



SERIES C

HEAD X

C83X

HEAD V

C85V

HEAD N

C70N

HEAD A

C85A

C92A

C120A

GB
M029143CA
Rev. 0.0
08-2025

LET'S LIGHT UP THE FUTURE.

CIB Unigas was founded in 1972 as a small company by Mr. Claudio Pancolini. The remarkable creative and design skills of its technical staff enabled the company to penetrate the market quickly and effectively. Over the past 50 years, with the goal of promoting eco-sustainable fuels and applications, **CIB Unigas has become one of the leading companies in the design, production and sale of burners for civil and industrial applications.**

Factors such as the progressive shift in demand abroad (over 85% of current turnover) and the willingness to develop a solid distribution network, have allowed the company to **open numerous branches, particularly in the United Kingdom, China, and the United States, in addition to more than 60 official dealers worldwide.** This strengthened and widespread sales network, combined with the complete range of burners offered and the constant participation in international conferences and trade fairs, has made CIB Unigas a leader in its sector.

In 1994, CIB Unigas obtained ISO 9001 quality certification and product certification (CE marking), issued by the most authoritative European certification body (TÜV). This certification is the most comprehensive available in this industrial sector, covering design, production, marketing, and after-sales services. As a result, the company currently meets all national and international requirements to sell, market, and install its products worldwide.

Today, the company is managed by the founder's heirs Mr. Filippo Pancolini and Mr. Riccardo Pancolini, who ensure the continuity not only of the business but also of CIB Unigas' vision: developing technologies with the aim of protect our world and our future. **With over 200 employees, the company produces all its products at its Italian plant facility in Campodarsego (Padua), where its main activities of design, assembly and innovation take place.**

Thanks to the strong flexibility of its production and organizational structure, CIB Unigas is able to meet any demand quickly and according to the specific requirements that arise from the market. This means, not only the ability to produce in series, but above all, the creative strength to satisfy market demands—values that are at the core of the shared efforts at CIB Unigas.



SERIES C

LOW NO_x

Low emissions (Class 3 - EN676)

Possibility of working with innovative fuels with low environmental impact, such as hydrogen

Wide modulation range

HEAD X

C83X ...xR	GAS	7
C83X ...xP	GAS / LIGHT OIL	11

ULTRA LOW NO_x

Low emissions (Class 4 - EN676)

Wide modulation range

HEAD V

C85V	GAS	15
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ULTRA LOW NO_x

Low emissions (Class 4 - EN676)

Wide modulation range

HEAD N

C70N	GAS	15
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High flexibility burners

Extensive flexibility

Adjustment flexibility

Ability to work with a variety of fuels

Many types of civil and industrial applications

Special applications and furnaces

HEAD A

C85A...xR / C120A...xR	GAS	19
C85A...xP / C120A...xP	GAS	23
C92A...SP / C120A...SP	GAS / LIGHT OIL	27

DESIGNATION

M-. PR. SR. xx. A. 1. 50. EA. xxx.

FUEL

M - NATURAL GAS

L - L.P.G.

B - BIOGAS

C - TOWN GAS

G - LIGHT OIL

A - BIO DIESEL

K - KEROSENE

N - HEAVY OIL UP TO 50 cSt at 50°C (7°E - 50°C)

D - HEAVY OIL UP TO 400 cSt at 50°C (50°E - 50°C)

* VARIOUS FUEL CONFIGURATIONS AVAILABLE IN THE DUAL-FUEL VERSION

OPERATION

TN - ON/OFF

AB - HIGH - LOW FLAME

PR - PROGRESSIVE

MD - FULLY MODULATING

SP - SOFT START

BLAST TUBE

S - STANDARD

M - STANDARD

DUAL LENGTH BLAST TUBE

L - LONG

SP - Standard blast tube + ABS polymer (silenced) air intake

SR - Standard blast tube + ABS polymer (silenced) air intake

LP - Extended blast tube + aluminum air intake

LR - Extended blast tube + ABS polymer (silenced) air intake

DESTINATION COUNTRY

GB - UNITED KINGDOM

... AVAILABLE FOR OTHER COUNTRIES UPON REQUEST

BURNER MANUFACTURE

A STANDARD

Y SPECIAL

G CONTROL PANEL AND JUNCTION BOX

E JUNCTION BOX

EQUIPMENT

0 2 GAS VALVES

1 2 GAS VALVES + LEAKAGE CONTROL

7 2 GAS VALVES + MAXIMUM GAS PRESSURE SWITCH

8 2 GAS VALVES + LEAKAGE CONTROL AND MAXIMUM GAS PRESSURE SWITCH

GAS CONNECTION

32 1" 1/4

40 1" 1/2

50 DN50

65 DN65

80 DN80

ELECTRONIC VERSION

EA Burners complete with electronic cam

EB Burners complete with electronic cam and inverter

EC Dual fuel burners complete with electronic cam

ED Dual fuel burners complete with electronic cam and inverter

ES Burners complete with electronic cam, without O₂ control, without inverter

EO Burners complete with electronic cam and O₂ control, without inverter

EI Burners complete with electronic cam and inverter, without O₂ control

EK Burners complete with electronic cam with O₂ control and with inverter

EF Burners complete with electronic cam and temperature-compensated flue gas recirculation FGR without O₂ monitoring, without inverter

EG Burners complete with electronic cam, inverter and temperature-compensated flue gas recirculation FGR without O₂ monitoring

EP Burners complete with electronic cam and temperature-compensated flue gas recirculation FGR with O₂ monitoring, without inverter

ER Burners complete with electronic cam, inverter and temperature-compensated flue gas recirculation FGR with O₂ monitoring

FLUE GAS RECIRCULATION

FGR Flue gas recirculation

SOME FEATURES ARE NOT INCLUDED IN THIS CATALOGUE

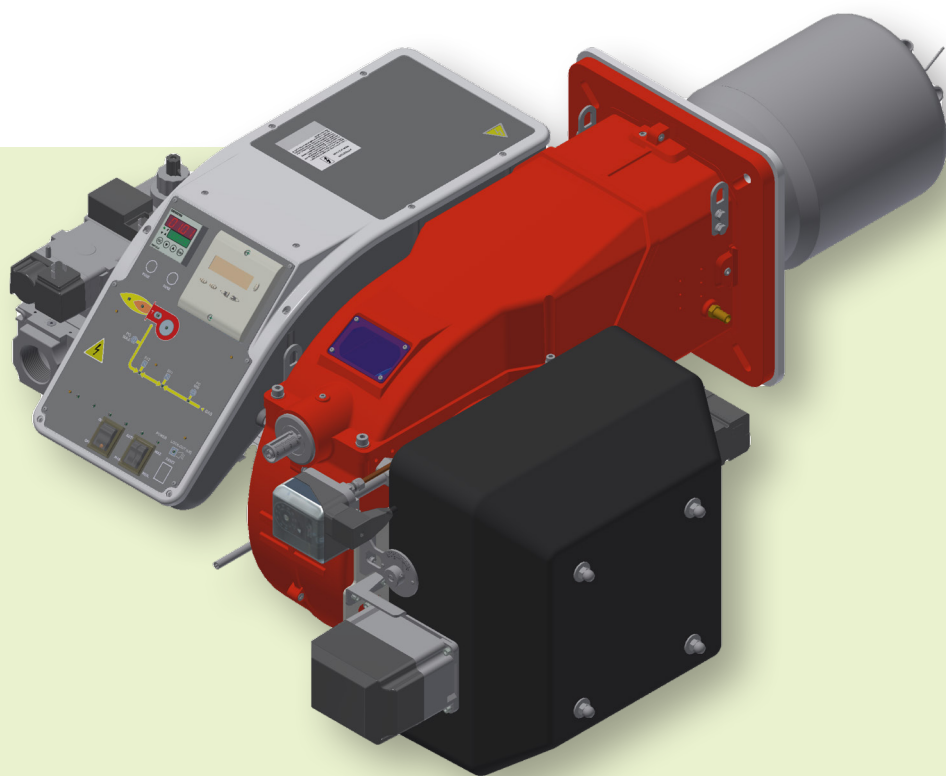
FOR CONFIGURATIONS OF BURNERS IN THE LAMTEC VERSION WITH O₂+CO OXYGEN CONTROL, PLEASE CONTACT OUR SALES DEPARTMENT.

HEAD X

C83X ...xR

Low NOx

- Low emissions (Class 3 - EN676)
- Possibility of working with innovative combustibles with low environmental impact such as
- Ample modulation range

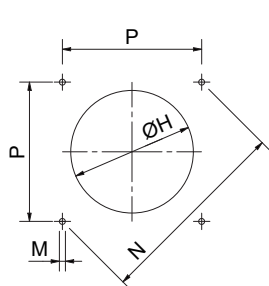
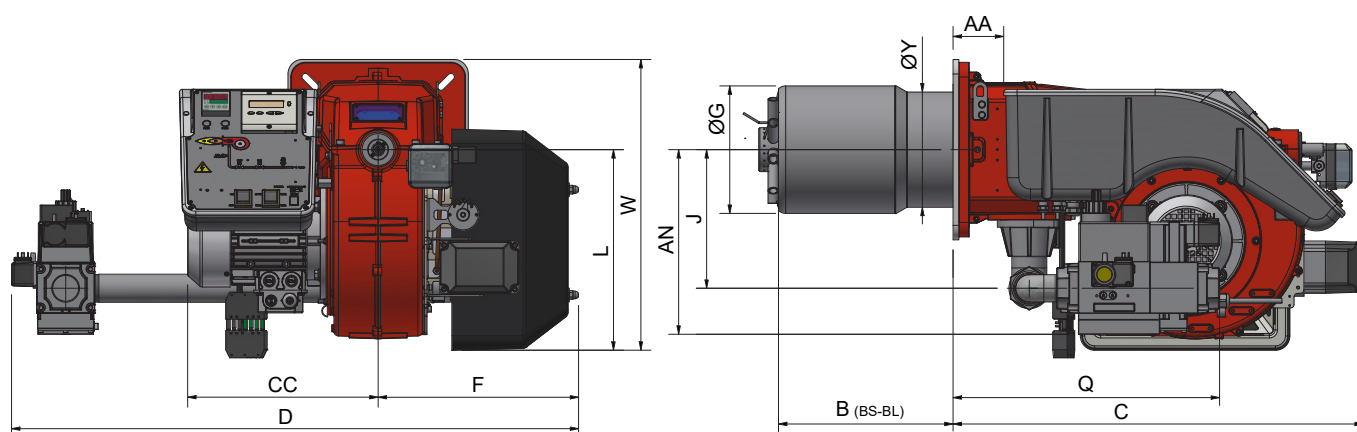


GAS

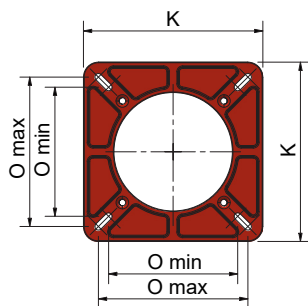
TECHNICAL SPECIFICATIONS

Type	Model	Power kW		Power supply	Fan motor kW	Gas connections	Level of noise emissions dBA
		min	max				
C83X	M-.xx.xR.IT.A.0.xx	200	830	230/400 V 3N ac	1,1	1"¼ - 1"½ - 2" - DN65	< 75

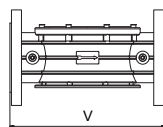
For information on choosing the length of the blast tube, refer to the Technical Information booklet.



**BOILER RECOMMENDED
DRILLING TEMPLATE**



BURNER FLANGE



DN65 - DN80



PACKAGING DIMENSIONS* (mm)

Type	l	p	h	kg
C83X	1345	835	750	60

***INDICATIVE VALUES**

DIMENSIONS* (mm)

Type	Model	Overall dimensions																						
		AA	AN	B BS	BL	C	CC	D	F	G	H	J	K	L	M	N	O min	P	Q	U	V	W	Y	
C83X	M-.xx.xR.IT.A.0.32	87	292	300	450	873	327	932	344	219	249	238	300	349	M10	330	216	250	233	387	531	-	504	198
C83X	M-.xx.xR.IT.A.0.40	87	317	300	450	873	327	927	344	219	249	238	300	349	M10	330	216	250	233	458	533	-	504	198
C83X	M-.xx.xR.IT.A.0.50	87	317	300	450	873	327	916	344	219	249	238	300	349	M10	330	216	250	233	469	522	-	504	198
C83X	M-.xx.xR.IT.A.0.65	87	404	300	450	873	327	1034	344	219	249	287	300	349	M10	330	216	250	233	535	565	292	504	198

***INDICATIVE VALUES**

Attention: - The size of the gas train varies according to size and configuration.

