Библиотека СОК

CIB UNIGAS®

SERIES E

HEAD X

E115X
E150X
E180X

HEAD V

E140V
E170V

HEAD N

E120N

HEAD A

E165A
E205A

GB
M029144CA
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 E

LOW NOx

Low emissions (Class 3 - EN676)
Possibility of working with innovative fuels with low environmental impact, such as hydrogen
Wide modulation range

HEAD X

E115X / E150X / E180X	GAS	7
E115X / E150X / E180X	GAS / LIGHT OIL	11

ULTRA LOW NOx

Low emissions (Class 4 - EN676)
Wide modulation range

HEAD V

E140V / E170V	GAS	15

ULTRA LOW NOx

Low emissions (Class 4 - EN676)
Wide modulation range

HEAD N

E120N	GAS	19

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

E165A / E205A	GAS	23
E165A / E205A	GAS	27
E165A / E205A	GAS / LIGHT OIL	31

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 REQUES

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
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 O_2 control, without inverter
EO Burners complete with electronic cam and O_2 control, without inverter
EI Burners complete with electronic cam and inverter, without O_2 control
EK Burners complete with electronic cam with O_2 control and with inverter
EF Burners complete with electronic cam and temperature-compensated flue gas recirculation FGR without O_2 monitoring, without inverter
EG Burners complete with electronic cam, inverter and temperature-compensated flue gas recirculation FGR without O_2 monitoring
EP Burners complete with electronic cam and temperature-compensated flue gas recirculation FGR witht O_2 monitoring, without inverter
ER Burners complete with electronic cam, inverter and temperature-compensated flue gas recirculation FGR with O_2 monitoring l

FLUE GAS RECIRCULATION
FGR Flue gas recirculation

SOME FEATURES ARE NOT INCLUDED IN THIS CATALOGUE

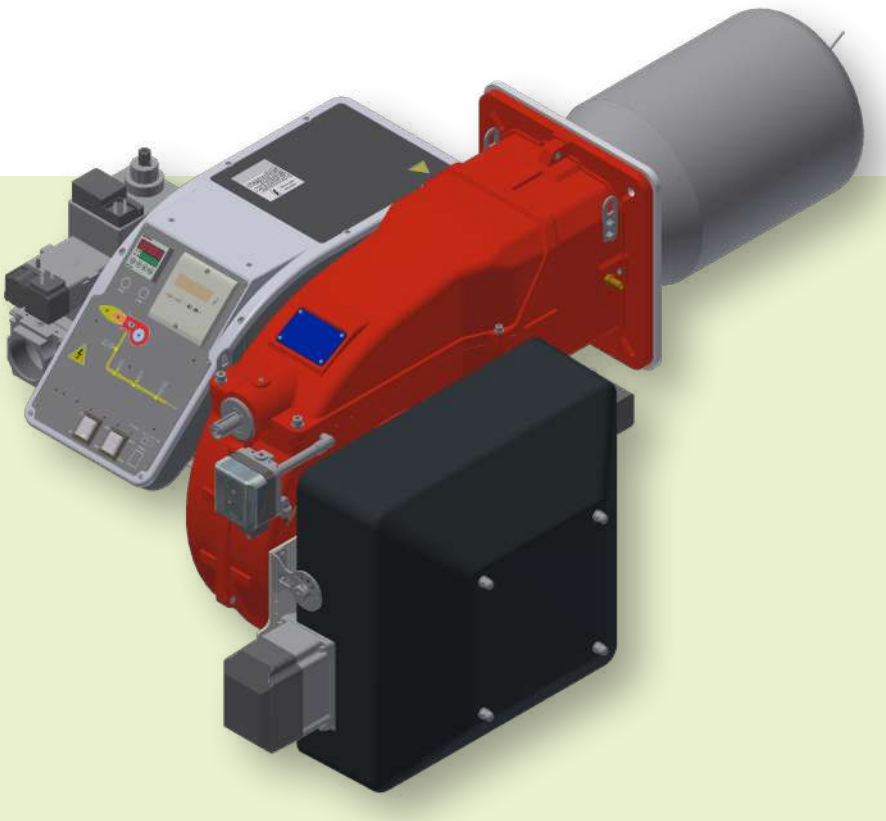
FOR CONFIGURATIONS OF BURNERS IN THE LAMTEC VERSION WITH O_2+CO OXYGEN CONTROL, PLEASE CONTACT OUR SALES DEPARTMENT.

