

Ecoflam

DUAL FUEL RANGE

MULTICALOR



www.ecoflam-burners.com

CUSTOMIZED BURNERS SOLUTIONS FOR ANY TYPE OF APPLICATION



OUR EXPERIENCE

Thanks to almost 50 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 and reliable operation with significant energy savings and feature 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 allows 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 PRODUCT RANGE

The flexibility of Ecoflam solutions allows the manufacturing of highly customized products covering a range from 17 kW to 34 MW:



MAX GAS

Gas range
17 - 700 kW



BLU

Gas range
245 - 17000 kW



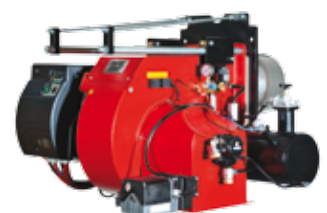
MAX

Light oil range
18 - 546 kW



MAIOR

Light oil range
300 - 17000 kW



MAXFLAM/OILFLAM

Heavy oil range
68 - 17000 kW



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.

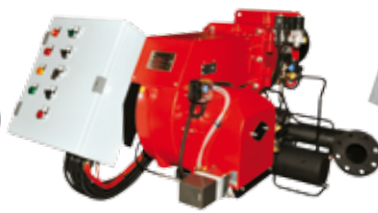
OUR INTERNATIONAL APPROACH

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.