MECHANICAL OPERATION

Model	Gas train	Operation
M-.AB.SR.IT.A.0.32	1"¼	AB
M-.AB.SR.IT.A.0.40	1"½	AB
M-.AB.SR.IT.A.0.50	2"	AB
M-.AB.SR.IT.A.0.65	DN65	AB
M-.AB.SR.IT.A.0.80	DN80	AB
M-.PR.SR.IT.A.0.32	1"¼	PR (*)
M-.PR.SR.IT.A.0.40	1"½	PR (*)
M-.PR.SR.IT.A.0.50	2"	PR (*)
M-.PR.SR.IT.A.0.65	DN65	PR (*)
M-.PR.SR.IT.A.0.80	DN80	PR (*)

SP = Standard blast tube + aluminum air intake (1)

SR = Standard blast tube + ABS polymer (silenced) air intake

LP = Extended blast tube + aluminum air intake

LR = Extended blast tube + ABS polymer (silenced) air intake (2)

PR = Progressive Adjustment

MD (*) = Modulating adjustment

(for the MD modulating version, the Modulation Kit must be added; see the list of variants)

Modulation kit = Kit to be combined with PR Progressive versions

In the MD modulating version, the burner must be equipped with the relevant modulating probe to complete the supply.

For LPG burners, see the list of variants

ELECTRONIC OPERATION

Model	Gas train	Operation
M-.PR.SR.IT.A.1.32.EA	1"¼	PR (*)
M-.PR.SR.IT.A.1.40.EA	1"½	PR (*)
M-.PR.SR.IT.A.1.50.EA	2"	PR (*)
M-.PR.SR.IT.A.1.65.EA	DN65	PR (*)
M-.PR.SR.IT.A.1.80.EA	DN80	PR (*)
M-.MD.SR.IT.A.1.32.ES	1"¼	MD
M-.MD.SR.IT.A.1.40.ES	1"½	MD
M-.MD.SR.IT.A.1.50.ES	2"	MD
M-.MD.SR.IT.A.1.65.ES	DN65	MD
M-.MD.SR.IT.A.1.80.ES	DN80	MD

(1) For applications on furnaces and rotary drums, see the version with aluminium drawer (SP). Contact Cib Unigas for any clarification.

(2) For the following versions, please contact our offices.

The products comply with European standards EN676 and EN267 and the following directives:
DIRECTIVE GAR 2016/426/EU

NOx emission level:

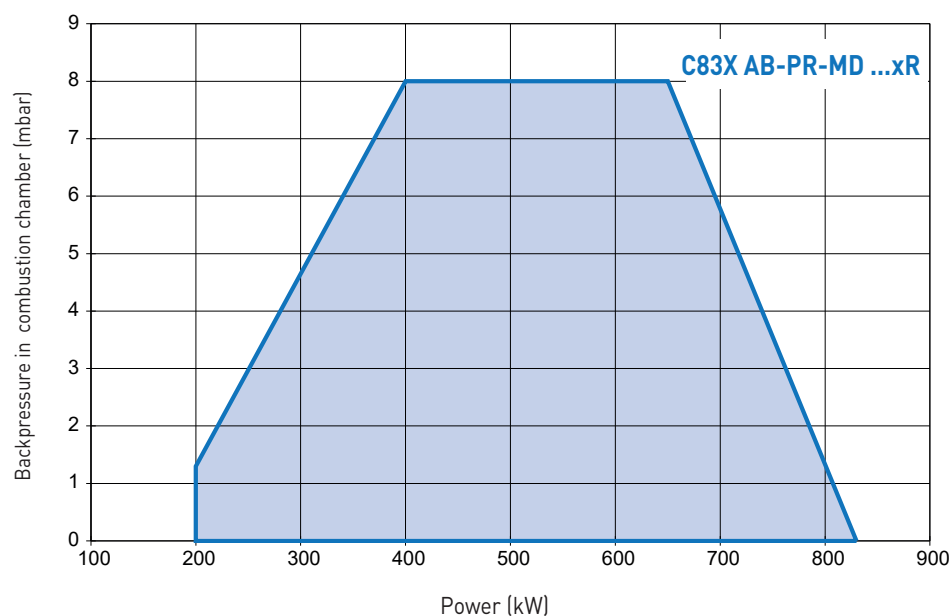
- Class 3 (<80 mg/kWh) in gas operation according to EN676

For information on choosing the length of the blast tube, refer to the Technical Information booklet.



**Burners also compatible with
GPL, H₂**

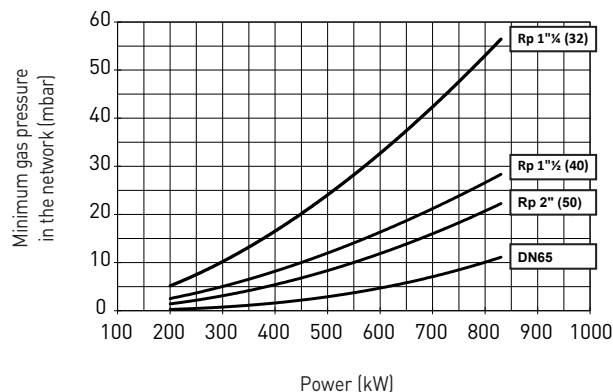
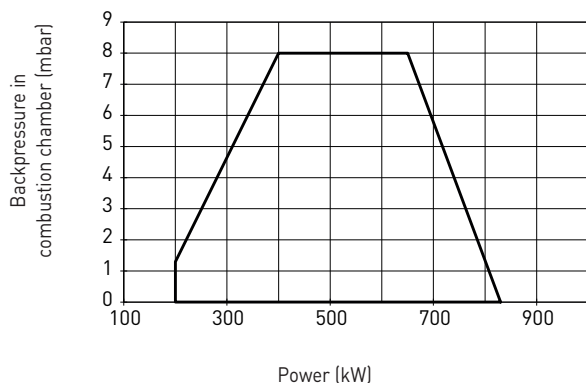
PERFORMANCE CURVES



PERFORMANCE CURVES

PRESSURE IN THE NETWORK

C83X AB-PR-MD...xR



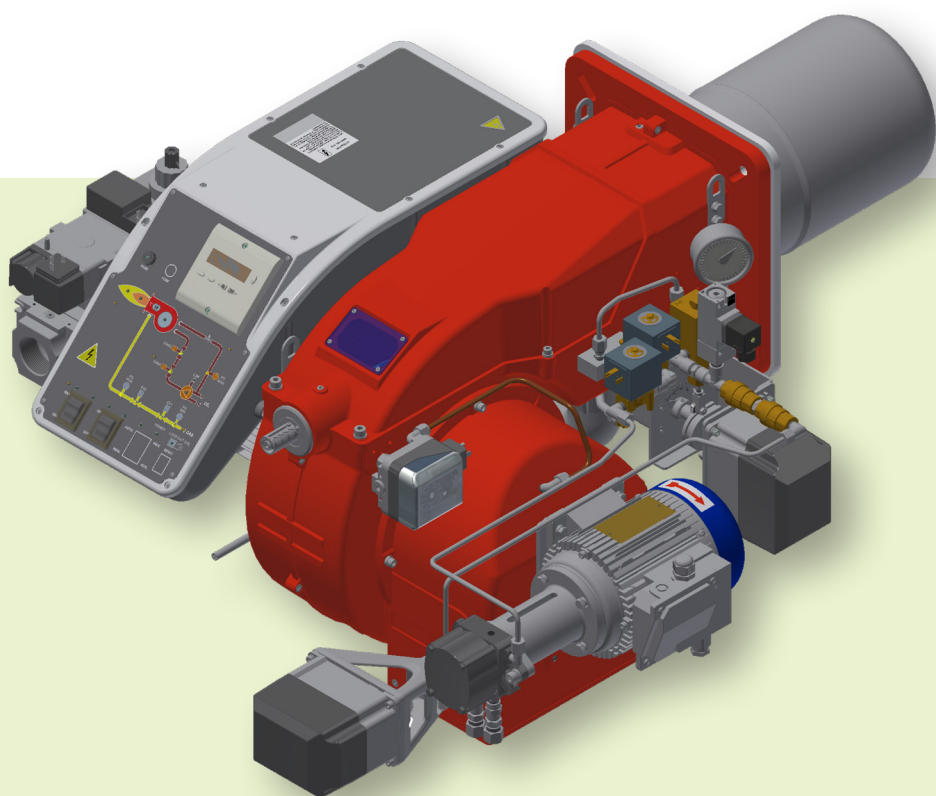
- Attention:**
- The working range values were determined with reference to laboratory tests with natural gas of lower calorific value $Hi=34.02 \text{ MJ/Stm}^3$ and density 0.714 kg/Stm^3 , (Stm^3 refers to 1013 mbar and 15° C) and ambient conditions 1013 mbar and 20° C .
 - To know the minimum gas pressure in the network, it is necessary to add the boiler back pressure to the value read on the curve.
 - The pressure values vary depending on the configuration of the gas ramp. The minimum gas pressure curves refer to gas ramps assembled with standard supply valves.
 - In the abscissa is the power value, in the ordinate the corresponding network pressure value net of the pressure in the combustion chamber. In order to know the minimum pressure at the ramp inlet, necessary to obtain the required gas flow, the pressure in the combustion chamber must be added to the value read on the ordinate.

HEAD X

C83X ...xP

Low NOx

- Low emissions (Class 3 - EN676)
- Possibility of working with innovative combustibles with low environmental impact such as
- Ample modulation range

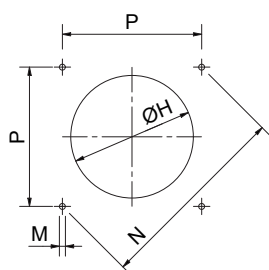
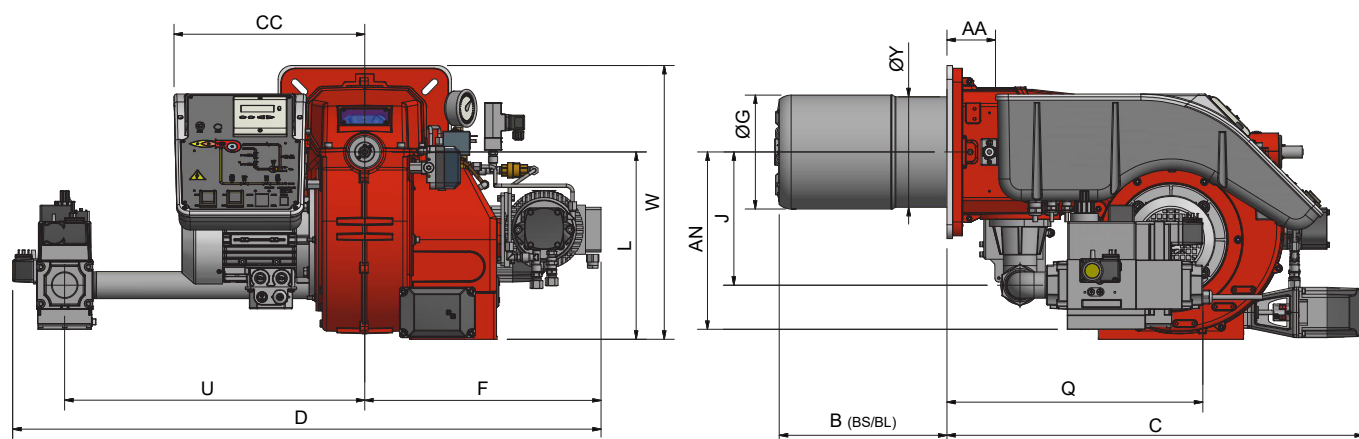


GAS / LIGHT OIL

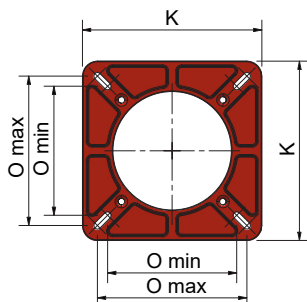
TECHNICAL SPECIFICATIONS

Type	Model	Power kW		Power supply	Fan motor kW	Pump motor kW	Gas connections	Level of noise emissions dBA
		min	max					
C83X	MG.xx.xP.IT.0.xx	200	830	230/400 V 3N ac	1,1	0,55	1"¼ - 1"½ - 2" - DN65	<80

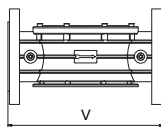
For information on choosing the length of the blast tube, refer to the Technical Information booklet.



