000.1	115	500	VGD 40.125	DN125	3142666	3145823	3145829	3142206
	165	500	VGD 40.100	DN100	3141869	3145817	3145822	3142205
	290	500	VGD 40.080	DN80	3142026	3145814	3145816	3142088
	550	500	VGD 40.065	DN65	3124110	3145793	3145801	3124111
for BLU 12000.1	175	500	VGD 40.125	DN125	3142666	3145823	3145829	3142206
	230	500	VGD 40.100	DN100	3141869	3145817	3145822	3142205
	420	500	VGD 40.080	DN80	3142026	3145814	3145816	3142088

*: both codes have to be selected in case of order

! Default blank spring: head pressure 0...22 mbar; choose and change spring and damping (to be fitted during installation on site) - see page 109
 For minimum inlet pressures higher than 250 mbar, choose the pressure switch GW500 (to be fitted during installation on site) - see page 109
 For gas trains in EN676 Configuration a tightness control device must be included over 1200 kW (already included on PRE burners) - see page 116

- Fuels: natural gas, LPG
- Operation: two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)
- Emission class: Low NOx class 2 (≤ 120 mg/kWh) according to EN676

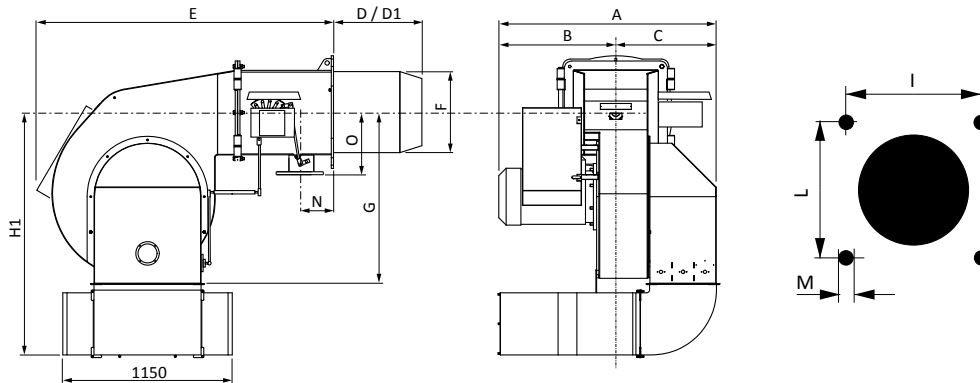
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Power supply	Motor (kW)	NOx class	Operation
BLU 15000.1	3690 - 15000	3/400/50Hz	45	Class 2	PR, PRE
BLU 18000.1	4000 - 17000	3/400/50Hz	55	Class 2	PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	H1*	I	L	M	N	O
BLU 15000.1	1530	810	720	590	-	1860	550	1320	1670	619	619	M20	210	320
BLU 18000.1	1580	860	720	590	-	1860	550	1320	1670	619	619	M20	210	320

BURNERS

Two stage progressive/modulating mechanical

Model	Head	Code
BLU 15000.1 PR	TC	3143751
BLU 18000.1 PR	TC	3143752

Two stage progressive/modulating electronic

Model	Head	Code
BLU 15000.1 PRE	TC	3145136
BLU 18000.1 PRE	TC	3145137



BLU 15000.1 PR

OTHER AVAILABLE CONFIGURATIONS

60 Hz	Continuous Ventilation (CV)	Post-purge
●	●	●

● Codes available on request

GAS TRAINS

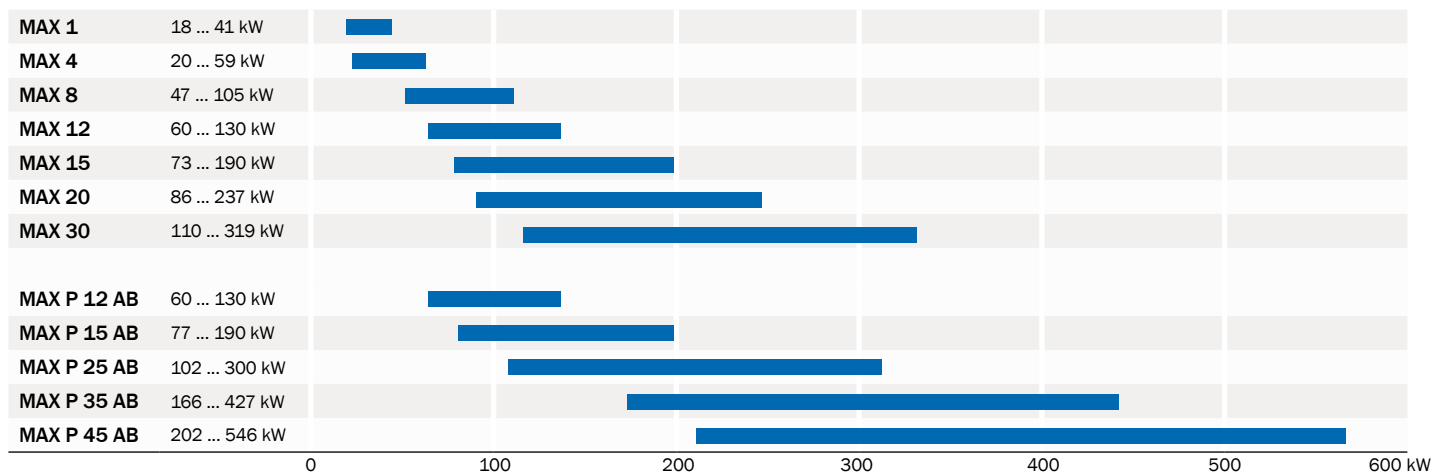
	Pressure (mbar)		Model	Size	Codes for PR versions	Codes for PRE versions	Connection pipe	Filter
	min	max						
for BLU 15000.1	150	500	VGD 40.125	DN125	3142666	3145823	3145829	3142206
	230	500	VGD 40.100	DN100	3141869	3145817	3145822	3142205
	450	500	VGD 40.080	DN80	3142026	3145814	3145816	3142088
for BLU 18000.1	210	500	VGD 40.125	DN125	3142666	3145823	3145829	3142206
	330	500	VGD 40.100	DN100	3141869	3145817	3145822	3142205

*: both codes have to be selected in case of order

! Default blank spring: head pressure 0...22 mbar; choose and change spring and damping (to be fitted during installation on site) - see page 109
 For minimum inlet pressures higher than 250 mbar, choose the pressure switch GW500 (to be fitted during installation on site) - see page 109
 For gas trains in EN676 Configuration a tightness control device must be included over 1200 kW (already included on PRE burners) - see page 116

MONOBLOCK LIGHT OIL BURNERS FROM 18 TO 546 kW

RANGE OVERVIEW



MAIN FEATURES

- High efficiency fan ventilation system (HPV) allowing easy matching with boilers having high combustion chamber back pressure
- Electrical wiring simple to disassemble for easy maintenance
- Combustion head easy to assemble and adjust
- The hinge flange allows easy access to burner head without losing burner settings (MAX 35 and MAX 45)
- Models from MAX 1 to MAX 12 work with 50-60 Hz electrical frequency



CONFIGURATIONS

MAX range is available in the following operation modes:

MAX	MAX P ... AB	MAX P ... AB HS
One stage	Two stages	Two stages with hydraulic jack
All models	MAX P 35 AB - P 45 AB	MAX P 12 AB HS ... P 45 AB HS

Other available configurations:

- Continuous ventilation versions
- High temperature versions
- Versions with specific pump for light oil with maximum viscosity 5°E at 20°C
- OEM and other special versions on request according to feasibility

FUEL

- Light oil (viscosity from 1,6 cSt to 6 cSt at 20°C)

EMISSIONS

Class	NOx mg/kWh
1	250
2	185
3	120

All models are in compliance with EN 267 European Standard

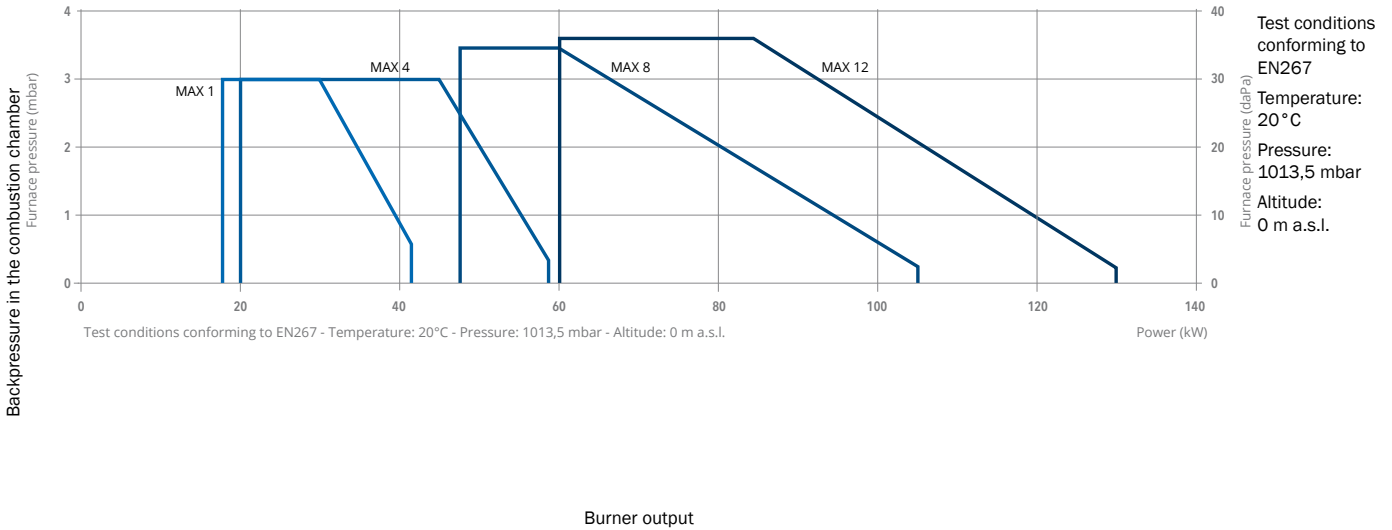
CONFORM TO

- All products are in accordance with the following directives:
- 2006/42/EC Machinery Directive
 - 2014/30/UE EMC Directive
 - 2014/35/UE Low Voltage Directive



- Fuel: light oil (viscosity from 1,6 cSt to 6 cSt at 20 °C)
- Operation: one stage
- Emission class: Low NOx class 2 (≤ 185 mg/kWh) according to EN267

WORKING DIAGRAM



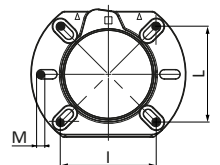
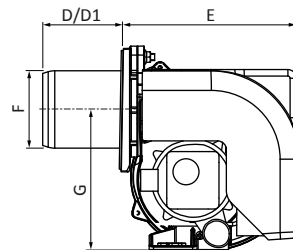
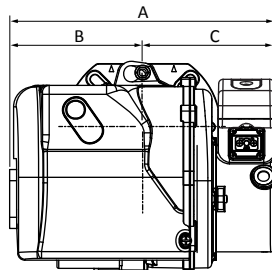
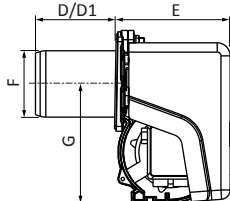
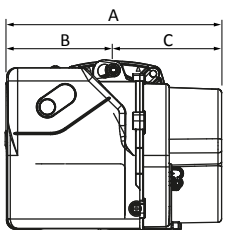
TECHNICAL DATA

	Burner output (kW)	Flow rate (kg/h)	Power supply	Motor (W)	NOx class	Operation
MAX 1	18 - 41	1,5 - 3,5	1/230V/50-60Hz	75	Class 2	1 stage
MAX 4	20 - 59	1,7 - 5	1/230V/50-60Hz	75	Class 2	1 stage
MAX 8	47 - 105	4 - 8,9	1/230V/50-60Hz	100	Class 2	1 stage
MAX 12	60 - 130	5,1 - 11	1/230V/50-60Hz	130	Class 2	1 stage

OVERALL DIMENSIONS

MAX 1

MAX 4 - 8 - 12



Dimensions in mm
 Head length: D short / D1 long

	A	B	C	D	D1	E	F	G	I	L	M
MAX 1	288	143	145	80	140	153	89	160	92/107	92/107	M8
MAX 4	297	149	148	90	145	204	89	160	90/107	90/107	M8
MAX 8	303	155	148	90	145	204	89	160	100/120	100/120	M8
MAX 12	317	169	148	100	155	204	98	160	100/120	100/120	M8

BURNERS

One stage

Model	Head	Ariston BCU	Siemens BCU
MAX 1	TC	3142709	3120979
	TL	3142710	3120980
MAX 4	TC	3142714	3120981
	TL	3142715	3120982
MAX 8	TC	3142716	3120983
	TL	3142717	3120984
MAX 12	TC	3142718	3120985
	TL	3142719	3120986



MAX 4

One stage with pre-heater

Model	Head	Ariston BCU
MAX 1 R	TC	3142711
	TL	3142712
MAX 4 R	TC	3142720
	TL	3142721

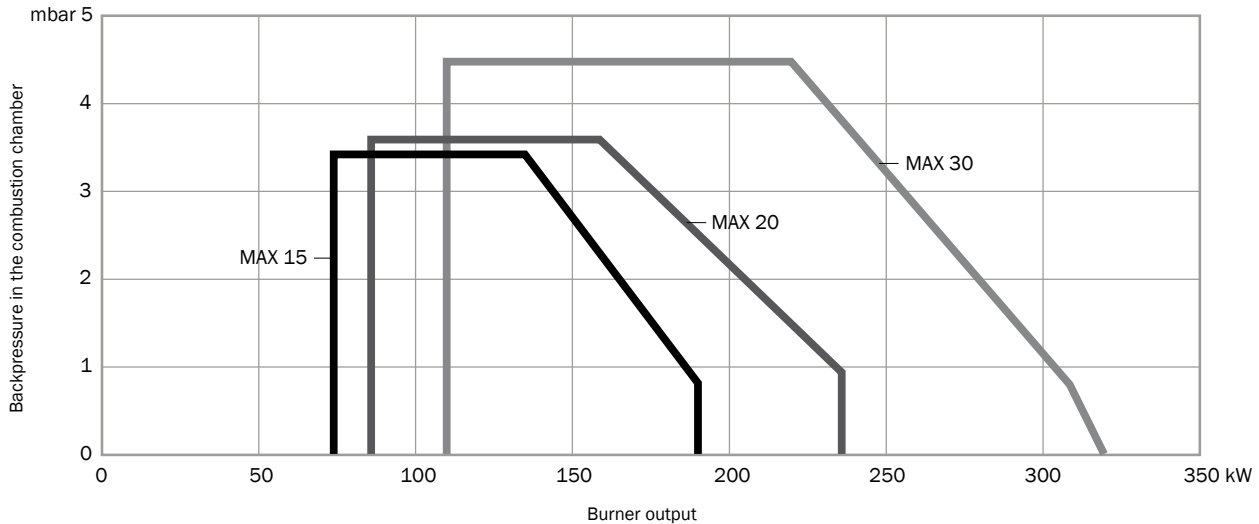
OTHER AVAILABLE CONFIGURATIONS

60 Hz	High Temperature (HT)	Continuous Ventilation (CV)	Post-purge	110 V
●	●	●	●	●

● Codes available on request

- Fuel: light oil (viscosity from 1,6 cSt to 6 cSt at 20 °C)
- Operation: one stage
- Emission class: Low NOx class 2 (≤ 185 mg/kWh) according to EN267

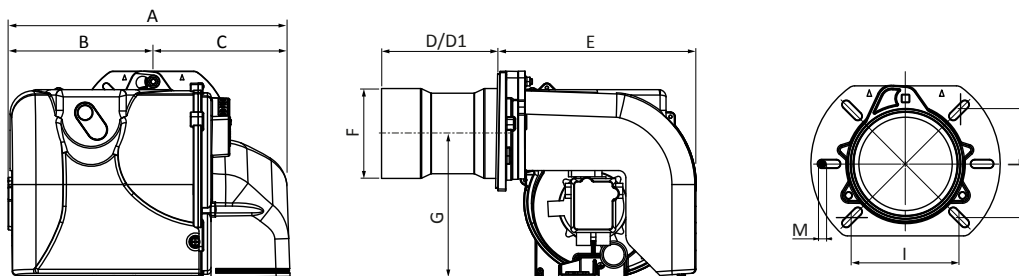
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Flow rate (kg/h)	Power supply	Motor (W)	NOx class	Operation
MAX 15	73 - 190	6,2 - 16	1/230V/50Hz	130	Class 2	1 stage
MAX 20	86 - 237	7,3 - 20	1/230V/50Hz	200	Class 2	1 stage
MAX 30	110 - 319	9,3 - 27	1/230V/50Hz	200	Class 2	1 stage

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long

	A	B	C	D	D1	E	F	G	I	L	M
MAX 15	392	202	190	160	260	276	107	201	120/131	120/131	M8
MAX 20	392	202	190	160	260	276	125	201	120/131	120/131	M8
MAX 30	392	202	190	160	260	276	125	201	120/131	120/131	M8

BURNERS

One stage

Model	Head	Ariston BCU	Siemens BCU
MAX 15	TC	3142729	3120987
	TL	3142730	3120988
MAX 20	TC	3142731	3120989
	TL	3142732	3120990
MAX 30	TC	3142733	3120991
	TL	3142734	3120992



MAX 15

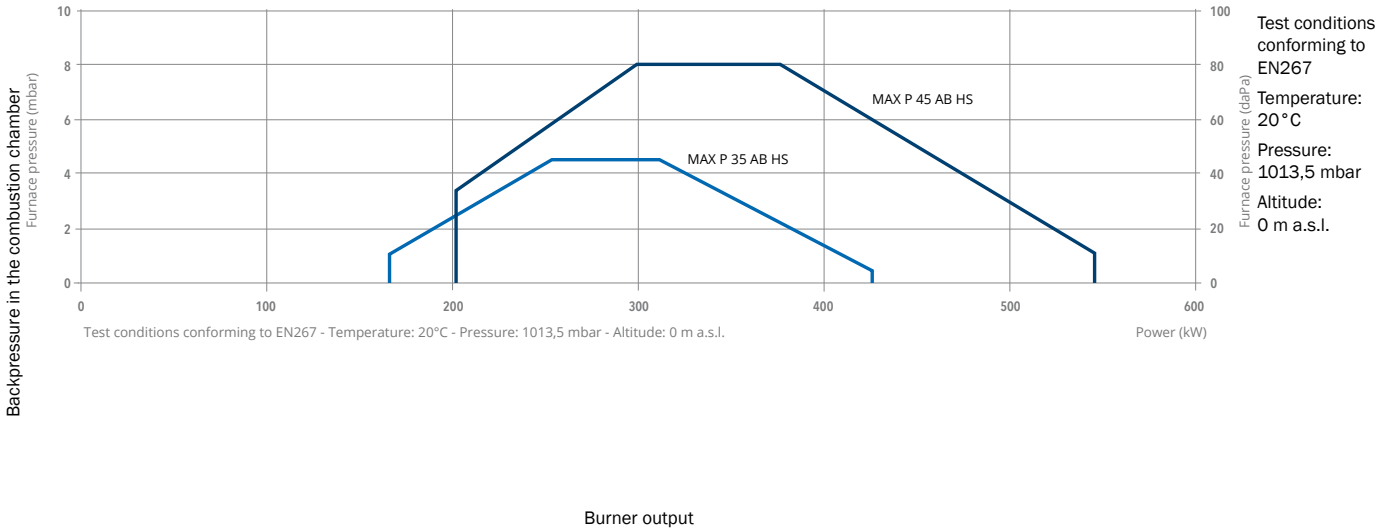
OTHER AVAILABLE CONFIGURATIONS

60 Hz	High Temperature (HT)	Continuous Ventilation (CV)	Post-purge	110 V
●	●	●	●	●

● Codes available on request

- Fuel: light oil (viscosity from 1,6 cSt to 6 cSt at 20 °C)
- Operation: two stages with hydraulic jack
- Emission class: Low NOx class 2 (≤ 185 mg/kWh) according to EN267

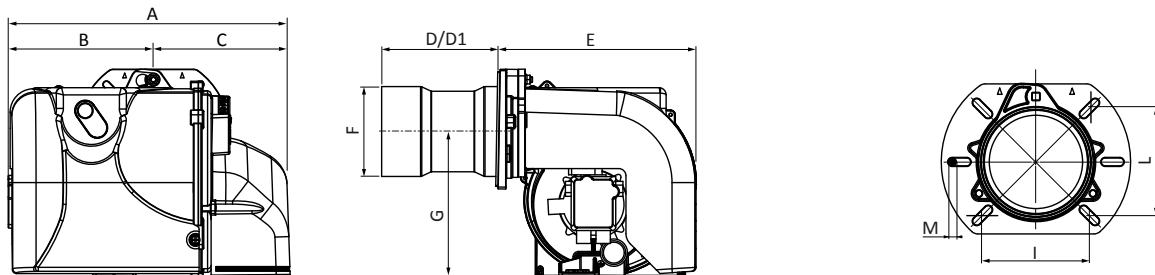
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Flow rate (kg/h)	Power supply	Motor (W)	NOx class	Operation
MAX P 12 AB HS	60 - 130	5,1 - 11	1/230V/50-60Hz	130	Class 2	P AB HS
MAX P 15 AB HS	77 - 190	6,5 - 16	1/230V/50-60Hz	130	Class 2	P AB HS
MAX P 25 AB HS	102 - 300	8,6 - 25,4	1/230V/50-60Hz	200	Class 2	P AB HS

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long

	A	B	C	D	D1	E	F	G	I	L	M
MAX P 12 AB HS	308	169	139	100	155	204	98	160	100/120	100/120	M8
MAX P 15 AB HS	392	202	190	160	260	276	107	201	120/131	120/131	M8
MAX P 25 AB HS	392	202	190	160	260	276	125	201	120/131	120/131	M8

BURNERS

Two stages with hydraulic jack

Model	Head	Code
MAX P 12 AB HS	TC	3146905
	TL	3146906
MAX P 15 AB HS	TC	3146907
	TL	3146908
MAX P 25 AB HS	TC	3146909
	TL	3146910



MAX P 12 AB HS

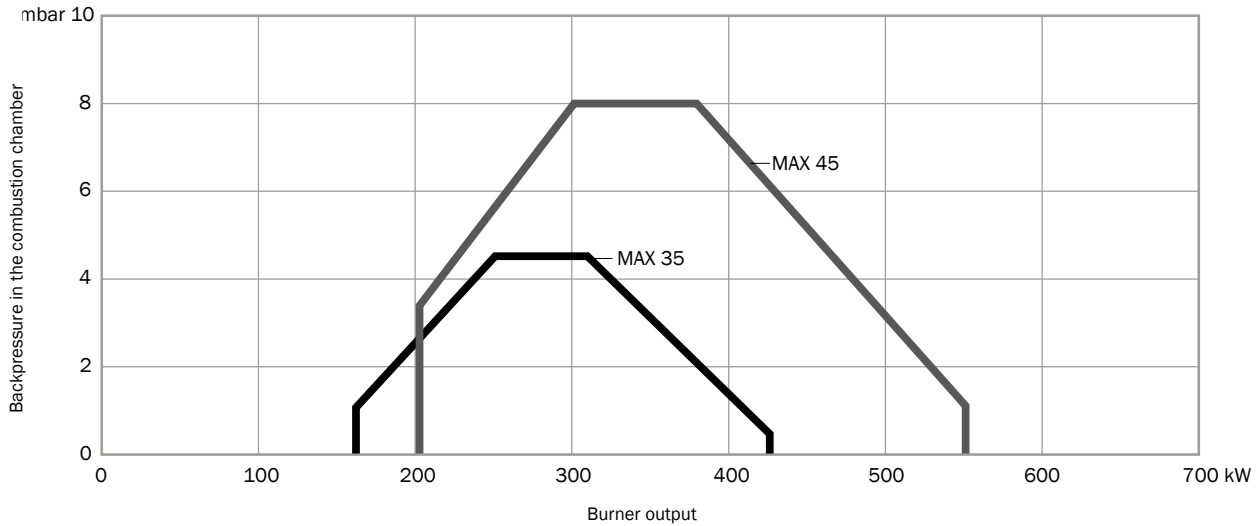
OTHER AVAILABLE CONFIGURATIONS

60 Hz	High Temperature (HT)	Continuous Ventilation (CV)	Post-purge	110 V
●	●	●	●	●

● Codes available on request

- Fuel: light oil (viscosity from 1,6 cSt to 6 cSt at 20 °C)
- Operation: two stages and two stages with hydraulic jack
- Emission class: Low NOx class 2 (≤ 185 mg/kWh) according to EN267

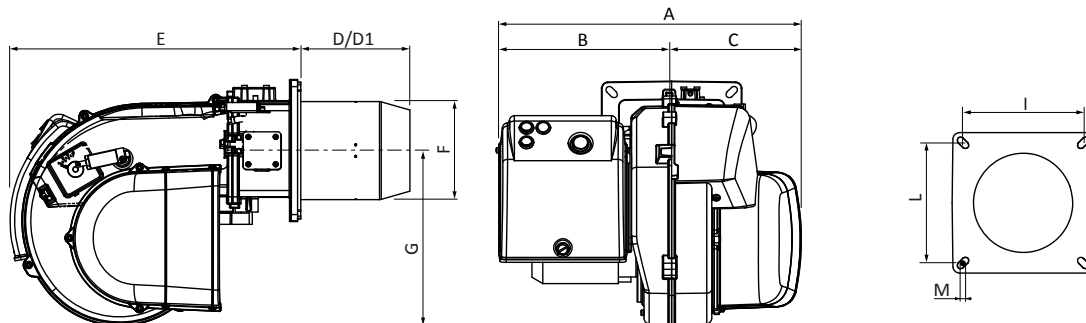
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Flow rate (kg/h)	Power supply	Motor (W)	NOx class	Operation
MAX P 35 AB	166 - 427	14 - 36	1/230V/50Hz	370	Class 2	AB
MAX P 45 AB	202 - 546	17 - 46	3/230-400V/50Hz	550	Class 2	AB
MAX P 35 AB HS	166 - 427	14 - 36	1/230V/50Hz	370	Class 2	AB HS
MAX P 45 AB HS	202 - 546	17 - 46	3/230-400V/50Hz	550	Class 2	AB HS

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long

	A	B	C	D	D1	E	F	G	I	L	M
MAX P 35	501	294	207	175	365	466	160	280	185/200	185/200	M8
MAX P 45	501	294	207	175	365	466	160	280	185/200	185/200	M8

BURNERS

Two stages

Model	Head	Code
MAX P 35 AB	TC	3142943
	TL	3142942
MAX P 45 AB	TC	3142945
	TL	3142944

Two stages with hydraulic jack

Model	Head	Code
MAX P 35 AB HS	TC	3142301
	TL	3142302
MAX P 45 AB HS	TC	3142305
	TL	3142306



MAX P 35 AB HS

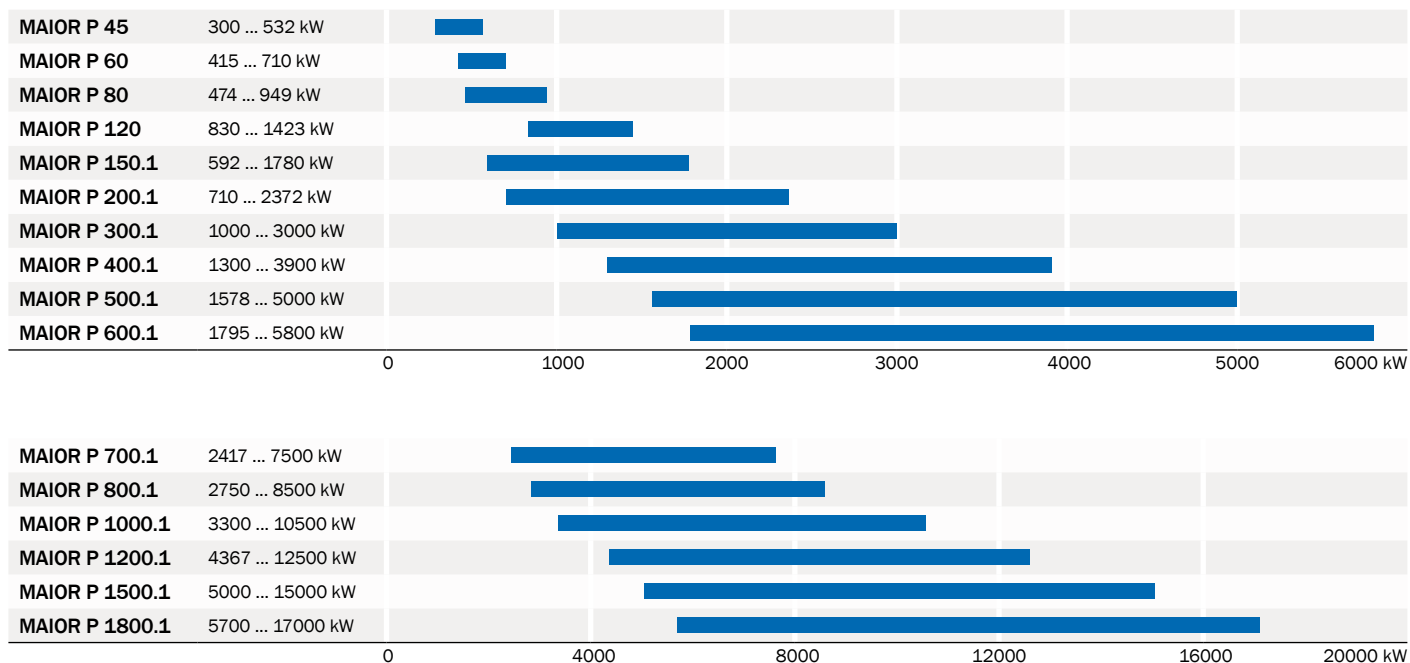
OTHER AVAILABLE CONFIGURATIONS

60 Hz	High Temperature (HT)	Continuous Ventilation (CV)	Post-purge	110 V
●	●	●	●	●

● Codes available on request

MONOBLOCK LIGHT OIL BURNERS FROM 300 TO 17000 kW

RANGE OVERVIEW



MAIN FEATURES

- Two stage version with hydraulic jack or electric servomotor up to MAIOR P 400.1
- Progressive mechanical version with flow return nozzle
- Modulating version with PID system controller with digital set point display and real time value
- Version with fully electronic Burner Management System available for all models
- Version with sliding bars standard for models from MAIOR 700.1 to MAIOR 1200.1
- Adjustable combustion head for easy regulation and matching with different combustion chambers

MAIOR P60 AB HS



MAIOR P120 AB HS



MAIOR P200.1 AB



CONFIGURATIONS

MAIOR range is available in the following operation modes:

MAIOR P ... AB	MAIOR P ... AB HS	MAIOR P ... PR	MAIOR P ... PRE
Two stages	Two stages with hydraulic jack	Two stages progressive/modulating mechanical	Two stages progressive/modulating electronic
MAIOR P 60 AB ... P 400.1 AB	MAIOR P 60 ... P 400.1 AB HS	MAIOR P 45 ... P 1800.1 PR	MAIOR P 45 ... P 1800.1 PRE

Other available configurations:

- Continuous ventilation versions
- Versions with specific pump for light oil with maximum viscosity 5° E at 20°C
- OEM and other special versions on request according to feasibility