MULTICALOR

Dual fuel (gas/light oil)
190 - 17000 kW



MULTIFLAM

Dual fuel (gas/heavy oil)
414 - 17000 kW



TS RANGE

All fuels
230 - 34000 kW

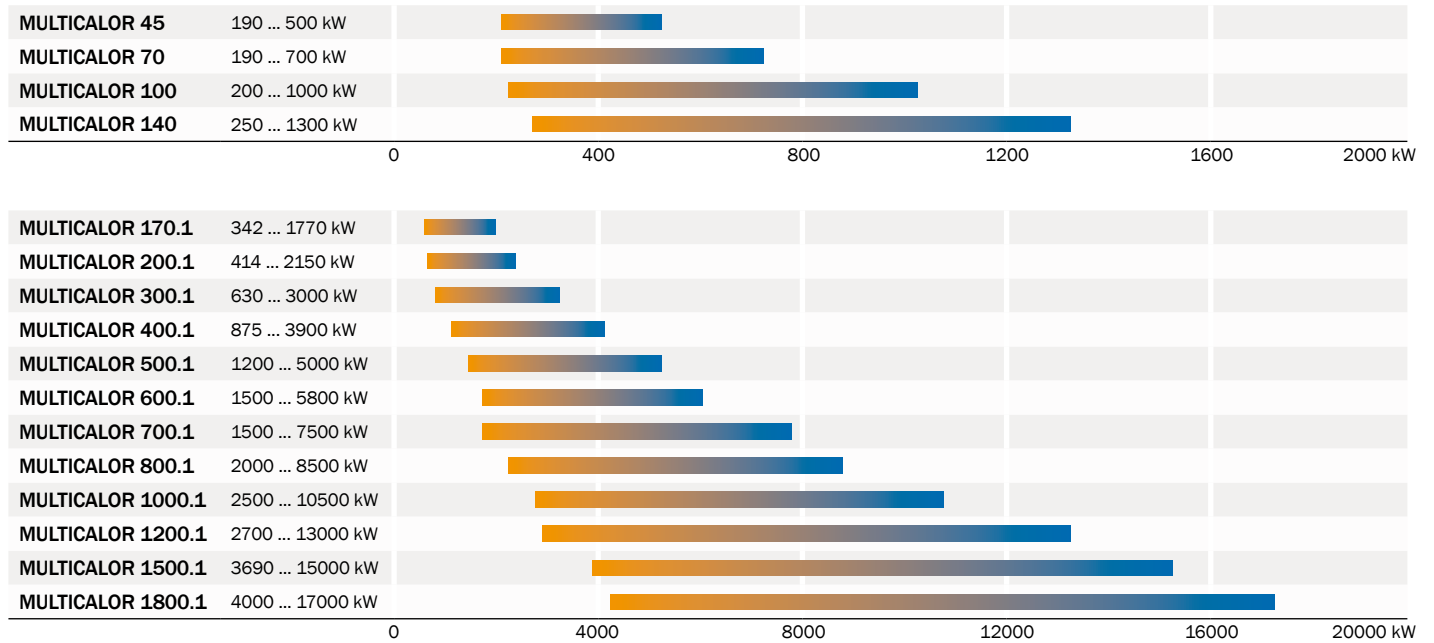


SPECIAL VERSIONS

Fuel | Range

DUAL FUEL (GAS/LIGHT OIL) | MULTICALOR

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



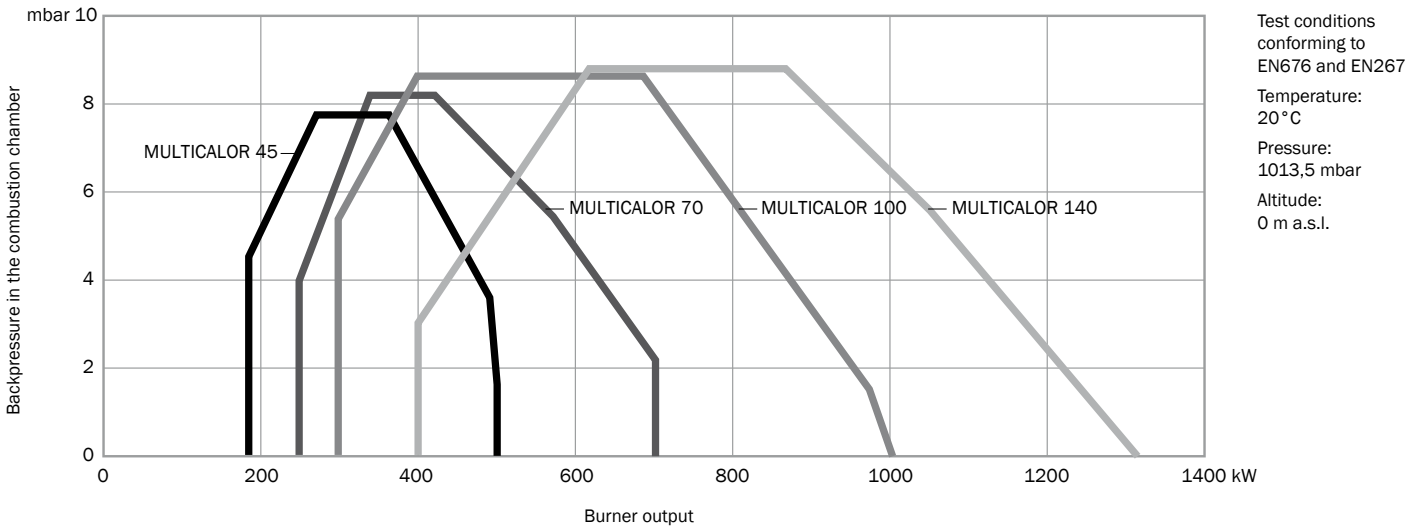
MULTICALOR 1200.1 PR