**BOILER RECOMMENDED
DRILLING TEMPLATE**



BURNER FLANGE



DN65 - DN80



PACKAGING DIMENSIONS* (mm)

Type	l	p	h	kg
C83X	1730	1280	1020	140

***INDICATIVE VALUES**

DIMENSIONS* (mm)

Type	Model	Overall dimensions																							
		AA	AN	B	B	C	CC	D	F	G	H	J	K	L	M	N	O	P	Q	U	V	W	Y		
		BS		BL	min																		max		
C83X	MG.xx.xP.IT.A.0.32	87	292	300	446	834	342	1025	437	204	234	238	300	335	M10	330	216	250	233	387	531	-	490	198	
C83X	MG.xx.xP.IT.A.0.40	87	317	300	446	834	342	1020	437	204	234	238	300	335	M10	330	216	250	233	458	533	-	490	198	
C83X	MG.xx.xP.IT.A.0.50	87	317	300	446	834	342	1009	437	204	234	238	300	335	M10	330	216	250	233	469	522	-	490	198	
C83X	MG.xx.xP.IT.A.0.65	87	404	300	446	834	342	1094	437	204	234	287	300	335	M10	330	216	250	233	535	565	292	490	198	

***INDICATIVE VALUES**

Attention: - The size of the gas train varies according to size and configuration.

MECHANICAL OPERATION

Model	Gas train	Operation
MG.PR.SP.IT.A.0.32	1"¼	PR (*)
MG.PR.SP.IT.A.0.40	1"½	PR (*)
MG.PR.SP.IT.A.0.50	2"	PR (*)
MG.PR.SP.IT.A.0.65	DN65	PR (*)

SP = Standard blast tube + aluminum air intake (1)
 SR = Standard blast tube + ABS polymer (silenced) air intake
 LP = Extended blast tube + aluminum air intake
 LR = Extended blast tube + ABS polymer (silenced) air intake (2)
 PR = Progressive Adjustment
 MD (*) = Modulating adjustment
 (for the MD modulating version, the Modulation Kit must be added; see the list of variants)

Modulation kit = Kit to be combined with PR Progressive versions

In the MD modulating version, the burner must be equipped with the relevant modulating probe to complete the supply.

For LPG burners, see the list of variants

(1) For applications on furnaces and rotary drums, see the version with aluminium drawer (SP). Contact Cib Unigas for any clarification.

(2) For the following versions, please contact our offices.

ELECTRONIC OPERATION

Model	Gas train	Operation
MG.PR.SP.IT.A.1.32.EC	1"¼	PR (*)
MG.PR.SP.IT.A.1.40.EC	1"½	PR (*)
MG.PR.SP.IT.A.1.50.EC	2"	PR (*)
MG.PR.SP.IT.A.1.65.EC	DN65	PR (*)
MG.MD.SP.IT.A.1.32.ES	1"¼	MD
MG.MD.SP.IT.A.1.40.ES	1"½	MD
MG.MD.SP.IT.A.1.50.ES	2"	MD
MG.MD.SP.IT.A.1.65.ES	DN65	MD

The products comply with European standards EN676 and EN267 and the following directives:

DIRECTIVE GAR 2016/426/EU

DIRECTIVE Low Tension 2014/35/UE

DIRECTIVE Electromagnetic compatibility 2014/30/UE

DIRECTIVE Machinery 2006/42/CE

NOx emission level:

- Class 3 (<80 mg/kWh) in gas operation according to EN676

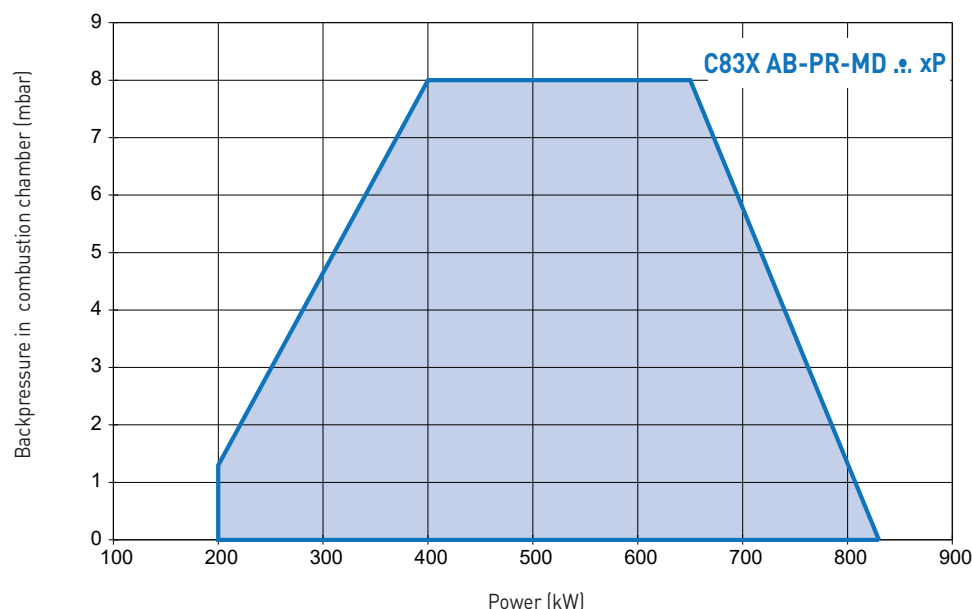
- Class 2 (< 185 mg/kWh) in light oil operation according to EN267

For information on choosing the length of the blast tube, refer to the Technical Information booklet.



Burners also compatible with GPL, H₂
 Burners also compatible with bio-oli

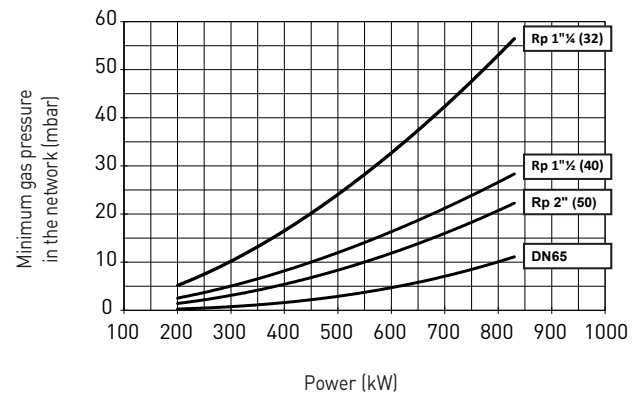
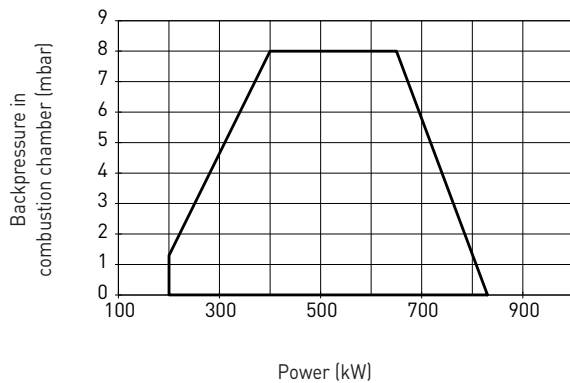
PERFORMANCE CURVES



PERFORMANCE CURVES

PRESSURE IN THE NETWORK

C83X xP-PR-MD



- Attention:**
- The working range values were determined with reference to laboratory tests with natural gas of lower calorific value $Hi=34.02 \text{ MJ/Stm}^3$ and density 0.714 kg/Stm^3 , (Stm^3 refers to 1013 mbar and 15° C) and ambient conditions 1013 mbar and 20° C .
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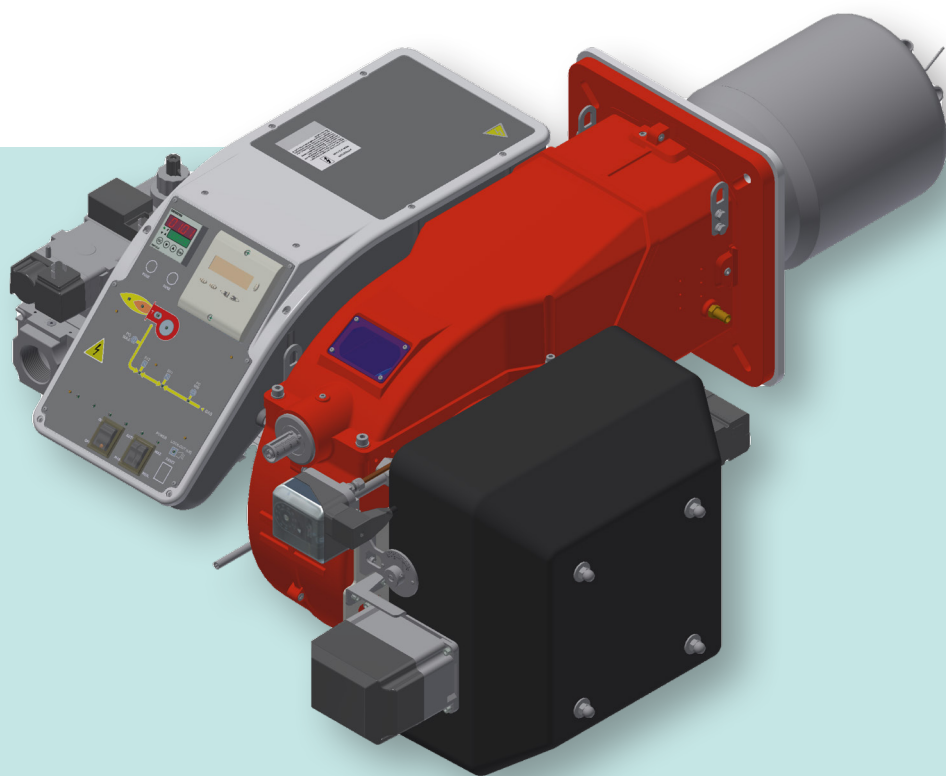
Ultra Low NOx

HEAD V

C85V

Low emissions (Class 4 - EN676)

Wide modulation range



GAS

TECHNICAL SPECIFICATIONS

Type	Model	Power kW		Power supply	Fan motor kW	Gas connections	Level of noise emissions dBA
		min	max				
C85V	M-.xx.xR.IT.A.0.xx	280	835	230/400 V 3N ac	1,1	1"¼ - 1"½ - 2" - DN65	< 75

DIMENSIONS* (mm)

Not available

ELECTRONIC OPERATION

Model	Gas train	Operation
M-.PR.SR.IT.A.1.32.EA	1"¼	PR (*)
M-.PR.SR.IT.A.1.40.EA	1"½	PR (*)
M-.PR.SR.IT.A.1.50.EA	2"	PR (*)
M-.PR.SR.IT.A.1.65.EA	DN65	PR (*)
M-.PR.SR.IT.A.1.80.EA	DN80	PR (*)
M-.MD.SR.IT.A.1.32.ES	1"¼	MD
M-.MD.SR.IT.A.1.40.ES	1"½	MD
M-.MD.SR.IT.A.1.50.ES	2"	MD
M-.MD.SR.IT.A.1.65.ES	DN65	MD
M-.MD.SR.IT.A.1.80.ES	DN80	MD

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SR = Standard blast tube + ABS polymer (silenced) air intake

LP = Extended blast tube + aluminum air intake

LR = Extended blast tube + ABS polymer (silenced) air intake (2)

PR = Progressive Adjustment

MD (*) = Modulating adjustment

(for the MD modulating version, the Modulation Kit must be added; see the list of variants)

Modulation kit = Kit to be combined with PR Progressive versions

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For LPG burners, see the list of variants

(1) For applications on furnaces and rotary drums, see the version with aluminium drawer (SP). Contact Cib Unigas for any clarification.

(2) For the following versions, please contact our offices.

