

# Ecoflam

DUAL FUEL RANGE

## MULTICALOR

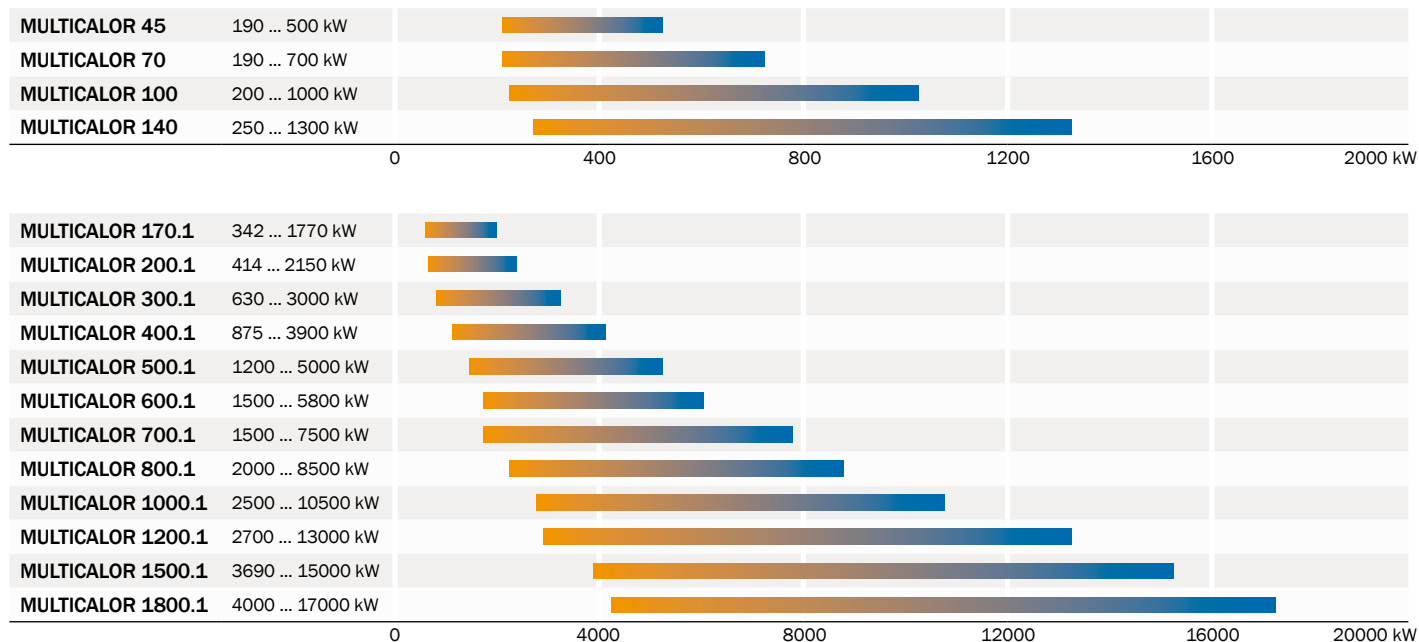


---

[www.ecoflam-burners.com](http://www.ecoflam-burners.com)