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

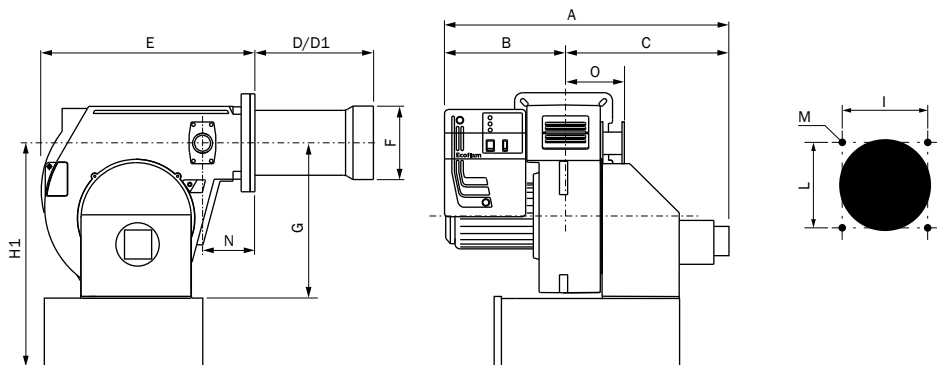
WORKING DIAGRAM



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

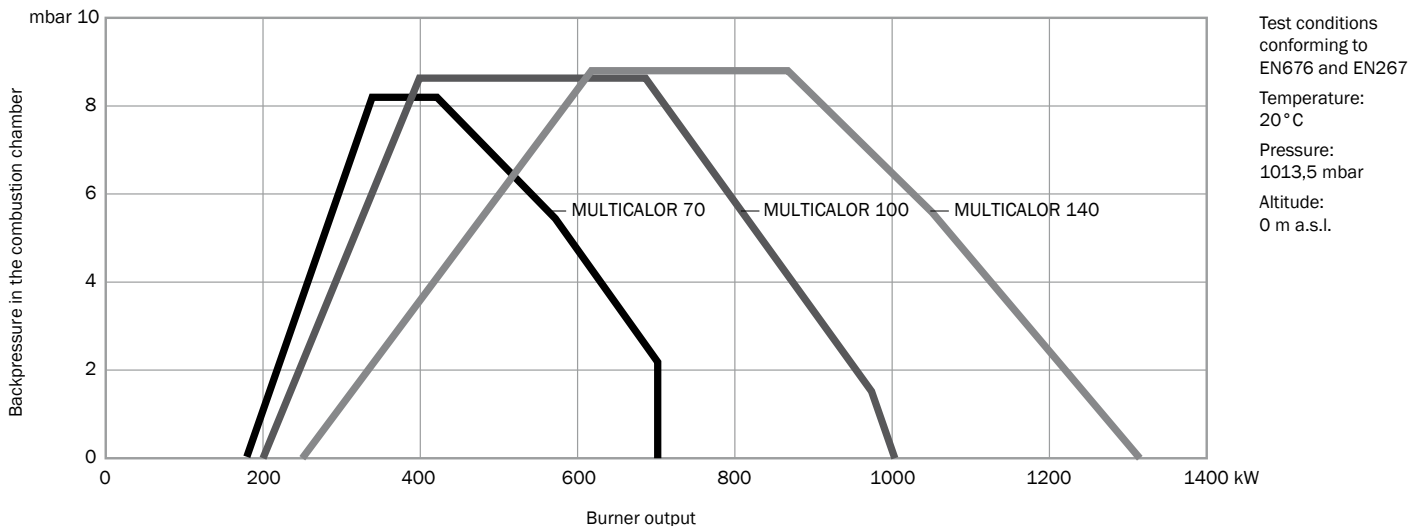


Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	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

- 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 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