The products comply with European standards EN676 and EN267 and the following directives:

DIRECTIVE GAR 2016/426/EU

NOx emission level:

- Class 4 (<60 mg/kWh) in gas operation according to EN676

For information on choosing the length of the blast tube, refer to the Technical Information booklet.

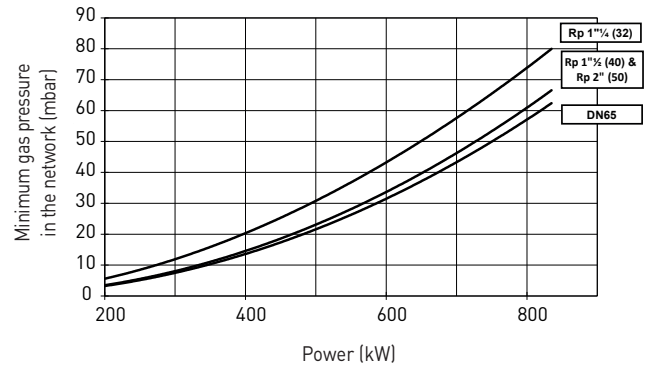
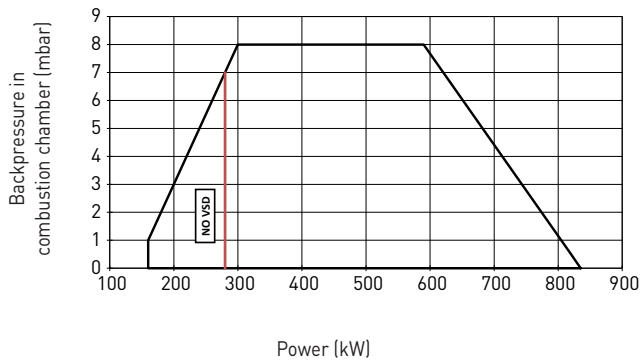


**Burners also compatible with
GPL, H₂**

PERFORMANCE CURVES

PRESSURE IN THE NETWORK

C85V xP-PR-MD



- Attention:**
- The working range values were determined with reference to laboratory tests with natural gas of lower calorific value $Hi=34.02 \text{ MJ/Stm}^3$ and density 0.714 kg/Stm^3 , (Stm^3 refers to 1013 mbar and 15° C) and ambient conditions 1013 mbar and 20° C .
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 - In the abscissa is the power value, in the ordinate the corresponding network pressure value net of the pressure in the combustion chamber. In order to know the minimum pressure at the ramp inlet, necessary to obtain the required gas flow, the pressure in the combustion chamber must be added to the value read on the ordinate.

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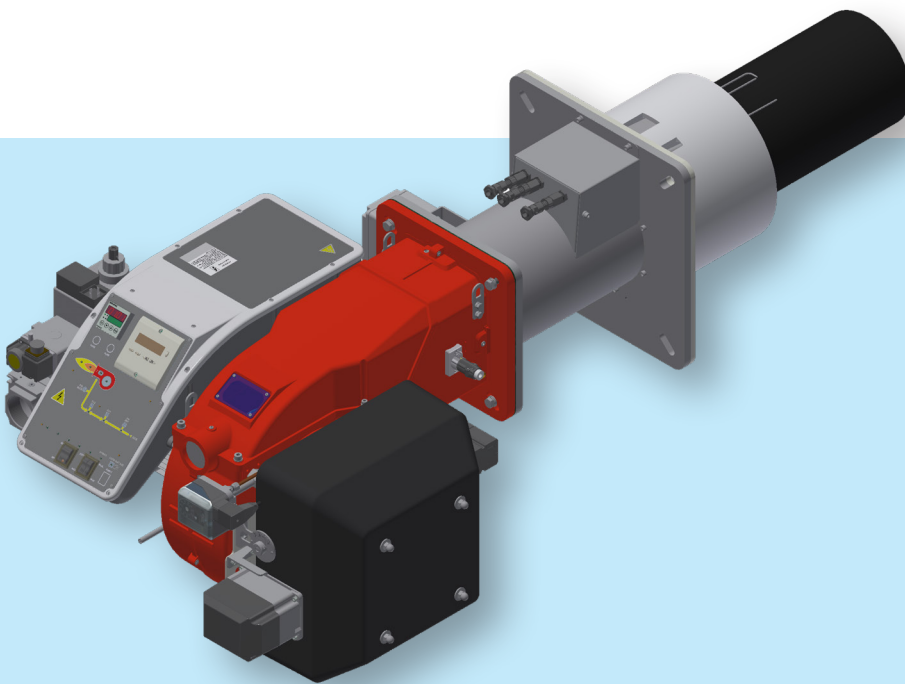
HEAD N

C70N

Ultra Low NOx Premix

Low emissions (Class 4 - EN676)

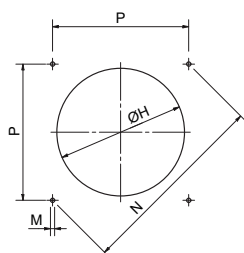
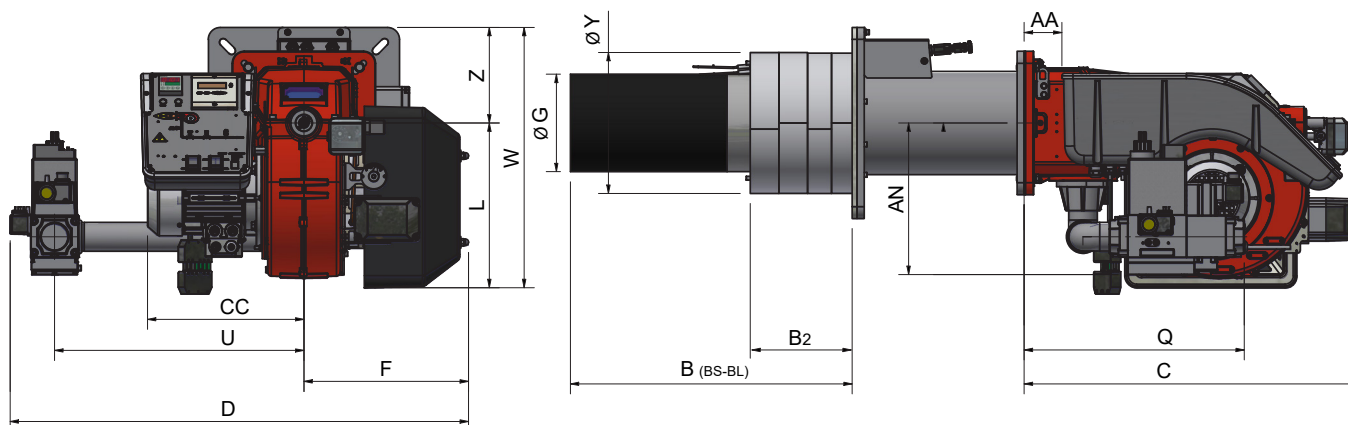
Wide modulation range



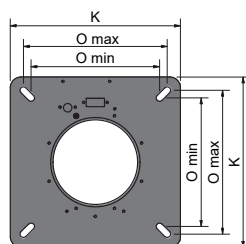
GAS

TECHNICAL SPECIFICATIONS

Type	Power kW min max	Power supply output	Power supply aux	Fan motor kW	Gas connections	Level of noise emissions dBA
C70N	70 725	400V 3 AC 50 Hz	230V 2 AC 50 Hz	1,1	1" 1/2, 2", 2" 1/2 DN65	≤ 80



**BOILER RECOMMENDED
DRILLING TEMPLATE**



BURNER FLANGE

DIMENSIONS* (mm)

Type	DN	Overall dimensions																						
		AA	AN	SL	B BL	B2	C	CC	D	F	G	H	J	K	L	M	N	min	O max	P	Q	U	W	Y
C70N	DN50	79	317	590	-	376	697	327	960	345	204	300	238	400	345	M12	453	302	338	320	461	522	495	295

***INDICATIVE VALUES**

The products comply with European standards EN676 and EN267 and the following directives:
DIRECTIVE GAR 2016/426/EU

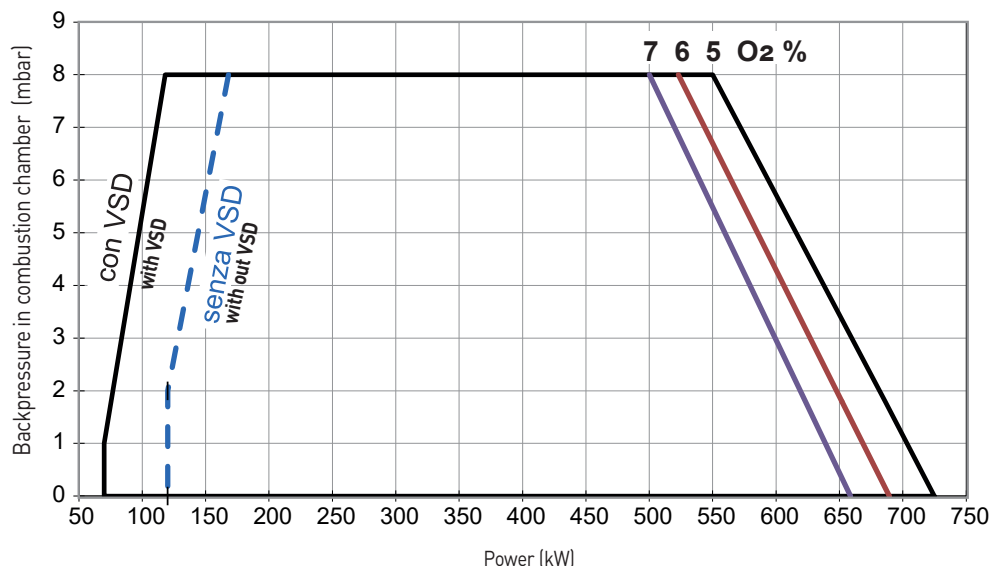
NOx emission level:
- <30 mg/kWh in gas operation



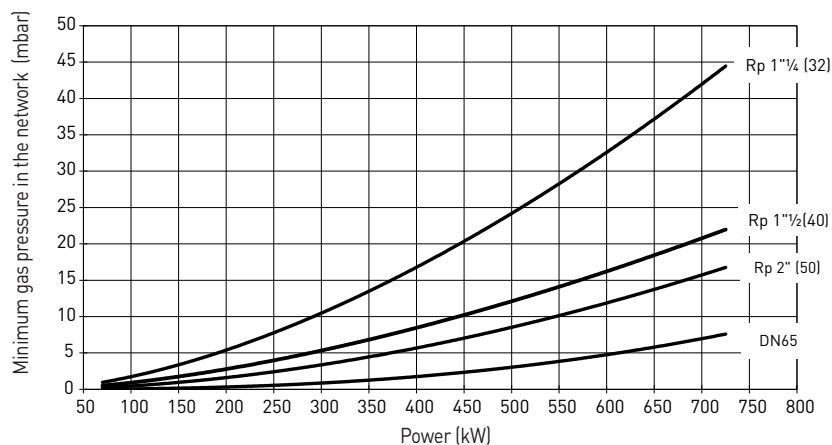
**Burners also compatible with
GPL, H₂**

Attention: - The size of the gas train varies according to size and configuration.

PERFORMANCE CURVES



MINIMUM GAS PRESSURE AT THE BURNER INLET



- Attention:**
- The working range values were determined with reference to laboratory tests with natural gas of lower calorific value $Hi=34.02 \text{ MJ/Stm}^3$ and density 0.714 kg/Stm^3 , (Stm^3 refers to 1013 mbar and 15° C) and ambient conditions 1013 mbar and 20° C .
 - To know the minimum gas pressure in the network, it is necessary to add the boiler back pressure to the value read on the curve.
 - The pressure values vary depending on the configuration of the gas ramp. The minimum gas pressure curves refer to gas ramps assembled with standard supply valves.
 - In the abscissa is the power value, in the ordinate the corresponding network pressure value net of the pressure in the combustion chamber. In order to know the minimum pressure at the ramp inlet, necessary to obtain the required gas flow, the pressure in the combustion chamber must be added to the value read on the ordinate.