# 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



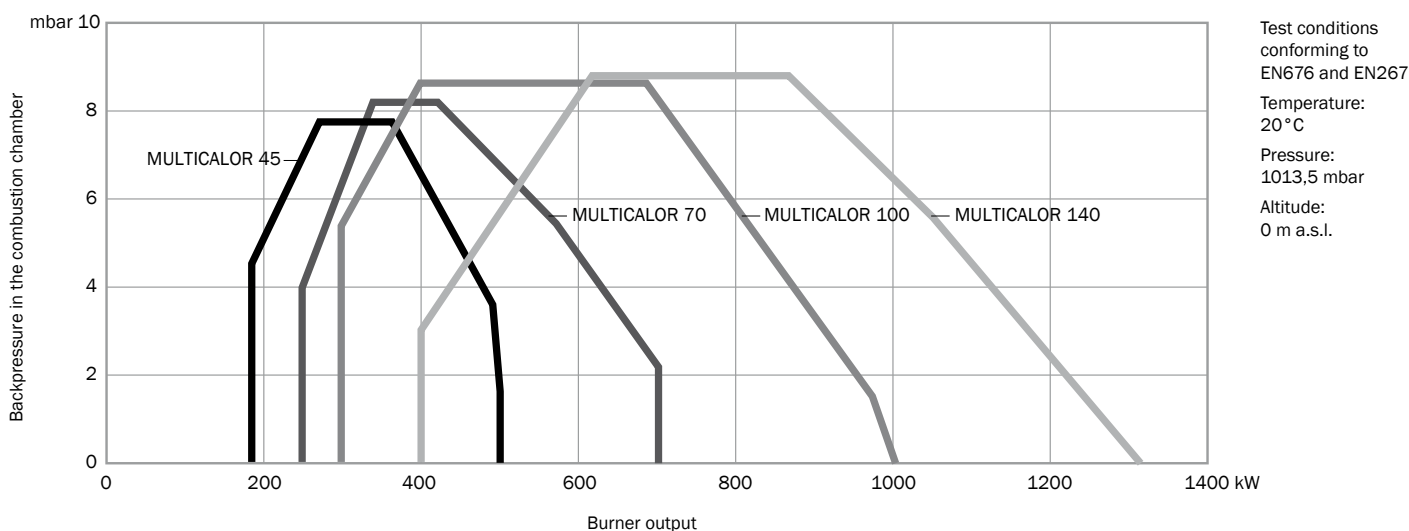
MULTICALOR 1200.1 PR



# MULTICALOR Range **45 - 70 - 100 - 140** Models

- 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 ( $\leq 120$  mg/kWh) according to EN676 in gas and class 1 ( $\leq 250$  mg/kWh) according to EN267 in oil