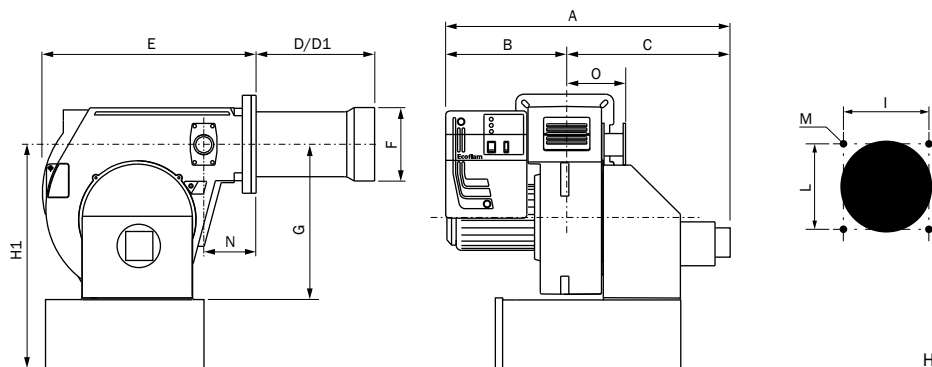
WORKING DIAGRAM



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

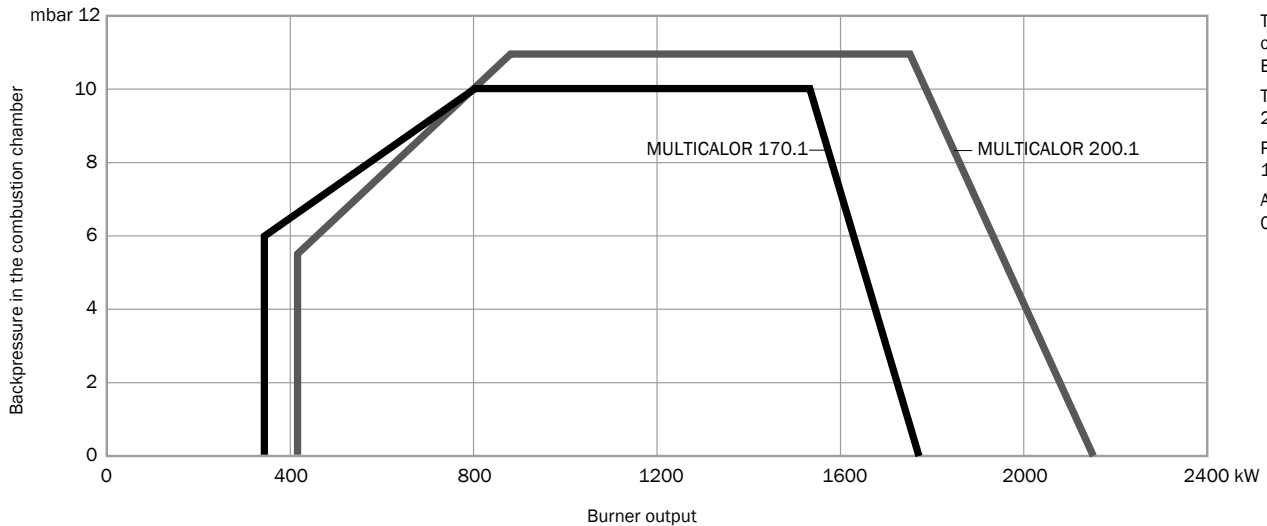


Dimensions in mm
 Head length: **D** short / **D1** long
 *: with silencer (optional)

	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

- 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
- 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