HEAD X

E115X
E150X
E180X

Low NOx

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

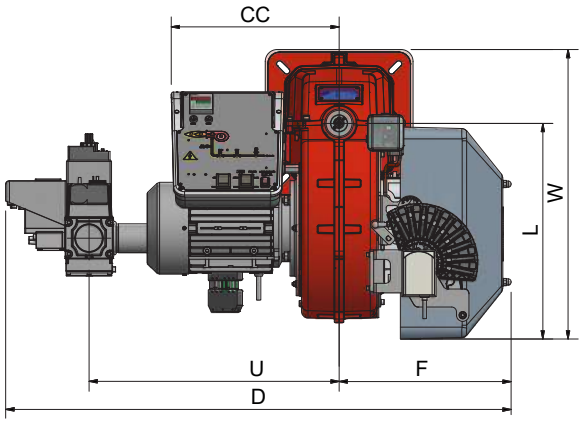


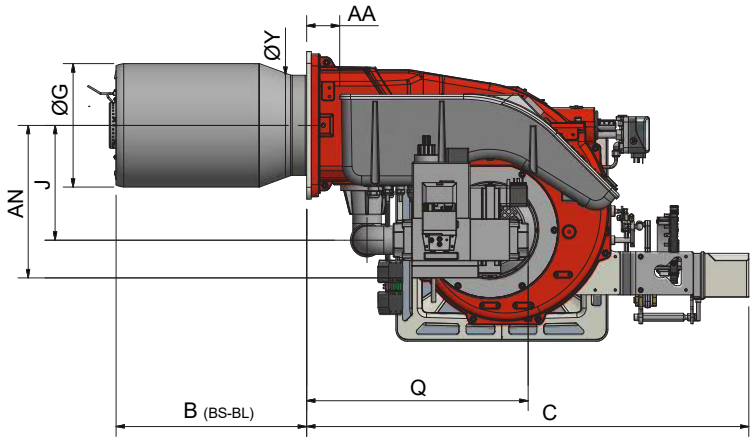
GAS

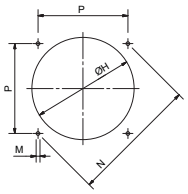
TECHNICAL SPECIFICATIONS

Type	Model	Power kW min	Power kW max	Power supply	Fan motor kW	Gas connections	Level of noise emissions dBA
E115X	M-.xx.xR.IT.A.0.xx	300	1.150	230/400 V 3N ac	2,2	1"½ - 2" - DN65 - DN80	< 75
E150X	M-.xx.xR.IT.A.1.xx	250	1.550	230/400 V 3N ac	2,2	1"½ - 2" - DN65 - DN80	< 75
E180X	M-.xx.xR.IT.A.1.xx	320	1.800	230/400 V 3N ac	3,0	1"½ - 2" - DN65 - DN80	< 75

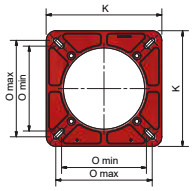
For information on choosing the length of the blast tube, refer to the Technical Information booklet.



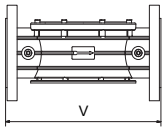




BOILER RECOMMENDED DRILLING TEMPLATE



BURNER FLANGE



DN65 - DN80

Type	l	p	h	kg
E115X	1465	815	800	115
E150X	1465	815	800	125
E180X	1465	815	800	125

***INDICATIVE VALUES**

DIMENSIONS* (mm)