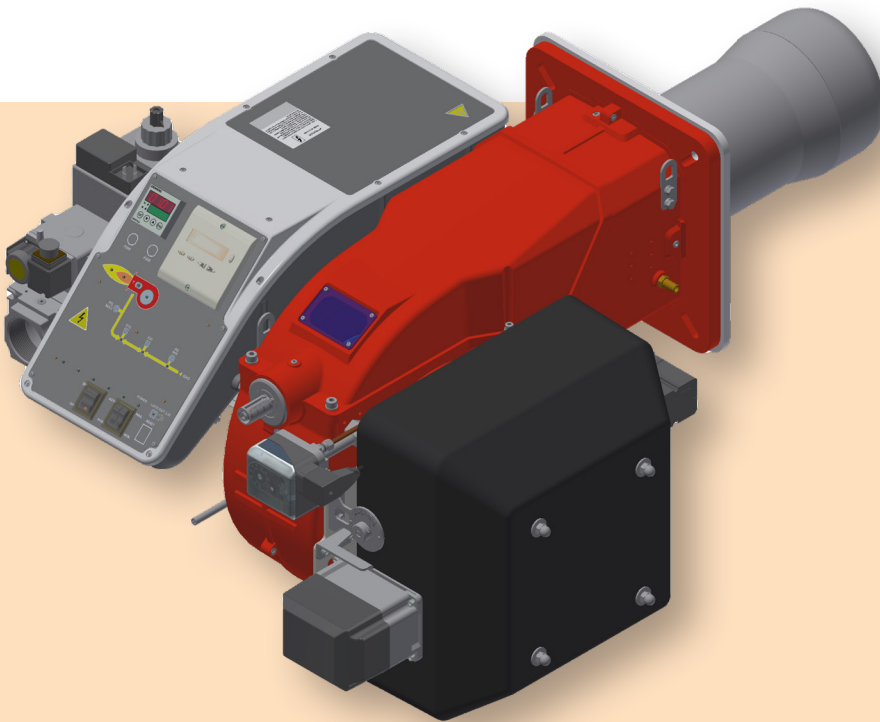
HEAD A

C85A ...xR

C120A ...xR

Highly flexible burners

- Extensive flexibility
- Adjustment flexibility
- Possibility of working with all types of vacuum furnaces
- Many types of civil and industrial applications

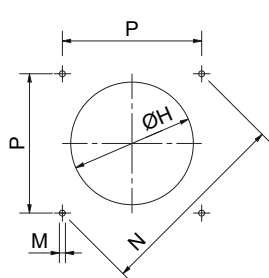
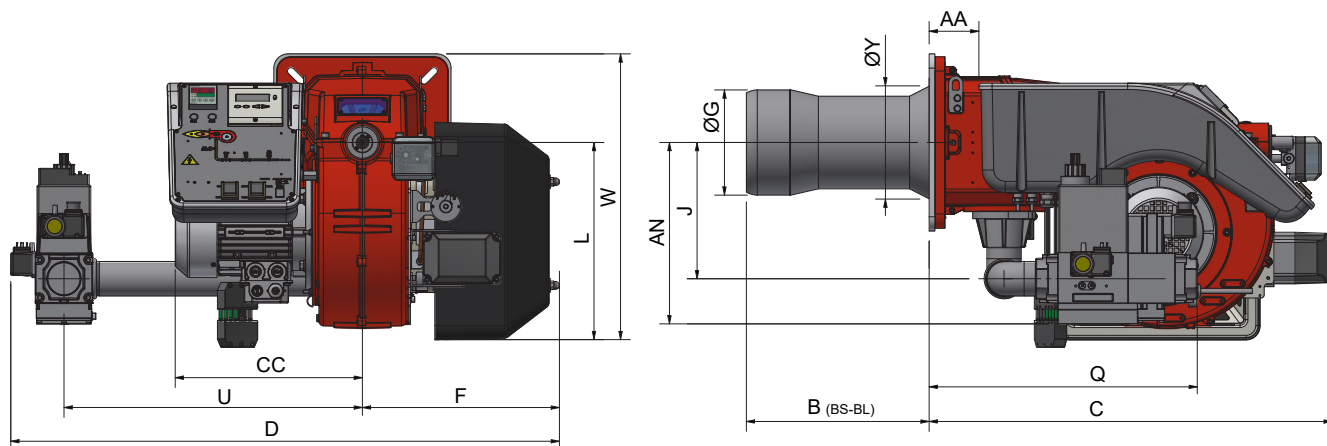


GAS

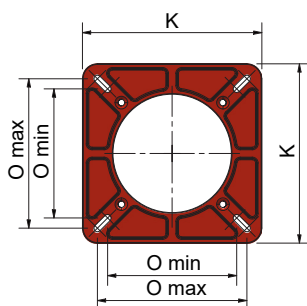
TECHNICAL SPECIFICATIONS

Type	Model	Power kW		Power supply	Fan motor kW	Gas connections	Level of noise emissions dBA
		min	max				
C85A	M-.xx.xR.IT.A.0.xx	230	850	230/400 V 3N ac	1,1	1"¼ - 1"½ - 2" - DN65	< 75
C120A	M-.xx.xR.IT.A.0.xx	300	1200	230/400 V 3N ac	1,5	1"½ - 2" - DN65 - DN80	< 75

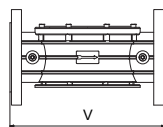
For information on choosing the length of the blast tube, refer to the Technical Information booklet.



**BOILER RECOMMENDED
DRILLING TEMPLATE**



BURNER FLANGE



DN65 - DN80



PACKAGING DIMENSIONS* (mm)

Type	l	p	h	kg
C85A	1345	835	750	60
C120A	1345	835	750	60

***INDICATIVE VALUES**

DIMENSIONS* (mm)

Type	Model	Overall dimensions																							
		AA	AN	BS	B BL	C	CC	D	F	G	H	J	K	L	M	N	O		P	Q	U	V	W	Y	
																		min	max						
C85A	M-.xx.xR.IT.A.0.32	87	292	322	412	873	328	932	344	184	204	238	300	347	M10	330	216	250	233	387	531	-	502	198	
C85A	M-.xx.xR.IT.A.0.40	87	317	322	412	873	328	927	344	184	204	238	300	347	M10	330	216	250	233	458	533	-	502	198	
C85A	M-.xx.xR.IT.A.0.50	87	317	322	412	873	328	916	344	184	204	238	300	347	M10	330	216	250	233	469	522	-	502	198	
C85A	M-.xx.xR.IT.A.0.65	87	404	322	412	873	328	1034	344	184	204	287	300	347	M10	330	216	250	233	535	565	292	502	198	
C120A	M-.xx.xR.IT.A.0.40	87	292	381	491	873	328	927	344	234	264	238	300	347	M10	330	216	250	233	458	533	-	502	198	
C120A	M-.xx.xR.IT.A.0.50	87	317	381	491	873	328	916	344	234	264	238	300	347	M10	330	216	250	233	469	522	-	502	198	
C120A	M-.xx.xR.IT.A.0.65	87	404	381	491	873	328	1034	344	234	264	287	300	347	M10	330	216	250	233	535	565	292	502	198	
C120A	M-.xx.xR.IT.A.1.80	87	363	381	491	873	328	1034	344	234	264	284	300	347	M10	330	216	250	233	559	565	310	502	198	

***INDICATIVE VALUES**

Attention: - The size of the gas train varies according to size and configuration.

MECHANICAL OPERATION

Modello	Rampa gas	Regolazione
M-.AB.SR.IT.A.0.32	1"¼	AB
M-.AB.SR.IT.A.0.40	1"½	AB
M-.AB.SR.IT.A.0.50	2"	AB
M-.AB.SR.IT.A.0.65	DN65	AB
M-.AB.SR.IT.A.0.80	DN80	AB
M-.PR.SR.IT.A.0.32	1"¼	PR (*)
M-.PR.SR.IT.A.0.40	1"½	PR (*)
M-.PR.SR.IT.A.0.50	2"	PR (*)
M-.PR.SR.IT.A.0.65	DN65	PR (*)
M-.PR.SR.IT.A.0.80	DN80	PR (*)

SP = Standard blast tube + aluminum air intake [1]

SR = Standard blast tube + ABS polymer (silenced) air intake

LP = Extended blast tube + aluminum air intake

LR = Extended blast tube + ABS polymer (silenced) air intake [2]

PR = Progressive Adjustment

MD (*) = Modulating adjustment

(for the MD modulating version, the Modulation Kit must be added; see the list of variants)

Modulation kit = Kit to be combined with PR Progressive versions

In the MD modulating version, the burner must be equipped with the relevant modulating probe to complete the supply.

For LPG burners, see the list of variants

ELECTRONIC OPERATION

Modello	Rampa gas	Regolazione
M-.PR.SR.IT.A.1.32 EA	1"¼	PR (*)
M-.PR.SR.IT.A.1.40.EA	1"½	PR (*)
M-.PR.SR.IT.A.1.50.EA	2"	PR (*)
M-.PR.SR.IT.A.1.65.EA	DN65	PR (*)
M-.PR.SR.IT.A.1.80 EA	DN80	PR (*)
M-.MD.SR.IT.A.1.32 ES	1"¼	MD
M-.MD.SR.IT.A.1.40.ES	1"½	MD
M-.MD.SR.IT.A.1.50.ES	2"	MD
M-.MD.SR.IT.A.1.65.ES	DN65	MD
M-.MD.SR.IT.A.1.80 ES	DN80	MD

(1) For applications on furnaces and rotary drums, see the version with aluminium drawer (SP). Contact Cib Unigas for any clarification.

(2) For the following versions, please contact our offices.

The products comply with European standards EN676 and EN267 and the following directives:
DIRECTIVE GAR 2016/426/EU

NOx emission level:

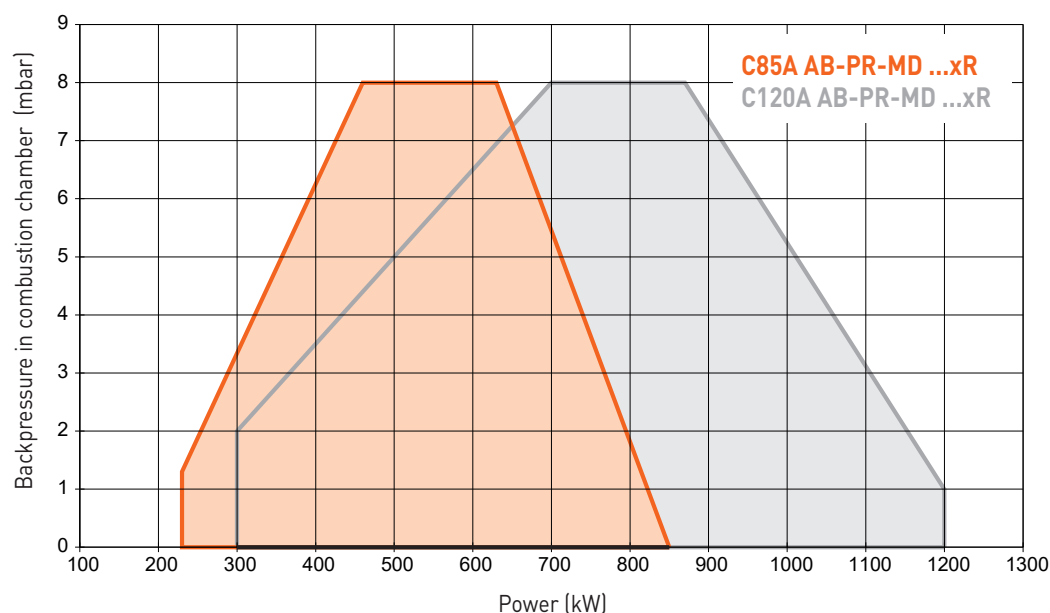
- Class 2 (<120 mg/kWh) in gas operation according to EN676

For information on choosing the length of the blast tube, refer to the Technical Information booklet.