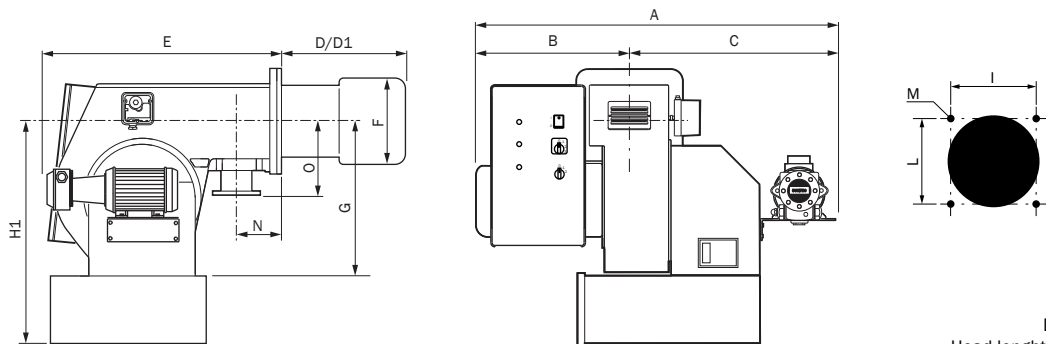
WORKING DIAGRAM



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



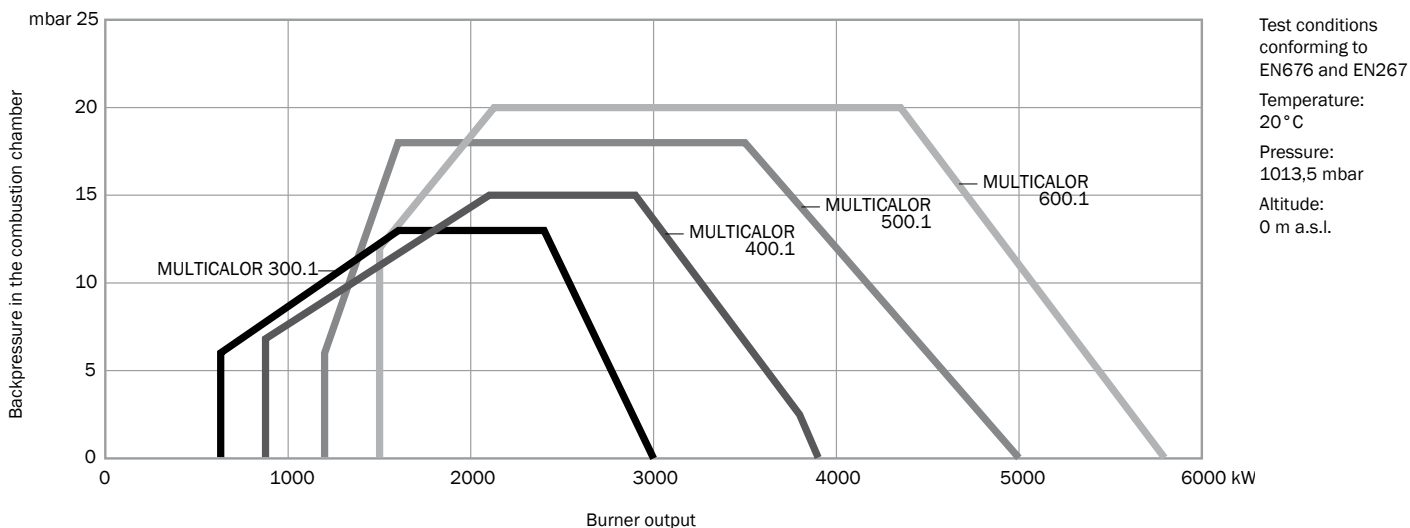
Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	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

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
- 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