FUEL

- Light oil (viscosity from 1,6 cSt to 6 cSt at 20°C)

EMISSIONS

Class	NOx mg/kWh
1	250
2	185
3	120

All models are in compliance with EN 267 European Standard

CONFORM TO

- All products are in accordance with the following directives:
- 2006/42/EC Machinery Directive
 - 2014/30/UE EMC Directive
 - 2014/35/UE Low Voltage Directive

MAIOR 800.1 PR

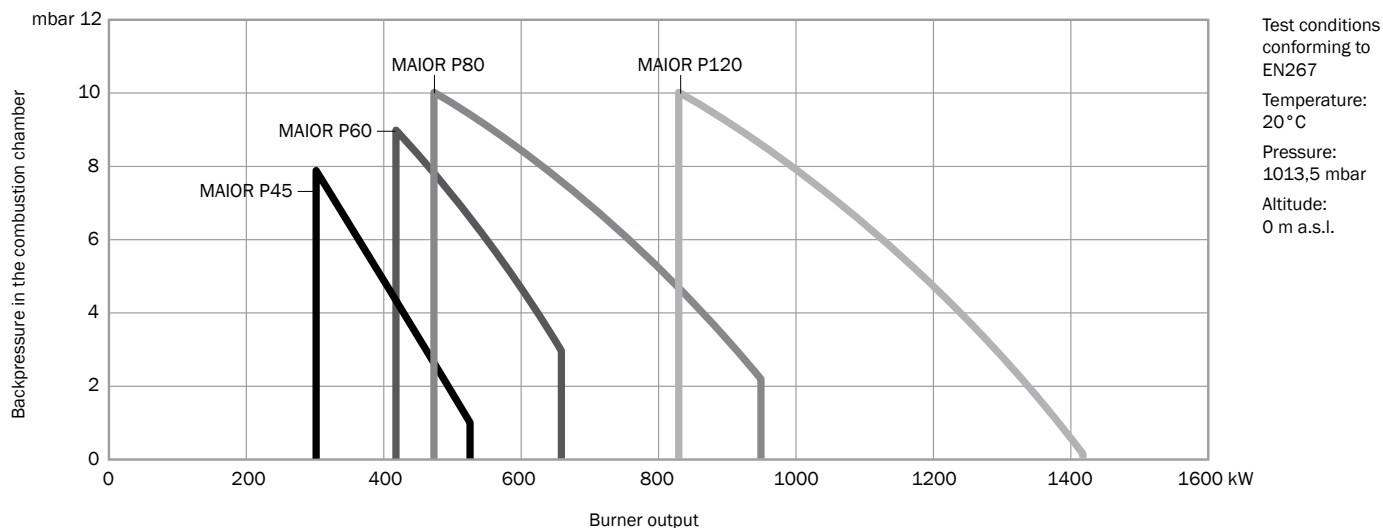


MAIOR P1500.1 PR



- Fuel: light oil (viscosity from 1,6 cSt to 6 cSt at 20 °C)
- Operation: two stages, two stages with hydraulic jack, two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)
- Emission class: class 1 (≤ 250 mg/kWh) according to EN267

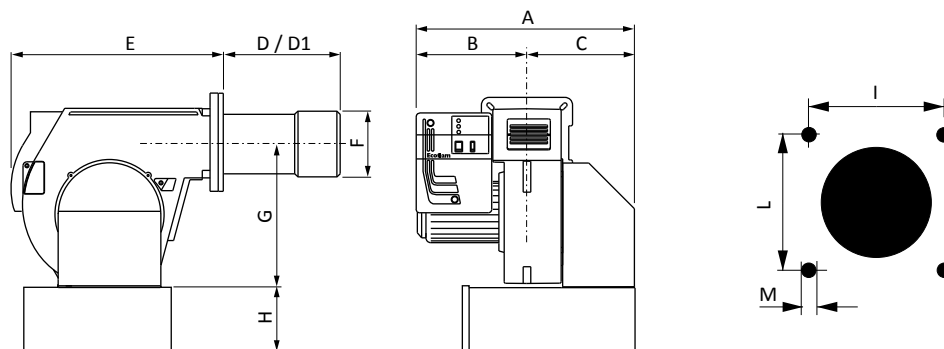
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Flow rate (kg/h)	Power supply	Motor (kW)	NOx class	Operation
MAIOR P 45	296 - 532	25 - 45	3/230-400V/50Hz	0,55	Class 1	PR, PRE
MAIOR P 60	415 - 710	35 - 60	3/230-400V/50Hz	1,1	Class 1	AB, AB HS, PR, PRE
MAIOR P 80	474 - 949	40 - 80	3/230-400V/50Hz	1,1	Class 1	AB, AB HS, PR, PRE
MAIOR P 120	830 - 1423	70 - 120	3/230-400V/50Hz	2,2	Class 1	AB, AB HS, PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	H*	I	L	M
MAIOR P 45	590	330	260	200	390	555	160	390	225	190	190	M10
MAIOR P 60	590	330	260	235	395	555	180	390	225	190	190	M10
MAIOR P 80	590	330	260	235	395	555	180	390	225	190	190	M10
MAIOR P 120	690	350	340	225	445	555	190	390	225	190	190	M10

BURNERS

Two stages

Model	Head	Code
MAIOR P 60 AB	TC	3121016
	TL	3122265
MAIOR P 80 AB	TC	3121018
	TL	3122266
MAIOR P 120 AB	TC	3121020
	TL	3122269



MAIOR P 60 AB HS

Two stages with hydraulic jack

Model	Head	Code
MAIOR P 60 AB HS	TC	3140151
	TL	3140152
MAIOR P 80 AB HS	TC	3121063
	TL	3121064
MAIOR P 120 AB HS	TC	3121065
	TL	3121066

Two stage progressive/modulating mechanical

Model	Head	Code
MAIOR P 45 PR	TL	3145193
MAIOR P 60 PR	TL	3145194
MAIOR P 80 PR	TL	3145195
MAIOR P 120 PR	TL	3145196

Two stage progressive/modulating electronic

Model	Head	Code
MAIOR P 45 PRE	TL	on request
MAIOR P 60 PRE	TL	on request
MAIOR P 80 PRE	TL	on request
MAIOR P 120 PRE	TL	on request

! Nozzle not included in the code of the burner - see page 118

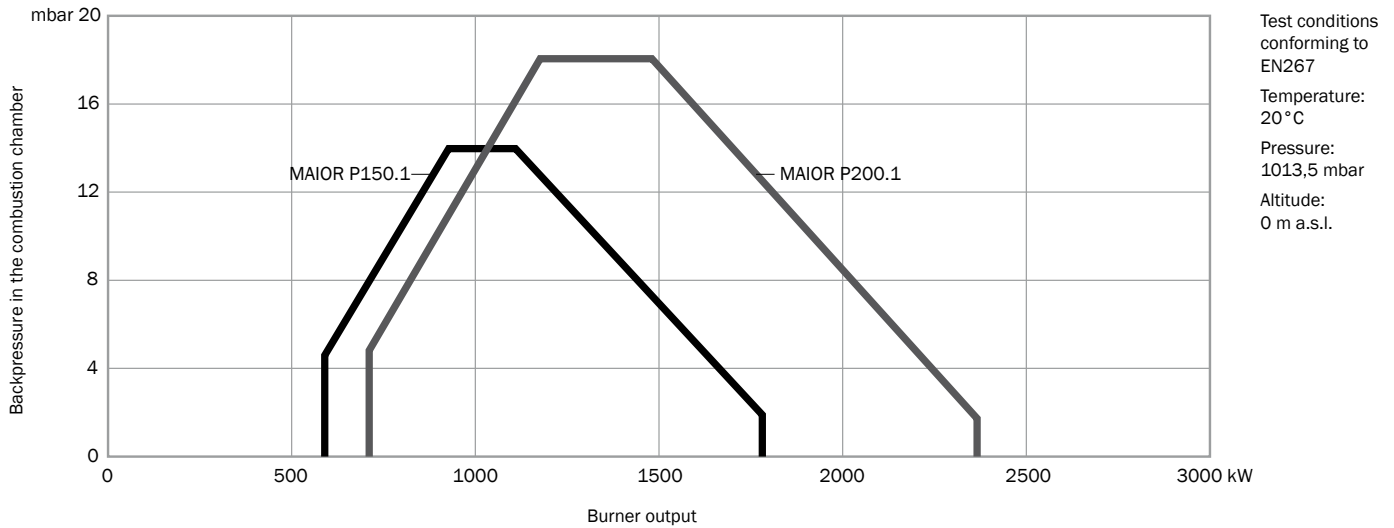
OTHER AVAILABLE CONFIGURATIONS

60 Hz	Continuous Ventilation (CV)	Post-purge
●	●	●

● Codes available on request

- Fuel: light oil (viscosity from 1,6 cSt to 6 cSt at 20 °C)
- Operation: two stages, two stages with hydraulic jack, two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)
- Emission class: class 1 (≤ 250 mg/kWh) according to EN267

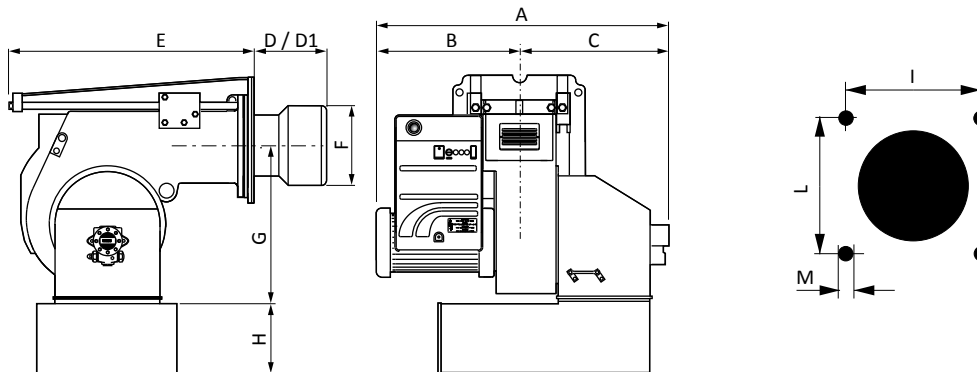
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Flow rate (kg/h)	Power supply	Motor (kW)	NOx class	Operation
MAIOR P 150.1	592 - 1780	50 - 150	3/230-400V/50Hz	3	Class 1	AB, AB HS, PR, PRE
MAIOR P 200.1	710 - 2372	60 - 200	3/230-400V/50Hz	4	Class 1	AB, AB HS, PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	H*	I	L	M
MAIOR P 150.1	775	385	390	285	485	660	250	398	283	240	240	M14
MAIOR P 200.1	795	405	390	285	485	660	270	398	283	240	240	M14

BURNERS

Two stages

Model	Head	Code
MAIOR P 150.1 AB	TC	3121022
	TL	3121021
MAIOR P 200.1 AB	TC	3121024
	TL	3121023

Two stages with hydraulic jack

Model	Head	Code
MAIOR P 150.1 AB HS	TC	3121067
	TL	3121068
MAIOR P 200.1 AB HS	TC	3121069
	TL	3121070

Two stage progressive/modulating mechanical

Model	Head	Code
MAIOR P 150.1 PR	TC	on request
	TL	3145197
MAIOR P 200.1 PR	TC	on request
	TL	3145198

Two stage progressive/modulating electronic

Model	Head	Code
MAIOR P 150.1 PRE	TC	on request
	TL	on request
MAIOR P 200.1 PRE	TC	on request
	TL	on request

! Nozzle not included in the code of the burner - see page 118



MAIOR P 200.1 AB

OTHER AVAILABLE CONFIGURATIONS

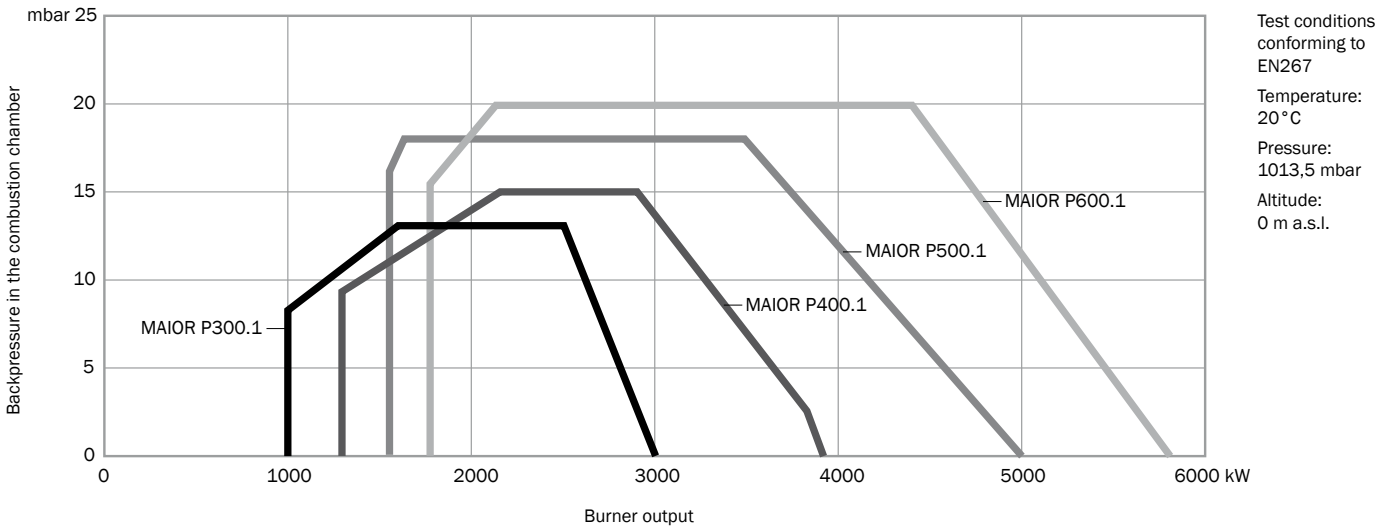
60 Hz	Continuous Ventilation (CV)	Post-purge
●	●	●

● Codes available on request

Range | Models
MAIOR | P 300.1 - P 400.1 - P 500.1 - P 600.1

- Fuel: light oil (viscosity from 1,6 cSt to 6 cSt at 20 °C)
- Operation: two stages, two stages with hydraulic jack, two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)
- Emission class: class 1 (≤ 250 mg/kWh) according to EN267

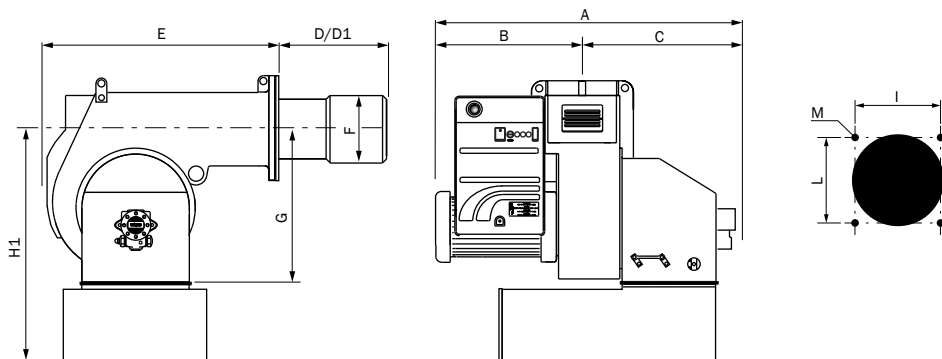
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Flow rate (kg/h)	Power supply	Motor (kW)	NOx class	Operation
MAIOR P 300.1	1000 - 3000	85 - 250	3/400V/50Hz	7,5	Class 1	AB, PR, PRE
MAIOR P 400.1	1300 - 3900	110 - 330	3/400V/50Hz	9	Class 1	AB, PR, PRE
MAIOR P 500.1	1578 - 5000	134 - 422	3/400V/50Hz	11	Class 1	PR, PRE
MAIOR P 600.1	1795 - 5800	153 - 490	3/400V/50Hz	15	Class 1	PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	H1*	I	L	M
MAIOR P 300.1	1055	502	553	330	530	810	290	471	746	315	315	M16
MAIOR P 400.1	1100	547	553	345	545	810	320	471	746	315	315	M16
MAIOR P 500.1	1180	535	645	355	555	970	320	570	965	330	330	M16
MAIOR P 600.1	1190	545	645	355	555	970	320	570	965	330	330	M16

BURNERS

Two stages

Model	Head	Code
MAIOR P 300.1 AB	TC	3143731
	TL	3143742
MAIOR P 400.1 AB Z3	TC	3143733
	TL	3143732

Two stages with hydraulic jack

Model	Head	Code
MAIOR P 300.1 AB HS	TC	3143743
	TL	3143744
MAIOR P 400.1 AB HS Z3	TC	3143745
	TL	3143746



MAIOR P 500.1 PR

Two stage progressive/modulating mechanical

Model	Head	Code
MAIOR P 300.1 PR	TC	3143734
	TL	3143735
MAIOR P 400.1 PR	TC	3143736
	TL	3143737
MAIOR P 500.1 PR	TC	3143738
	TL	3143739
MAIOR P 600.1 PR	TC	3143740
	TL	3143741

Two stage progressive/modulating electronic

Model	Head	Code
MAIOR P 300.1 PRE	TC	on request
	TL	on request
MAIOR P 400.1 PRE	TC	on request
	TL	on request
MAIOR P 500.1 PRE	TC	on request
	TL	on request
MAIOR P 600.1 PRE	TC	on request
	TL	on request

! Nozzle not included in the code of the burner - see page 118

OTHER AVAILABLE CONFIGURATIONS

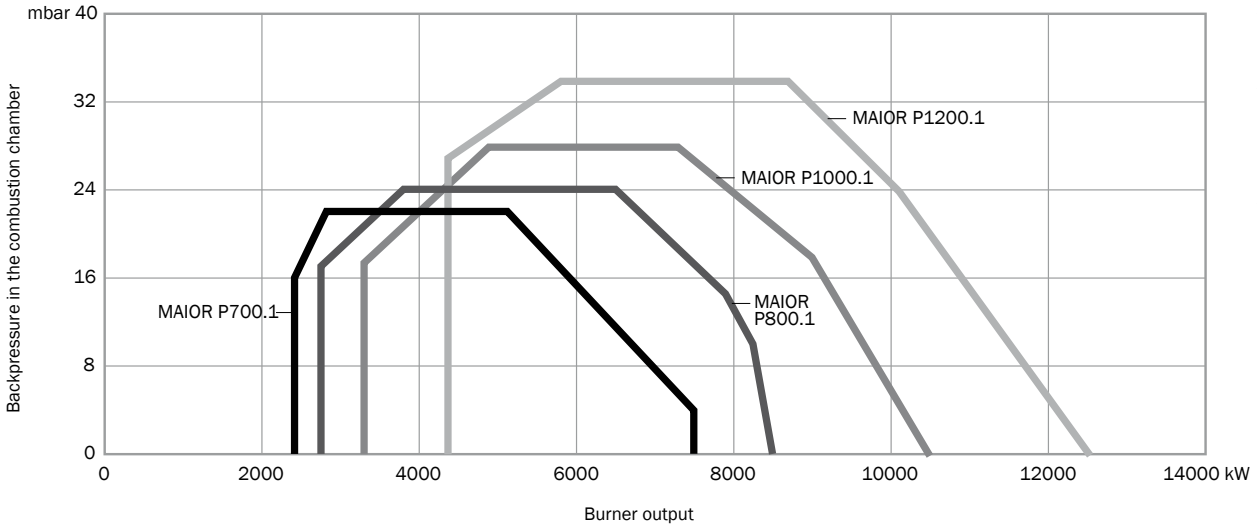
60 Hz	Continuous Ventilation (CV)	Post-purge
●	●	●

● Codes available on request

MAIOR P 700.1 - P 800.1 - P 1000.1 - P 1200.1

- Fuel: light oil (viscosity from 1,6 cSt to 6 cSt at 20 °C)
- Operation: two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)
- Emission class: class 1 (≤ 250 mg/kWh) according to EN267

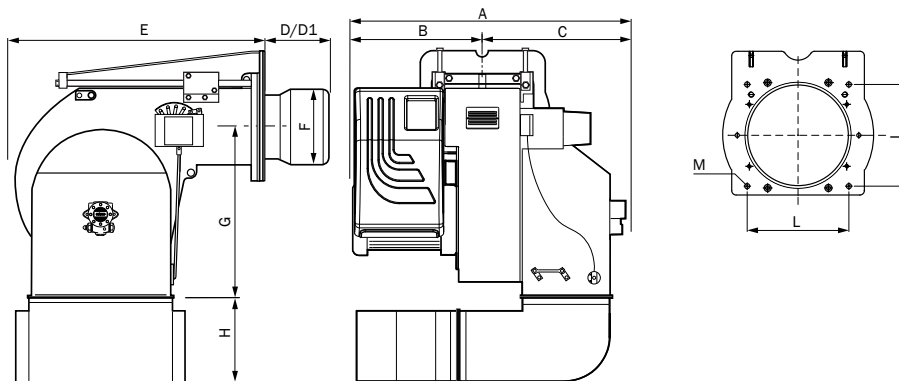
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Flow rate (kg/h)	Power supply	Motor (kW)	NOx class	Operation
MAIOR P 700.1	2417 - 7500	205 - 634	3/400V/50Hz	15	Class 1	PR, PRE
MAIOR P 800.1	2750 - 8500	234 - 718	3/400V/50Hz	18,5	Class 1	PR, PRE
MAIOR P 1000.1	3300 - 10500	281 - 887	3/400V/50Hz	22	Class 1	PR, PRE
MAIOR P 1200.1	4367 - 12500	371 - 1056	3/400V/50Hz	37	Class 1	PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	H*	I	L	M
MAIOR P 700.1	1340	585	755	457	645	1247	385	800	500	460	460	M20
MAIOR P 800.1	1410	655	755	557	-	1247	465	800	500	460	460	M20
MAIOR P 1000.1	1440	685	755	557	-	1247	465	800	500	460	460	M20
MAIOR P 1200.1	1550	795	755	557	-	1247	465	800	500	460	460	M20


BURNERS

Two stage progressive/modulating mechanical

Model	Head	Code
MAIOR P 700.1 PR	TC	3145199
	TL	3145200
MAIOR P 800.1 PR	TC	3142963
MAIOR P 1000.1 PR	TC	3145201
MAIOR P 1200.1 PR	TC	3145202

Two stage progressive/modulating electronic

Model	Head	Code
MAIOR P 700.1 PRE	TC	on request
MAIOR P 800.1 PRE	TC	on request
MAIOR P 1000.1 PRE	TC	on request
MAIOR P 1200.1 PRE	TC	on request

 Nozzle not included in the code of the burner - see page 118



MAIOR P 800.1 PR

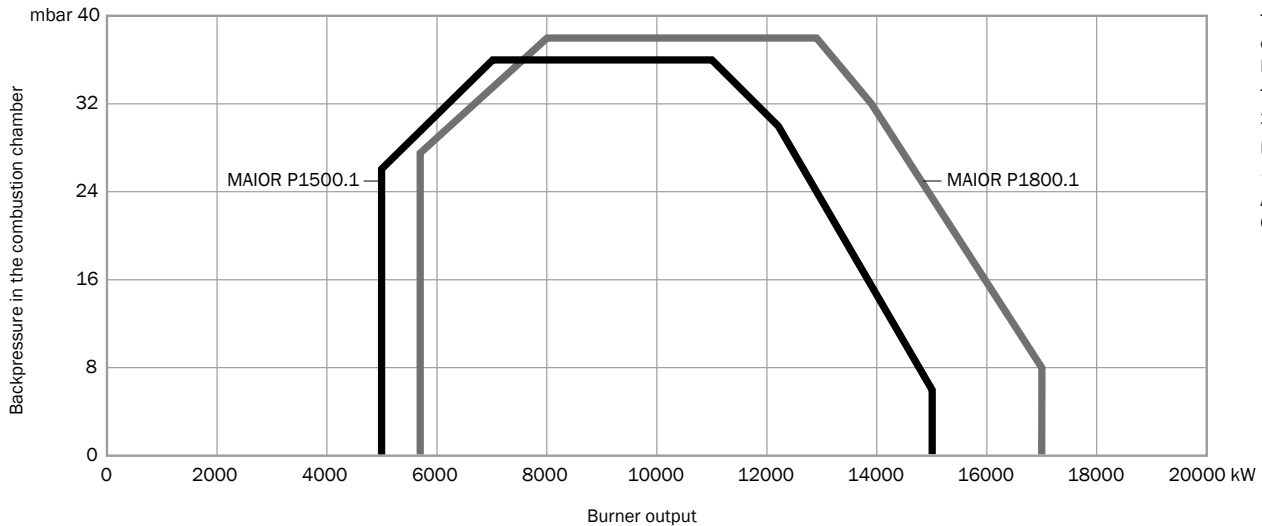
OTHER AVAILABLE CONFIGURATIONS

60 Hz	Continuous Ventilation (CV)	Post-purge
●	●	●

● Codes available on request

- Fuel: light oil (viscosity from 1,6 cSt to 6 cSt at 20 °C)
- Operation: two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)
- Emission class: class 1 (≤ 250 mg/kWh) according to EN267

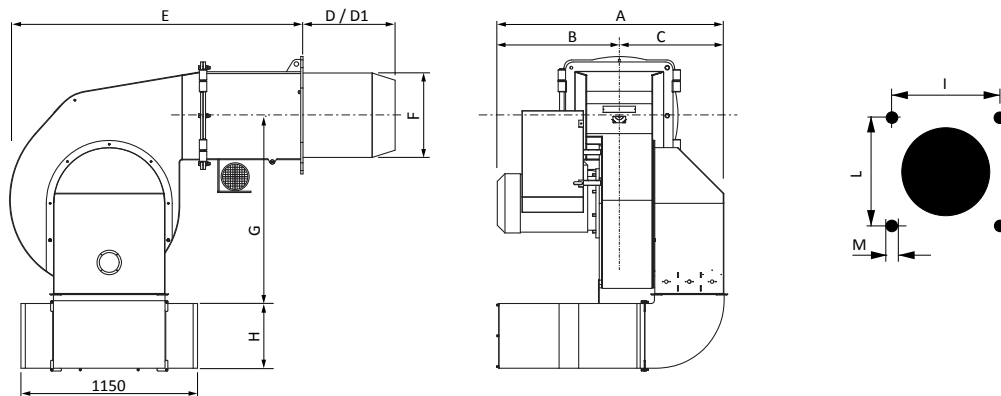
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Flow rate (kg/h)	Power supply	Motor (kW)	NOx class	Operation
MAIOR P 1500.1	5000 - 15000	422 - 1268	3/400V/50Hz	45	Class 1	PR, PRE
MAIOR P 1800.1	5700 - 17000	482 - 1437	3/400V/50Hz	55	Class 1	PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	H	I	L	M
MAIOR P 1500.1	1670	800	870	590	-	1750	550	1100	500	620	620	M20
MAIOR P 1800.1	1670	800	870	590	-	1750	550	1100	500	620	620	M20

BURNERS

Two stage progressive/modulating mechanical

Model	Head	Code
MAIOR P 1500.1 PR	TC	3142964
MAIOR P 1800.1 PR	TC	3145203

Two stage progressive/modulating electronic

Model	Head	Code
MAIOR P 1500.1 PRE	TC	on request
MAIOR P 1800.1 PRE	TC	on request

! Nozzle not included in the code of the burner - see page 118



MAIOR P 1500.1 PR

OTHER AVAILABLE CONFIGURATIONS

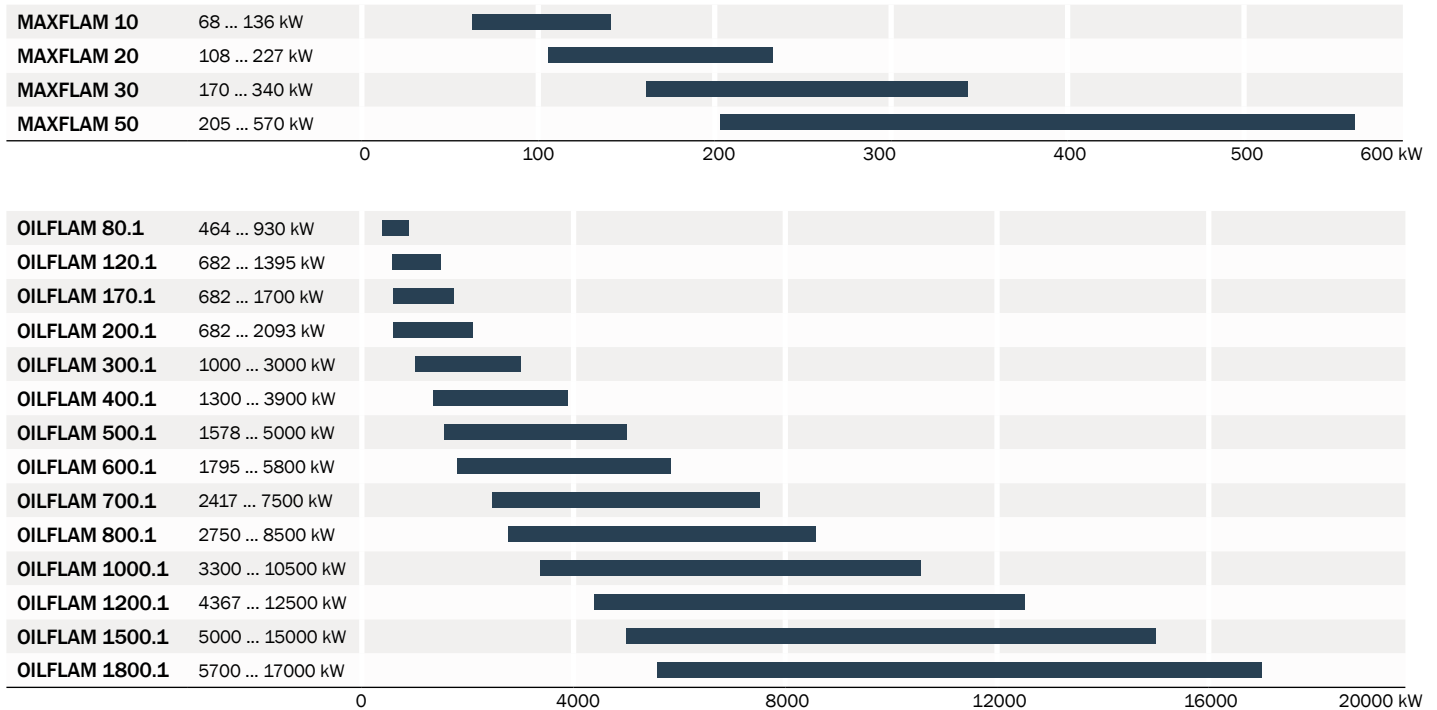
60 Hz	Continuous Ventilation (CV)	Post-purge
●	●	●

● Codes available on request

MAXFLAM / OILFLAM

MONOBLOCK HEAVY OIL BURNERS FROM 68 TO 17000 kW

RANGE OVERVIEW



MAIN FEATURES

- All models are suitable to work with heavy oil up to 50°E at 50 °C
- Two stage version with electric servomotor available up to model OILFLAM 400.1
- Version with fully electronic Burner Management System available for all models
- Integrated electrical panel complete with pre-heater management system
- Digital thermoregulator integrated on the front panel to grant temperature stability of the fuel (from OILFLAM 300.1)
- Self-cleaning filter installed in the pre-heater in order to keep the nozzle clean from OILFLAM 300.1
- Adjustable combustion head for easy regulation and matching with different combustion chambers
- Heavy oil electric heating system on board
- Ring system for oil preparation can be designed and supply on request