**Burners also compatible with
GPL, biogas, syngas, off gas**

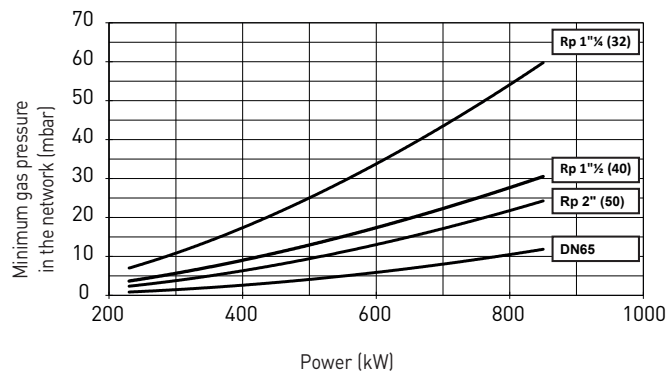
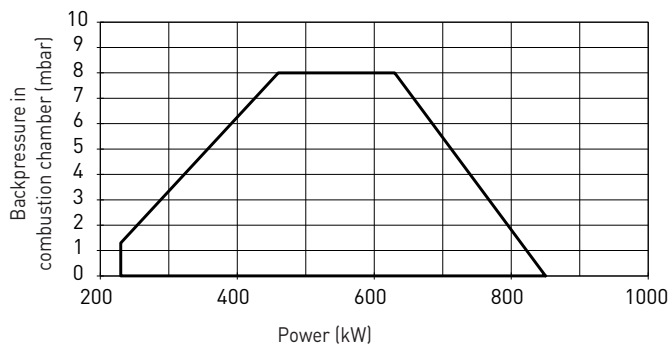
PERFORMANCE CURVES



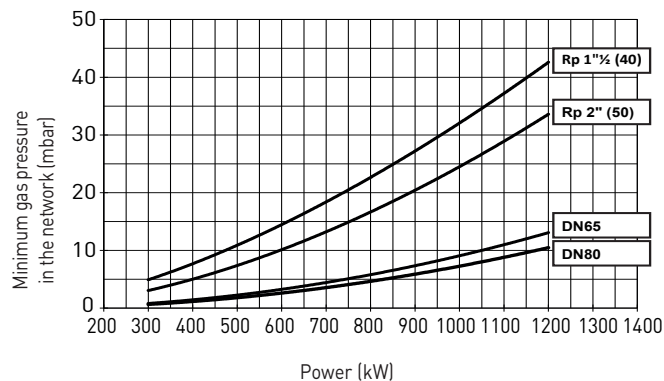
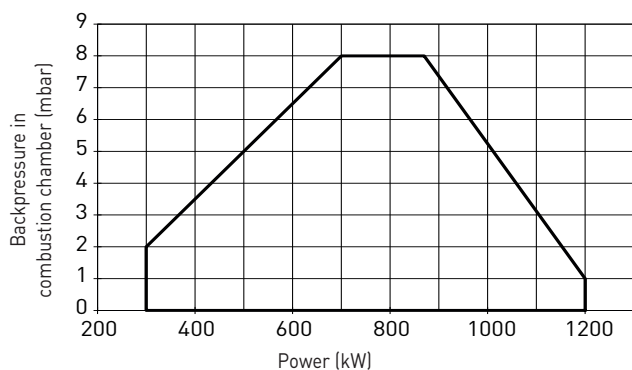
PERFORMANCE CURVES

PRESSURE IN THE NETWORK

C85A AB-PR-MD...xR



C120A AB-PR-MD...xR



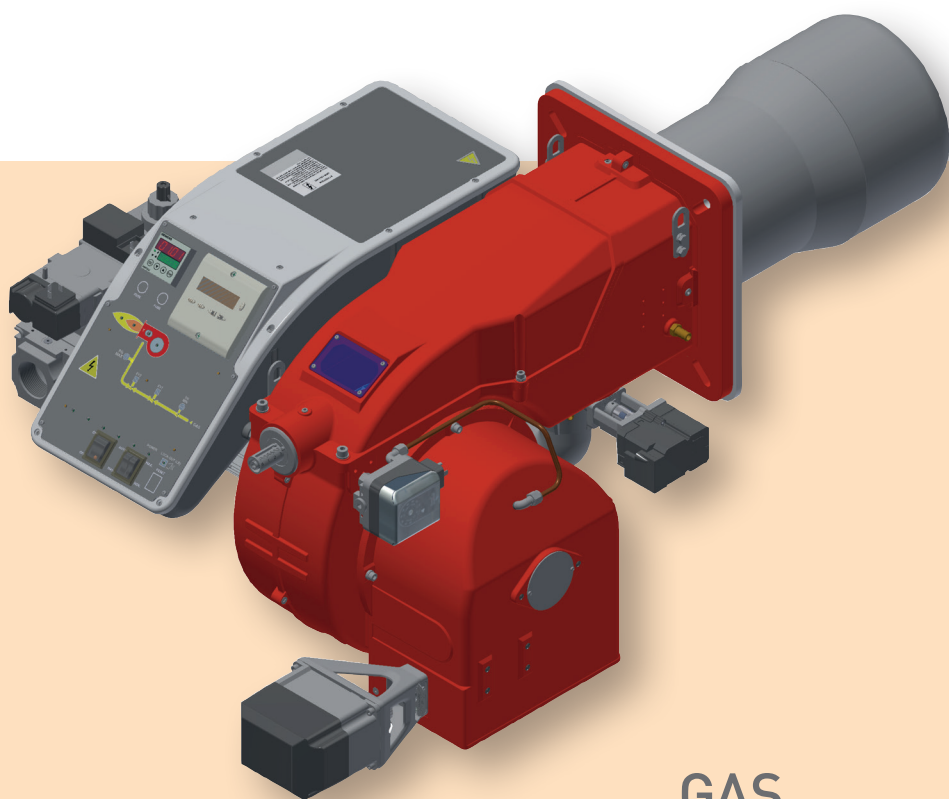
- Attention:**
- The working range values were determined with reference to laboratory tests with natural gas of lower calorific value $Hi=34.02 \text{ MJ/Sm}^3$ and density 0.714 kg/Sm^3 , (Sm^3 refers to 1013 mbar and 15°C) and ambient conditions 1013 mbar and 20°C .
 - To know the minimum gas pressure in the network, it is necessary to add the boiler back pressure to the value read on the curve.
 - The pressure values vary depending on the configuration of the gas ramp. The minimum gas pressure curves refer to gas ramps assembled with standard supply valves.
 - In the abscissa is the power value, in the ordinate the corresponding network pressure value net of the pressure in the combustion chamber. In order to know the minimum pressure at the ramp inlet, necessary to obtain the required gas flow, the pressure in the combustion chamber must be added to the value read on the ordinate.

HEAD A

C85A ...xP
C120A ...xP

Highly flexible burners

- Extensive flexibility
- Adjustment flexibility
- Possibility of working with all types of vacuum furnaces
- Many types of civil and industrial applications

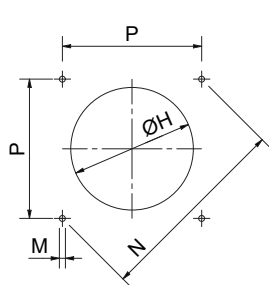
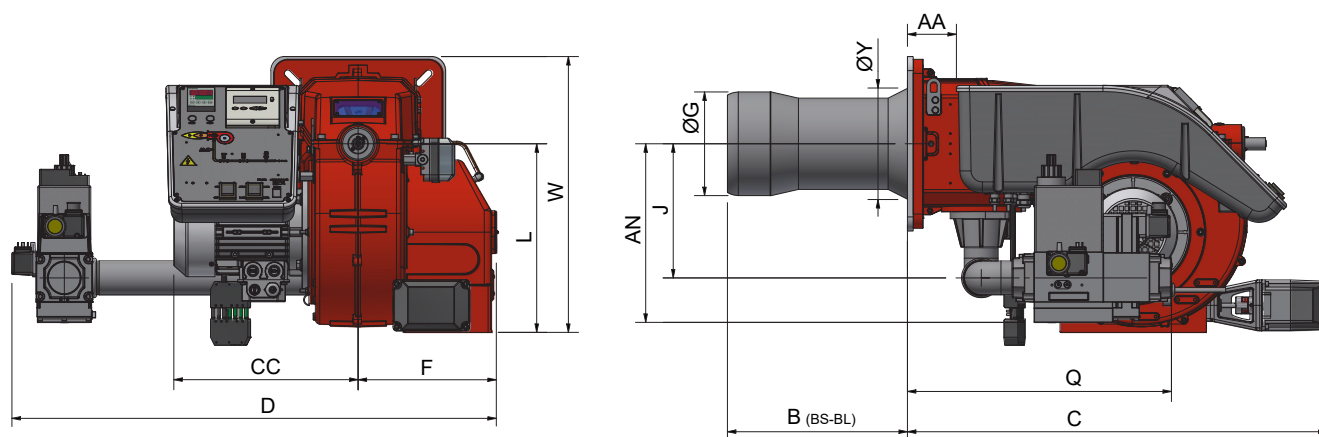


GAS

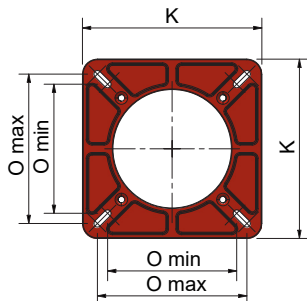
TECHNICAL SPECIFICATIONS

		kW		Power supply	Fan motor kW	Gas connections	Level of noise emissions dBA
		min	max				
C85A	M-.xx.xP.IT.A.0.xx	230	850	230/400 V 3N ac	1,1	1"¼ - 1"½ - 2" - DN65	< 80
C120A	M-.xx.xP.IT.A.0.xx	300	1200	230/400 V 3N ac	1,5	1"½ - 2" - DN65 - DN80	< 80

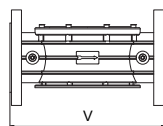
For information on choosing the length of the blast tube, refer to the Technical Information booklet.



**BOILER RECOMMENDED
DRILLING TEMPLATE**



BURNER FLANGE



DN65 - DN80



PACKAGING DIMENSIONS* (mm)

Type	l	p	h	kg
C85A	1345	835	750	60
C120A	1345	835	750	60

***INDICATIVE VALUES**

DIMENSIONS* (mm)

Type	Model	Overall dimensions																						
		AA	AN	B		C	CC	D	F	G	H	J	K	L	M	N	O		P	Q	U	V	W	Y
				BS	BL												min	max						
C85A	M-.xx.xP.IT.A.0.32	87	292	322	412	802	328	915	327	184	204	238	300	335	M10	330	216	250	233	456	531	-	490	198
C85A	M-.xx.xP.IT.A.0.40	87	317	322	412	802	328	910	327	184	204	238	300	335	M10	330	216	250	233	458	533	-	490	198
C85A	M-.xx.xP.IT.A.0.50	87	317	322	412	802	328	899	327	184	204	238	300	335	M10	330	216	250	233	469	522	-	490	198
C85A	M-.xx.xP.IT.A.0.65	87	404	322	412	802	328	935	327	184	204	287	300	335	M10	330	216	250	233	535	565	292	490	198
C120A	M-.xx.xP.IT.A.0.40	87	317	381	491	802	328	910	327	234	264	238	300	335	M10	330	216	250	233	458	533	-	490	198
C120A	M-.xx.xP.IT.A.0.50	87	317	381	491	802	328	899	327	234	264	238	300	335	M10	330	216	250	233	469	522	-	490	198
C120A	M-.xx.xP.IT.A.0.65	87	404	381	491	802	328	935	327	234	264	287	300	335	M10	330	216	250	233	535	565	292	490	198
C120A	M-.xx.xP.IT.A.0.80	87	363	381	491	802	328	935	327	234	264	284	300	335	M10	330	216	250	233	559	565	310	490	198

***INDICATIVE VALUES**

Attention: - The size of the gas train varies according to size and configuration.

MECHANICAL OPERATION

Model	Gas train	Operation
M-.AB.SP.IT.A.0.32	1"¼	AB
M-.AB.SP.IT.A.0.40	1"½	AB
M-.AB.SP.IT.A.0.50	2"	AB
M-.AB.SP.IT.A.0.65	DN65	AB
M-.AB.SP.IT.A.0.80	DN80	AB
M-.PR.SP.IT.A.0.32	1"¼	PR (*)
M-.PR.SP.IT.A.0.40	1"½	PR (*)
M-.PR.SP.IT.A.0.50	2"	PR (*)
M-.PR.SP.IT.A.0.65	DN65	PR (*)
M-.PR.SP.IT.A.0.80	DN80	PR (*)

SP = Standard blast tube + aluminum air intake (1)
 SR = Standard blast tube + ABS polymer (silenced) air intake
 LP = Extended blast tube + aluminum air intake
 LR = Extended blast tube + ABS polymer (silenced) air intake (2)
 PR = Progressive Adjustment
 MD (*) = Modulating adjustment
 (for the MD modulating version, the Modulation Kit must be added; see the list of variants)

Modulation kit = Kit to be combined with PR Progressive versions

In the MD modulating version, the burner must be equipped with the relevant modulating probe to complete the supply.