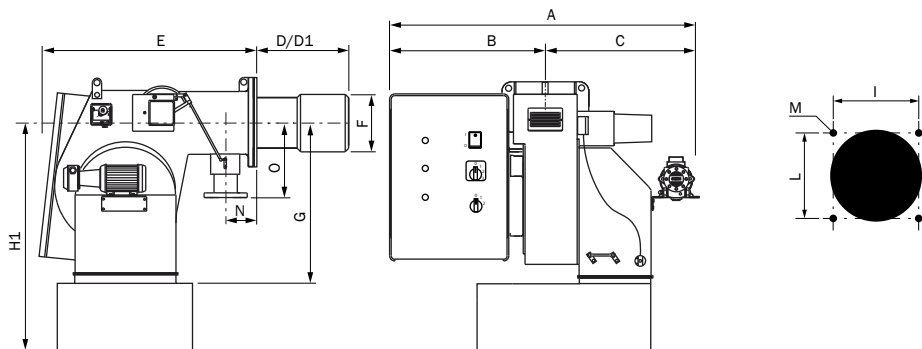
WORKING DIAGRAM



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



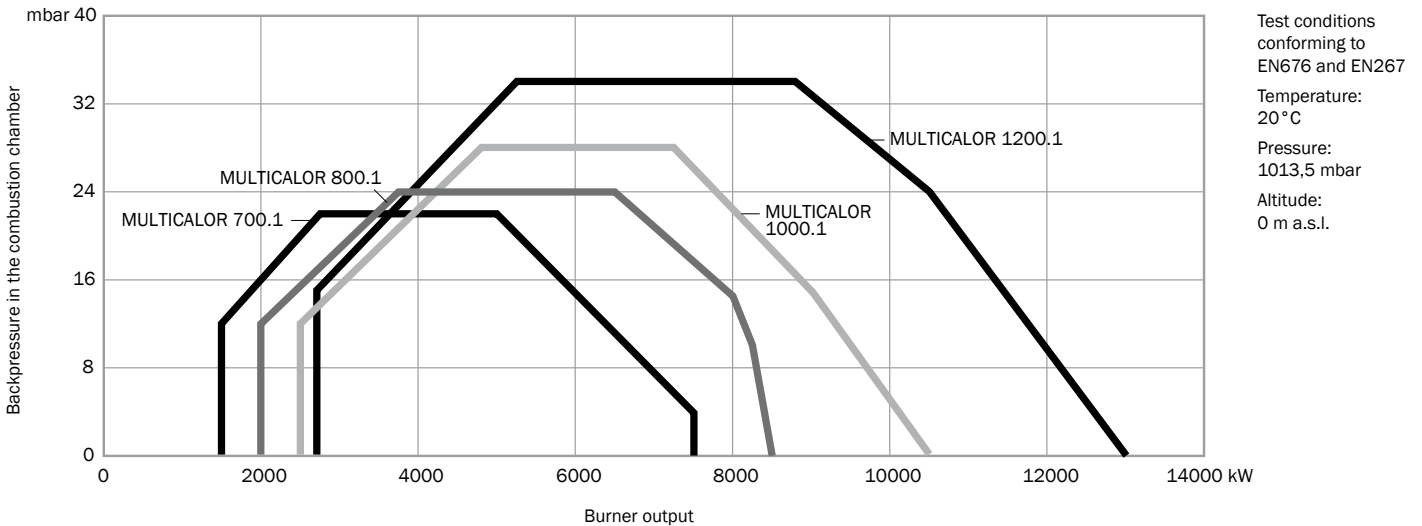
Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	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

Range | Models
MULTICALOR 700.1 - 800.1 - 1000.1 - 1200.1

- 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
- 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