MAXFLAM 20



MAXFLAM 50 AB



OILFLAM 300.1 AB



CONFIGURATIONS

MAXFLAM range is available in the following operation modes:

MAXFLAM	MAXFLAM ... AB
One stage	Two stages
MAXFLAM 10 ... 30	MAXFLAM 30 ... 50 AB

OILFLAM range is available in the following operation modes:

OILFLAM ... AB	OILFLAM ... PR	OILFLAM ... PRE
Two stages	Two stage progressive/modulating mechanical	Two stage progressive/modulating electronic
All models	OILFLAM 80.1 PR ... 1800.1 PR	OILFLAM 80.1 PRE ... 1800.1 PRE

Other available configurations:

- Continuous ventilation versions
- High temperature versions
- High viscosity versions suitable for 118 cSt (15 °E) at 80 °C available on request

FUEL

- Heavy oil (max viscosity 380 cSt (50 °E) at 50 °C)

CONFORM TO

- All products are in accordance with the following directives:
- 2006/42/EC Machinery Directive
 - 2014/30/UE EMC Directive
 - 2014/35/UE Low Voltage Directive

OILFLAM 1000.1 PR



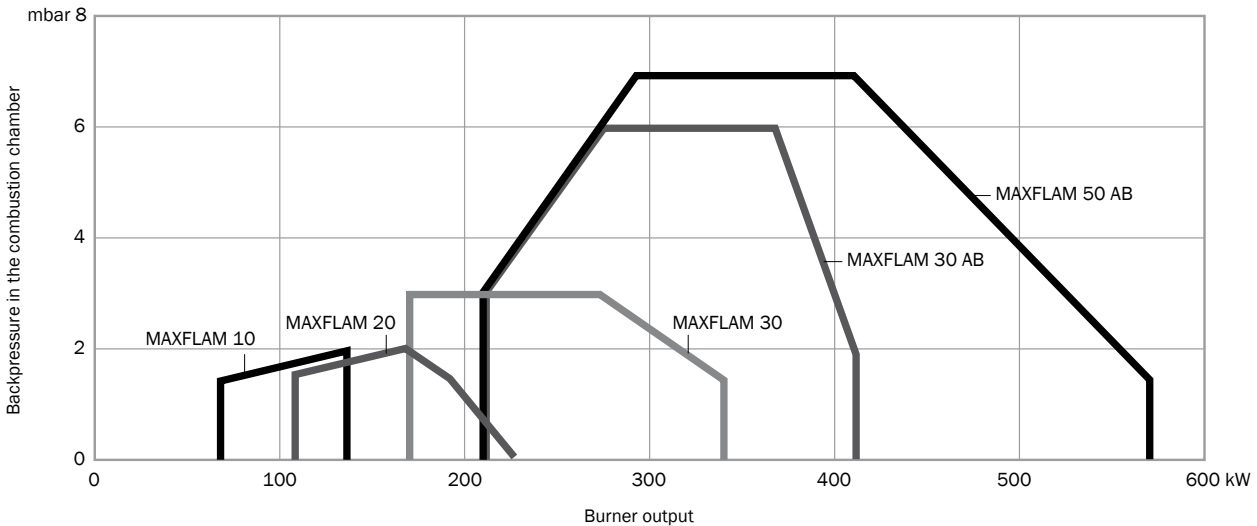
OILFLAM 1800.1 PR



Range | Models
MAXFLAM | 10 - 20 - 30 - 50

- Fuel: heavy oil (max viscosity 380 cSt (50° E) at 50° C)
- Operation: one stage and two stages

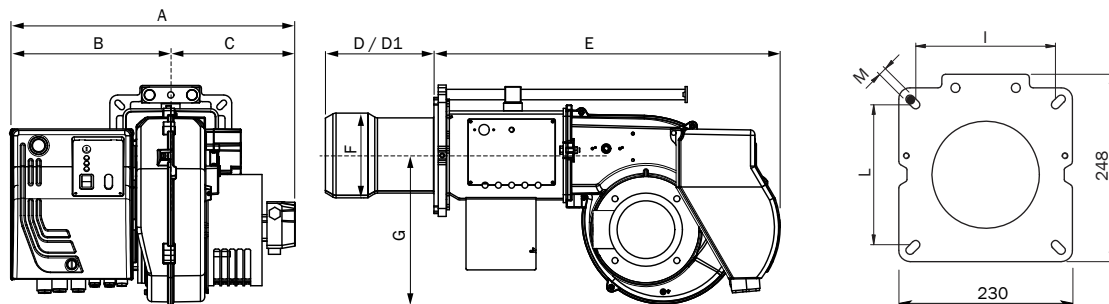
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Flow rate (kg/h)	Power supply	Resistance (kW)	Motor (kW)	Operation
MAXFLAM 10	68 - 136	6 - 12	1/230V/50Hz	1,3	0,45	1 stage
MAXFLAM 20	108 - 227	9,5 - 20	1/230V/50Hz	1,95	0,45	1 stage
MAXFLAM 30	170 - 340	15 - 30	3/230-400V/50Hz	3,9	0,74	1 stage
MAXFLAM 30 AB	205 - 410	18 - 36	3/230-400V/50Hz	3,9	0,74	AB
MAXFLAM 50 AB	205 - 570	18 - 50	3/230-400V/50Hz	3,9	1,1	AB

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long

	A	B	C	D	D1	E	F	G	I	L	M
MAXFLAM 10	520	290	230	205	325	535	130	201	160	160	M8
MAXFLAM 20	520	290	230	205	325	535	130	201	160	160	M8
MAXFLAM 30	562	302	260	210	330	653	160	280	185/200	185/200	M10
MAXFLAM 30 AB	562	302	260	205	325	653	170	280	185/200	185/200	M10
MAXFLAM 50 AB	562	302	260	205	325	653	170	280	185/200	185/200	M10

BURNERS

One stage

Model	Head	Code
MAXFLAM 10	TC	3143324
	TL	3143325
MAXFLAM 20	TC	3143326
	TL	3143327
MAXFLAM 30	TC	3143328
	TL	3143329

Two stages

Model	Head	Code
MAXFLAM 30 AB	TC	3143330
	TL	3143331
MAXFLAM 50 AB	TC	3143332
	TL	3143333



MAXFLAM 50 AB

! Nozzle not included in the code of the burner - see page 118

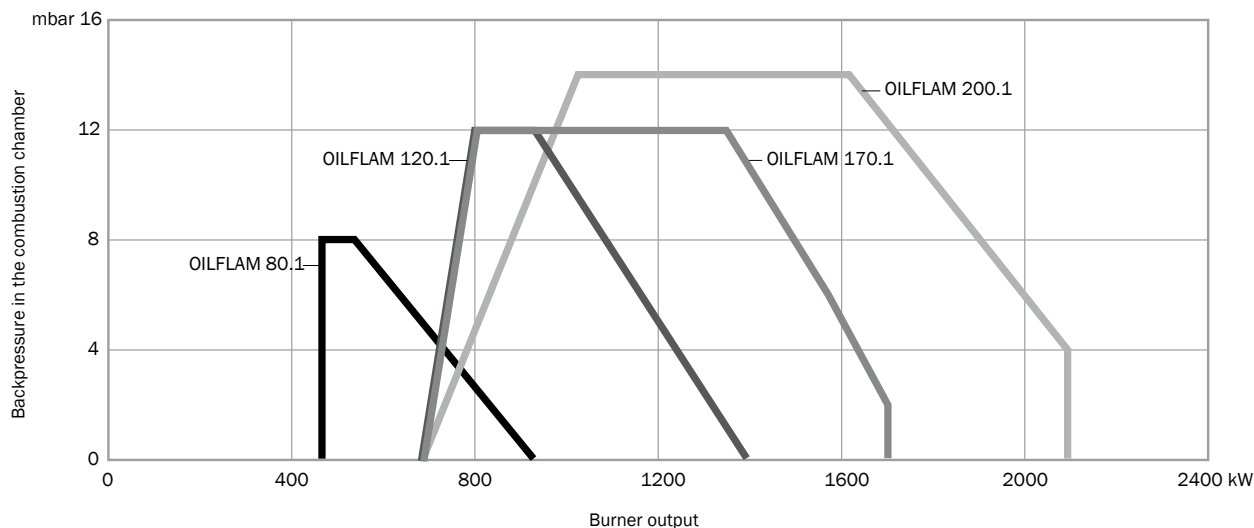
OTHER AVAILABLE CONFIGURATIONS

60 Hz	High viscosity version	Continuous Ventilation (CV)	Post-purge
●	●	●	●

● Codes available on request

- Fuel: heavy oil (max viscosity 380 cSt (50° E) at 50° C)
- Operation: two stages and two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)

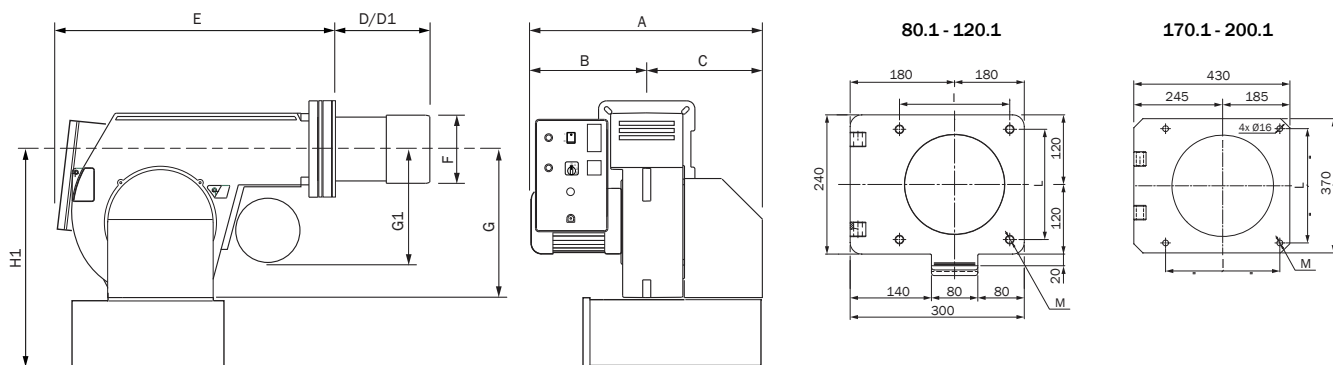
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Flow rate (kg/h)	Power supply	Resistance (kW)	Motor (kW)	Operation
OILFLAM 80.1	464 - 930	41 - 82	3/230-400V/50Hz	4,7	1,5	AB, PR, PRE
OILFLAM 120.1	682 - 1395	60 - 122	3/230-400V/50Hz	7,1	2,2	AB, PR, PRE
OILFLAM 170.1	682 - 1700	60 - 148	3/230-400V/50Hz	9	3	AB, PR, PRE
OILFLAM 200.1	682 - 2093	60 - 184	3/230-400V/50Hz	10,5	4	AB, PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	G1	H1*	I	L	M
OILFLAM 80.1	758	388	370	170	310	600	185	390	440	600	190	190	M10
OILFLAM 120.1	758	388	370	170	310	600	185	390	440	600	190	190	M10
OILFLAM 170.1	920	450	470	280	480	710	250	420	390	680	315	315	M14
OILFLAM 200.1	920	450	470	280	480	710	270	420	390	680	315	315	M14

BURNERS

Two stages

Model	Head	Code
OILFLAM 80.1 AB	TC	3142604
	TL	3142605
OILFLAM 120.1 AB	TC	3142606
	TL	3142607
OILFLAM 170.1 AB	TC	3142608
	TL	3142609
OILFLAM 200.1 AB	TC	3142610
	TL	3142611



OILFLAM 80.1 AB

Two stage progressive/modulating mechanical

Model	Head	Code
OILFLAM 80.1 PR	TL	on request
OILFLAM 120.1 PR	TL	on request
OILFLAM 170.1 PR	TL	on request
OILFLAM 200.1 PR	TL	on request

Two stage progressive/modulating electronic

Model	Head	Code
OILFLAM 80.1 PRE	TL	on request
OILFLAM 120.1 PRE	TL	on request
OILFLAM 170.1 PRE	TL	on request
OILFLAM 200.1 PRE	TL	on request

! Nozzle not included in the code of the burner - see page 118

OTHER AVAILABLE CONFIGURATIONS

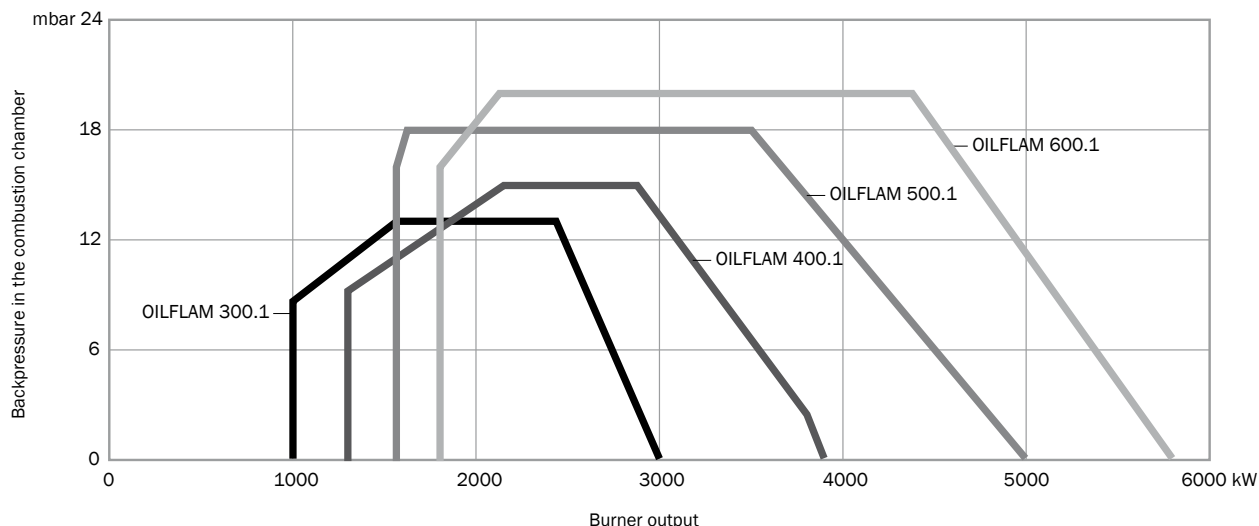
60 Hz	High viscosity version	Continuous Ventilation (CV)	Post-purge
●	●	●	●

● Codes available on request

Range | Models
OILFLAM | 300.1 - 400.1 - 500.1 - 600.1

- Fuel: heavy oil (max viscosity 380 cSt (50° E) at 50° C)
- Operation: two stages and two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)

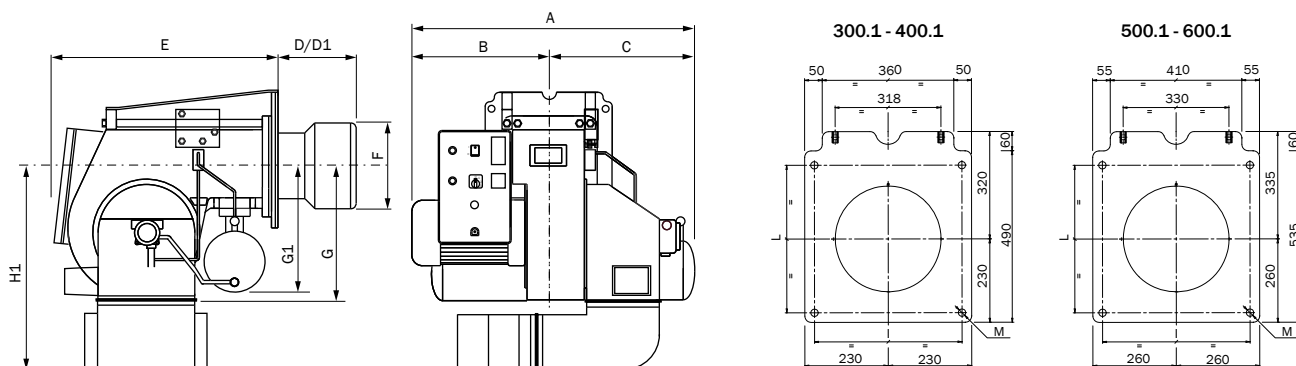
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Flow rate (kg/h)	Power supply	Resistance (kW)	Motor (kW)	Operation
OILFLAM 300.1	1000 - 3000	88,5 - 264	3/400V/50Hz	18	7,5	AB, PR, PRE
OILFLAM 400.1	1300 - 3900	115 - 343	3/400V/50Hz	21	9	AB, PR, PRE
OILFLAM 500.1	1578 - 5000	140 - 440	3/400V/50Hz	24	11	PR, PRE
OILFLAM 600.1	1795 - 5800	159 - 510	3/400V/50Hz	24	15	PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	G1	H1*	I	L	M
OILFLAM 300.1	1205	603	602	350	600	925	290	470	430	746	400	400	M16
OILFLAM 400.1	1205	603	602	350	600	925	320	470	430	746	400	400	M16
OILFLAM 500.1	1300	610	690	370	670	990	320	570	480	965	460	460	M16
OILFLAM 600.1	1300	610	690	370	670	990	320	570	480	965	460	460	M16

BURNERS

Two stages

Model	Head	Code
OILFLAM 300.1 AB	TC	3143753
	TL	3143754
OILFLAM 400.1 AB Z3	TC	3143755
	TL	3143756

Two stage progressive/modulating mechanical

Model	Head	Code
OILFLAM 300.1 PR	TC	3143757
	TL	3143758
OILFLAM 400.1 PR	TC	3143759
	TL	3143760
OILFLAM 500.1 PR	TC	3143761
	TL	3143762
OILFLAM 600.1 PR	TC	3143763
	TL	3143764



OILFLAM 300.1 PR

Two stage progressive/modulating electronic

Model	Head	Code
OILFLAM 300.1 PRE	TC	on request
	TL	on request
OILFLAM 400.1 PRE	TC	on request
	TL	on request
OILFLAM 500.1 PRE	TC	on request
	TL	on request
OILFLAM 600.1 PRE	TC	on request
	TL	on request

! Nozzle not included in the code of the burner - see page 118

OTHER AVAILABLE CONFIGURATIONS

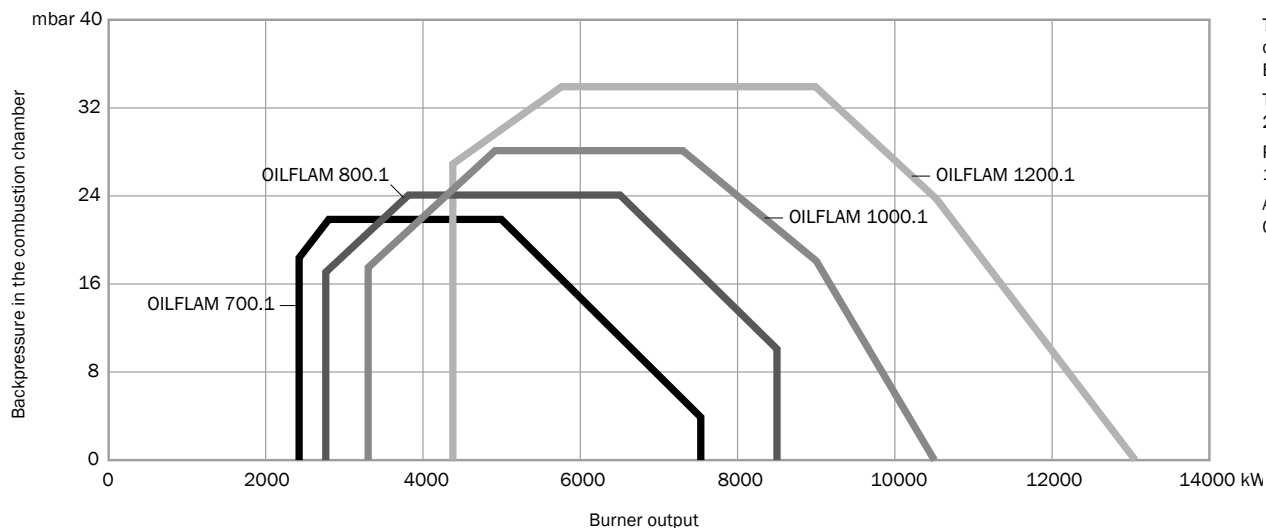
60 Hz	High viscosity version	Continuous Ventilation (CV)	Post-purge
●	●	●	●

● Codes available on request

Range | Models
OILFLAM 700.1 - 800.1 - 1000.1 - 1200.1

- Fuel: heavy oil (max viscosity 380 cSt (50° E) at 50° C)
- Operation: two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)

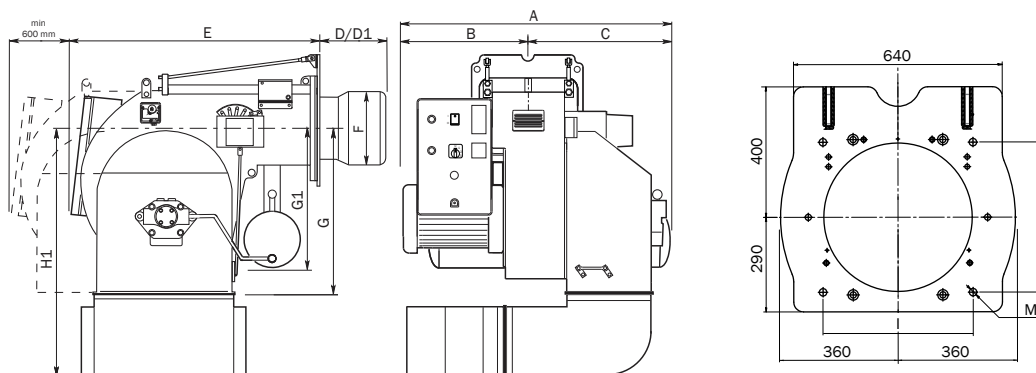
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Flow rate (kg/h)	Power supply	Resistance (kW)	Motor (kW)	Operation
OILFLAM 700.1	2417 - 7500	214 - 660	3/400V/50Hz	30	15	PR, PRE
OILFLAM 800.1	2750 - 8500	243 - 748	3/400V/50Hz	30	18,5	PR, PRE
OILFLAM 1000.1	3300 - 10500	292 - 924	3/400V/50Hz	44	22	PR, PRE
OILFLAM 1200.1	4367 - 12500	386 - 1099	3/400V/50Hz	2x 30	37	PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	G1	H1*	I	L	M
OILFLAM 700.1	1390	660	730	525	-	1240	385	775	520	1270	460	460	M20
OILFLAM 800.1	1480	660	820	535	-	1240	430	775	520	1270	460	460	M20
OILFLAM 1000.1	1505	685	820	535	-	1240	460	775	520	1270	460	460	M20
OILFLAM 1200.1	1750	800	950	535	-	1410	460	775	900	1270	460	460	M20

BURNERS

Two stage progressive/modulating mechanical

Model	Head	Code
OILFLAM 700.1 PR	TC	3143936
OILFLAM 800.1 PR	TC	on request
OILFLAM 1000.1 PR	TC	on request
OILFLAM 1200.1 PR	TC	on request

Two stage progressive/modulating electronic

Model	Head	Code
OILFLAM 700.1 PRE	TC	on request
OILFLAM 800.1 PRE	TC	on request
OILFLAM 1000.1 PRE	TC	on request
OILFLAM 1200.1 PRE	TC	on request

! Nozzle not included in the code of the burner - see page 118



OILFLAM 1000.1 PR

OTHER AVAILABLE CONFIGURATIONS

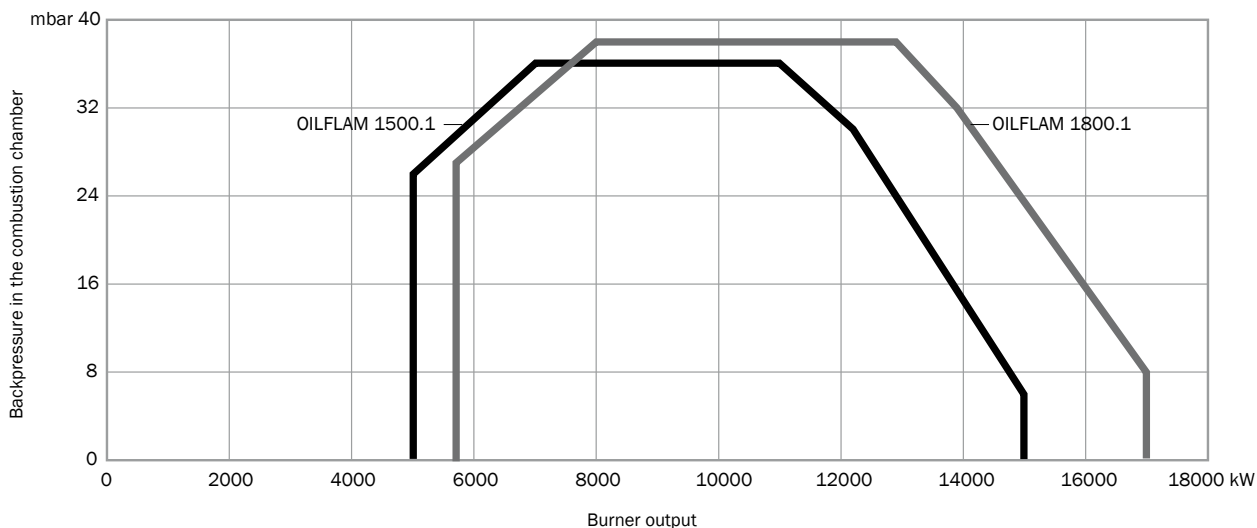
60 Hz	High viscosity version	Continuous Ventilation (CV)	Post-purge
●	●	●	●

● Codes available on request

Range | Models
OILFLAM 1500.1 - 1800.1

- Fuel: heavy oil (max viscosity 380 cSt (50° E) at 50° C)
- Operation: two stages and two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)

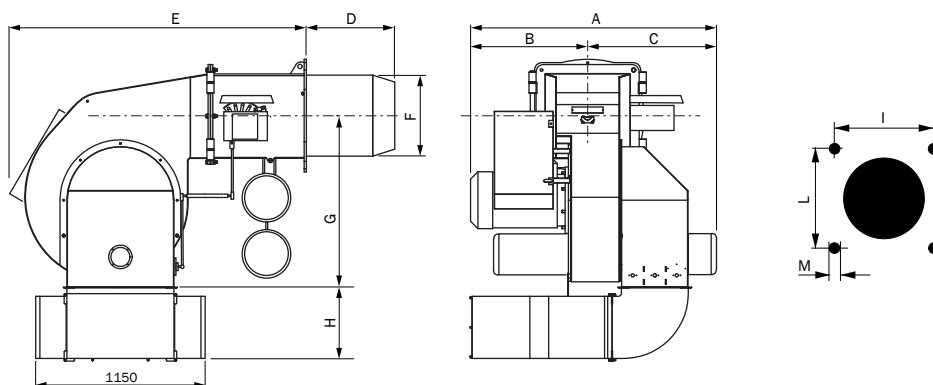
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Flow rate (kg/h)	Power supply	Resistance (kW)	Motor (kW)	Operation
OILFLAM 1500.1	5000 - 15000	440 - 1319	3/400V/50Hz	75	45	PR, PRE
OILFLAM 1800.1	5700 - 17000	501 - 1495	3/400V/50Hz	75	55	PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	H*	I	L	M
OILFLAM 1500.1	1948	860	1088	590	-	1910	550	1167	530	620	620	M20
OILFLAM 1800.1	1948	860	1088	590	-	1910	550	1167	530	620	620	M20

BURNERS

Two stage progressive/modulating mechanical

Model	Head	Code
OILFLAM 1500.1 PR	TC	on request
OILFLAM 1800.1 PR	TC	on request

Two stage progressive/modulating electronic

Model	Head	Code
OILFLAM 1500.1 PRE	TC	on request
OILFLAM 1800.1 PRE	TC	on request

! Nozzle not included in the code of the burner - see page 118



OILFLAM 1800.1 PR

OTHER AVAILABLE CONFIGURATIONS

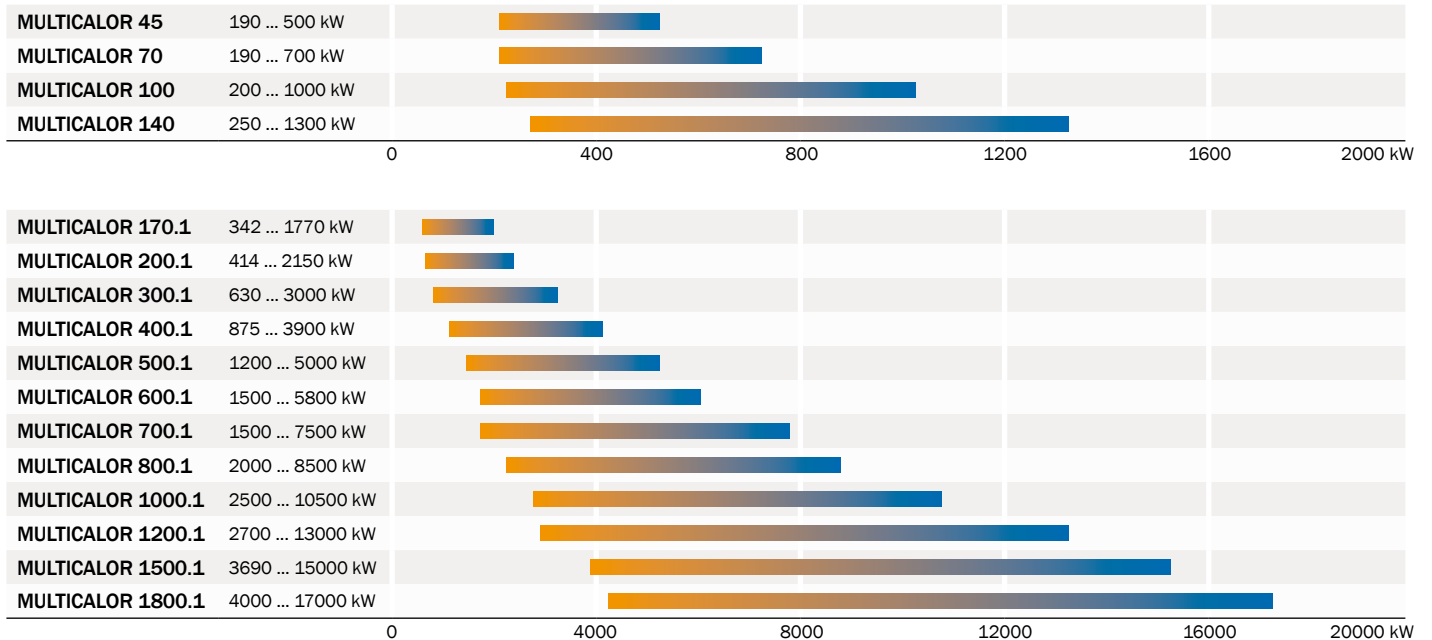
60 Hz	High viscosity version	Continuous Ventilation (CV)	Post-purge
●	●	●	●