For LPG burners, see the list of variants

For information on choosing the length of the blast tube, refer to the Technical Information booklet.

ELECTRONIC OPERATION

Model	Gas train	Operation
M-.PR.SP.IT.A.1.32 EA	1"¼	PR (*)
M-.PR.SP.IT.A.1.40.EA	1"½	PR (*)
M-.PR.SP.IT.A.1.65.EA	2"	PR (*)
M-.PR.SP.IT.A.1.50.EA	DN65	PR (*)
M-.PR.SP.IT.A.1.80 EA	DN80	PR (*)
M-.MD.SP.IT.A.1.32 ES	1"¼	MD
M-.MD.SP.IT.A.1.40.ES	1"½	MD
M-.MD.SP.IT.A.1.65.ES	2"	MD
M-.MD.SP.IT.A.1.50.ES	DN65	MD
M-.MD.SP.IT.A.1.80 ES	DN80	MD

(1) For applications on furnaces and rotary drums, see the version with aluminium drawer (SP). Contact Cib Unigas for any clarification.

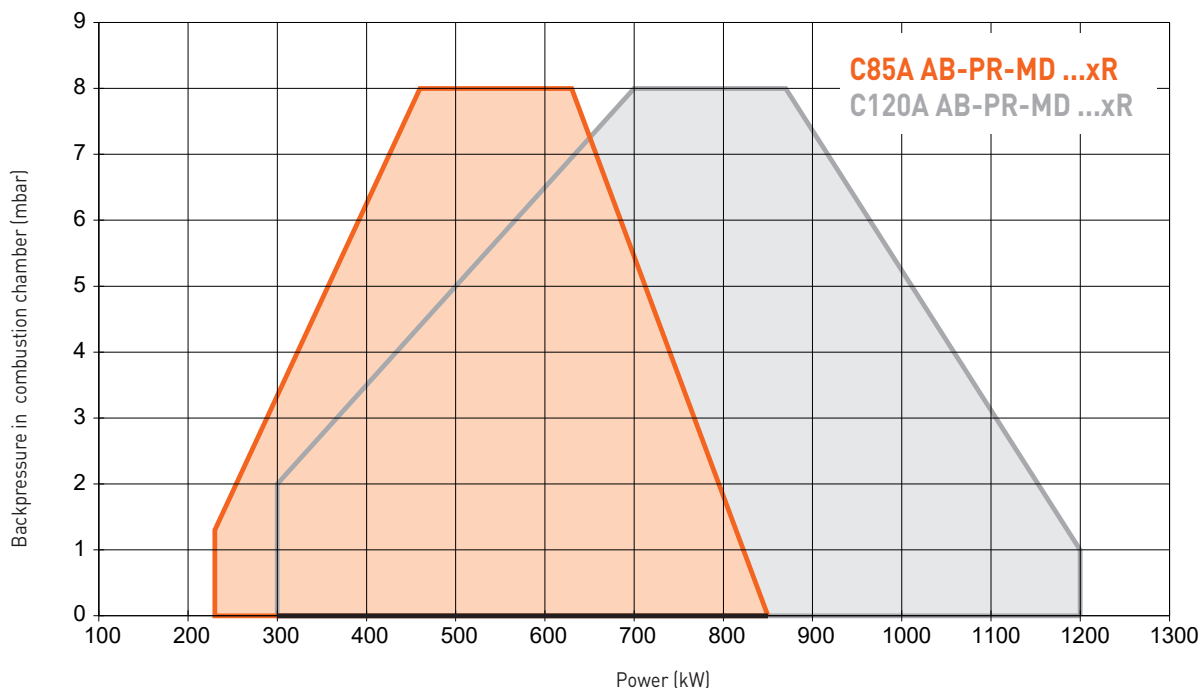
(2) For the following versions, please contact our offices.

The products comply with European standards EN676 and EN267 and the following directives:
 DIRECTIVE GAR 2016/426/EU

NOx emission level:

- Class 2 (<120 mg/kWh) in gas operation according to EN676

PERFORMANCE CURVES

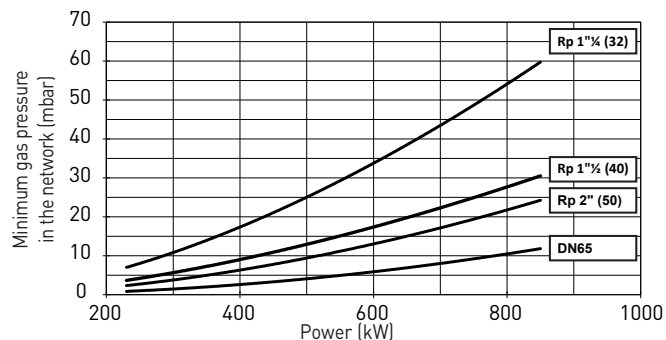
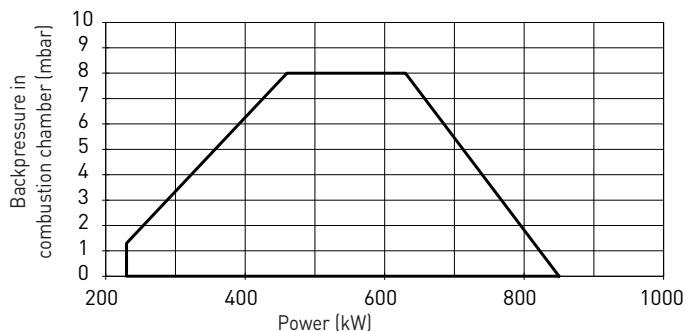


Burners also compatible with
GPL, biogas, syngas, off gas

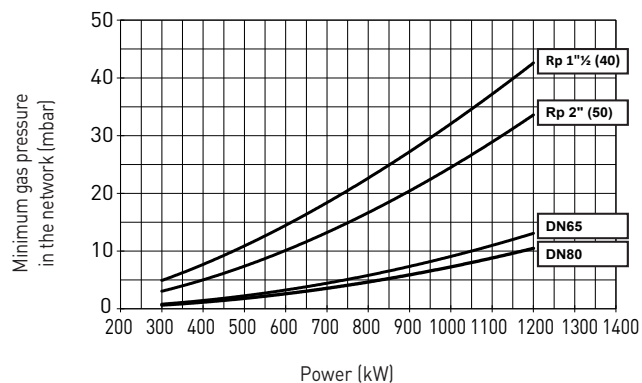
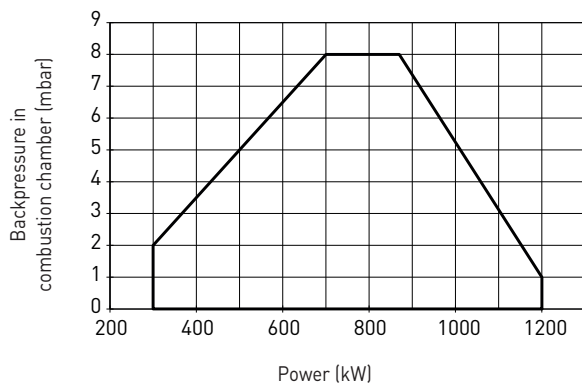
PERFORMANCE CURVES

PRESSURE IN THE NETWORK

C85A AB-PR-MD...xP



C120A AB-PR-MD...xP



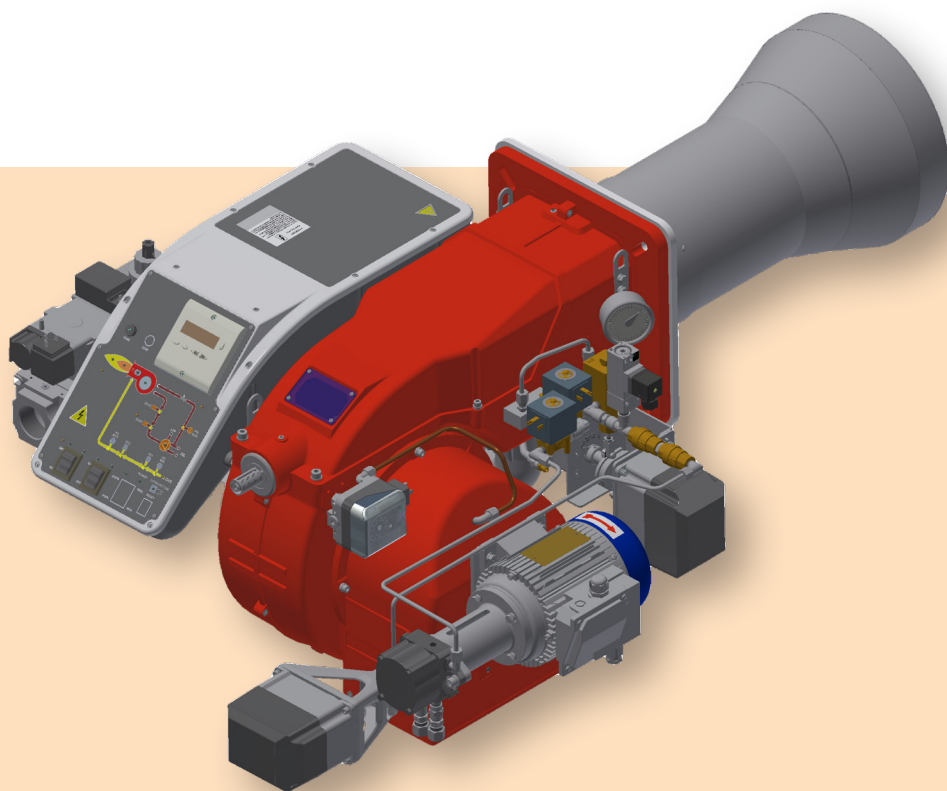
- Attention:**
- The working range values were determined with reference to laboratory tests with natural gas of lower calorific value $Hi=34.02 \text{ MJ/Stm}^3$ and density 0.714 kg/Stm^3 , (Stm^3 refers to 1013 mbar and 15° C) and ambient conditions 1013 mbar and 20° C .
 - To know the minimum gas pressure in the network, it is necessary to add the boiler back pressure to the value read on the curve.
 - The pressure values vary depending on the configuration of the gas ramp. The minimum gas pressure curves refer to gas ramps assembled with standard supply valves.
 - In the abscissa is the power value, in the ordinate the corresponding network pressure value net of the pressure in the combustion chamber. In order to know the minimum pressure at the ramp inlet, necessary to obtain the required gas flow, the pressure in the combustion chamber must be added to the value read on the ordinate.

HEAD A

C92A ..SP
C120A ..SP

Highly flexible burners

- Extensive flexibility
- Adjustment flexibility
- Possibility of working with all types of vacuum furnaces
- Many types of civil and industrial applications



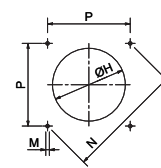
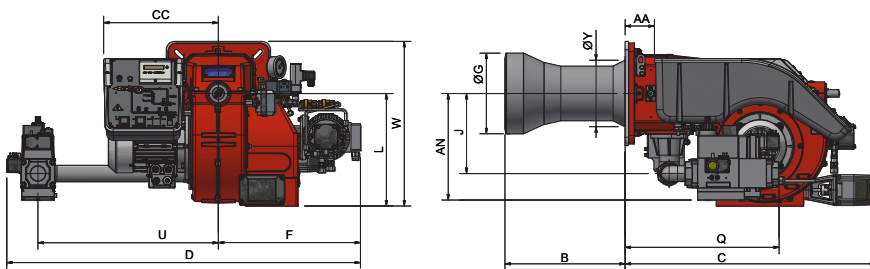
GAS / LIGHT OIL

TECHNICAL SPECIFICATIONS

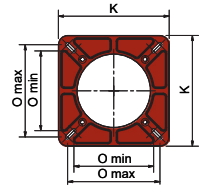
Type	Model	Power kW		Power supply	Fan motor kW	Pump motor kW	Gas connections	Level of noise emissions dBA
		min	max					
C92A	MG.xx.SP.IT.0.xx	250	920	230/400 V 3N ac	1,1	0,55	1"½ - 1"¼ - 2" - DN65	< 80
C120A	MG.xx.SP.IT.0.xx	300	1200	230/400 V 3N ac	1,5	0,55	1"½ - 2" - DN65 - DN80	< 80

For information on choosing the length of the blast tube, refer to the Technical Information booklet.