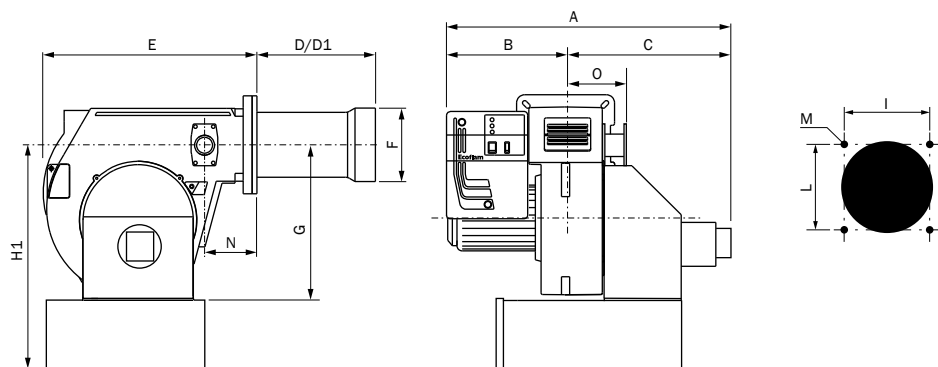
## WORKING DIAGRAM



## 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

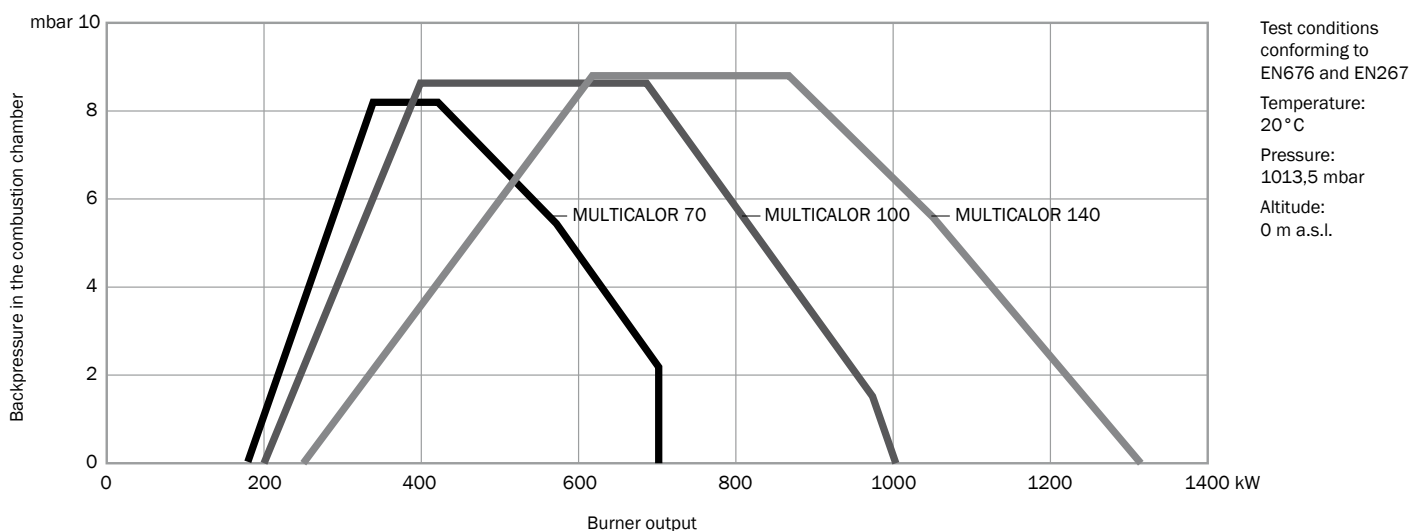


Dimensions in mm  
 Head length: **D** short / **D1** long  
 \*: with silencer (optional)

	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 ( $\leq 120$  mg/kWh) according to EN676 in gas and class 1 ( $\leq 250$  mg/kWh) according to EN267 in oil