● Codes available on request

MULTICALOR

MONOBLOCK DUAL FUEL (GAS/LIGHT OIL) BURNERS FROM 190 TO 17000 kW

RANGE OVERVIEW



MAIN FEATURES

- Two stage version with electric servomotor and integrated system for the regulation of air and fuel (from MULTICALOR 45 to MULTICALOR 200.1)
- Progressive version with electric servomotor and double adjustable mechanical cam that allows air and fuel fine tuning
- Version with fully electronic Burner Management System available for all models
- Adjustable combustion head for easy regulation and matching with different combustion chambers
- Configured and special versions on request according to feasibility



CONFIGURATIONS

MULTICALOR range is available in the following operation modes:

MULTICALOR	MULTICALOR ... PR/AB	MULTICALOR ... PR	MULTICALOR ... PRE
Two stages in gas and in light oil	Two stage progressive/modulating mechanical in gas / two stages in light oil	Two stage progressive/modulating mechanical in gas and in light oil	Two stages progressive/modulating electronic in gas and in light oil
MULTICALOR 45 ... 200.1	MULTICALOR 70 ... 200.1 PR/AB	MULTICALOR 70 ... 1800.1 PR	MULTICALOR 70 ... 1800.1 PRE

Other available configurations:

- Continuous ventilation versions
- Swirl system for flame geometry customization
- OEM and special versions on request according to feasibility

FUEL

- Natural gas (G20, G25 according to EN676)
- LPG
- Light oil (viscosity from 1,6 cSt to 6 cSt at 20 °C)

EMISSIONS

Class	Gas		Class	Oil	
	NOx mg/kWh			NOx mg/kWh	
1	170		1	250	
2	120		2	185	
3	80		3	120	

All models are in compliance with EN 676 and EN 267 European Standard

CONFORM TO

- All products are built in accordance with the following directives:
- 2006/42/EC Machinery Directive
 - 2014/30/UE EMC Directive
 - 2014/35/UE Low Voltage Directive
 - 2009/142/CEE Gas Appliances Directive

MULTICALOR 800.1 PR



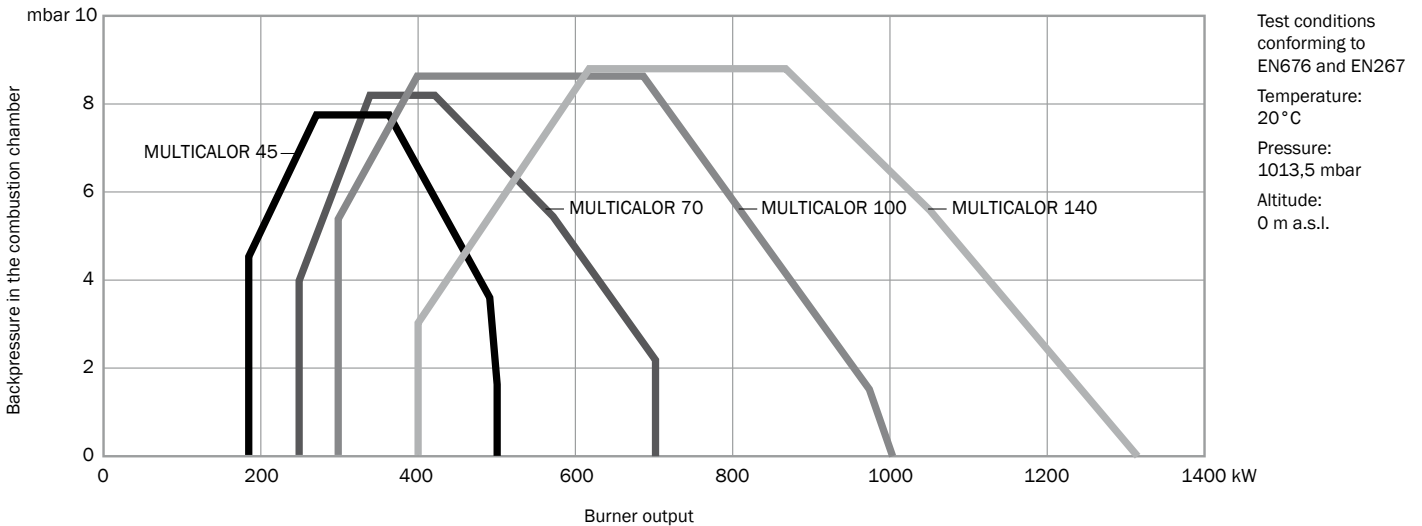
MULTICALOR 1200.1 PR



Range | Models
MULTICALOR 45 - 70 - 100 - 140

- Fuel: natural gas, LPG; light oil (viscosity from 1,6 cSt to 6 cSt at 20 °C)
- Operation: two stages
- Emission class: Low NOx class 2 (≤ 120 mg/kWh) according to EN676 in gas and class 1 (≤ 250 mg/kWh) according to EN267 in oil

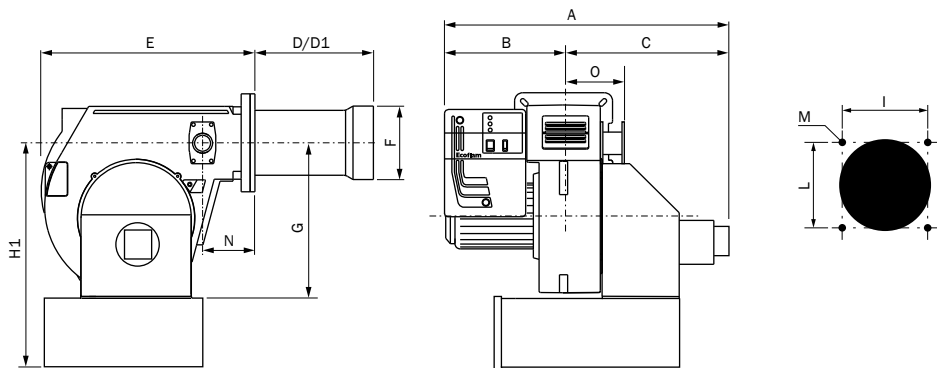
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Flow rate (kg/h)	Power supply	Motor (kW)	NOx class	Operation
MULTICALOR 45	190 - 500	16 - 42,2	3/230-400/50Hz	0,55	Class 2 / Class 1	2 stages
MULTICALOR 70	250 - 700	21 - 59	3/230-400/50Hz	1,1	Class 2 / Class 1	2 stages
MULTICALOR 100	300 - 1000	25,3 - 84,3	3/230-400/50Hz	1,1	Class 2 / Class 1	2 stages
MULTICALOR 140	400 - 1300	33,1 - 110	3/230-400/50Hz	2,2	Class 2 / Class 1	2 stages

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	H1*	I	L	M	N	O
MULTICALOR 45	1045	510	535	175	335	555	160	390	600	190	190	M10	140	165
MULTICALOR 70	1045	510	535	175	395	555	180	390	600	190	190	M10	140	165
MULTICALOR 100	1045	510	535	175	395	555	190	390	600	190	190	M10	140	165
MULTICALOR 140	1070	510	560	307	457	555	215	390	600	190	190	M10	140	165

BURNERS

Two stages in gas and in light oil

Model	Head	Code
MULTICALOR 45	TC	3140429
	TL	3140428
MULTICALOR 70	TC	3140431
	TL	3140430
MULTICALOR 100	TC	3140433
	TL	3140432
MULTICALOR 140	TC	3140439
	TL	3140438



MULTICALOR 100

OTHER AVAILABLE CONFIGURATIONS

60 Hz	Continuous Ventilation (CV)	Post-purge
●	●	●

● Codes available on request

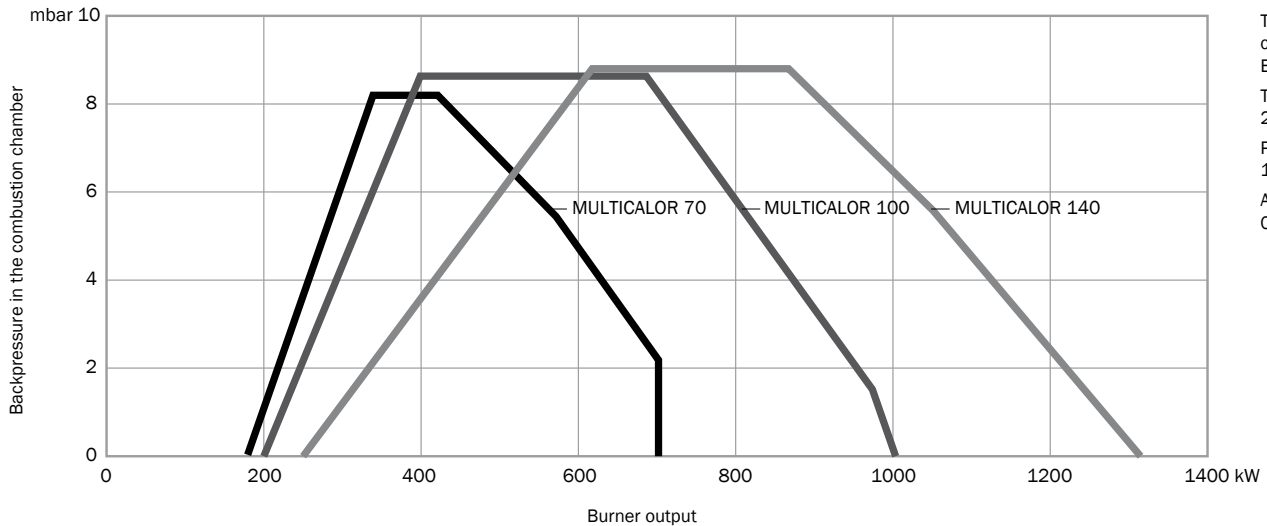
GAS TRAINS

	Pressure (mbar)		Model	Size	Code	Filter
	min	max				
for MULTICALOR 45	15	360	MB-DLE 415	1"1/2	3141846	included
	30	360	MB-DLE 412	1"1/4	3141845	included
	50	360	MB-DLE 410	1"	3142022	included
	85	360	MB-DLE 407	3/4"	3141843	included
for MULTICALOR 70	17	360	MB-DLE 420	2"	3141847	included
	25	360	MB-DLE 415	1"1/2	3141846	included
	75	360	MB-DLE 410	1"	3142022	included
for MULTICALOR 100	27	360	MB-DLE 420	2"	3141847	included
	35	360	MB-DLE 415	1"1/2	3141846	included
	75	360	MB-DLE 412	1"1/4	3141845	included
for MULTICALOR 140	25	500	VGD 20.503	2"	3123860	3121384
	40	360	MB-DLE 420	2"	3141847	included
	50	360	MB-DLE 415	1"1/2	3141846	included
	100	360	MB-DLE 412	1"1/4	3141845	included

! For minimum inlet pressures higher than 250 mbar, choose the pressure switch GW500 (to be fitted during installation on site) - see page 109
 For gas trains in EN676 Configuration a tightness control device must be included over 1200 kW (already included on PRE burners) - see page 116

- Fuel: natural gas, LPG; light oil (viscosity from 1,6 cSt to 6 cSt at 20 °C)
- Operation: two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106) in gas operation and two stages (AB-PR versions) or two stages progressive (PR versions) in light oil operation
- Emission class: Low NOx class 2 (≤ 120 mg/kWh) according to EN676 in gas and class 1 (≤ 250 mg/kWh) according to EN267 in oil

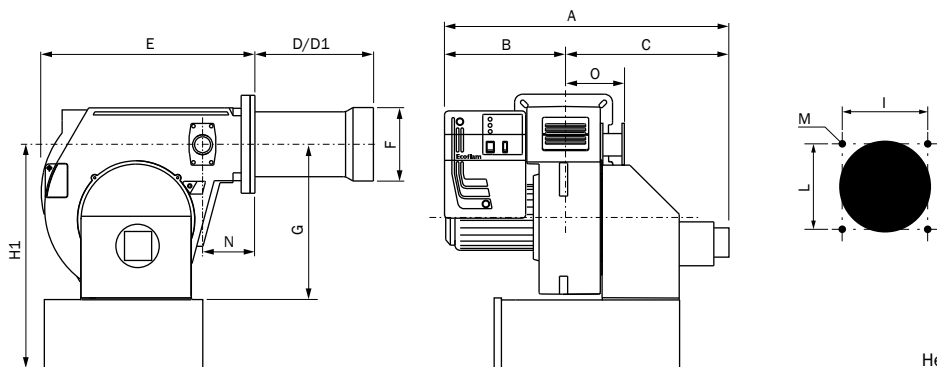
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Flow rate (kg/h)	Power supply	Motor (kW)	NOx class	Operation
MULTICALOR 70	190 - 700	16 - 59	3/230-400/50Hz	1,1	Class 2 / Class 1	PR- AB, PR, PRE
MULTICALOR 100	200 - 1000	16,9 - 84,3	3/230-400/50Hz	1,1	Class 2 / Class 1	PR- AB, PR, PRE
MULTICALOR 140	250 - 1300	21,1 - 110	3/230-400/50Hz	2,2	Class 2 / Class 1	PR- AB, PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	H1*	I	L	M	N	O
MULTICALOR 70 PR-AB	780	330	450	175	395	555	180	390	600	190	190	M10	140	165
MULTICALOR 100 PR-AB	780	330	450	175	395	555	190	390	600	190	190	M10	140	165
MULTICALOR 140 PR-AB	800	350	450	307	457	555	215	390	600	190	190	M10	140	165
MULTICALOR 70 PR	1045	510	535	175	395	760	180	390	600	190	190	M10	140	165
MULTICALOR 100 PR	1045	510	535	175	395	760	190	390	600	190	190	M10	140	165
MULTICALOR 140 PR	1070	510	560	307	457	760	215	390	600	190	190	M10	140	165

BURNERS

Two stage progressive/modulating mechanical in gas - Two stages in light oil

Model	Head	Code
MULTICALOR 70 PR-AB	TC	3142632
	TL	3142633
MULTICALOR 100 PR-AB	TC	3142634
	TL	3142635
MULTICALOR 140 PR-AB	TC	3142636
	TL	3142637



MULTICALOR 140 PR

Two stage progressive/modulating mechanical in gas and in light oil

Model	Head	Code
MULTICALOR 70 PR	TL	on request
MULTICALOR 100 PR	TL	on request
MULTICALOR 140 PR	TL	on request

Two stage progressive/modulating electronic in gas and in light oil

Model	Head	Code
MULTICALOR 70 PRE	TL	3145139
MULTICALOR 100 PRE	TL	3145140
MULTICALOR 140 PRE	TL	3145141

! Nozzle not included in the code of the burner - see page 118

OTHER AVAILABLE CONFIGURATIONS

60 Hz	Continuous Ventilation (CV)	Post-purge
●	●	●

● Codes available on request

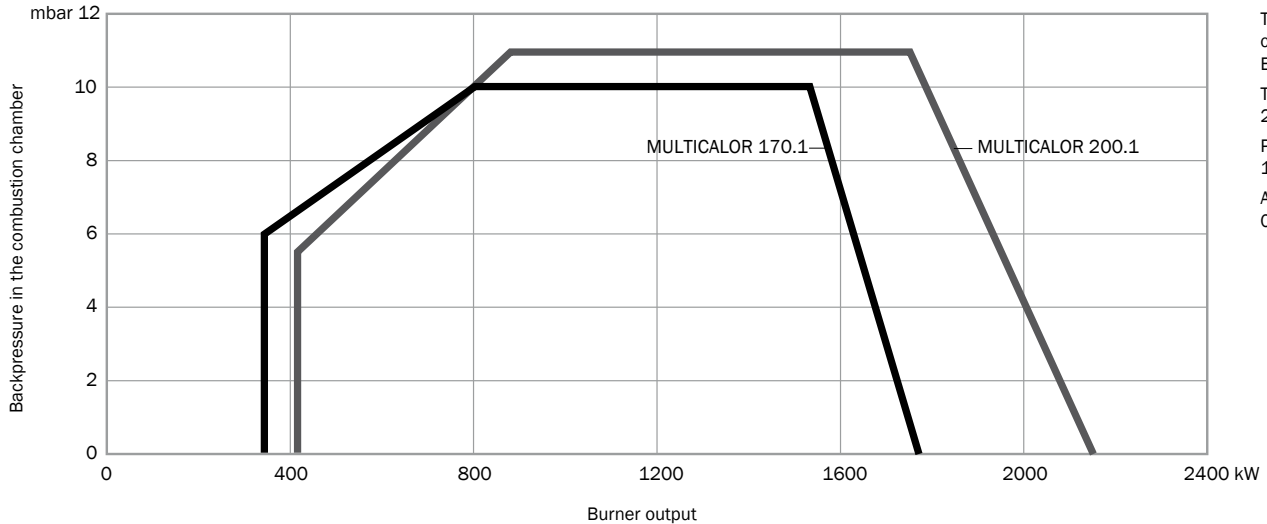
GAS TRAINS

	Pressure (mbar)		Model	Size	Codes for PR-PAB and PR	Codes for PRE	Filter
	min	max					
for MULTICALOR 70	17	360	MB-DLE 420	2"	3141847	3145934	included
	25	360	MB-DLE 415	1"1/2	3141846	3145933	included
	75	360	MB-DLE 410	1"	3142022	3145931	included
for MULTICALOR 100	27	360	MB-DLE 420	2"	3141847	3145934	included
	35	360	MB-DLE 415	1"1/2	3141846	3145933	included
	75	360	MB-DLE 412	1"1/4	3141845	3145932	included
for MULTICALOR 140	25	500	VGD 20.503	2"	3123860	-	3121384
	40	360	MB-DLE 420	2"	3141847	3145934	included
	50	360	MB-DLE 415	1"1/2	3141846	3145933	included
	100	360	MB-DLE 412	1"1/4	3141845	3145932	included

! For minimum inlet pressures higher than 250 mbar, choose the pressure switch GW500 (to be fitted during installation on site) - see page 109
 For gas trains in EN676 Configuration a tightness control device must be included over 1200 kW (already included on PRE burners) - see page 116

- Fuel: natural gas, LPG; light oil (viscosity from 1,6 cSt to 6 cSt at 20 °C)
- Operation: two stages and two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)
- Emission class: Low NOx class 2 (≤ 120 mg/kWh) according to EN676 in gas and class 1 (≤ 250 mg/kWh) according to EN267 in oil

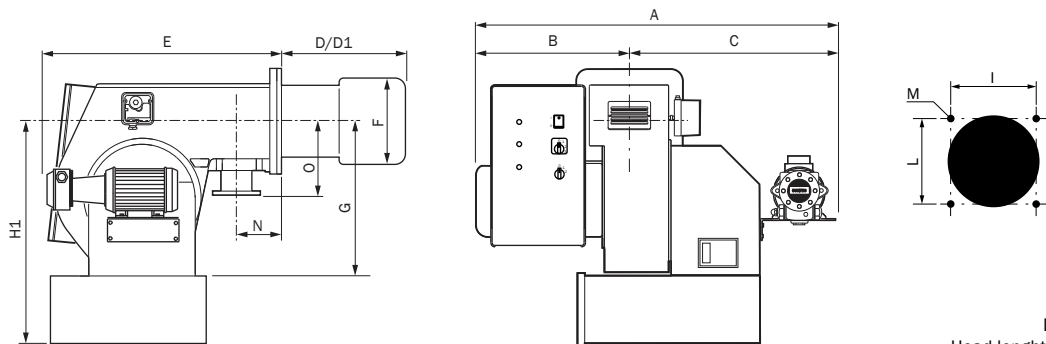
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Flow rate (kg/h)	Power supply	Motor (kW)	NOx class	Operation
MULTICALOR 170.1	342 - 1770	29 - 150	3/230-400/50Hz	3	Class 2 / Class 1	2 stages, PR-AB, PR, PRE
MULTICALOR 200.1	414 - 2150	35 - 182	3/230-400/50Hz	4	Class 2 / Class 1	2 stages, PR-AB, PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	H1*	I	L	M	N	O
MULTICALOR 170.1	965	395	570	290	490	700	250	420	680	240	240	M14	125	250
MULTICALOR 200.1	990	420	570	290	490	700	270	420	680	240	240	M14	125	250
MULTICALOR 170.1 PR/AB	950	400	550	290	490	770	250	420	680	240	240	M14	125	250
MULTICALOR 200.1 PR/AB	950	400	550	290	490	770	270	420	680	240	240	M14	125	250
MULTICALOR 170.1 PR	1030	520	510	290	490	820	250	420	680	240	240	M14	125	250
MULTICALOR 200.1 PR	1030	520	510	290	490	820	270	420	680	240	240	M14	125	250

BURNERS

Two stages in gas and in light oil

Model	Head	Code
MULTICALOR 170.1	TC	3142628
	TL	3142629
MULTICALOR 200.1	TC	3142630
	TL	3142631



MULTICALOR 170.1 PR-AB

Two stage progressive/modulating mechanical in gas - 2 stages in light oil

Model	Head	Code
MULTICALOR 170.1 PR-AB	TC	3142638
	TL	3142639
MULTICALOR 200.1 PR-AB	TC	3142640
	TL	3142641

Two stage progressive/modulating mechanical in gas and in light oil

Model	Head	Code
MULTICALOR 170.1 PR	TL	on request
MULTICALOR 200.1 PR	TL	on request

Two stage progressive/modulating electronic in gas and in light oil

Model	Head	Code
MULTICALOR 170.1 PRE	TL	3145142
MULTICALOR 200.1 PRE	TL	3145143

! Nozzle not included in the code of the burner - see page 118

OTHER AVAILABLE CONFIGURATIONS

60 Hz	Continuous Ventilation (CV)	Post-purge
●	●	●

● Codes available on request

GAS TRAINS

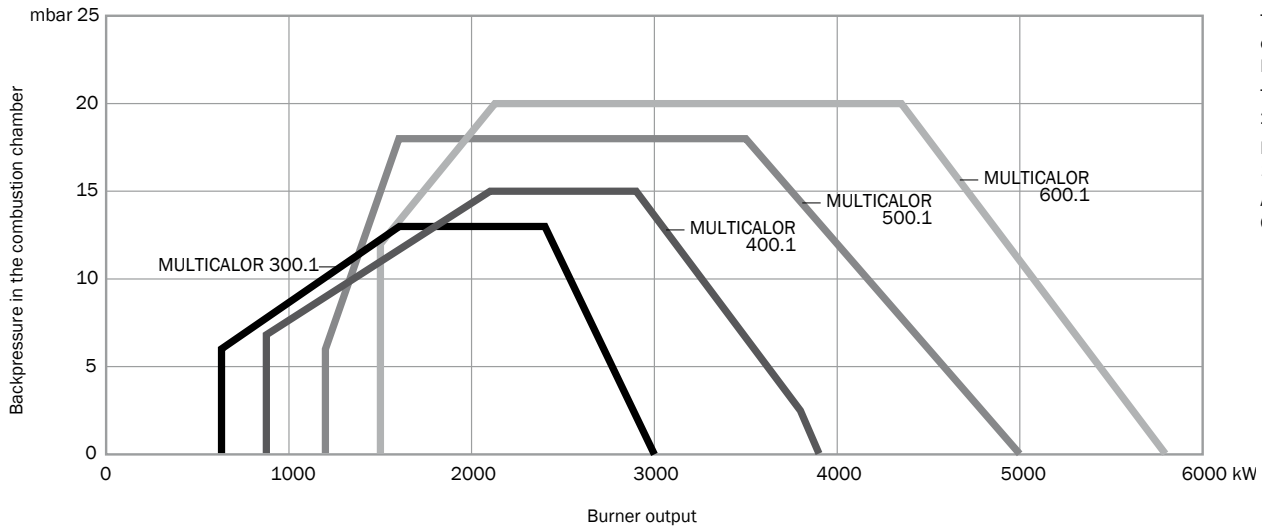
	Pressure (mbar)		Model	Size	Code for PR-PAB and PR	Connection pipe	Codes for PRE	Connection pipe	Filter
	min	max							
for MULTICALOR 170.1	20	500	VDG 40.080	DN80	3142026	3142069	3145814	3145815	3142088
	45	500	VDG 20.503	2"	3123860	3142075	3145790	3142075	3121384
	60	360	MB-DLE 420	2"	3141847	3142075	3145934	3142075	included
	85	360	MB-DLE 415	1"1/2	3141846	3142075	3145933	3142075	included
for MULTICALOR 200.1	23	500	VDG 40.080	DN80	3142026	3142069	3145814	3145815	3142088
	35	500	VDG 40.065	DN65	3124110	3142197	3145793	3145800	3124111
	60	500	VDG 20.503	2"	3123860	3142075	3145790	3142075	3121384
	75	360	MB-DLE 420	2"	3141847	3142075	3145934	3142075	included
	100	360	MB-DLE 415	1"1/2	3141846	3142075	3145933	3142075	included

! For minimum inlet pressures higher than 250 mbar, choose the pressure switch GW500 (to be fitted during installation on site) - see page 109
 For gas trains in EN676 Configuration a tightness control device must be included over 1200 kW (already included on PRE burners) - see page 116

Range | Models
MULTICALOR 300.1 - 400.1 - 500.1 - 600.1

- Fuel: natural gas, LPG; light oil (viscosity from 1,6 cSt to 6 cSt at 20 °C)
- Operation: two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)
- Emission class: Low NOx class 2 (≤ 120 mg/kWh) according to EN676 in gas and class 1 (≤ 250 mg/kWh) according to EN267 in oil

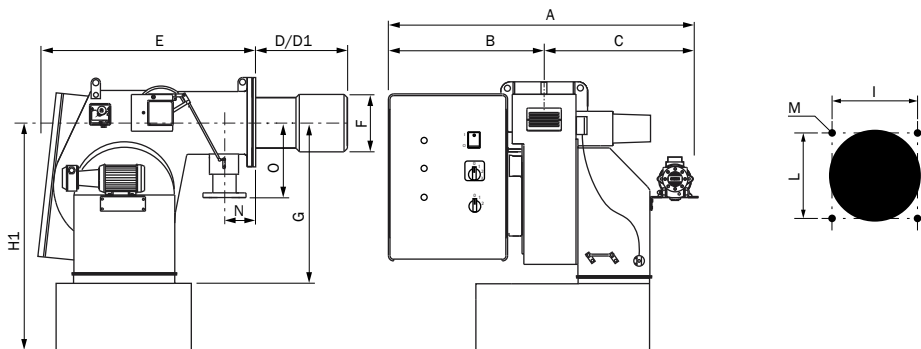
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Flow rate (kg/h)	Power supply	Motor (kW)	NOx class	Operation
MULTICALOR 300.1	630 - 3000	53 - 253	3/400/50Hz	5,5	Class 2 / Class 1	PR, PRE
MULTICALOR 400.1	875 - 3900	74 - 330	3/400/50Hz	7,5	Class 2 / Class 1	PR, PRE
MULTICALOR 500.1	1200 - 5000	101 - 423	3/400/50Hz	11	Class 2 / Class 1	PR, PRE
MULTICALOR 600.1	1500 - 5800	126 - 490	3/400/50Hz	15	Class 2 / Class 1	PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	H1*	I	L	M	N	O
MULTICALOR 300.1	1230	610	620	330	530	900	290	471	746	315	315	M16	195	250
MULTICALOR 400.1	1230	610	620	345	545	900	320	471	746	315	315	M16	195	250
MULTICALOR 500.1	1200	590	610	355	555	1000	320	570	965	330	330	M16	195	250
MULTICALOR 600.1	1200	590	610	355	555	1000	320	570	965	330	330	M16	195	250

BURNERS

Two stage progressive/modulating mechanical in gas and in light oil

Model	Head	Code
MULTICALOR 300.1 PR	TC	3143765
	TL	3143766
MULTICALOR 400.1 PR	TC	3143767
	TL	3143768
MULTICALOR 500.1 PR	TC	3143769
	TL	3143770
MULTICALOR 600.1 PR	TC	3143771
	TL	3143772



MULTICALOR 300.1 PR

Two stage progressive/modulating electronic in gas and in light oil

Model	Head	Code
MULTICALOR 300.1 PRE	TC	3145144
	TL	3145145
MULTICALOR 400.1 PRE	TC	3145146
	TL	3145147
MULTICALOR 500.1 PRE	TC	3145148
	TL	3145149
MULTICALOR 600.1 PRE	TC	3145150
	TL	3145151

! Nozzle not included in the code of the burner - see page 118

OTHER AVAILABLE CONFIGURATIONS

60 Hz	Continuous Ventilation (CV)	Post-purge
●	●	●

● Codes available on request

GAS TRAINS

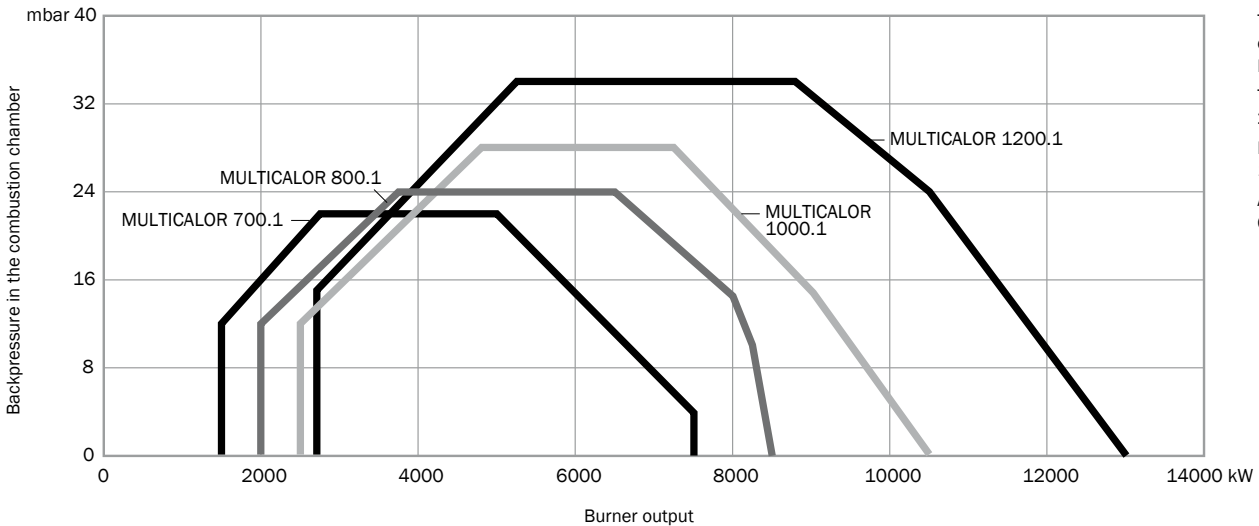
	Pressure (mbar)		Model	Size	Codes for PR versions	Codes for PRE versions	Connection pipe	Filter
	min	max						
for MULTICALOR 300.1	22	500	VGD 40.100	DN100	3141869	3145817	3145820	3142205
	35	500	VGD 40.080	DN80	3142026	3145814	3145815	3142088
	55	500	VGD 40.065	DN65	3124110	3145793	3145800	3124111
	100	500	VGD 20.503	2"	3123860	3145790	3142075	3121384
for MULTICALOR 400.1	30	500	VGD 40.100	DN100	3141869	3145817	3145820	3142205
	50	500	VGD 40.080	DN80	3142026	3145814	3145815	3142088
	90	500	VGD 40.065	DN65	3124110	3145793	3145800	3124111
	170	500	VGD 20.503	2"	3123860	3145790	3142075	3121384
for MULTICALOR 500.1	35	500	VGD 40.125	DN125	3142666	3145823	3145830	3142206
	45	500	VGD 40.100	DN100	3141869	3145817	3145821	3142205
	75	500	VGD 40.080	DN80	3142026	3145814	3145864	3142088
	140	500	VGD 40.065	DN65	3124110	3145793	3145997	3124111
	250	500	VGD 20.503	2"	3123860	3145790	3142075	3121384
for MULTICALOR 600.1	50	500	VGD 40.125	DN125	3142666	3145823	3145830	3142206
	60	500	VGD 40.100	DN100	3141869	3145817	3145821	3142205
	100	500	VGD 40.080	DN80	3142026	3145814	3145864	3142088
	180	500	VGD 40.065	DN65	3124110	3145793	3145997	3124111
	340	500	VGD 20.503	2"	3123860	3145790	3142075	3121384