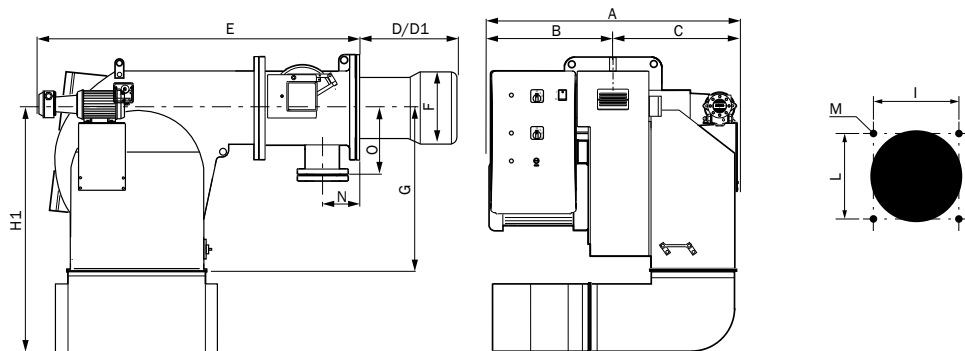
WORKING DIAGRAM



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



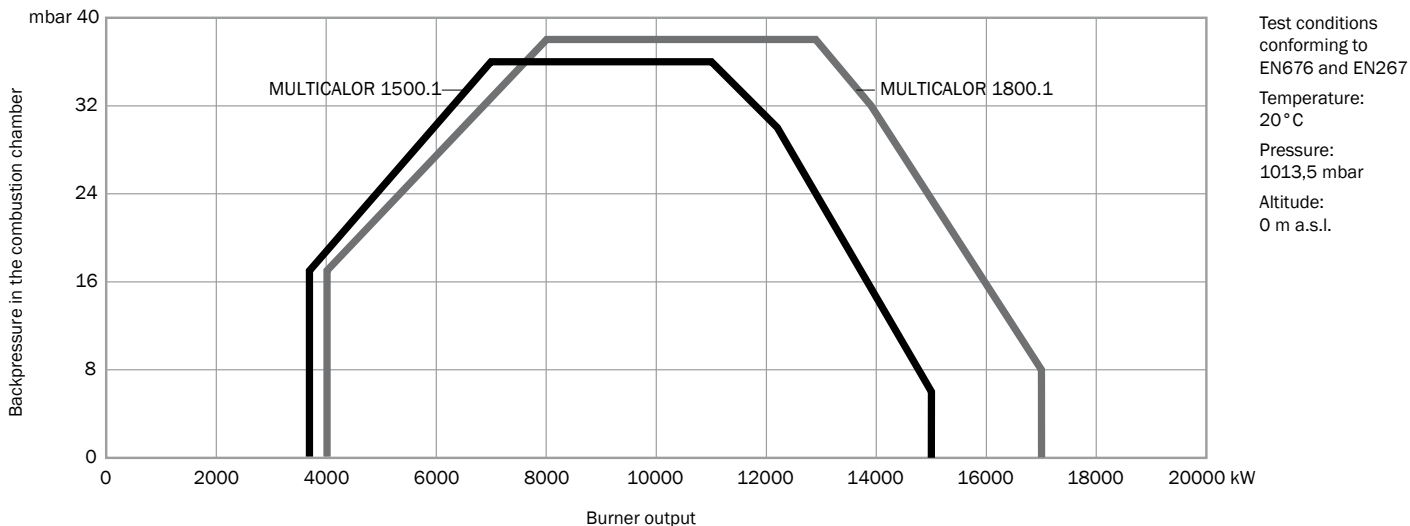
Dimensions in mm
 Head length: D short / D1 long
 *: with silencer (optional)

	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

Range | Models
MULTICALOR 1500.1 - 1800.1

- 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
- 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

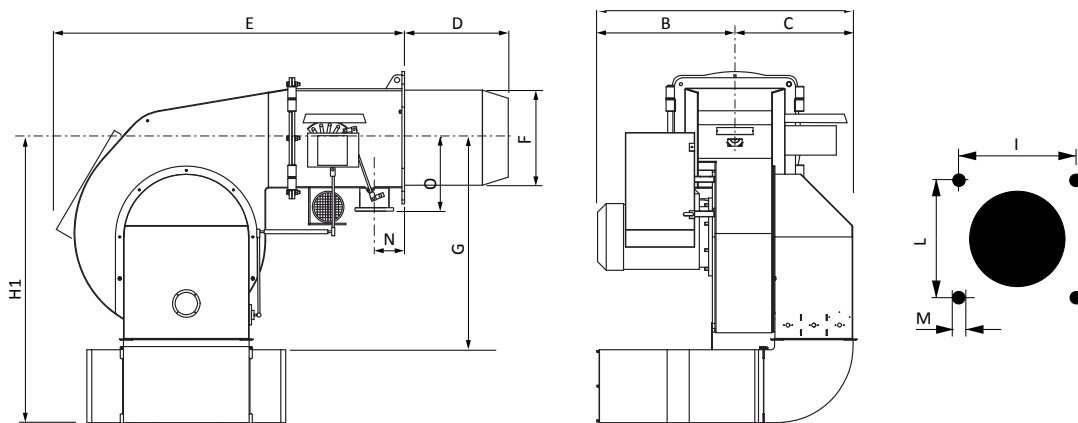
WORKING DIAGRAM



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

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ECOFLAM Bruciatori S.p.A. reserve the right to make any adjustments, without prior notice, which is considered necessary or useful to its products, without affecting their main features.