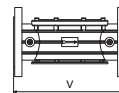
C92A



BOILER RECOMMENDED DRILLING TEMPLATE



BURNER FLANGE



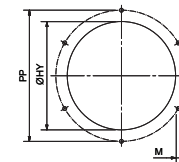
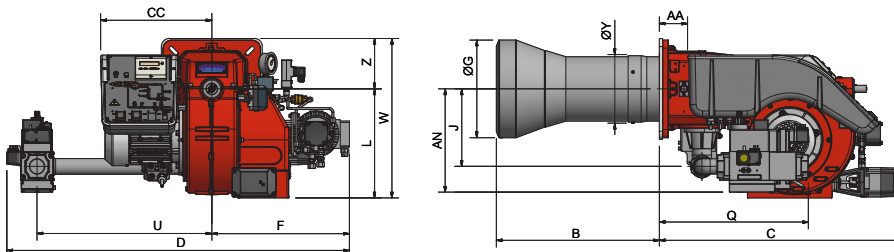
DN65 - DN80



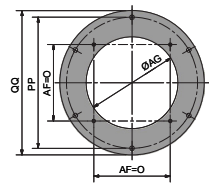
PACKAGING DIMENSIONS* (mm)

Type	l	p	h	kg
C92A	1730	1280	1020	140
C120A	1730	1280	1020	140

***INDICATIVE VALUES**



BOILER RECOMMENDED DRILLING TEMPLATE



BURNER FLANGE

DIMENSIONS* (mm)

Type	Model	Overall dimensions																					
		AA	AN	B	C	CC	D	F	G	H	J	K	L	M	N	O		P	Q	U	V	W	Y
																min	max						
C92A	MG.xx.SP.IT.A.0.32	87	292	358	834	342	1025	437	240	270	238	300	335	M10	330	216	250	233	387	531	-	490	198
C92A	MG.xx.SP.IT.A.0.40	87	317	358	834	342	1020	437	240	270	238	300	335	M10	330	216	250	233	458	533	-	490	198
C92A	MG.xx.SP.IT.A.0.50	87	317	358	834	342	1009	437	240	270	238	300	335	M10	330	216	250	233	469	522	-	490	198
C92A	MG.xx.SP.IT.A.0.65	87	404	358	834	342	1094	437	240	270	287	300	335	M10	330	216	250	233	535	565	292	490	198
C120A	MG.xx.SP.IT.A.1.40	87	317	500	834	342	1067	437	300	330	238	300	335	M12	330	216	250	233	458	533	-	490	198
C120A	MG.xx.SP.IT.A.1.50	87	317	500	834	342	1052	437	300	330	238	300	335	M12	330	216	250	233	469	522	-	490	198
C120A	MG.xx.SP.IT.A.1.65	87	404	500	834	342	1064	437	300	330	287	300	335	M12	330	216	250	233	535	565	292	490	198
C120A	MG.xx.SP.IT.A.1.80	87	363	500	834	342	1064	437	300	330	284	300	335	M12	330	216	250	233	559	565	310	490	198

***INDICATIVE VALUES**

Attention: - The size of the gas train varies according to size and configuration.

MECHANICAL OPERATION

Model	Gas train	Operation
MG.AB.SP.IT.A.0.32	1"¼	AB
MG.AB.SP.IT.A.0.40	1"½	AB
MG.AB.SP.IT.A.0.50	2"	AB
MG.AB.SP.IT.A.0.65	DN65	AB
MG.AB.SP.IT.A.0.80	DN80	AB
MG.PR.SP.IT.A.0.32	1"¼	PR (*)
MG.PR.SP.IT.A.0.40	1"½	PR (*)
MG.PR.SP.IT.A.0.50	2"	PR (*)
MG.PR.SP.IT.A.0.65	DN65	PR (*)
MG.PR.SP.IT.A.0.80	DN80	PR (*)

SP = Standard blast tube + aluminum air intake (1)
 SR = Standard blast tube + ABS polymer (silenced) air intake
 LP = Extended blast tube + aluminum air intake
 LR = Extended blast tube + ABS polymer (silenced) air intake (2)
 PR = Progressive Adjustment
 MD (*) = Modulating adjustment
 (for the MD modulating version, the Modulation Kit must be added; see the list of variants)

Modulation kit = Kit to be combined with PR Progressive versions

Nella versione modulante MD per completare la fornitura è necessario corredare il bruciatore della relativa sonda modulante.

For LPG burners, see the list of variants

(1) For applications on furnaces and rotary drums, see the version with aluminium drawer (SP). Contact Cib Unigas for any clarification.

(2) For the following versions, please contact our offices.

ELECTRONIC OPERATION

Model	Operation	Operation
MG.PR.SP.IT.A.1.32.EC	1"¼	PR (*)
MG.PR.SP.IT.A.1.40.EC	1"½	PR (*)
MG.PR.SP.IT.A.1.50.EC	2"	PR (*)
MG.PR.SP.IT.A.1.65.EC	DN65	PR (*)
MG.PR.SP.IT.A.1.80.EC	DN80	PR (*)
MG.MD.SP.IT.A.1.32.EC	1"¼	MD
MG.MD.SP.IT.A.1.40.EC	1"½	MD
MG.MD.SP.IT.A.1.50.EC	2"	MD
MG.MD.SP.IT.A.1.65.EC	DN65	MD
MG.MD.SP.IT.A.1.80.EC	DN80	MD

The products comply with European standards EN676 and EN267 and the following directives:

DIRECTIVE GAR 2016/426/EU

DIRECTIVE Low Tension 2014/35/UE

DIRECTIVE Electromagnetic compatibility 2014/30/UE

DIRECTIVE Machinery 2006/42/CE

NOx emission level:

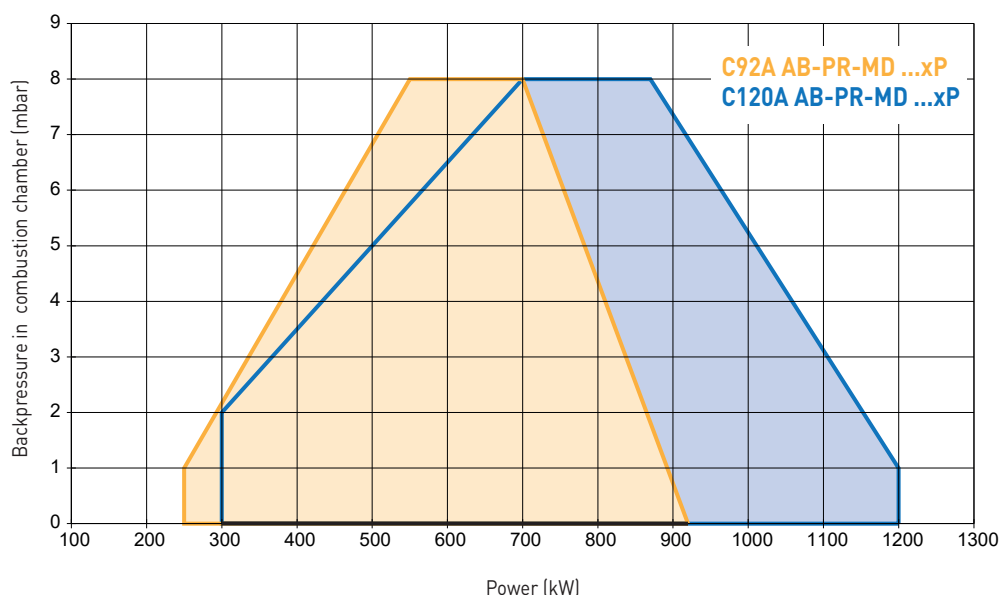
- Class 2 (<120 mg/kWh) in gas operation according to EN676
- Class 1 (< 250 mg/kWh) in light oil operation according to EN267

For information on choosing the length of the blast tube, refer to the Technical Information booklet.



**Burners also compatible with
GPL, biogas, syngas, off gas, H₂ blend**

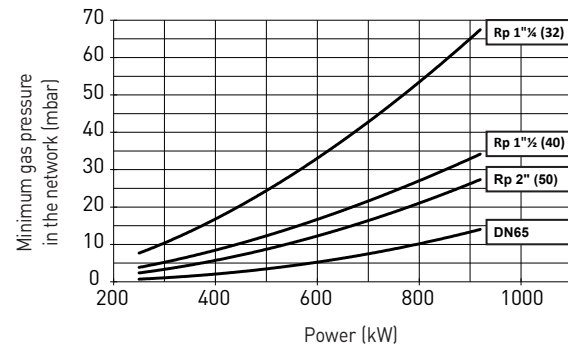
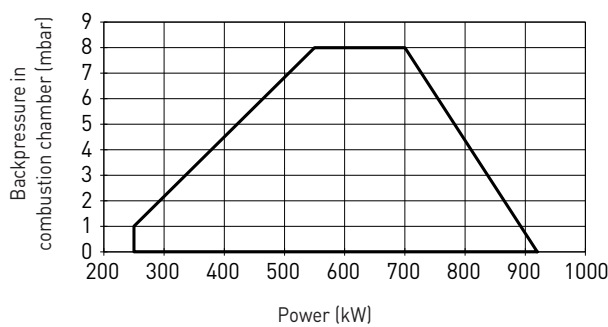
PERFORMANCE CURVES



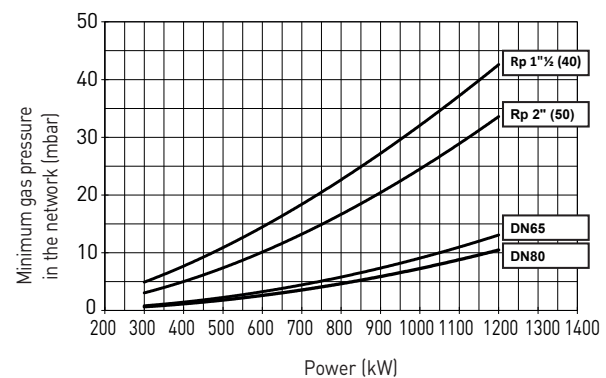
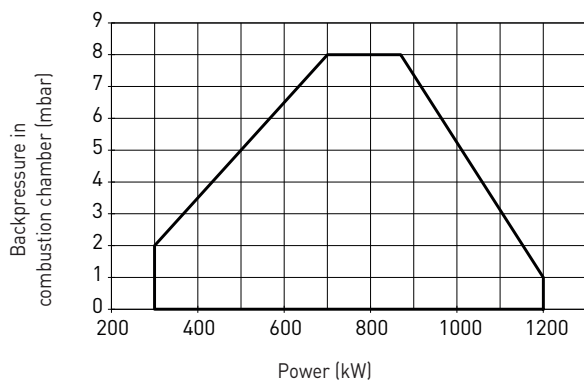
PERFORMANCE CURVES

PRESSURE IN THE NETWORK

C92A AB-PR-MD...SP



C120A AB-PR-MD...SP



- Attention:**
- The working range values were determined with reference to laboratory tests with natural gas of lower calorific value $Hi=34.02 \text{ MJ/Stm}^3$ and density 0.714 kg/Stm^3 , (Stm^3 refers to 1013 mbar and 15° C) and ambient conditions 1013 mbar and 20° C .
 - To know the minimum gas pressure in the network, it is necessary to add the boiler back pressure to the value read on the curve.
 - The pressure values vary depending on the configuration of the gas ramp. The minimum gas pressure curves refer to gas ramps assembled with standard supply valves.
 - In the abscissa is the power value, in the ordinate the corresponding network pressure value net of the pressure in the combustion chamber. In order to know the minimum pressure at the ramp inlet, necessary to obtain the required gas flow, the pressure in the combustion chamber must be added to the value read on the ordinate.



C.I.B. UNIGAS S.p.A.

Via L. Galvani, 9 - 35011 CAMPODARSEGO (PD) - Italy

Tel. +39 049 9200944

Fax +39 049 9200945 - 9201269

cibunigas@cibunigas.com - www.cibunigas.com

**Note: specifications and data subject to change.
Errors and omissions excepted.**