*: both codes have to be selected in case of order

! Default blank spring: head pressure 0...22 mbar; choose and change spring and damping (to be fitted during installation on site) - see page 109
 For minimum inlet pressures higher than 250 mbar, choose the pressure switch GW500 (to be fitted during installation on site) - see page 109
 For gas trains in EN676 Configuration a tightness control device must be included over 1200 kW (already included on PRE burners) - see page 116

- Fuel: natural gas, LPG; light oil (viscosity from 1,6 cSt to 6 cSt at 20 °C)
- Operation: two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)
- Emission class: Low NOx class 2 (≤ 120 mg/kWh) according to EN676 in gas and class 1 (≤ 250 mg/kWh) according to EN267 in oil

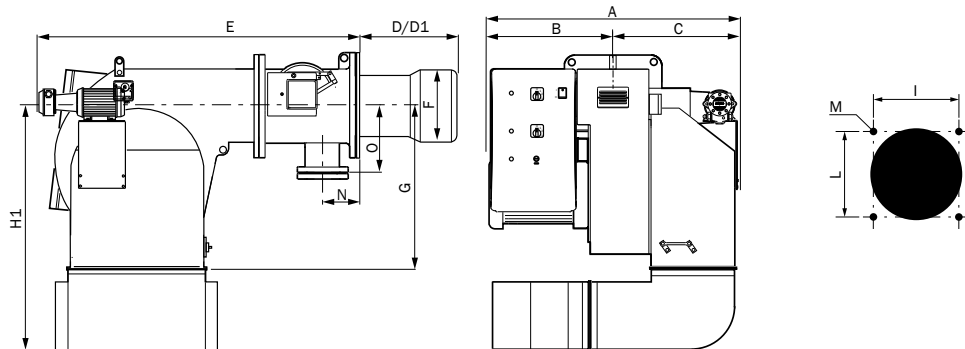
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Flow rate (kg/h)	Power supply	Motor (kW)	NOx class	Operation
MULTICALOR 700.1	1500 - 7500	126 - 634	3/400/50Hz	15	Class 2 / Class 1	PR, PRE
MULTICALOR 800.1	2000 - 8500	169 - 718	3/400/50Hz	18,5	Class 2 / Class 1	PR, PRE
MULTICALOR 1000.1	2500 - 10500	211 - 887	3/400/50Hz	22	Class 2 / Class 1	PR, PRE
MULTICALOR 1200.1	2700 - 13000	228 - 1099	3/400/50Hz	37	Class 2 / Class 1	PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	H1*	I	L	M	N	O
MULTICALOR 700.1	1370	740	630	470	-	1640	420	775	1270	460	460	M20	195	232
MULTICALOR 800.1	1370	740	630	470	-	1640	420	775	1270	460	460	M20	195	232
MULTICALOR 1000.1	1370	740	630	470	-	1640	420	775	1270	460	460	M20	195	232
MULTICALOR 1200.1	1430	800	630	470	-	1640	450	775	1270	460	460	M20	195	232

BURNERS

Two stage progressive/modulating mechanical in gas and in light oil

Model	Head	Code
MULTICALOR 700.1 PR	TC	3143773
MULTICALOR 800.1 PR	TC	3143774
MULTICALOR 1000.1 PR	TC	3143775
MULTICALOR 1200.1 PR	TC	3143776

Two stage progressive/modulating electronic in gas and in light oil

Model	Head	Code
MULTICALOR 700.1 PRE	TC	3145152
MULTICALOR 800.1 PRE	TC	3145153
MULTICALOR 1000.1 PRE	TC	3145154
MULTICALOR 1200.1 PRE	TC	3145155



MULTICALOR 800.1 PR

! Nozzle not included in the code of the burner - see page 118

OTHER AVAILABLE CONFIGURATIONS

60 Hz	Continuous Ventilation (CV)	Post-purge
●	●	●

● Codes available on request

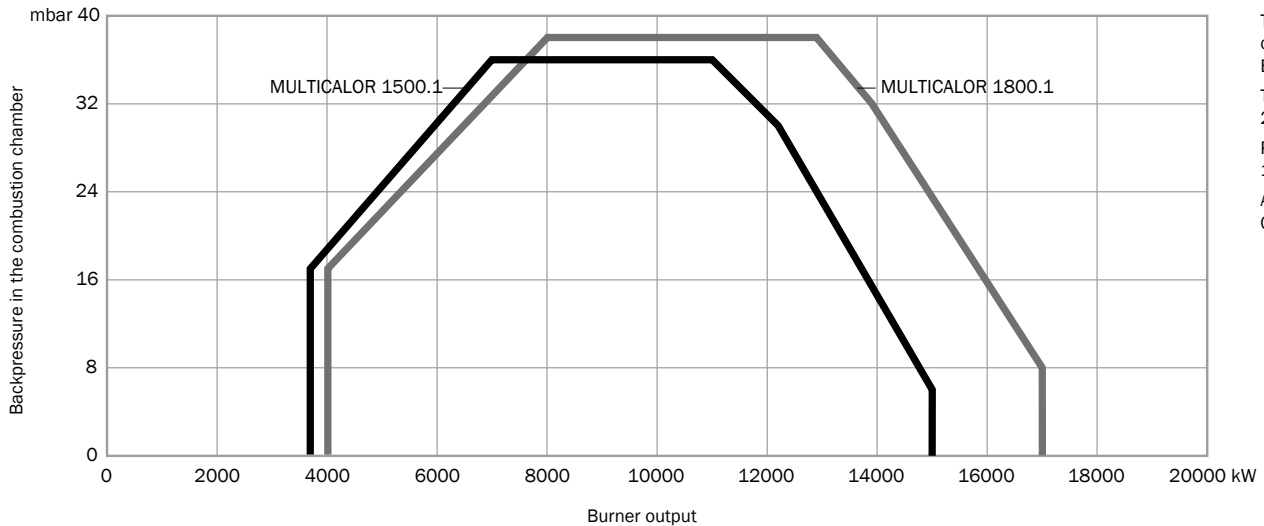
GAS TRAINS

	Pressure (mbar)		Model	Size	Codes for PR versions	Codes for PRE versions	Connection pipe	Filter
	min	max						
for MULTICALOR 700.1	60	500	VGD 40.125	DN125	3142666	3145823	3145829	3142206
	75	500	VGD 40.100	DN100	3141869	3145817	3145822	3142205
	140	500	VGD 40.080	DN80	3142026	3145814	3145816	3142088
	280	500	VGD 40.065	DN65	3124110	3145793	3145801	3124111
for MULTICALOR 800.1	85	500	VGD 40.125	DN125	3142666	3145823	3145829	3142206
	110	500	VGD 40.100	DN100	3141869	3145817	3145822	3142205
	210	500	VGD 40.080	DN80	3142026	3145814	3145816	3142088
	410	500	VGD 40.065	DN65	3124110	3145793	3145801	3124111
for MULTICALOR 1000.1	115	500	VGD 40.125	DN125	3142666	3145823	3145829	3142206
	165	500	VGD 40.100	DN100	3141869	3145817	3145822	3142205
	290	500	VGD 40.080	DN80	3142026	3145814	3145816	3142088
	550	500	VGD 40.065	DN65	3124110	3145793	3145801	3124111
for MULTICALOR 1200.1	175	500	VGD 40.125	DN125	3142666	3145823	3145829	3142206
	230	500	VGD 40.100	DN100	3141869	3145817	3145822	3142205
	420	500	VGD 40.080	DN80	3142026	3145814	3145816	3142088

! Default blank spring: head pressure 0...22 mbar; choose and change spring and damping (to be fitted during installation on site) - see page 109
 For minimum inlet pressures higher than 250 mbar, choose the pressure switch GW500 (to be fitted during installation on site) - see page 109
 For gas trains in EN676 Configuration a tightness control device must be included over 1200 kW (already included on PRE burners) - see page 116

- Fuel: natural gas, LPG; light oil (viscosity from 1,6 cSt to 6 cSt at 20 °C)
- Operation: two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)
- Emission class: Low NOx class 2 (≤ 120 mg/kWh) according to EN676 in gas and class 1 (≤ 250 mg/kWh) according to EN267 in oil

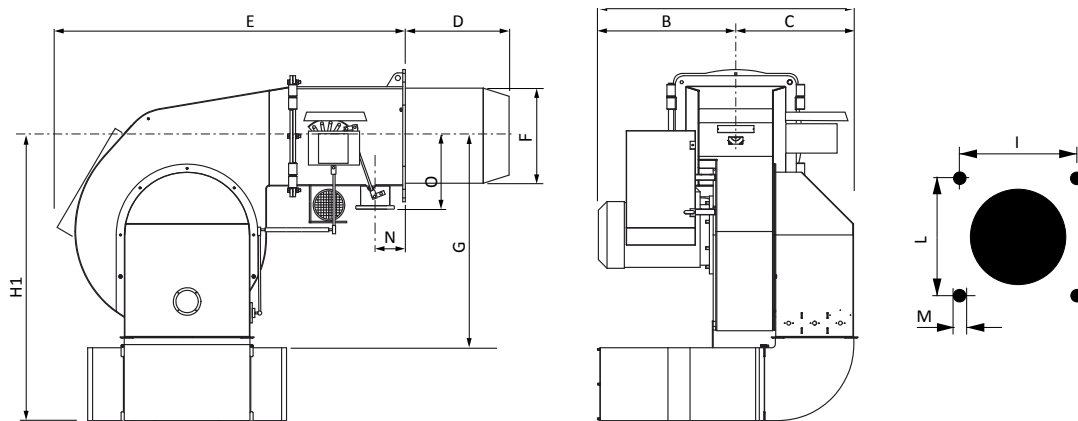
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Flow rate (kg/h)	Power supply	Motor (kW)	NOx class	Operation
MULTICALOR 1500.1	3690 - 15000	312 - 1268	3/400/50Hz	45	Class 2 / Class 1	PR, PRE
MULTICALOR 1800.1	4000 - 17000	338 - 1437	3/400/50Hz	55	Class 2 / Class 1	PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	H1*	I	L	M	N	O
MULTICALOR 1500.1	1700	800	900	590	-	1910	550	1320	1670	619	619	M20	210	320
MULTICALOR 1800.1	1770	870	900	590	-	1910	550	1320	1670	619	619	M20	210	320

BURNERS

Two stage progressive/modulating mechanical in gas and in light oil

Model	Head	Code
MULTICALOR 1500.1 PR	TC	3143777
MULTICALOR 1800.1 PR	TC	3143778

Two stage progressive/modulating electronic in gas and in light oil

Model	Head	Code
MULTICALOR 1500.1 PRE	TC	3145156
MULTICALOR 1800.1 PRE	TC	3145157

! Nozzle not included in the code of the burner - see page 118



MULTICALOR 1500.1 PR

OTHER AVAILABLE CONFIGURATIONS

60 Hz	Continuous Ventilation (CV)	Post-purge
●	●	●

● Codes available on request

GAS TRAINS

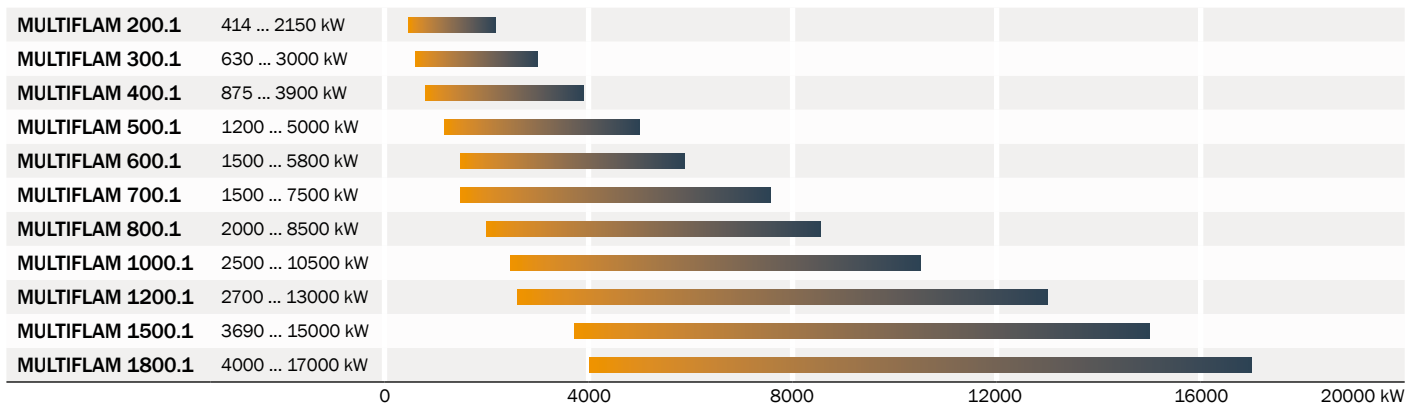
	Pressure (mbar)		Model	Size	Codes for PR versions	Codes for PRE versions	Connection pipe	Filter
	min	max						
for MULTICALOR 1500.1	150	500	VGD 40.125	DN125	3142666	3145823	3145829	3142206
	230	500	VGD 40.100	DN100	3141869	3145817	3145822	3142205
	450	500	VGD 40.080	DN80	3142026	3145814	3145816	3142088
for MULTICALOR 1800.1	210	500	VGD 40.125	DN125	3142666	3145823	3145829	3142206
	330	500	VGD 40.100	DN100	3141869	3145817	3145822	3142205

! Default blank spring: head pressure 0...22 mbar; choose and change spring and damping (to be fitted during installation on site) - see page 109
 For minimum inlet pressures higher than 250 mbar, choose the pressure switch GW500 (to be fitted during installation on site) - see page 109
 For gas trains in EN676 Configuration a tightness control device must be included over 1200 kW (already included on PRE burners) - see page 116

MULTIFLAM

MONOBLOCK DUAL FUEL (GAS/HEAVY OIL) BURNERS FROM 414 TO 17000 kW

RANGE OVERVIEW



MAIN FEATURES

- Two stage version with electric servomotor and integrated system for the regulation of air and fuel (for MULTIFLAM 200.1)
- Progressive version with electric servomotor and double adjustable mechanical cam that allows air and fuel fine tuning
- Modulating version with PID system controller with digital set point display and real time value
- Version with fully electronic Burner Management System available for all models
- Digital thermoregulator integrated on the front panel to grant temperature stability of the fuel (from MULTIFLAM 300.1)
- Adjustable combustion head for easy regulation and matching with different combustion chambers
- Gas pilot included with separate supply line
- Heavy oil electric heating system on board
- Configured and special version on request according to feasibility

MULTIFLAM 200.1



MULTIFLAM 400.1 PR



CONFIGURATIONS

MULTIFLAM range is available in the following operation modes:

MULTIFLAM	MULTIFLAM ... PR	MULTIFLAM ... PRE
Two stages in gas / two stages in heavy oil	Two stage progressive/modulating mechanical in gas and in heavy oil	Two stage progressive/modulating electronic in gas and in heavy oil
MULTIFLAM 200.1	MULTIFLAM 300.1 PR ... 1800.1 PR	MULTIFLAM 300.1 PRE ... 1800.1 PRE

Other available configurations:

- Continuous ventilation versions
- High temperature versions
- High viscosity versions suitable for 118 cSt (15° E) at 80 °C available on request

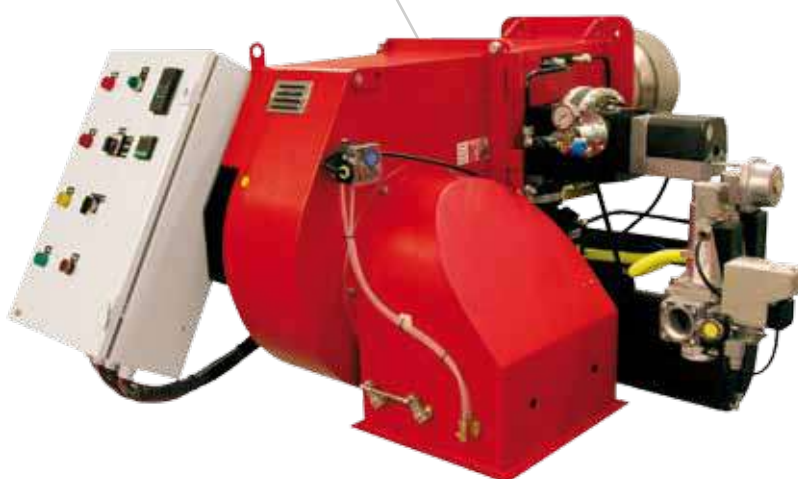
FUEL:

- Natural gas (G20, G25 according to EN676)
- LPG
- Heavy oil (max viscosity 380 cSt (50° E) at 50 °C)

CONFORM TO

- All products are built in accordance with the following directives:
- 2006/42/EC Machinery Directive
 - 2014/30/UE EMC Directive
 - 2014/35/UE Low Voltage Directive
 - 2009/142/CEE Gas Appliances Directive

MULTIFLAM 600.1 PR

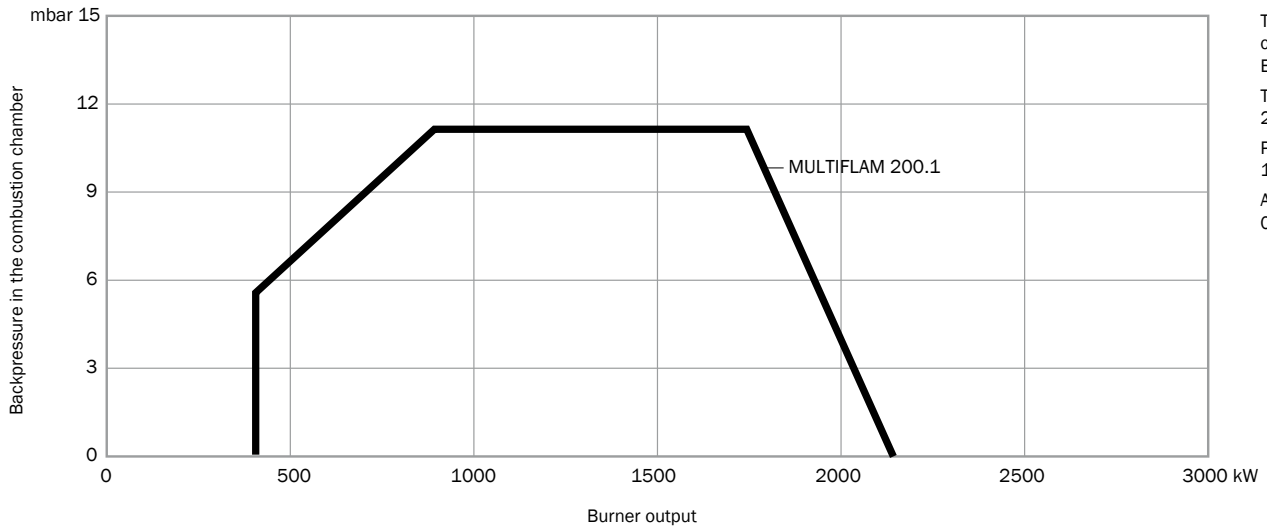


MULTIFLAM 1500.1 PR



- Fuel: natural gas, LPG; heavy oil (max viscosity 380 cSt (50 °E) at 50 °C)
- Operation: two stages
- Emission class: Low NOx class 2 (≤120 mg/kWh) according to EN676 in gas

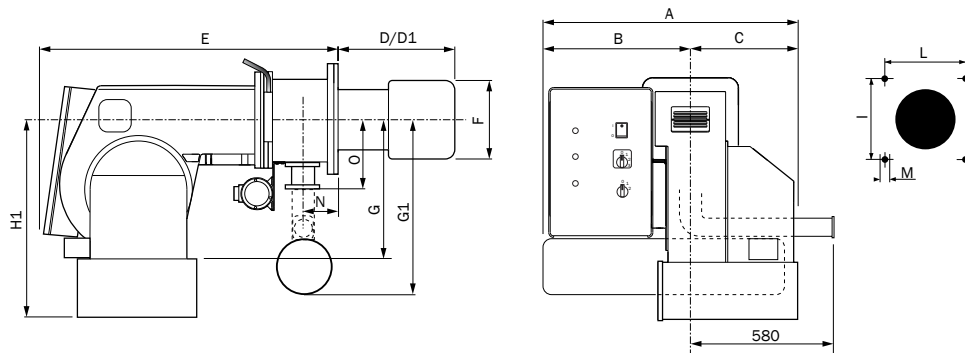
WORKING DIAGRAM



TECHNICAL DATA

	Burner output (kW)	Flow rate (kg/h)	Power supply	Motor (kW)	NOx class (in gas)	Operation
MULTIFLAM 200.1	414 - 2150	36 - 189	3/230-400/50Hz	4	Class 2	PAB

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	G1	H1*	I	L	M	N	O
MULTIFLAM 200.1	915	335	580	290	490	1150	270	420	600	680	315	315	M16	125	250

BURNERS

Two stages in gas and in heavy oil

Model	Head	Code
MULTIFLAM 200.1	TC	3142669
	TL	3142670



MULTIFLAM 200.1

OTHER AVAILABLE CONFIGURATIONS

60 Hz	High viscosity version	Continuous Ventilation (CV)	Post-purge
●	●	●	●

● Codes available on request

GAS TRAINS

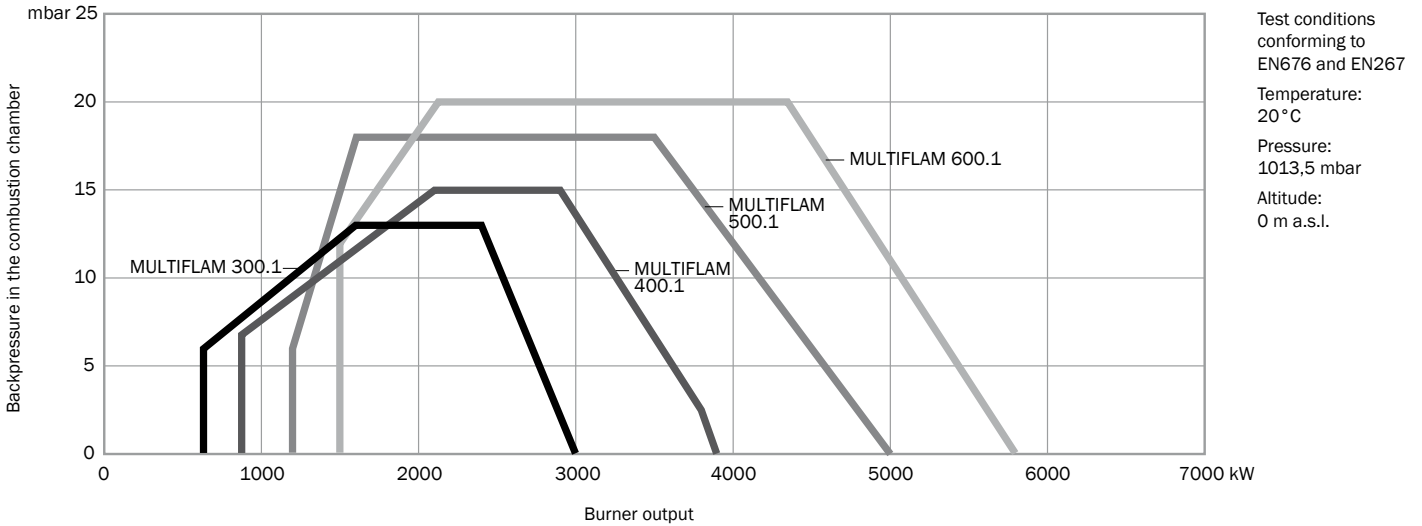
	Pressure (mbar)		Model	Size	Code	Connection pipe	Filter
	min	max					
for MULTIFLAM 200.1	35	700	VGD 40.080	DN80	3142026	-	3142088
	55	700	VGD 40.065	DN65	3124110	3142935	3124111
	100	600	VGD 20.503	2"	3123860	3143080	3121384

! For minimum inlet pressures higher than 250 mbar, choose the pressure switch GW500 (to be fitted during installation on site) - see page 109
 For gas trains in EN676 Configuration a tightness control device must be included over 1200 kW (already included on PRE burners) - see page 116

Range | Models
MULTIFLAM 300.1 - 400.1 - 500.1 - 600.1

- Fuel: natural gas, LPG; heavy oil (max viscosity 380 cSt (50 °E) at 50 °C)
- Operation: two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)
- Emission class: Low NOx class 2 (≤ 120 mg/kWh) according to EN676 in gas

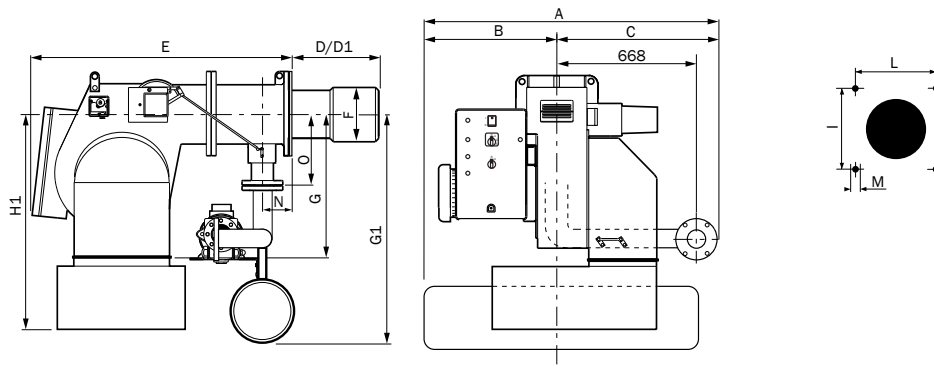
WORKING DIAGRAM



TECHNICAL DATA

	Output range (kW)	Flow rate (kg/h)	Power supply	Motor (kW)	NOx class (in gas)	Operation
MULTIFLAM 300.1	630 - 3000	55 - 264	3/400/50Hz	5,5	Class 2	PR, PRE
MULTIFLAM 400.1	875 - 3900	77 - 343	3/400/50Hz	7,5	Class 2	PR, PRE
MULTIFLAM 500.1	1200 - 5000	105 - 440	3/400/50Hz	11	Class 2	PR, PRE
MULTIFLAM 600.1	1500 - 5800	132 - 510	3/400/50Hz	15	Class 2	PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	G1	H1*	I	L	M	N	O
MULTIFLAM 300.1	1288	610	678	330	530	1130	290	471	750	746	315	315	M16	195	250
MULTIFLAM 400.1	1288	610	678	345	545	1130	320	471	750	746	315	315	M16	195	250
MULTIFLAM 500.1	1358	680	678	354	554	1230	320	570	775	965	330	330	M16	195	250
MULTIFLAM 600.1	1358	680	678	354	554	1230	320	570	775	965	330	330	M16	195	250

BURNERS

Two stage progressive/modulating mechanical in gas and in heavy oil

Model	Head	Code
MULTIFLAM 300.1 PR	TC	3143779
	TL	3143780
MULTIFLAM 400.1 PR	TC	3143781
	TL	3143782
MULTIFLAM 500.1 PR	TC	3143783
	TL	3143784
MULTIFLAM 600.1 PR	TC	3143785
	TL	3143786



MULTIFLAM 400.1 PR

Two stage progressive/modulating electronic in gas and in heavy oil

Model	Head	Code
MULTIFLAM 300.1 PRE	TC	on request
	TL	on request
MULTIFLAM 400.1 PRE	TC	on request
	TL	on request
MULTIFLAM 500.1 PRE	TC	on request
	TL	on request
MULTIFLAM 600.1 PRE	TC	on request
	TL	on request

! Nozzle not included in the code of the burner - see page 118

OTHER AVAILABLE CONFIGURATIONS

60 Hz	High viscosity version	Continuous Ventilation (CV)	Post-purge
●	●	●	●

● Codes available on request

GAS TRAINS

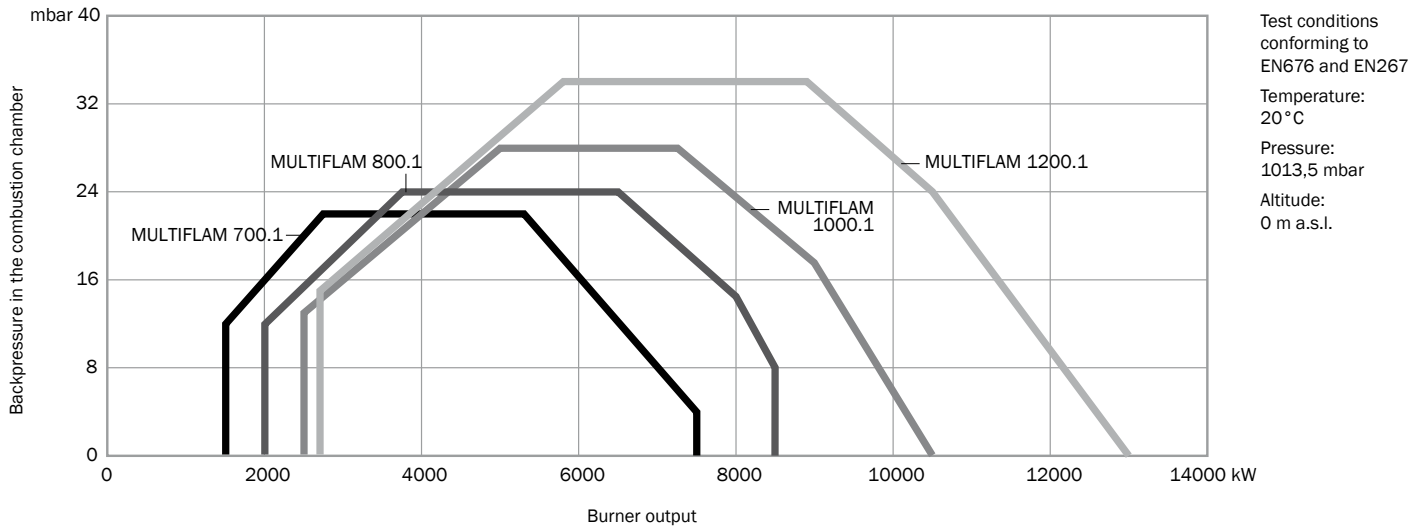
	Pressure (mbar)		Model	Size	Code	Connection pipe	Filter
	min	max					
for MULTIFLAM 300.1	22	700	VGD 40.100	DN100	3141869	3142073	3142205
	35	700	VGD 40.080	DN80	3142026	-	3142088
	55	700	VGD 40.065	DN65	3124110	3142935	3124111
	100	600	VGD 20.503	2"	3123860	3143080	3121384
for MULTIFLAM 400.1	30	700	VGD 40.100	DN100	3141869	3142073	3142205
	50	700	VGD 40.080	DN80	3142026	-	3142088
	90	700	VGD 40.065	DN65	3124110	3142935	3124111
	170	600	VGD 20.503	2"	3123860	3143080	3121384
for MULTIFLAM 500.1	35	700	VGD 40.125	DN125	3142666	3143105	3142206
	45	700	VGD 40.100	DN100	3141869	3142073	3142205
	75	700	VGD 40.080	DN80	3142026	-	3142088
	140	700	VGD 40.065	DN65	3124110	3142935	3124111
	250	600	VGD 20.503	2"	3123860	3143080	3121384
for MULTIFLAM 600.1	50	700	VGD 40.125	DN125	3142666	3143105	3142206
	60	700	VGD 40.100	DN100	3141869	3142073	3142205
	100	700	VGD 40.080	DN80	3142026	-	3142088
	180	700	VGD 40.065	DN65	3124110	3142935	3124111
	340	600	VGD 20.503	2"	3123860	3143080	3121384