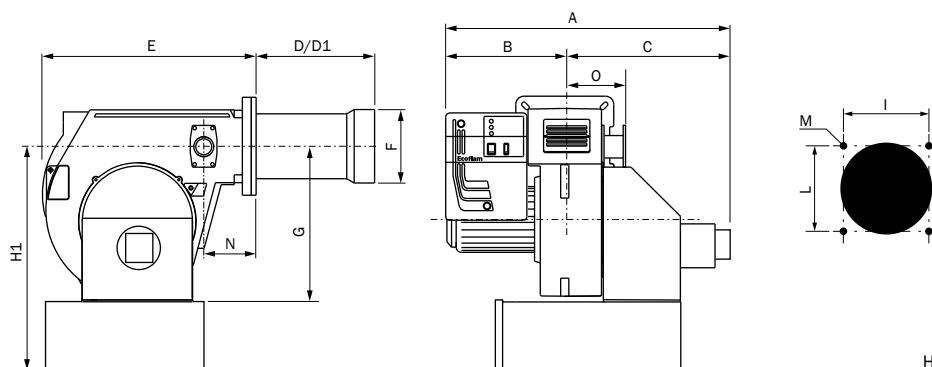
## WORKING DIAGRAM



## 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

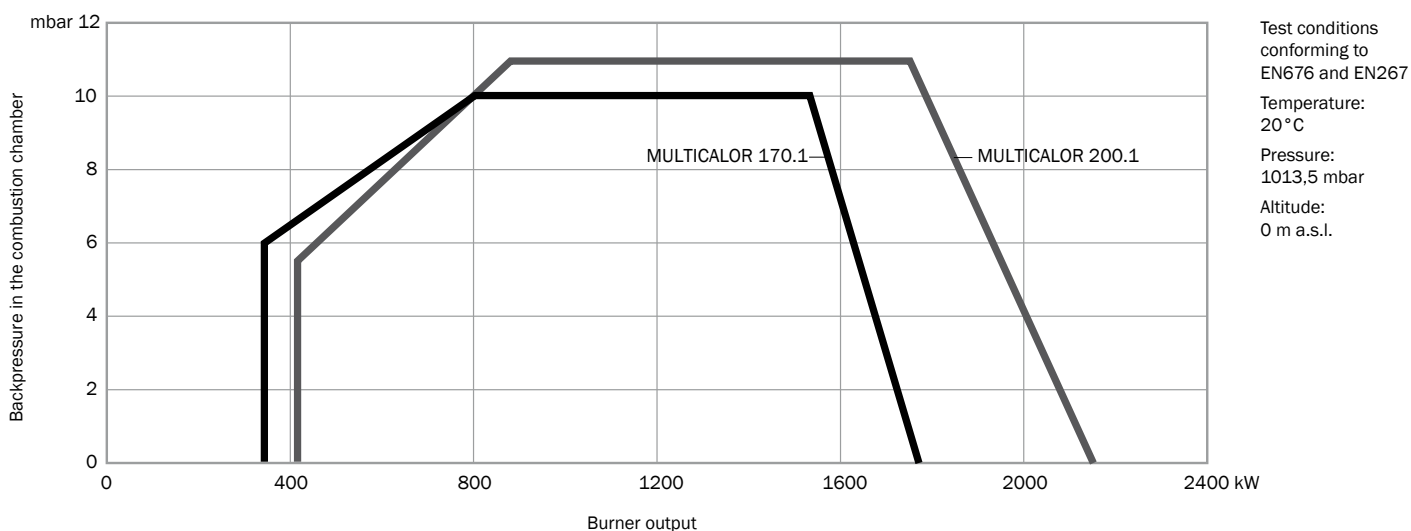


Dimensions in mm  
 Head length: D short / D1 long  
 \*: with silencer (optional)

	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 ( $\leq 120$  mg/kWh) according to EN676 in gas and class 1 ( $\leq 250$  mg/kWh) according to EN267 in oil