Type	Model	Overall dimensions																						
		AA	AN	B BS	B BL	C	CC	D	F	G	H	J	K	L	M	N	O min	O max	P	Q	U	V	W	Y
E115X	M-.xx.xR.IT.A.0.40	69	321	305	390	833	353	942	361	219	249	243	300	453	M10	330	220	250	233	454	539	-	608	210
E115X	M-.xx.xR.IT.A.0.50	69	320	305	390	833	353	936	361	219	249	241	300	453	M10	330	220	250	233	465	525	-	608	210
E115X	M-.xx.xR.IT.A.0.65	69	407	305	390	833	353	1080	361	219	249	291	300	453	M10	330	220	250	233	529	565	292	608	210
E115X	M-.xx.xR.IT.A.0.80	69	422	305	390	833	353	1054	361	219	249	233	300	453	M10	330	220	250	233	558	565	310	608	210
E150X	M-.xx.xR.IT.A.1.40	69	321	400	500	833	353	1072	361	259	289	243	300	453	M10	330	220	250	233	454	539	-	608	210
E150X	M-.xx.xR.IT.A.1.50	69	320	400	500	833	353	1061	361	259	289	241	300	453	M10	330	220	250	233	465	525	-	608	210
E150X	M-.xx.xR.IT.A.1.65	69	407	400	500	833	353	1162*	361	259	289	291	300	453	M10	330	220	250	233	529	565	292	608	210
E150X	M-.xx.xR.IT.A.1.80	69	422	400	500	833	353	1136	361	259	289	233	300	453	M10	330	220	250	233	562	565	310	608	210
E180X	M-.xx.xR.IT.A.1.40	69	321	400	500	833	353	1072	361	259	289	243	300	453	M10	330	220	250	233	454	539	-	608	210
E180X	M-.xx.xR.IT.A.1.50	69	320	400	500	833	353	1061	361	259	289	241	300	453	M10	330	220	250	233	465	525	-	608	210
E180X	M-.xx.xR.IT.A.1.65	69	407	400	500	833	353	1162*	361	259	289	291	300	453	M10	330	220	250	233	529	565	292	608	210
E180X	M-.xx.xR.IT.A.1.80	69	422	400	500	833	353	1136	361	259	289	235	300	453	M10	330	220	250	233	558	565	310	608	210

***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.1.40	1"½	AB
M-.AB.SR.IT.A.1.50	2"	AB
M-.AB.SR.IT.A.1.65	DN65	AB
M-.AB.SR.IT.A.1.80	DN80	AB
M-.PR.SR.IT.A.1.40	1"½	PR (*)
M-.PR.SR.IT.A.1.50	2"	PR (*)
M-.PR.SR.IT.A.1.65	DN65	PR (*)
M-.PR.SR.IT.A.1.80	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.1.40.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.1.40.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.

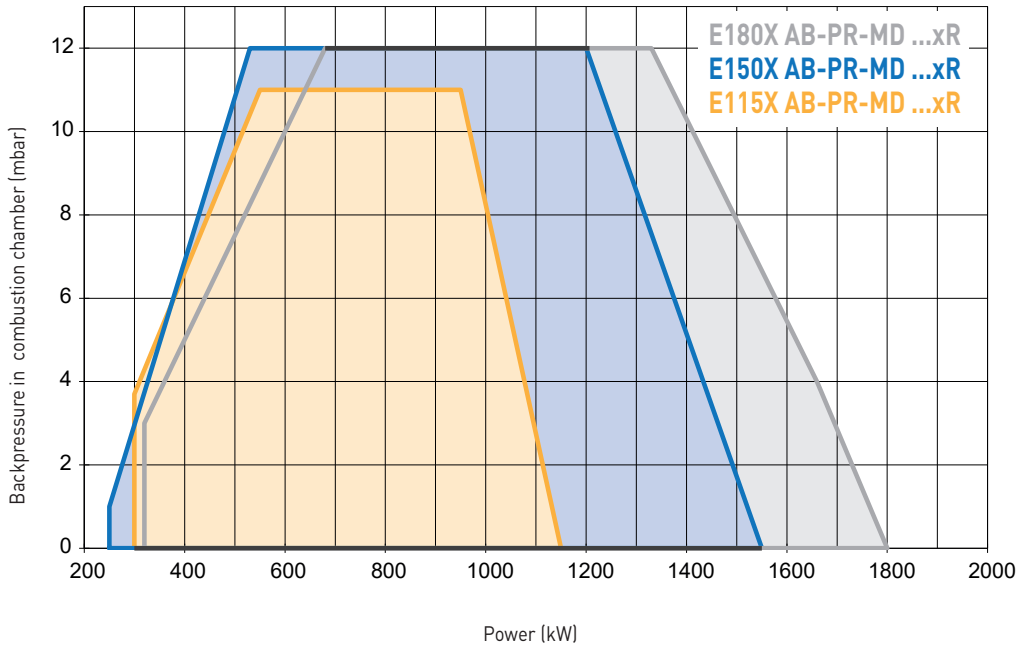
The products comply with European standards EN676 and EN267 and the following directives:
DIRECTIVE GAR 2016/426/EU