! Default blank spring: head pressure 0...22 mbar; choose and change spring and damping (to be fitted during installation on site) - see page 109
 For minimum inlet pressures higher than 250 mbar, choose the pressure switch GW500 (to be fitted during installation on site) - see page 109
 For gas trains in EN676 Configuration a tightness control device must be included over 1200 kW (already included on PRE burners) - see page 116

Range | Models
MULTIFLAM 700.1 - 800.1 - 1000.1 - 1200.1

- Fuel: natural gas, LPG; heavy oil (max viscosity 380 cSt (50 °E) at 50 °C)
- Operation: two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)
- Emission class: Low NOx class 2 (≤ 120 mg/kWh) according to EN676 in gas

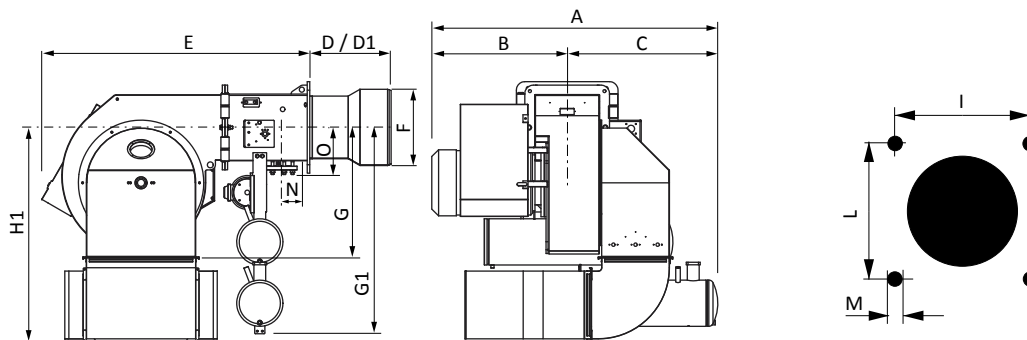
WORKING DIAGRAM



TECHNICAL DATA

	Output range (kW)	Flow rate (kg/h)	Power supply	Motor (kW)	NOx class (in gas)	Operation
MULTIFLAM 700.1	1500 - 7500	132 - 660	3/400/50Hz	15	Class 2	PR, PRE
MULTIFLAM 800.1	2000 - 8500	176 - 748	3/400/50Hz	18,5	Class 2	PR, PRE
MULTIFLAM 1000.1	2500 - 10500	220 - 924	3/400/50Hz	22	Class 2	PR, PRE
MULTIFLAM 1200.1	2700 - 13000	237 - 1143	3/400/50Hz	37	Class 2	PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	G1	H1*	N	O	I	L	M
MULTIFLAM 700.1	1370	740	630	470	-	1640	420	775	850	1270	195	232	460	460	M20
MULTIFLAM 800.1	1370	740	630	470	-	1640	420	775	850	1270	195	232	460	460	M20
MULTIFLAM 1000.1	1500	740	760	470	-	1640	420	775	850	1270	195	232	460	460	M20
MULTIFLAM 1200.1	1700	800	900	470	-	1640	450	775	1200	1270	195	232	460	460	M20

BURNERS

Two stage progressive/modulating mechanical in gas and in heavy oil

Model	Head	Code
MULTIFLAM 700.1 PR	TC	on request
MULTIFLAM 800.1 PR	TC	on request
MULTIFLAM 1000.1 PR	TC	on request
MULTIFLAM 1200.1 PR	TC	on request

Two stage progressive/modulating electronic in gas and in heavy oil

Model	Head	Code
MULTIFLAM 700.1 PRE	TC	on request
MULTIFLAM 800.1 PRE	TC	on request
MULTIFLAM 1000.1 PRE	TC	on request
MULTIFLAM 1200.1 PRE	TC	on request



MULTIFLAM 700.1

! Nozzle not included in the code of the burner - see page 118

OTHER AVAILABLE CONFIGURATIONS

60 Hz	High viscosity version	Continuous Ventilation (CV)	Post-purge
●	●	●	●

● Codes available on request

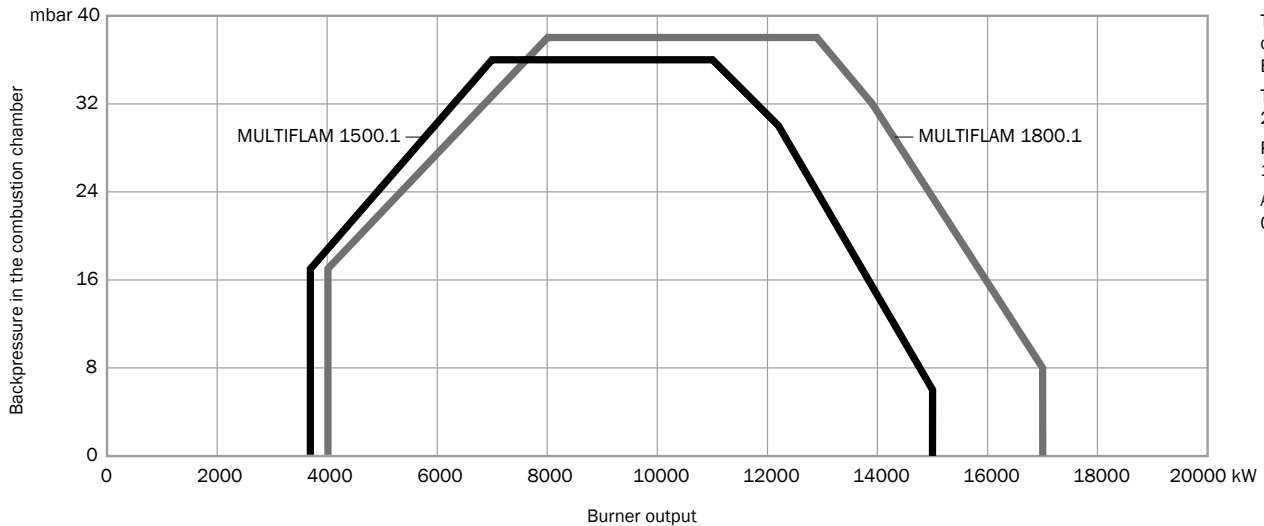
GAS TRAINS

	Pressure (mbar)		Model	Size	Code	Connection pipe	Filter
	min	max					
for MULTIFLAM 700.1	60	700	VGD 40.125	DN125	3142666	3145829	3142206
	75	700	VGD 40.100	DN100	3141869	3145822	3142205
	140	700	VGD 40.080	DN80	3142026	3145816	3142088
	280	700	VGD 40.065	DN65	3124110	3145801	3124111
for MULTIFLAM 800.1	85	700	VGD 40.125	DN125	3142666	3145829	3142206
	110	700	VGD 40.100	DN100	3141869	3145822	3142205
	210	700	VGD 40.080	DN80	3142026	3145816	3142088
	410	700	VGD 40.065	DN65	3124110	3145801	3124111
for MULTIFLAM 1000.1	115	700	VGD 40.125	DN125	3142666	3145829	3142206
	165	700	VGD 40.100	DN100	3141869	3145822	3142205
	290	700	VGD 40.080	DN80	3142026	3145816	3142088
	550	700	VGD 40.065	DN65	3124110	3145801	3124111
for MULTIFLAM 1200.1	160	700	VGD 40.150	DN150	on request	on request	on request
	175	700	VGD 40.125	DN125	3142666	3145829	3142206
	230	700	VGD 40.100	DN100	3141869	3145822	3142205
	420	700	VGD 40.080	DN80	3142026	3145816	3142088

! Default blank spring: head pressure 0...22 mbar; choose and change spring and damping (to be fitted during installation on site) - see page 109
 For minimum inlet pressures higher than 250 mbar, choose the pressure switch GW500 (to be fitted during installation on site) - see page 109
 For gas trains in EN676 Configuration a tightness control device must be included over 1200 kW (already included on PRE burners) - see page 116

- Fuel: natural gas, LPG; heavy oil (max viscosity 380 cSt (50 °E) at 50 °C)
- Operation: two stage progressive or modulating with the installation of a power regulator and dedicated probes (see page 106)
- Emission class: Low NOx class 2 (≤ 120 mg/kWh) according to EN676 in gas

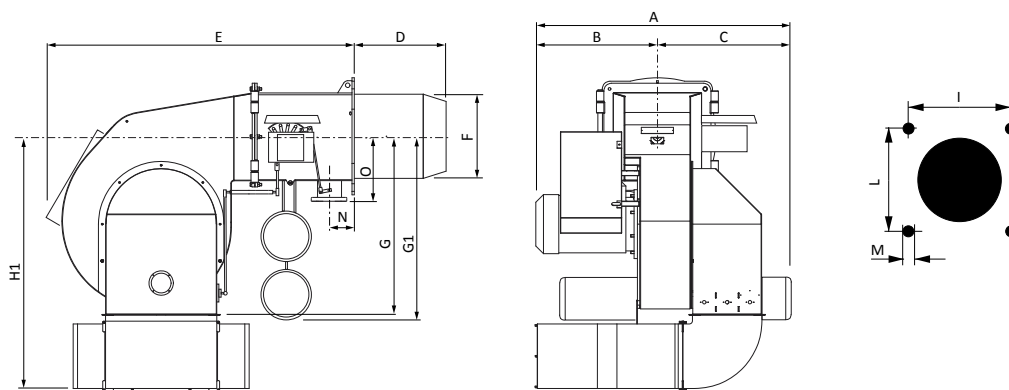
WORKING DIAGRAM



TECHNICAL DATA

	Output range (kW)	Flow rate (kg/h)	Power supply	Motor (kW)	NOx class (in gas)	Operation
MULTIFLAM 1500.1	3690 - 15000	324 - 1319	3/400/50Hz	45	Class 2	PR, PRE
MULTIFLAM 1800.1	4000 - 17000	352 - 1495	3/400/50Hz	55	Class 2	PR, PRE

OVERALL DIMENSIONS



Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	A	B	C	D	D1	E	F	G	G1	H1*	N	O	I	L	M
MULTIFLAM 1500.1	1700	800	900	590	-	1910	550	1170	1220	1670	210	320	620	620	M20
MULTIFLAM 1800.1	1770	870	900	590	-	1910	550	1170	1220	1670	210	320	620	620	M20

BURNERS

Two stage progressive/modulating mechanical in gas and in heavy oil

Model	Head	Code
MULTIFLAM 1500.1 PR	TC	on request
MULTIFLAM 1800.1 PR	TC	on request

Two stage progressive/modulating electronic in gas and in heavy oil

Model	Head	Code
MULTIFLAM 1500.1 PRE	TC	on request
MULTIFLAM 1800.1 PRE	TC	on request



MULTIFLAM 1500.1 PR

! Nozzle not included in the code of the burner - see page 118

OTHER AVAILABLE CONFIGURATIONS

60 Hz	High viscosity version	Continuous Ventilation (CV)	Post-purge
●	●	●	●

● Codes available on request

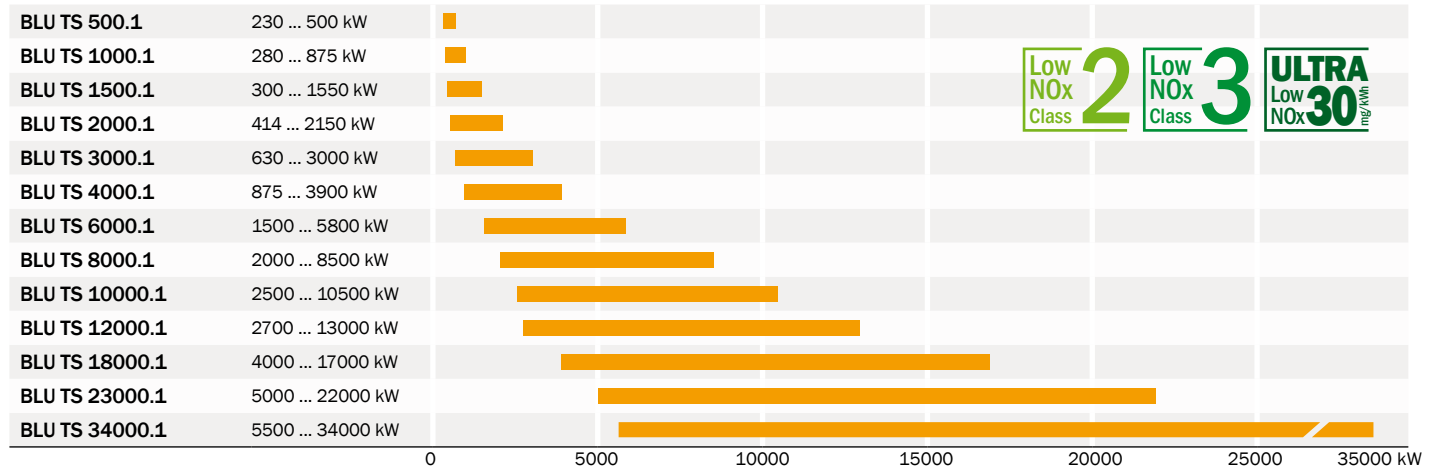
GAS TRAINS

	Pressure (mbar)		Model	Size	Code	Connection pipe	Filter
	min	max					
for MULTIFLAM 1500.1	125	700	VGD 40.150	DN150	on request	on request	on request
	150	700	VGD 40.125	DN125	3142666	3145829	3142206
	230	700	VGD 40.100	DN100	3141869	3145822	3142205
	450	700	VGD 40.080	DN80	3142026	3145816	3142088
for MULTIFLAM 1800.1	175	700	VGD 40.150	DN150	on request	on request	on request
	210	700	VGD 40.125	DN125	3142666	3145829	3142206
	330	700	VGD 40.100	DN100	3141869	3145822	3142205

! Default blank spring: head pressure 0...22 mbar; choose and change spring and damping (to be fitted during installation on site) - see page 109
For minimum inlet pressures higher than 250 mbar, choose the pressure switch GW500 (to be fitted during installation on site) - see page 109
For gas trains in EN676 Configuration a tightness control device must be included over 1200 kW (already included on PRE burners) - see page 116

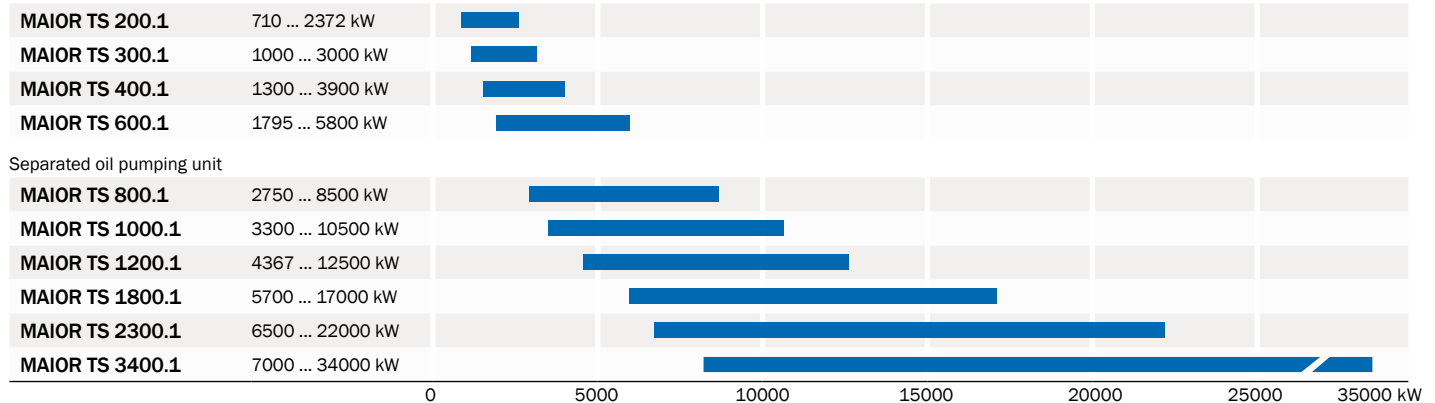
RANGE OVERVIEW

GAS



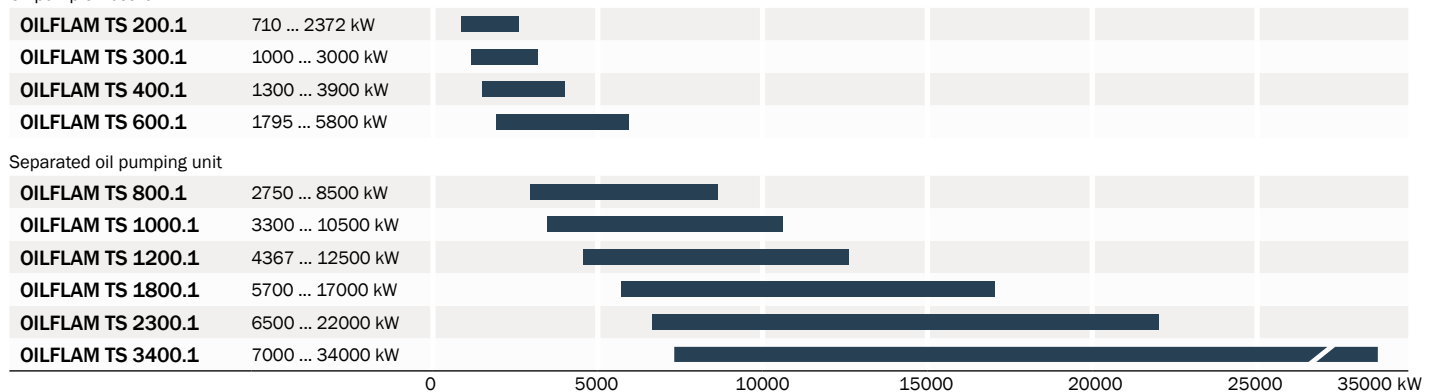
LIGHT OIL

Oil pump on board



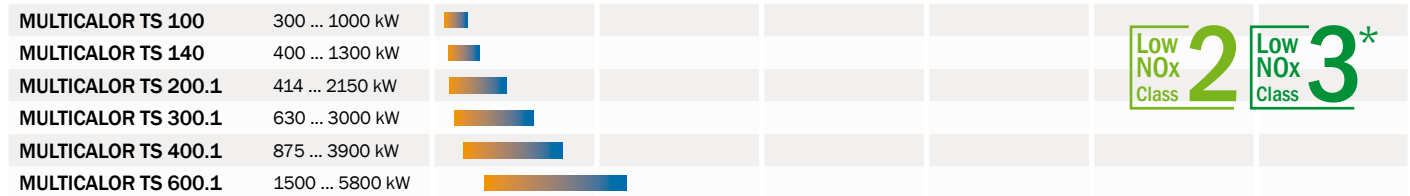
HEAVY OIL

Oil pump on board



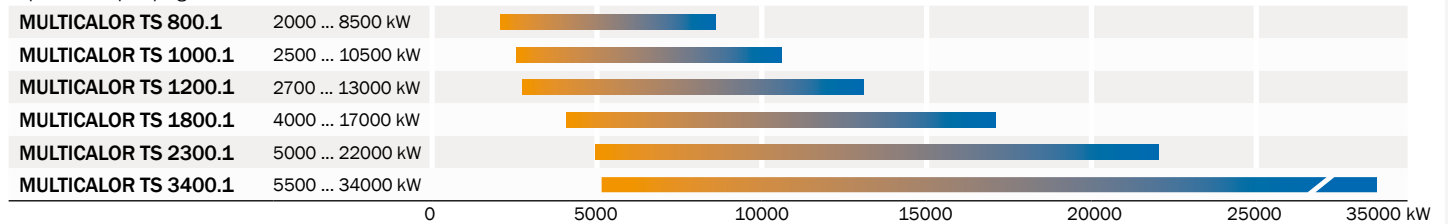
DUAL FUEL (GAS/LIGHT OIL)

Oil pump on board



Low NOx Class 2 Low NOx Class 3*

Separated oil pumping unit



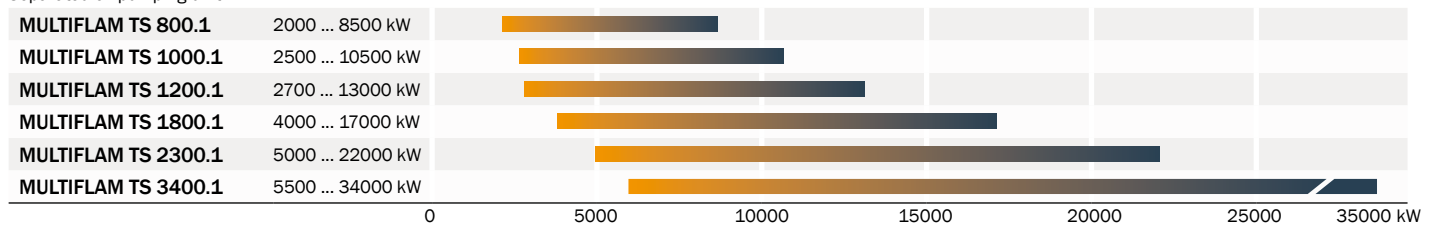
*: starting from MULTICALOR TS 800.1

DUAL FUEL (GAS/HEAVY OIL)

Oil pump on board



Separated oil pumping unit



TS RANGE

TS Range is available in the following operation modes:

"Range" TS ... AB

Two stages (Models up to 2 MW)

"Range" TS ... PR

Two stage progressive/modulating mechanical

"Range" TS ... PRE

Two stage progressive/modulating electronic



MAIN FEATURES

All the benefits of the separate ventilation

In contrast to monoblock burners, duoblock burners are made up of two units, or blocks, as the name implies: the burner head with the air inlet, and the separately-installed fan; the two units are connected via an air duct.

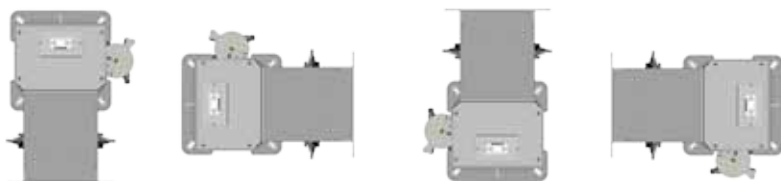
The separate installation of the fan offers several benefits:

- the fan can be installed in a separate room, for instance in the cellar; this results in considerably lower noise levels in the boiler room; when the fan is installed in the same room, a fan enclosure can be used to achieve optimum sound absorption, without inhibiting access to the burner;
- less space required in front of the boiler and in the boiler room;
- individual fan layout with optimum adaptation of the fan characteristic curve to suit the pressure ratio of the heat generator; this guarantees pulsation-free and stable burner behaviour, even on heat generators with high resistance on the exhaust side;
- combustion air can be pre-heated to increase installation efficiency;
- lower weight loading on the boiler front.



Maximum flexibility for highly customized solutions

Thanks to their extreme flexibility and ease of use TS burners are suitable for all types of installation from 200 kW up to 34 MW. Terminal block configuration is provided as standard; versions with integrated control panel are available on request.



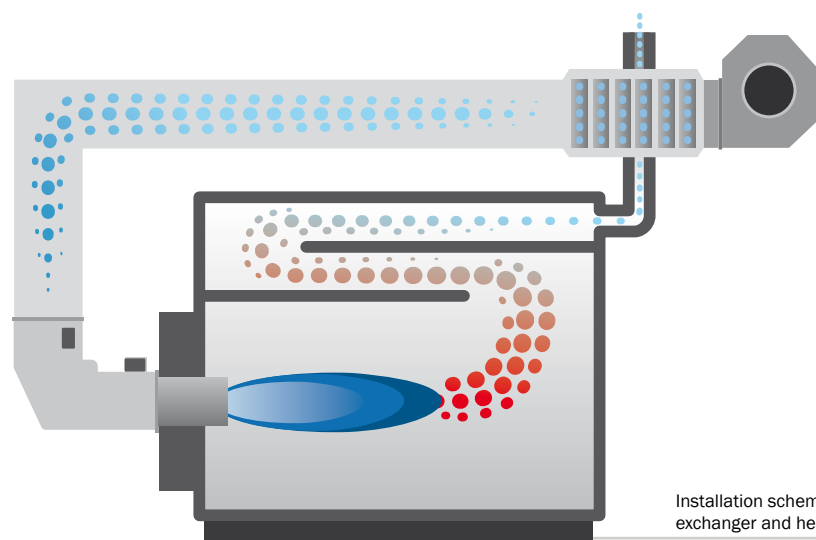
Burners can be assembled with air duct connection in different layouts in order to meet a wide range of specifications in terms of performance and overall dimensions.

Low maintenance, high reliability

All TS range models feature easy maintenance.

Access to the combustion head and to the internal components is allowed from the housing top cover with a single operation, without removing the burner from the boiler.

The clear layout allows rapid cleaning of the mechanical components, keeping the installation always in good conditions.



Installation scheme with smoke exchanger and heat recuperator

Hot air configuration

TS range can run in standard configuration with air up to 60° C.

Versions suitable to work with pre-heated combustion air up to 200° C can be used in order to achieve greater values of efficiency.

CONFIGURATIONS, VARIANTS AND ACCESSORIES



Standard configuration:
loose version with
derivative panel



IP55 Switch cabinet
configuration:
version with assembled
or remote switch cabinet



Pre-heating pump
station



Separate ventilator



Gas train unit



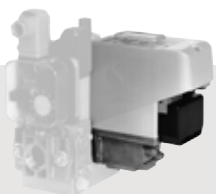
Modulation Kit



Gas governor/filter
Compulsory EN676



Max pressure switch

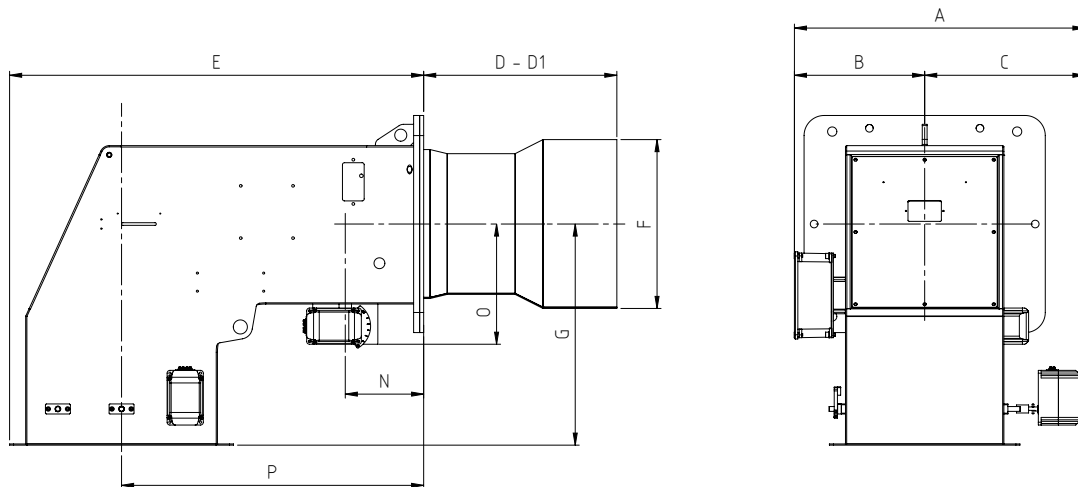


Tightness control
Compulsory EN676
(over 1200 kW)



LPG/Natural gas

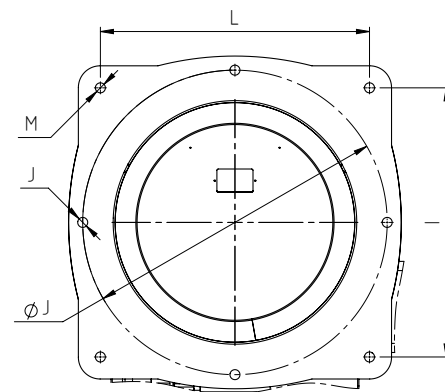
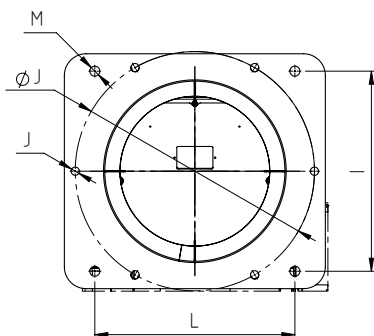
OVERALL DIMENSIONS: Burner Body



Connecting flange

Gas: **TS 500.1 ... 12000.1**
 Oil and dual: **TS 100 ... 1200.1**

Gas: **TS 1800.1 ... 34000.1**
 Oil and dual: **TS 1800.1 ... 3400.1**



	A	B	C	D	D1	E	F	G	I	L	M	ØJ	J	N	O	P
TS 500.1	523	216	307	174	394	556	160	290	190	190	4xM10	-	-	139	175*	405
TS 1000.1 / TS 100	523	216	307	174	394	556	190	290	190	190	4xM10	-	-	139	175*	405
TS 1500.1 / TS 140	523	216	307	342	492	556	200	290	190	190	4xM10	-	-	139	175*	405
TS 2000.1 / TS 200.1	543	234	309	348	548	620	270	375	270	270	4xM16	-	-	125	250	448
TS 3000.1 / TS 300.1	605	265	340	330	530	728	290	392	315	315	4xM16	-	-	188	250	528
TS 4000.1 / TS 400.1	605	265	340	365	565	728	320	392	315	315	4xM16	-	-	188	250	528
TS 6000.1 / TS 600.1	617	271	346	373	573	810	360	404	330	330	4xM16	-	-	195	250	575
TS 8000.1 / TS 800.1	723	324	399	470	-	1030	420	550	460	460	4xM20	550	4xM16	195	299	752
TS 10000.1 / TS 1000.1	723	324	399	470	-	1030	420	550	460	460	4xM20	550	4xM16	195	299	752
TS 12000.1 / TS 1200.1	723	324	399	470	-	1030	450	550	460	460	4xM20	550	4xM16	195	299	752
TS 18000.1 / TS 1800.1	899	412	487	590	-	1480	551	670	619	619	4xM20	700	4xM20	200	390	1115
TS 23000.1 / TS 2300.1	1080	501	579	530	-	1549	626	760	800	800	4xM20	1130	4xM20	210	412	1084
TS 34000.1 / TS 3400.1	1080	501	579	530	-	1549	626	760	800	800	4xM20	1130	4xM20	210	412	1084

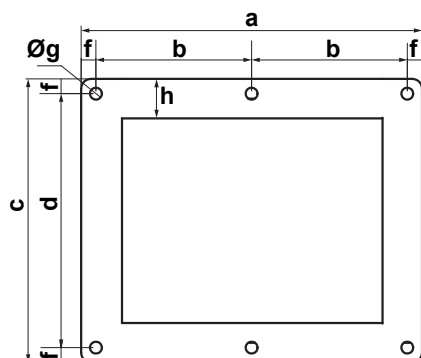
*: gas train connection on the right side of the burner

D: short head - D1: long head

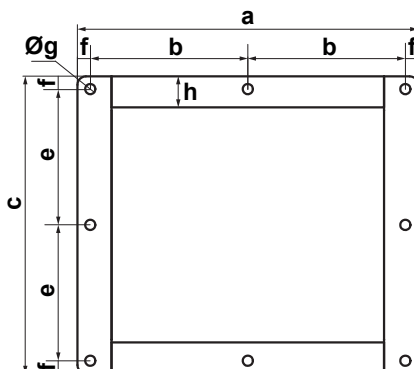
Dimensions (in mm) make reference to a standard model in electronic version; data may vary according to the configuration and options installed

OVERALL DIMENSIONS: Air Duct

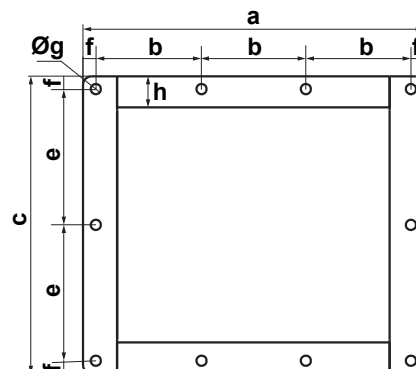
Gas: **TS 500.1 ... 2000.1**
Oil and dual: **TS 100 ... 200.1**



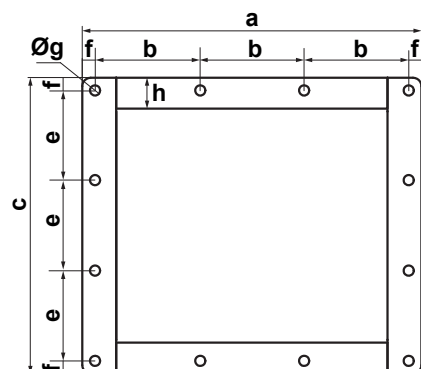
Gas: **TS 3000.1 ... 6000.1**
Oil and dual: **TS 300 ... 600.1**



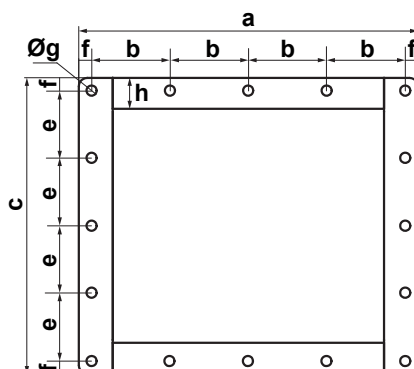
Gas: **TS 8000.1 ... 12000.1**
Oil and dual: **TS 800.1 ... 1200.1**



Gas: **TS 18000.1**
Oil and dual: **TS 1800.1**



Gas: **TS 23000.1 ... 34000.1**
Oil and dual: **TS 2300.1 ... 3400.1**



	a	b	c	d	e	f	Øg	h
TS 500.1	303	136,5	252	222	-	15	6x R12	40
TS 1000.1 / TS 100	303	136,5	252	222	-	15	6x R12	40
TS 1500.1 / TS 140	303	136,5	252	222	-	15	6x R12	40
TS 2000.1 / TS 200.1	345	157,5	287	257	-	15	6x R12	40
TS 3000.1 / TS 300.1	400	185	349	-	159,5	15	8x R12	40
TS 4000.1 / TS 400.1	400	185	349	-	159,5	15	8x R12	40
TS 6000.1 / TS 600.1	470	220	361	-	165,5	15	8x R12	40
TS 8000.1 / TS 800.1	557	173	474	-	218	19	10x R14	43
TS 10000.1 / TS 1000.1	557	173	474	-	218	19	10x R14	43
TS 12000.1 / TS 1200.1	557	173	474	-	218	19	10x R14	43
TS 18000.1 / TS 1800.1	730	230,7	650	-	204	19	12x R14	43
TS 23000.1 / TS 2300.1	930	223	828	-	197,5	19	16x R14	40
TS 34000.1 / TS 3400.1	930	223	828	-	197,5	19	16x R14	40

Dimensions in mm

Ecoflam is continuously focused on an environmental program, both for optimisation of existing products and new developments, with the target to offer efficient, reliable and technologically advanced solutions able to meet the most restrictive European legislation requirements, in particular in terms of emission and energy saving.