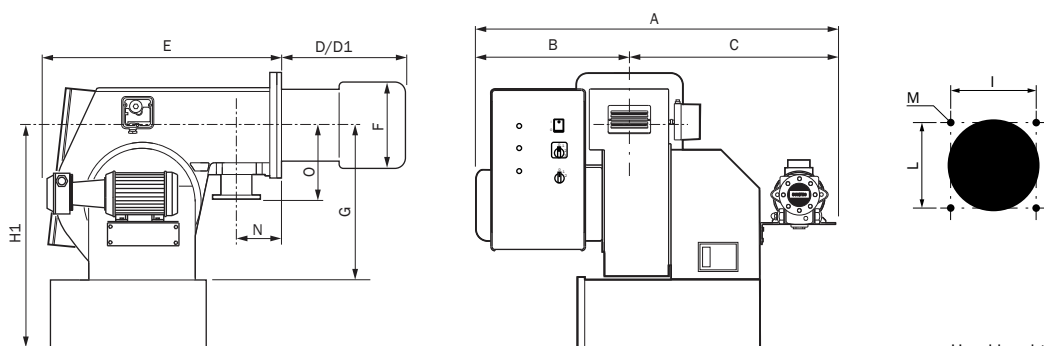
## WORKING DIAGRAM



## 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



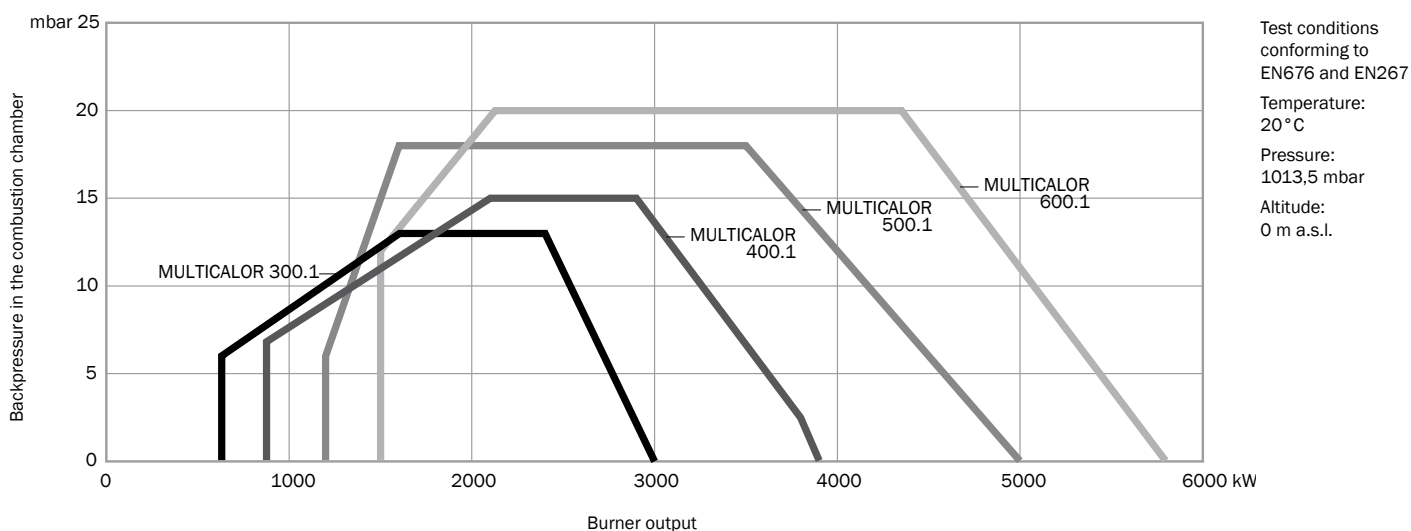
Dimensions in mm  
 Head length: D short / D1 long  
 \*: with silencer (optional)

	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 ( $\leq 120$  mg/kWh) according to EN676 in gas and class 1 ( $\leq 250$  mg/kWh) according to EN267 in oil