New series of low NO_x oil burners have been made available with one stage, two stage or modulating operation for OEM «Unit» applications.



MAX LN – Low NO_x one stage burners

- One stage light oil burners available in different rating sizes from 15 to 65 kW
- Low NO_x combustion technology able to guarantee NO_x emissions below 115 mg/kWh (EN 267:2009)
- High ventilation performance
- Easy installation, adjustment and maintenance



MAX 4 LN
24 - 34 kW

Low NO_x two stage special customized models

- Two stage light oil burners covering an output range from 11 to 42 kW
- Blue Flame combustion technology with NO_x emissions below 110 mg/kWh (EN 267:2009)
- Suitable to operate in altitude with high performances



UB1.42 VD
18 - 42 kW

F10/F15 E2-5 – Low NO_x modulating burners

- Innovative modulating light oil burners with an output range from 8 to 62 kW
- Blue Flame combustion technology granting NO_x emissions below 100 mg/kWh (EN 267:2009)
- Patented modulating system
- High ventilation performance
- Low noise and low electrical consumption
- Easy setting through a 3-point curve



F10E2-5.24
14 - 24 kW

Burners suitable for low sulphur oil and light oil/biofuel blends (biofuel up to 10%). Special dedicated burner models available for kerosene Low NO_x applications.

Ecoflam is renowned for its ability to conceive and build flexible products and to propose customized solutions for any type of applications. Successful and satisfied customers, both from OEM or distribution fields, demonstrate throughout the years that Ecoflam is able to meet their requests offering a wide range of special products capable to satisfy even the most difficult ones.

High Temperature versions



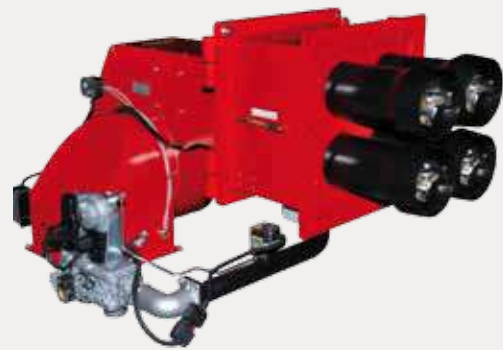
Small products for industrial applications



Two-gas burners



Two/four head burners



FGR (Flue Gas Recirculation)



Remote control panel



MODULATION KIT

MODULATING PID CONTROLLER - KIT FOR PROGRESSIVE VERSIONS

RWF50

Standard solution



Model	Code
KITMD-RWF50 for MAX GAS 70...250 PR	3146829
KITMD-RWF50 for MAX GAS 350/500 PR with Ariston BCU	3143922
KITMD-RWF50 for MULTICALOR 45...200 PR-AB	3144025
KITMD-RWF50 for models with Siemens LME7	3147786
Kit for all the other models in PR version	3143713

RWF55

More functions than RWF50

Not suitable for all burners



Model	Code
KITMD-RWF55*	3143714
KITMD-RWF55.6* (PID controller with Profibus communication)	3143830
KITMD-RWF55 for models with Siemens LME7	3147787

*: not applicable to MAX GAS with Ariston BCU and to MAX GAS 40...250 with Siemens BCU

TEMPERATURE AND PRESSURE PROBES

Model	Code
Water probe, temperature range from 0 to 130°C	3122316
Steam probe 0÷2 bar	3124100
Steam probe 0÷4 bar	3122317
Steam probe 0÷10 bar	3122318
Steam probe 0÷16 bar	3122319
Steam probe 0÷25 bar	3834314
Steam probe 0÷40 bar	3122320
Probe for external temperature from -35° to 50°C	3122315
Hot air or liquid probe, temperature range from 0 to 450°C	3122314
Thermocouple J type, temperature up to 750°C (for RWF55 only)	3146725

GAS TRAINS

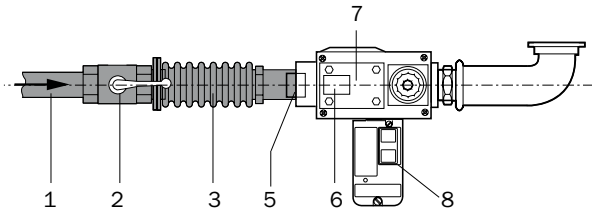
GAS TRAIN COMPOSITION

ECOFLAM gas trains are delivered separately for all gas and dual fuel burners and are available in different configurations:

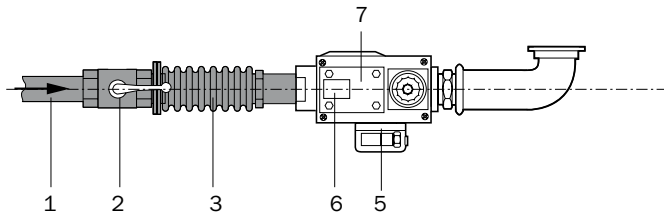
- EN676 standard gas train + kit/accessories in compliance with EN676;
- Export configuration + other additional options to be added by installer in compliance with local safety regulations and codes of practise.

MULTIBLOC DUNGS

Compact double solenoid valve with built-in filter, gas governor and gas pressure switch



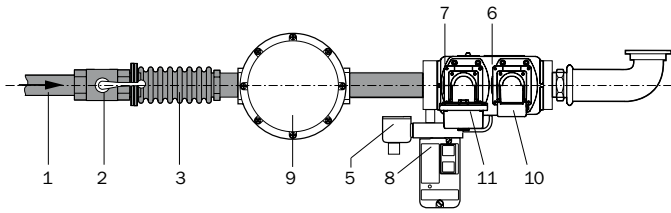
Configuration for electronic burners (PRE):



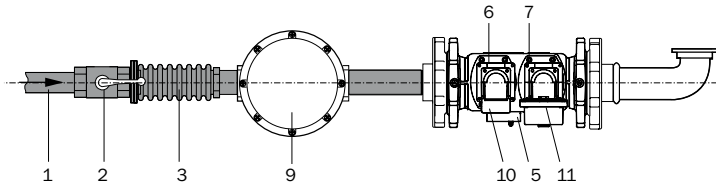
1. Main gas pipe		
2. Ball valve		ACS
3. Antivibrating joint		ACS
5. Gas pressure switch	EN676 CONFIGURATION	GAS TRAIN
6. Safety + Working gas valve		
7. Gas governor and filter		
8. Tightness control ⁽¹⁾		
Maximum gas pressure switch (kit)		KITPRES
Gas train connection pipe ⁽²⁾		GTCP ⁽²⁾

VGD SIEMENS

Double gas valve with actuators, gas regulator and gas pressure switch (gas filter not included)



Configuration for electronic burners (PRE):



1. Main gas pipe		
2. Ball valve		ACS
3. Antivibrating joint		ACS
5. Gas pressure switch	EXPORT EN676 CONFIGURATION	GAS TRAIN
6. Safety gas valve + 10. Actuator		
7. Working gas valve + 11. Actuator		
8. Tightness control ⁽¹⁾		
9. Gas filter		ACS
Maximum gas pressure switch (kit)		KITPRES
Gas train connection pipe ⁽²⁾		GTCP ⁽²⁾

- !** ¹: according to the European Standard for gas trains in EN676 Configuration a tightness control device must be included over 1200 kW (already included on PRE burners)
²: starting from models BLU 1700.1 / MULTICALOR 170.1 / MULTIFLAM 300.1, in order to fit the gas train, the corresponding connection pipe must be ordered

- !** for VGD gas trains in EN676 Configuration a filter must be ordered as a separate device

- !** Default blank spring: head pressure 0...22 mbar; starting from BLU 3000.1/MULTICALOR 300.1/MULTIFLAM 300.1 choose and change spring and damping (to be fitted during installation on site)

- !** For minimum inlet pressures higher than 250 mbar, choose the pressure switch GW500 (to be fitted during installation on site)

● Gas trains for MAX GAS in EN676 Configuration

MB-DLE MultiBloc Dungs for MAX GAS 40-250

Model	Size	Code
GT-D1-MBC65DLE-RP15-MAXGAS40-120	RP 15 - 1/2"	3141885
GT-D1-MBC120DLE-RP20-MAXGAS40-120	RP 20 - 3/4"	3141886
GT-D1-MBDLE403-RP15-MAXGAS40-120	RP 15 - 1/2"	3123944
GT-D1-MBDLE405-RP20-MAXGAS40-120	RP 20 - 3/4"	3123560
GT-D1-MBDLE407-RP20-MAXGAS170-250	RP 20 - 3/4"	3123525
GT-D1-MBDLE410-RP25-MAXGAS170-250	RP 25 - 1"	3123947
GT-D1-MBDLE412-RP32-MAXGAS170-250	RP 32 - 1"1/4	3141899

MB-ZRDLE MultiBloc Dungs for MAX GAS 40-250

Model	Size	Code
GT-D2-MBZRDLE405-RP20-MAXGAS40-120	RP 20 - 3/4"	3123960
GT-D2-MBZRDLE407-RP20-MAXGAS170-250	RP 20 - 3/4"	3123961
GT-D2-MBZRDLE410-RP25-MAXGAS170-250	RP 25 - 1"	3123962
GT-D2-MBZRDLE412-RP32-MAXGAS170-250	RP 32 - 1"1/4	3141901

MB-DLE MultiBloc Dungs for MAX GAS 350-700

Model	Size	Code
GT-D2-MBDLE407-RP20-MAXGAS350-500	RP 20 - 3/4"	3142392
GT-D2-MBDLE410-RP25-MAXGAS350-500	RP 25 - 1"	3142665
GT-D2-MBDLE412-RP32-MAXGAS350-500	RP 32 - 1"1/4	3142295
GT-D2-MBDLE415-RP40-MAXGAS350-500	RP 40 - 1"1/2	3142296
GT-D1-MBDLE420-RP50-PS1-350/700	RP 50 - 2"	3147990

! "EN676 Configuration" includes all the mandatory components in order to comply with EN676 regulation. Additional accessories and kits shall be installed by the installer in accordance to the local safety regulations and codes of practise.

● Gas trains for MAX GAS in EXPORT Configuration

Export gas trains for MAX GAS 40-250

Model	Size	Code
GT-B1-E6GSRP-RP15-MAXGAS40-120	RP 15 - 1/2"	3141888
GT-B1-EG12L-RP15-MAXGAS40-120	RP 15 - 1/2"	3141887
GT-K1-VAS125-RP25-MAXGAS170-250	RP 25 - 1"	3142815
GT-K1-VAS240-RP40-MAXGAS170-250	RP 40 - 1"1/2	3142816

! Additional accessories and kits shall be installed by the installer in accordance to the local safety regulations and codes of practise.

GAS TRAINS | BLU, MULTICALOR AND MULTIFLAM

● Gas trains for BLU, MULTICALOR and MULTIFLAM in EN676 Configuration

Model	Size	Code
GT-D2-MBDLE407-RP20-BLU/MULTI	RP 20 - 3/4"	3141843
GT-D2-MBDLE410-RP25-BLU/MULTI	RP 25 - 1"	3142022
GT-D2-MBDLE412-RP32-BLU/MULTI	RP 32 - 1"1/4	3141845
GT-D2-MBDLE415-RP40-BLU/MULTI	RP 40 - 1"1/2	3141846
GT-D2-MBDLE420-RP50-BLU/MULTI	RP 50 - 2"	3141847

● Gas trains for BLU, MULTICALOR and MULTIFLAM in EXPORT Configuration

Model	Size	Code
GT-S1-VGD20-RP50-PS1	RP 50 - 2"	3123860
GT-S1-VGD40-DN65-PS1	DN 65	3124110
GT-S1-VGD40-DN80-PS1	DN 80	3142026
GT-S1-VGD40-DN100-PS1	DN 100	3141869
GT-S1-VGD40-DN125-PS1	DN 125	3142666
GT-S1-VGD20-RP50-PS1-S	RP 50 - 2"	3147130
GT-S1-VGD40-DN65-PS1-S	DN65	3147131
GT-S1-VGD40-DN80-PS1-S	DN80	3147132
GT-S1-VGD20-RP50-PS3	RP 50 - 2"	3146004
GT-S1-VGD40-DN65-PS3	DN65	3146005
GT-S1-VGD40-DN80-PS3	DN80	3146006
GT-S1-VGD40-DN100-PS3	DN100	3146007
GT-S1-VGD40-DN125-PS3	DN125	3146008
Gas pressure switch GW500 A5 150+500 mbar for VGD4x (flanged valves)		3143350
Gas pressure switch GW500 A6 150+500 mbar for VGD20 (threaded valves)		3145164
Yellow spring	Head pressure: 15...120 mbar	3142204
Damping throttle		3142207

! Default blank spring: head pressure 0...22 mbar; starting from BLU 3000.1/MULTICALOR 300.1/MULTIFLAM 300.1 choose the yellow spring and the damping throttle (to be fitted during installation on site)

! For minimum inlet pressures higher than 250 mbar, choose the pressure switch GW500 (to be fitted during installation on site)

GAS TRAINS FOR ELECTRONIC VERSION BURNERS (PRE)

● Gas trains for BLU PRE, MULTICALOR PRE and MULTIFLAM PRE in EN676 Configuration

Model	Size	Code
GT-D1-MBDLE410-RP25-PS2	RP 25 - 1"	3145931
GT-D1-MBDLE412-RP32-PS2	RP 32 - 1"1/4	3145932
GT-D1-MBDLE415-RP40-PS2	RP 40 - 1"1/2	3145933
GT-D1-MBDLE420-RP50-PS2	RP 50 - 2"	3145934

● Gas trains for BLU PRE, MULTICALOR PRE and MULTIFLAM PRE in EXPORT Configuration

Model	Size	Code
GT-S1-VGD20-RP50-PS2	RP 50 - 2"	3145790
GT-S1-VGD40-DN65-PS2	DN 65	3145793
GT-S1-VGD40-DN80-PS2	DN 80	3145814
GT-S1-VGD40-DN100-PS2	DN 100	3145817
GT-S1-VGD40-DN125-PS2	DN 125	3145823
GT-S1-VGD20-RP50-PS2-S	RP 50 - 2"	3147672
GT-S1-VGD40-DN65-PS2-S	DN65	3147673
GT-S1-VGD40-DN80-PS2-S	DN80	3147674
Gas pressure switch GW500 A5 150+500 mbar for VGD4x (flanged valves)		3143350
Gas pressure switch GW500 A6 150+500 mbar for VGD20 (threaded valves)		3145164
Yellow spring	Head pressure: 15...120 mbar	3142204
Damping throttle		3142207

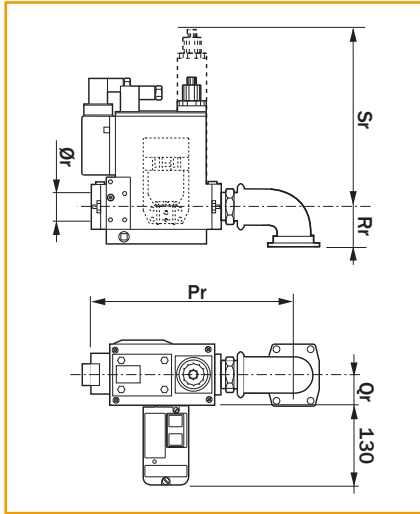
! Default blank spring: head pressure 0...22 mbar; starting from BLU 3000.1/MULTICALOR 300.1/MULTIFLAM 300.1 choose the yellow spring and the damping throttle (to be fitted during installation on site)

! For minimum inlet pressures higher than 250 mbar, choose the pressure switch GW500 (to be fitted during installation on site)

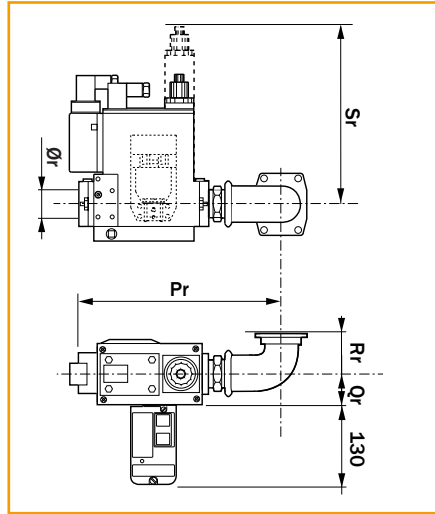
GAS TRAINS | DIMENSIONS

MB-... GAS TRAINS FOR P, PAB AND PR MODELS

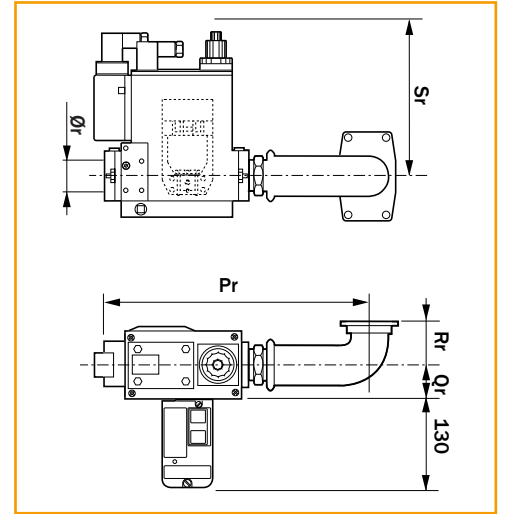
MAX GAS 40 ... 250



MAX GAS 350 - 700

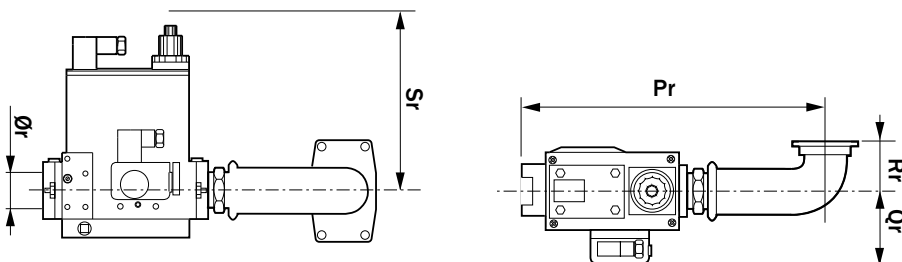


BLU / MULTICOLOR / MULTIFLAM



Code	Gas Train	Ø	Dimensions (mm)				
			Pr	Qr	Rr	Sr	Ør
3141885	GT-D1-MBC65DLE-RP15-MAXGAS40-120	RP 15 - 1/2"	250	42	35	140	1/2"
3141886	GT-D1-MBC120DLE-RP15-MAXGAS40-120	RP 15 - 1/2"	260	42	35	140	1/2"
3123944	GT-D1-MBDLE403-RP15-MAXGAS40-120	RP 15 - 1/2"	150	29	35	144	1/2"
3123560	GT-D1-MBDLE405-RP20-MAXGAS40-120	RP 20 - 3/4"	194	55	35	140	3/4"
3123525	GT-D1-MBDLE407-RP20-MAXGAS170-250	RP 20 - 3/4"	194	55	55	140	3/4"
3123947	GT-D1-MBDLE410-RP25-MAXGAS170-250	RP 25 - 1"	218	62	55	160	1"
3141899	GT-D1-MBDLE412-RP32-MAXGAS170-250	RP 32 - 1 1/4"	218	62	55	160	1 1/4"
3123960	GT-D2-MBZRDLE405-RP20-MAXGAS40-120	RP 20 - 3/4"	194	50	35	210	3/4"
3123961	GT-D2-MBZRDLE407-RP20-MAXGAS170-250	RP 20 - 3/4"	194	62	55	210	3/4"
3123962	GT-D2-MBZRDLE410-RP25-MAXGAS170-250	RP 25 - 1"	223	62	55	260	1"
3141901	GT-D2-MBZRDLE412-RP32-MAXGAS170-250	RP 32 - 1 1/4"	223	62	55	260	1 1/4"
3142392	GT-D1-MBDLE407-RP20-MAXGAS350-500	RP 20 - 3/4"	335	55	150	140	3/4"
3142665	GT-D1-MBDLE410-RP25-MAXGAS350-500	RP 25 - 1"	335	62	150	160	1"
3142295	GT-D1-MBDLE412-RP32-MAXGAS350-500	RP 32 - 1 1/4"	335	62	150	160	1 1/4"
3142296	GT-D1-MBDLE415-RP40-MAXGAS350-500	RP 40 - 1 1/2"	400	50	150	175	1 1/2"
3141843	GT-D1-MBDLE407-RP20-BLU/MULTI	RP 20 - 3/4"	315	55	85	140	3/4"
3142022	GT-D1-MBDLE410-RP25-BLU/MULTI	RP 25 - 1"	330	62	85	160	1"
3141845	GT-D1-MBDLE412-RP32-BLU/MULTI	RP 32 - 1 1/4"	330	62	85	160	1 1/4"
3141846	GT-D1-MBDLE415-RP40-BLU/MULTI	RP 40 - 1 1/2"	410	50	85	175	1 1/2"
3141847	GT-D1-MBDLE420-RP50-BLU/MULTI	RP 50 - 2"	420	50	85	175	2"
3147990	GT-D1-MBDLE420-RP50-PS1-350/700	RP 50 - 2"	400	50	150	175	2"

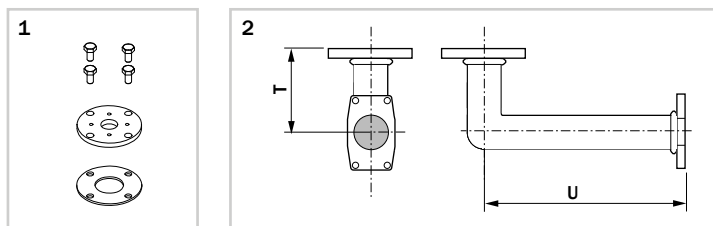
MB-... GAS TRAINS FOR PRE MODELS (ELECTRONIC VERSIONS)



Code	Gas Train	Ø	Dimensions (mm)				
			Pr	Qr	Rr	Sr	Ør
3145931	GT-D1-MBDLE410-RP25-PS2	RP 25 - 1"	330	102	85	160	1"
3145932	GT-D1-MBDLE412-RP32-PS2	RP 32 - 1 1/4"	330	102	85	160	1 1/4"
3145933	GT-D1-MBDLE415-RP40-PS2	RP 40 - 1 1/2"	410	90	85	175	1 1/2"
3145934	GT-D1-MBDLE420-RP50-PS2	RP 50 - 2"	420	90	85	175	2"

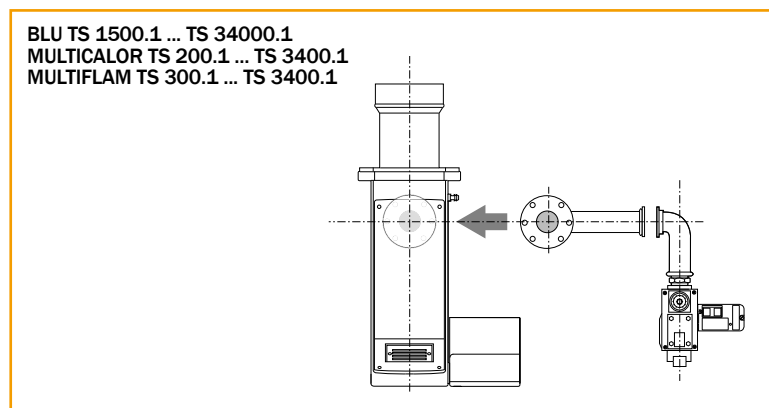
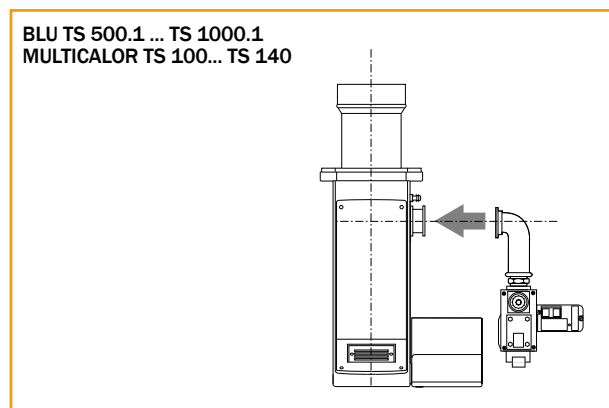
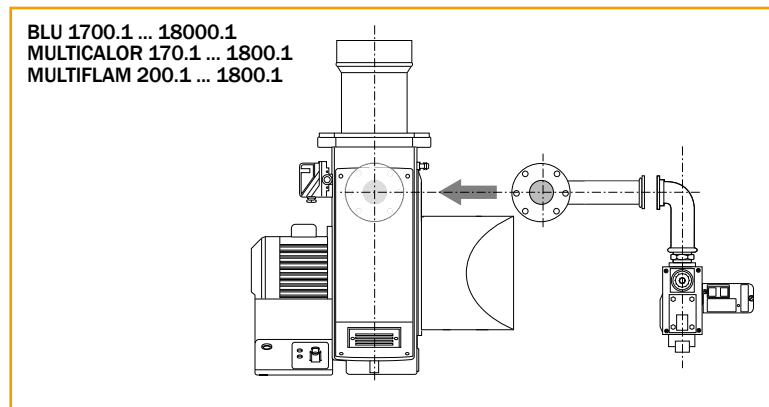
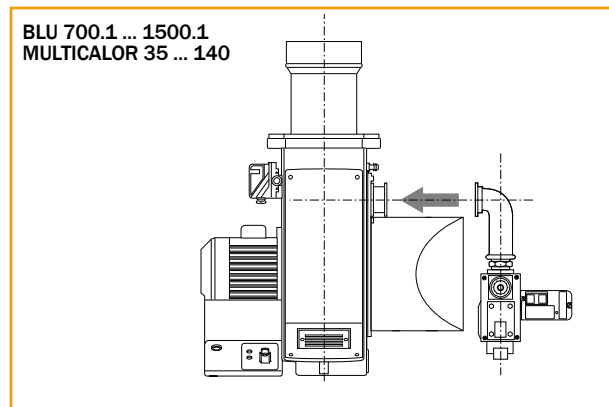
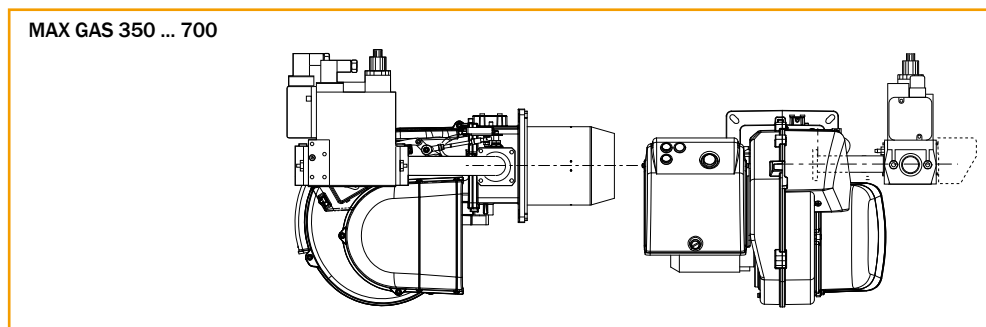
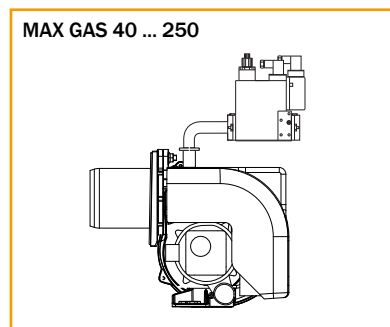
GAS TRAINS | DIMENSIONS

KIT ADAPTOR AND GAS TRAIN CONNECTION PIPE



Code	Designation	Ø	Ref.	Dimensions (mm)	
				T	U
3122300	KITADAPTOR-MAX GAS 170-250	RP 25 - 1"	1	-	-
3142074	GTCP-RP50-280	RP 32 - 1"1/4	2	85	400
3142076	GTCP-RP50-280/320/380	RP 40 - 1"1/2	2	85	588

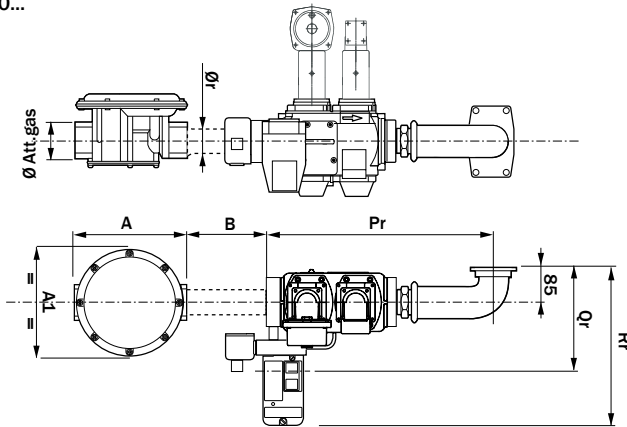
ASSEMBLY SCHEME



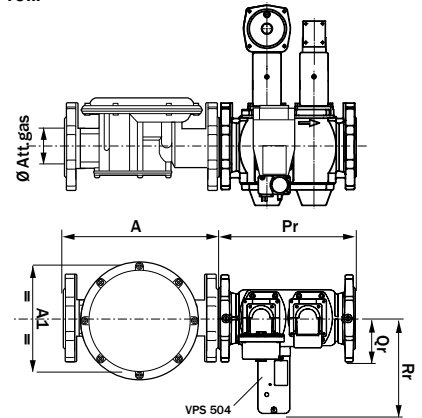
GAS TRAINS | DIMENSIONS

VG D... GAS TRAINS FOR P, PAB AND PR MODELS

VG D 20...

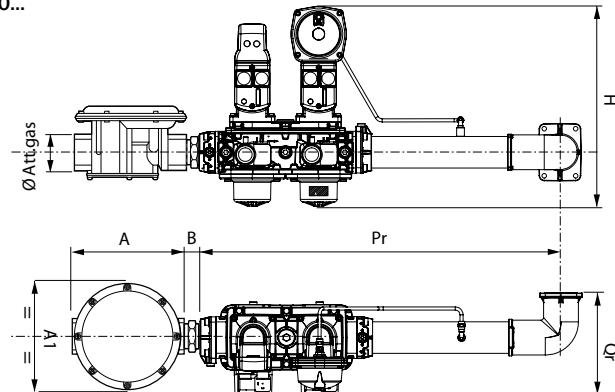


VG D 40...

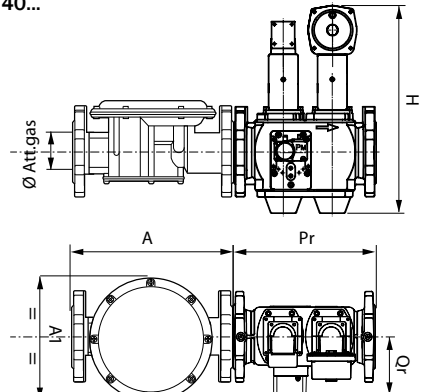


Code	Gas Train	Ø	Dimensions (mm)			
			Pr	Qr	H	B
3123860	GT-S1-VGD20-RP50-BLU/MULTI	RP 50 - 2"	450	185	315	2"
3124110	GT-S1-VGD40-DN65-BLU/MULTI	DN 65	290	97	211	DN65
3142026	GT-S1-VGD40-DN80-BLU/MULTI	DN 80	310	102	218	DN80
3141869	GT-S1-VGD40-DN100-BLU/MULTI	DN 100	350	113,5	229	DN100
3142666	GT-S1-VGD40-DN125-BLU/MULTI	DN 125	400	127,5	243	DN125

VG D 20...



VG D 40...

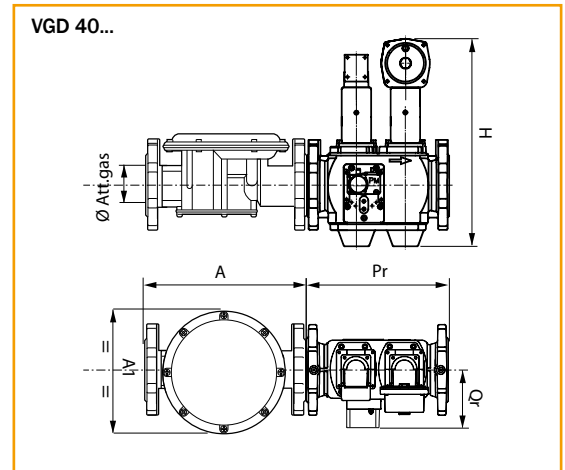
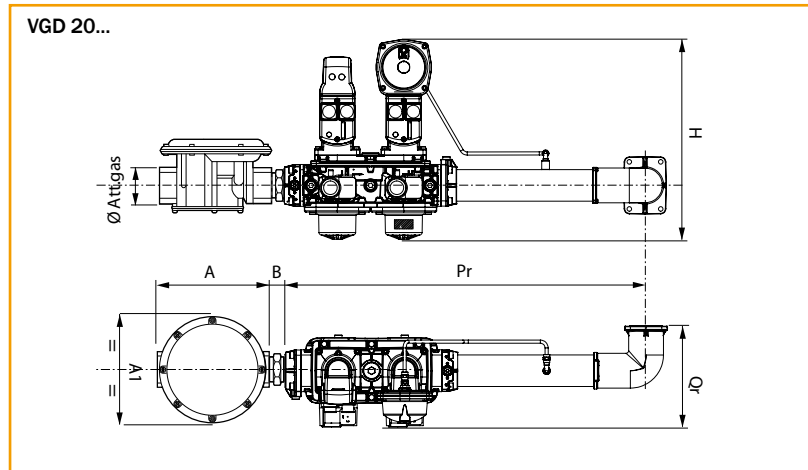


Code	Gas Train	Ø	Dimensions (mm)			
			Pr	Qr	H	B
3146004	GT-S1-VGD20-RP50-PS3	RP 50 - 2"	689	226	382	36
3146005	GT-S1-VGD40-DN65-PS3	DN65	290	127,3	421	-
3146006	GT-S1-VGD40-DN80-PS3	DN80	310	127,3	445	-
3146007	GT-S1-VGD40-DN100-PS3	DN100	350	145,4	476	-
3146008	GT-S1-VGD40-DN125-PS3	DN125	400	158,4	524	-
3147130	GT-S1-VGD20-RP50-PS1-S	RP 50 - 2"	689	34,9	382	36
3147131	GT-S1-VGD40-DN65-PS1-S	DN65	290	125,8	421	-
3147132	GT-S1-VGD40-DN80-PS1-S	DN80	310	127,3	445	-

GAS FILTER

Code	Gas Train	Ø	Dimensions (mm)		
			A	A1	B
3121384	Gas filter RP 50 - 2"	RP 50 - 2"	186	186	>100
3124111	Gas filter DN 65	DN 65 - 2"1/2	290	212	-
3142088	Gas filter DN 80	DN 80 - 3"	320	240	-
3142205	Gas filter DN 100	DN 100 - 4"	380	280	-
3142206	Gas filter DN 125	DN 125 - 5"	380	280	-
3142808	Gas filter DN 150	DN 150 - 6"	450	310	-

VGD... GAS TRAINS FOR PRE MODELS (ELECTRONIC VERSIONS)

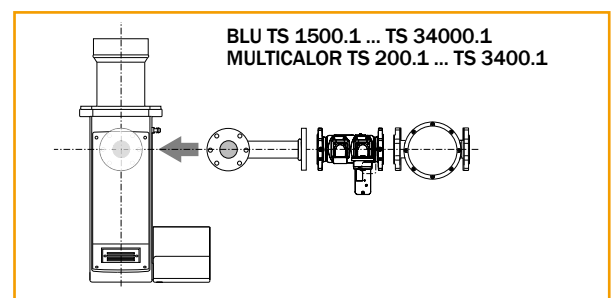
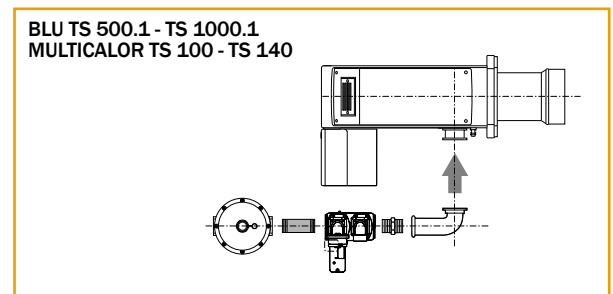
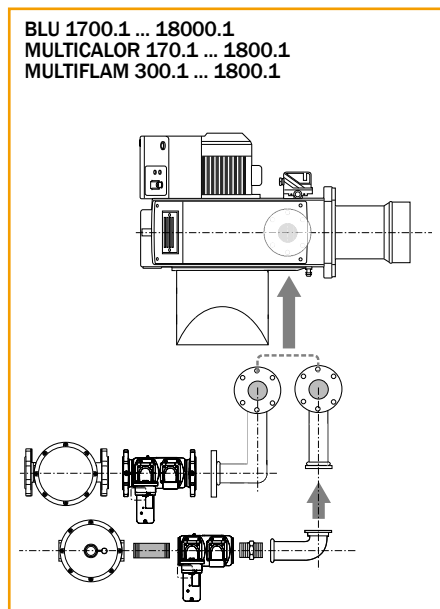
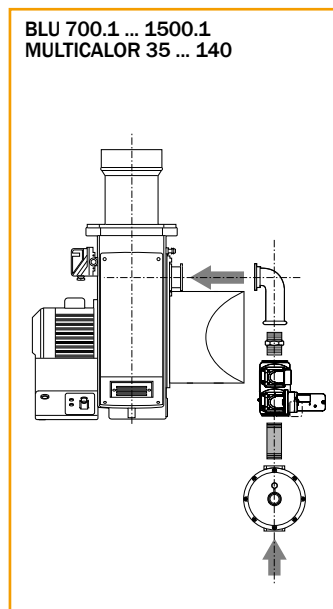


Code	Gas Train	Ø	Dimensions (mm)			
			Pr	Qr	H	B
3145790	GT-S1-VGD20-RP50-PS2	RP 50 - 2"	689	226	382	36
3145793	GT-S1-VGD40-DN65-PS2	DN 65	290	127,3	421	-
3145814	GT-S1-VGD40-DN80-PS2	DN 80	310	127,3	445	-
3145817	GT-S1-VGD40-DN100-PS2	DN 100	350	145,4	476	-
3145823	GT-S1-VGD40-DN125-PS2	DN 125	400	158,4	524	-
3147672	GT-S1-VGD20-RP50-PS2-S	RP 50 - 2"	628	34,9	382	36
3147673	GT-S1-VGD40-DN65-PS2-S	DN65	290	125,8	421	-
3147674	GT-S1-VGD40-DN80-PS2-S	DN80	310	127,3	445	-

GAS FILTER

Code	Gas Train	Ø	Dimensions (mm)		
			A	A1	B
3121384	Gas filter RP 50 - 2"	RP 50 - 2"	186	186	>100
3124111	Gas filter DN 65	DN 65 - 2"1/2	290	212	-
3142088	Gas filter DN 80	DN 80 - 3"	320	240	-
3142205	Gas filter DN 100	DN 100 - 4"	380	280	-
3142206	Gas filter DN 125	DN 125 - 5"	380	280	-
3142808	Gas filter DN 150	DN 150 - 6"	450	310	-

ASSEMBLY SCHEME



GAS GOVERNOR WITH BUILT-IN FILTER

Size	Maximum gas pressure	Code
RP 15 - 1/2"	500 mbar	3142519
RP 20 - 3/4"	500 mbar	3142520
RP 25 - 1"	500 mbar	3142521
RP 32 - 1"1/4	500 mbar	3142522
RP 40 - 1"1/2	500 mbar	3142523
RP 50 - 2"	500 mbar	3142524
RP50 - 2"	1 bar	3142051
DN 65	1 bar	3141983
DN 80	1 bar	3142538
DN 100	1 bar	on request
DN 125	1 bar	on request

! Default spring is neutral for outlet pressure range 10 - 30 mbar

SPRINGS FOR GAS GOVERNOR

Model	Gas pressure range	Code
Green spring for sizes 1/2", 3/4", 1"	5÷15 mbar	3142547
Neutral spring for sizes 1/2", 3/4", 1"	10÷30 mbar	3142548
Violet spring for sizes 1/2", 3/4", 1"	25÷80 mbar	3142549
Brown spring for sizes 1/2", 3/4", 1"	70÷160 mbar	3142550
Blue spring for sizes 1/2", 3/4", 1"	150÷280 mbar	3142551
White spring for sizes 1/2", 3/4", 1"	270÷350 mbar	3142552
Green spring for sizes 1"1/4, 1" 1/2	5÷15 mbar	3142553
Neutral spring for sizes 1"1/4, 1" 1/2	10÷30 mbar	3142554
Violet spring for sizes 1"1/4, 1" 1/2	20÷70 mbar	3142555
Brown spring for sizes 1"1/4, 1" 1/2	65÷130 mbar	3142556
White spring for sizes 1"1/4, 1" 1/2	120÷250 mbar	3142557
Black spring for sizes 1"1/4, 1" 1/2	240÷350 mbar	3142558
Green spring for size 2"	5÷15 mbar	3142559
Neutral spring for size 2"	10÷30 mbar	3142560
Violet spring for size 2"	30÷80 mbar	3142561
Brown spring for size 2"	70÷220 mbar	3142562
Blue spring for size 2"	210÷350 mbar	3142563
Red spring for size DN 65-80	25-80 mbar	3144252
Violet spring for size DN 65-80	60-120 mbar	3144253
Blue spring for size DN 65-80	100-220 mbar	3144254
White spring for size DN 65-80	200-450 mbar	3144255
Red spring for size DN100	30-70 mbar	3144256
Violet spring for size DN100	60-110 mbar	3144257
Brown spring for size DN100	100-210 mbar	3144258
White spring Sfor size DN100	200-450 mbar	3144060

GAS FILTER

Size	Code
RP 15 - 1/2"	3141957
RP 20 - 3/4"	3142045
RP 25 - 1"	3142046
RP 40 - 1"1/2	3141954
RP 50 - 2"	3121384
DN 65	3124111
DN 80	3142088
DN 100	3142205
DN 125	3142206
DN 150	3142808

ANTIVIBRATION JOINT

Size	Code
RP 15 - 1/2"	3122321
RP 20 - 3/4"	3122322
RP 25 - 1"	3122323
RP 32 - 1"1/4	3122324
RP 40 - 1"1/2	3122325
RP 50 - 2"	3122326
DN 65	3142060
DN 80	3122328
DN 100	3122329
DN 125	3142061

MANUAL VALVE

Size	Code
RP 15 - 1/2"	3158027
RP 20 - 3/4"	3142254
RP 25 - 1"	3121430
RP 32 - 1"1/4	3142253
RP 40 - 1"1/2	3142101
RP 50 - 2"	3142102
DN 65	3142062
DN 80	3143730
DN 100	3141997
DN 125	3141998

MAXIMUM GAS PRESSURE SWITCH

Model	Models	Output range	Setting range	Code
KITPRES50	PR models	<6 MW	5÷50 mbar	3141921
KITPRES150	PR models	6 MW ÷ 15 MW	30÷150 mbar	3142033
KITPRES500	PR models	>15 MW	50÷500 mbar	3145166
KITPRES150	PRE models	2 MW ÷ 15 MW	30÷150 mbar	3147771
KITPRES500	PRE models	>15 MW	50÷500 mbar	3147772

TIGHTNESS CONTROL

Description	Designation	Code
Kit VPS504 for MB-DLE, MB-ZRDLE and VGD65/80/100 valves (not for LPG)	KITTC-VPS504-MB-VGDDN65-80-100	3122303*
Kit VPS504 for MB-DLE, MB-ZRDLE and VGD65/80/100 valves (only for LPG)	KITTC-LPGVPS504-MB-VGDDN65-80-100	3142190*
Kit VPS504 for VGD20503 valve (not for LPG)	KITTC-VPS504-VGD20503	3122305
Kit VPS504 for VGD20503 valve (only for LPG)	KITTC-LPGVPS504-VGD20503	3142688
Kit VDK for VGD DN125/DN150 valves	KITTC-VDK200	3141922
Kit LDU	KITTC-LDU11	3142314
Adapter for MAX GAS 70 ... 250 PAB		3142239
Adapter for VPS pilot gas train		3142754



* : for MAX GAS 70 ... 250 PAB this kit can only be mounted with the addition of an adapter (code 3142239)
For gas trains in EN676 Configuration a tightness control device must be included over 1200 kW (already included on PRE burners)

MANOMETER + PUSH BUTTON

Description	Size	Code
Gas manometer	1/2", 0...60 mbar	3142056
Gas manometer	1/4", 0...250 mbar	3142055
Gas manometer	1/4", 0...1000 mbar	3142054
Push button 1/4"	1/4"	3142058
Push button 1/2"	1/2"	3142057

KIT LPG

Model	Burner	Code
Kit LPG MAX GAS 40 ... 120	MAX GAS 40 ... 120	3122301
Kit LPG MAX GAS 170-250	MAX GAS 170 - 250	3122302
Kit adapter for MAX GAS 170-250 (only for MB-xxx 405)	MAX GAS 170 - 250	3122300
Kit LPG MAX GAS 350 ... 500	MAX GAS 350 ... 500	3142431
Kit LPG MAX GAS 700	MAX GAS 700	3146026
Kit LPG BLU 700.1 ... 1500.1	BLU 700.1 ... 1500.1	3144610

OIL FILTER

Description	Suitable for	Code
Oil filter 3/8	MAX 1 ... 30	3142085
Oil filter 3/8	MAX 35/75, MAIOR 45/60, MULTICALOR 70 ... 140	3142089

KIT FOR AUTOMATIC FUEL SWITCH GAS/OIL FOR DUAL FUEL BURNERS

Description	Suitable for	Code
KIT Automatic switch	MULTICALOR and MULTIFLAM range	3142021

Standard version running on manual fuel selection mode and with the automatic changeover the system change fuel triggered by a gas pressure switch or by a timer

KIT BIODIESEL

Description	Suitable for	Code
KIT Biodiesel pump AS47	MAX 1 ... 30 and MAX P 25 AB HS	3141917
KIT Biodiesel pump AT2/AT3	MAX P 12/15 AB HS	3124103

MAGNETIC + SELF-CLEANING FILTER

Description	Suitable for	Code
KIT Magnetic self-cleaning filter 50 kg	MAXFLAM range	3142092
KIT Magnetic self-cleaning filter 250 kg	OILFLAM range	3141965

SEPARATE PRE-HEATER UNIT

Description	Code
From OILFLAM 300.1 pre-heater can be supplied separately with extra cost	on request

OIL PUMPING UNIT AND DAILY TANK

Description	Code
Separate daily tanks and pumping units	on request

HEAVY OIL HEATING AND PUMPING UNIT

Description	Code
"OIL RING" can be design and delivered assembled on skid or offered as single component	on request

OIL SPILL BACK NOZZLES

Size (kg/h)	Model	Connection	Code
40	Fluidics W2 50°	Threaded, 7/8	3145231
50	Fluidics W2 50°	Threaded, 7/8	3145232
60	Fluidics W2 50°	Threaded, 7/8	3142763
70	Fluidics W2 50°	Threaded, 7/8	3145233
80	Fluidics W2 50°	Threaded, 7/8	3145234
90	Fluidics W2 50°	Threaded, 7/8	3145235
100	Fluidics W2 50°	Threaded, 7/8	3142704
115	Fluidics W2 50°	Threaded, 7/8	3142564
130	Fluidics W2 50°	Threaded, 7/8	3142515
145	Fluidics W2 50°	Threaded, 7/8	3142516
160	Fluidics W2 50°	Threaded, 7/8	3142421
180	Fluidics W2 50°	Threaded, 7/8	3142492
200	Fluidics W2 50°	Threaded, 7/8	3142690
225	Fluidics W2 50°	Threaded, 7/8	3142489
250	Fluidics W2 50°	Threaded, 7/8	3142768
275	Fluidics W2 50°	Threaded, 7/8	3142805
300	Fluidics W2 50°	Threaded, 7/8	3142490
330	Fluidics W2 50°	Threaded, 7/8	3142703
360	Fluidics W2 50°	Threaded, 7/8	3142513
400	Fluidics W2 50°	Threaded, 7/8	3142497
450	Fluidics W2 50°	Threaded, 7/8	3142483
500	Fluidics W2 50°	Threaded, 7/8	3142699
550	Fluidics W2 50°	Threaded, 7/8	3142416
600	Fluidics W2 50°	Threaded, 7/8	3142506
650	Fluidics W2 50°	Threaded, 7/8	3142870
700	Fluidics W2 50°	Threaded, 7/8	3145236
750	Bergonzo B5 AA 45°	Threaded, 7/8	3142491
800	Bergonzo B5 AA 45°	Threaded, 7/8	3142833
850	Bergonzo B5 AA 45°	Threaded, 7/8	3145237
900	Bergonzo B5 AA 45°	Threaded, 7/8	3142510
950	Bergonzo B5 AA 45°	Threaded, 7/8	3145238
1000 - A (for models from 700.1 up to 1200.1)	Bergonzo B5 AA 45°	Threaded, 7/8	3142947
1100	Bergonzo B5 AA 45°	Threaded, 7/8	3142949
1000 - B (for models 1500.1 and 1800.1)	Bergonzo C5 45°	Threaded, M35x1/2	3142961
1100	Bergonzo C5 45°	Threaded, M35x1/2	3142769
1200	Bergonzo C5 45°	Threaded, M35x1/2	3144774
1300	Bergonzo C5 45°	Threaded, M35x1/2	3144490
1400	Bergonzo C5 45°	Threaded, M35x1/2	3142776
1500	Bergonzo C5 45°	Threaded, M35x1/2	3145239

OIL SPILL BACK NOZZLES (MONARCH)

Size (kg/h)	Code
26	3142326
33	3143301
37	3142511
39	3142503
49	3142351
50	3142512
62	3143299
71	3142504
76	3142488
90	3145764
97	3141817

OTHER KITS AND ACCESSORIES

SILENCER

Designation	Gas	Light oil	Heavy oil	Gas/light oil	Gas/heavy oil
KITSIL-260	BLU 700.1 - 1200.1	MAIOR 45 ... 120	OILFLAM 50.1 ... 120.1	MULTICALOR 45 ... 140	MULTIFLAM 50.1 ... 120.1
KITSIL-280	BLU 1500.1 - 2000.1	MAIOR 150.1 - 200.1	OILFLAM 170.1 - 200.1	MULTICALOR 170.1 - 200.1	MULTIFLAM 170.1 - 200.1
KITSIL-320	BLU 3000.1 - 4000.1	MAIOR 300.1 - 400.1	OILFLAM 300.1 - 400.1	MULTICALOR 300.1 - 400.1	MULTIFLAM 300.1 - 400.1
KITSIL-380	BLU 5000.1 - 6000.1	MAIOR 500.1 - 600.1	OILFLAM 500.1 - 600.1	MULTICALOR 500.1 - 600.1	MULTIFLAM 500.1 - 600.1
KITSIL-630	BLU 7000.1 ... 12000.1	MAIOR 700.1 ... 1200.1	OILFLAM 700.1 ... 1200.1	MULTICALOR 700.1 ... 1200.1	MULTIFLAM 700.1 ... 1200.1
KITSIL-710	BLU 15000.1 - 18000.1	MAIOR 1500.1 - 1800.1	OILFLAM 1500.1 - 1800.1	MULTICALOR 1500.1 - 1800.1	MULTIFLAM 1500.1 - 1800.1

Designation	Code
KITSIL-260	3141911
KITSIL-280	3122298
KITSIL-320	3141913
KITSIL-380	3141914
KITSIL-630	3142276
KITSIL-710	3142668

Separate ventilator silencer / silencing box on request

DIAGNOSTIC TOOL FOR ARISTON BURNER CONTROL

Description	Code
E-BCU Diagnostic tool for 1 stage BCU	3142931
PC interface for BCU	3833018

KIT WIELAND PLUGS

Model	Burner	Code
KITWP-MAIOR35-300.1PAB	MAIOR 45 - 300.1	3142037
KITWP-BLU700.1-2000.1PAB	BLU 700.1 - 2000.1 PAB	3142034
KITWP-BLU/MULTICALOR-PR/MD	BLU - MULTICALOR PR/MD	3141932

SWIRL SYSTEM

Description	Code
Swirls for blast tube that can reduce flame length	on request

OPTIONS FOR ELECTRONIC BURNERS

GUIDE FOR ELECTRONIC OPTIONS

Required option / Burners with BT300 control	LCM module variant	Frequency converter arrangement	Frequency converter	O ₂ trim kit	O ₂ + CO trim kit	PID load controller kit	Probes	ModBUS/ ProfiBUS KITS
Power modulation with PID						•	•	
Frequency converter (installed out of the burner control panel)	•	•	•					
O ₂ control	•			•				
O ₂ + CO control	•				•			
BUS communication	•							•

Note: dual fuel burners include LCM module

- **BURNER VARIANTS** (options already mounted in factory)

LCM MODULE (for communication via BUS, O₂ control, frequency converter)

Description	Code
Module mounted in factory, required for O ₂ control, frequency converter and communication buses connections	3146795

Note: only one LCM module is necessary for these 3 options; the module is already included on dual fuel burners

FREQUENCY CONVERTER ARRANGEMENT

Description	Code
Burner prepared to be connected to an external frequency converter	on request

Note: this variant includes the VSM module to control the frequency converter
LCM module is required and must be added separately
For frequency converter models selection see page 122

- **KITS** (supplied loose)

REMOTE SOFTWARE

Description	Code
Kit to connect a PC laptop to the BT300 for its parametrization	LSA100 + USB/CAN + CD-Rom 3751130

COMMUNICATION MODULES

Description	Code	
Additional module for BT3xx	ModBus/BT3	on request
	ProfiBus/BT3	on request
	Ethernet/BT3	on request

OPTIONS FOR ELECTRONIC BURNERS

O₂ TRIM for BT300, Etamatic and Etamatic OEM

This kit is used to optimize the combustion in order to keep the air excess as much stable as possible irrespective of the changes that can occur during operations, for instance slight calorific value variations, combustion air temperature and pressure. This improves the seasonal efficiency and therefore reduces the fuel consumption.

The kit includes the following components:

Lambda transmitter LT3 + Lambda probe LS2 + Probe installation fitting (PIF) + Gas extraction device (GED)

The control unit has to be installed close to the probe (max 25 m of cable).

The probe needs a calibration but no reference gas is necessary.

The display shows the O₂ content.

Maximum distance between the LT3 and the burner control panel is 500 m.

Description	Additional LSB modules installed at LT3	GED length	Code
Kit for O ₂ trim (LT3 + LS2) Flue temp max 300 °C - Display for O ₂ visualization (Note: for models equipped with BT3xx this kit needs a LCM module installed in the burner control panel)	none	150 mm	3759296
		300 mm	3759297
		450 mm	3759298
	4x 0/4-20 mA output	150 mm	3759299
		300 mm	3759300
		450 mm	3759301
	4x 0/4-20 mA output + 4x digital output	150 mm	3759302
		300 mm	3759303
		450 mm	3759304

The lambda probe LS2 is equipped with a 2 m long connection cable to connect the probe to the transmitter (LT3). This connection cable can be extended by a maximum of 23 m (total of 25 m). For longer distances the admission does expire. Therefore, there are ready-made cables as well as the probes connection box (PCB).

The PCB is a small terminal box that is connected to the 2 m cable already existing on the probe. The wiring between the PCB and the transmitter must be carried out on the construction site with suitable cables and trained personnel.

Description	Code
Extension LS2 cable 5m	3759314
Extension LS2 cable 10m	3759315
Extension LS2 cable 20m	3759316
Extension LS2 PCB	3759317

O₂ TRIM with CO measure for BT300, Etamatic and Etamatic OEM

This kit is used for optimizing the combustion in order to keep the air excess as low as possible in order to maximize the seasonal efficiency and therefore minimize the fuel consumption. In addition to the features of the O₂ trim only, this kit reduces the air excess to its minimum because this system continuously measures the content of unburned fuel (CO_e) in the flue: should the air excess be reduced too much, the CO_e raises and the system reacts by increasing the air excess in order to keep firing in safe conditions.

The kit includes the following components:

Lambda transmitter LT3-F + Lambda probe KS1D + Probe installation fitting (PIF) + Gas extraction device (GED)

The control unit has to be installed close to the probe (max 10 m of cable).

The probe needs a calibration but no reference gas is necessary.

The display shows the O₂ and CO_e content.

Maximum distance between the LT3-F and the burner control panel is 500 m.

Description	Additional LSB modules installed at LT3-F	GED length	Code
Kit for O ₂ trim and CO control (LT3-F + KS1D) Flue temp max 300 °C (Note: for models equipped with BT3xx this kit needs a LCM module installed in the burner control panel)	none	150 mm	3759305
		300 mm	3759306
		450 mm	3759307
	4x 0/4-20 mA output	150 mm	3759308
		300 mm	3759309
		450 mm	3759310
	4x 0/4-20 mA output + 4x digital output	150 mm	3759311
		300 mm	3759312
		450 mm	3759313

The lambda probe KS1D is equipped with a 2 m long connection cable to connect the probe to the transmitter (LT3-F). This connection cable can be extended by a maximum of 8 m (total of 10 m). For longer distances the admission does expire. Therefore, there is a ready-made cable as well as the probes connection box (PCB). The PCB is a small terminal box that is connected to the 2 m cable already existing on the probe. The wiring between the PCB and the transmitter must be carried out on the construction site with suitable cables and trained personnel.

Description	Code
Extension KS1D cable 5m	3759318
Extension KS1D PCB	3759319

FREQUENCY CONVERTER

Description		Code
IP21 with: <ul style="list-style-type: none"> • EMC filter • Inductor • Control panel 	3 kW	3757054
	4 kW	3757055
	5,5 kW	3757056
	7,5 kW	3757057
	11 kW	3757058
	15 kW	3757059
	18,5 kW	3757060
	22 kW	3757061
	30 kW	3757062
	37 kW	3757063
	45 kW	3757064
	55 kW	3757065
	75 kW	3757066
IP55 with: <ul style="list-style-type: none"> • EMC filter • Inductor • Control panel 	3 kW	3757067
	4 kW	3757068
	5,5 kW	3757069
	7,5 kW	3757070
	11 kW	3757071
	15 kW	3757072
	18,5 kW	3757073
	22 kW	3757074
	30 kW	3757075
	37 kW	3757076
	45 kW	3757077
	55 kW	3757078
	75 kW	3757079

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