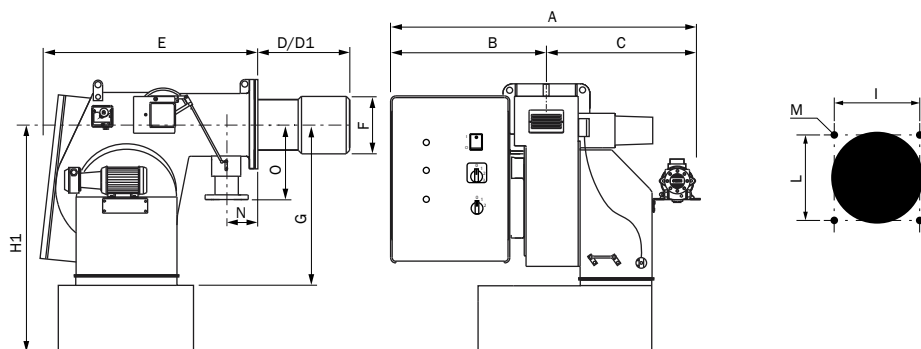
## WORKING DIAGRAM



## 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



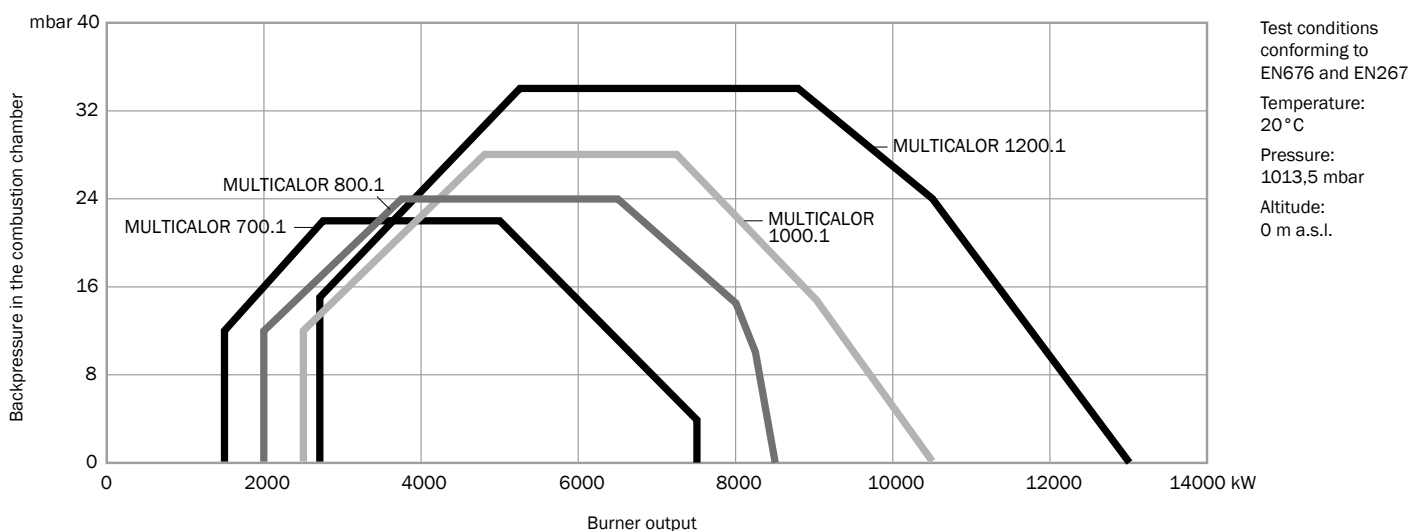
Dimensions in mm  
 Head length: D short / D1 long  
 \*: with silencer (optional)

	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

# MULTICALOR Range Models 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 ( $\leq 120$  mg/kWh) according to EN676 in gas and class 1 ( $\leq 250$  mg/kWh) according to EN267 in oil

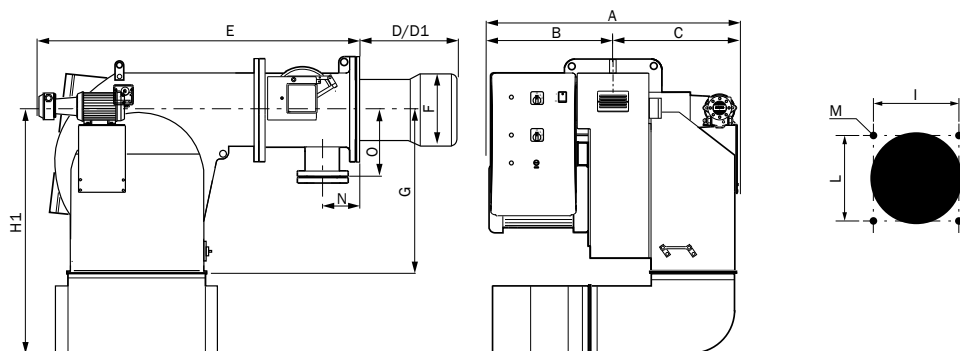
## WORKING DIAGRAM



## 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



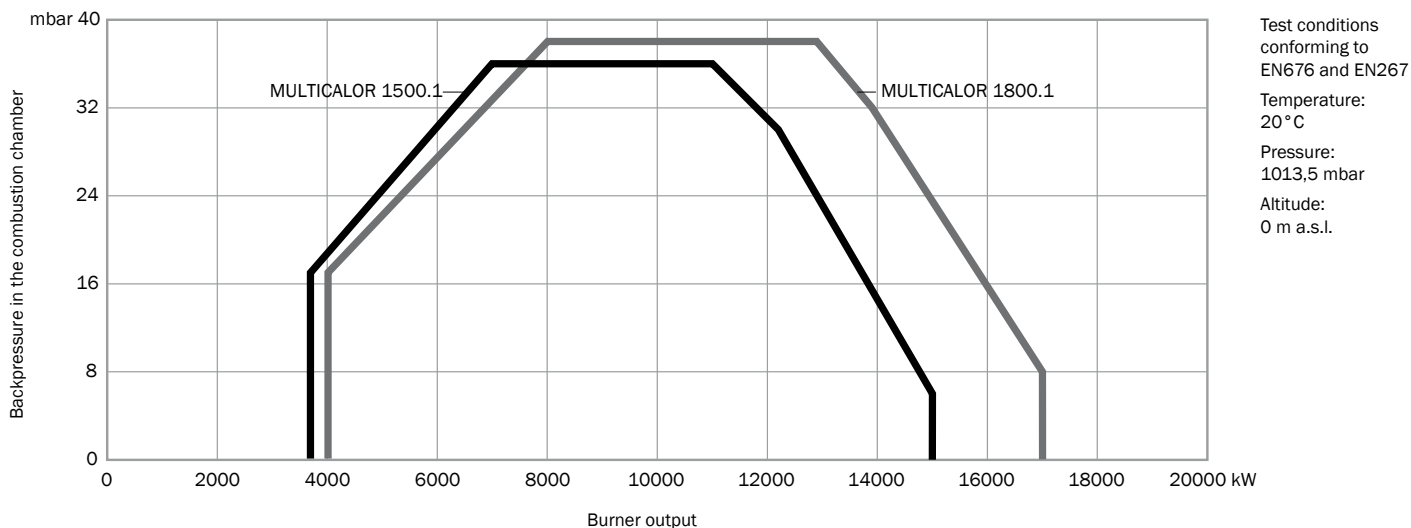
Dimensions in mm  
 Head lenght: **D** short / **D1** long  
 \*: with silencer (optional)

	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



- 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 ( $\leq 120$  mg/kWh) according to EN676 in gas and class 1 ( $\leq 250$  mg/kWh) according to EN267 in oil

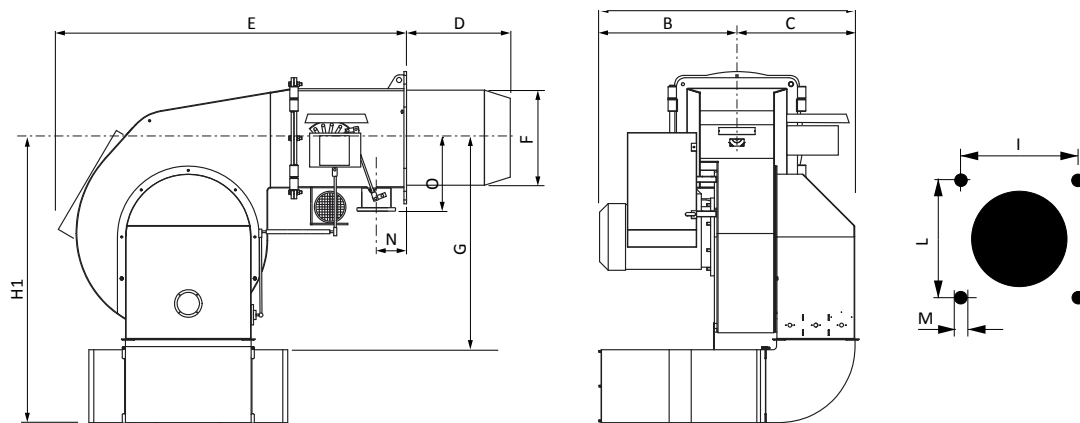
## WORKING DIAGRAM



## 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

**HEAD OFFICE:**  
Via Roma, 64  
31023 Resana (TV)

**REGISTERED OFFICE:**  
Viale A. Merloni, 45  
60044 Fabriano (AN)

**Tel.: +39 0423 719500**  
**Fax: +39 0423 719580**  
**Email: [export@ecoflam-burners.com](mailto:export@ecoflam-burners.com)**

Company subject to the direction and coordination of Ariston Thermo SpA. Via A. Merloni, 45 - 60044 Fabriano (AN) - CF 01026940427

**Version 1.1 - 02/10/2017**

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.