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, H_2

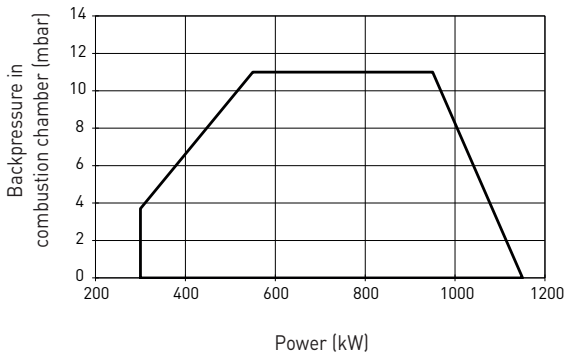
PERFORMANCE CURVES

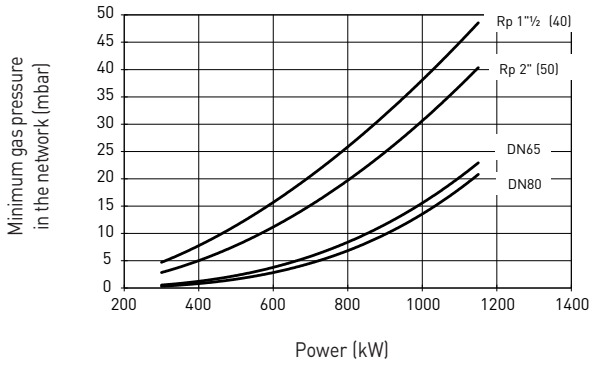


PERFORMANCE CURVES

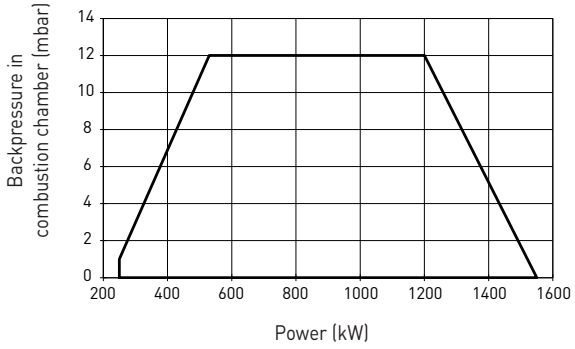
PRESSURE IN THE NETWORK

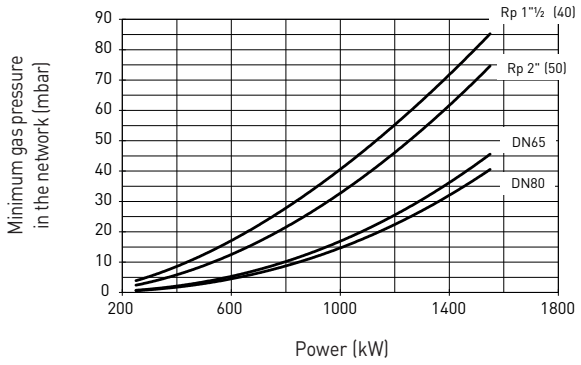
E115X AB-PR-MD ...xR



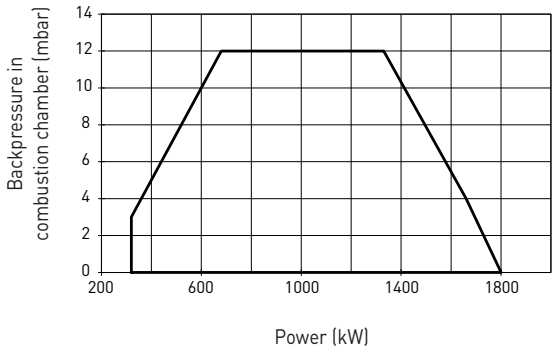


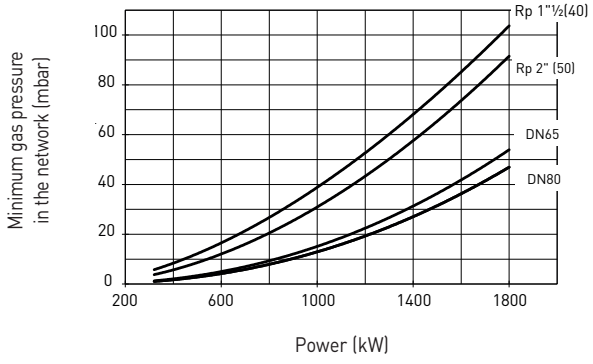
E150X AB-PR-MD ...xR





E180X AB-PR-MD ...xR





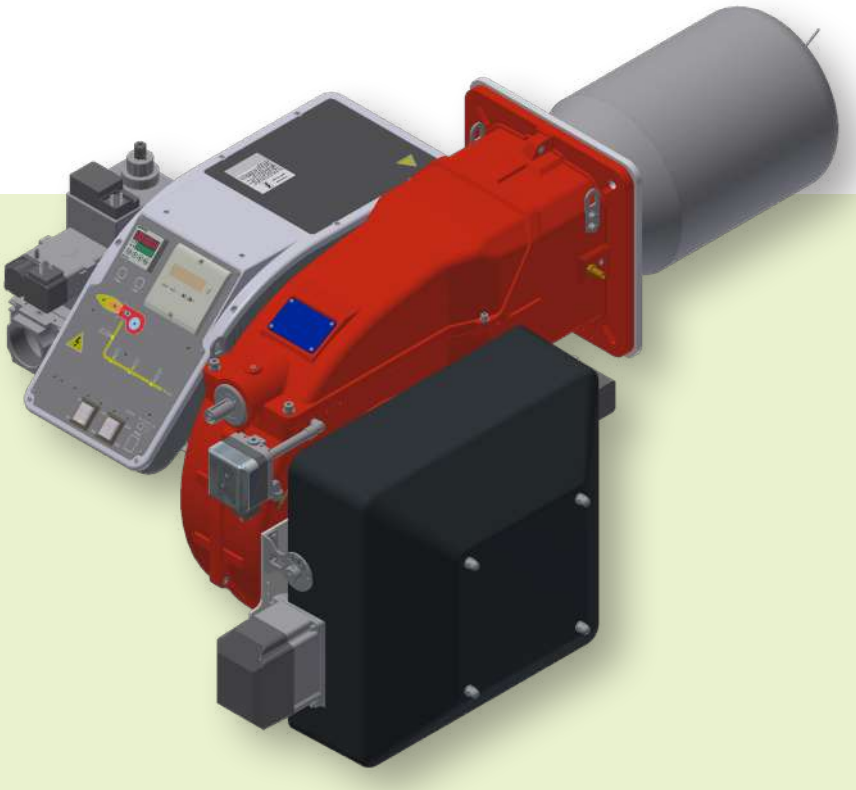
Attention:
- The working range values were determined with reference to laboratory tests with natural gas of lower calorific value Hi=34.02 MJ/Stm³ and density 0.714 kg/Stm³, (Stm³ refers to 1013 mbar and 15° C) and ambient conditions 1013 mbar and 20° C.
- To know the minimum gas pressure in the network, 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 mi nimum 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

E115X
E150X
E180X

Low NOx

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

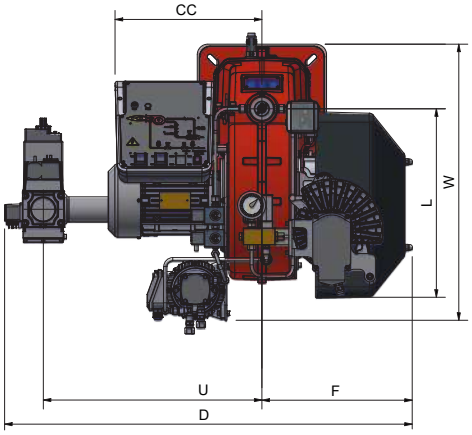


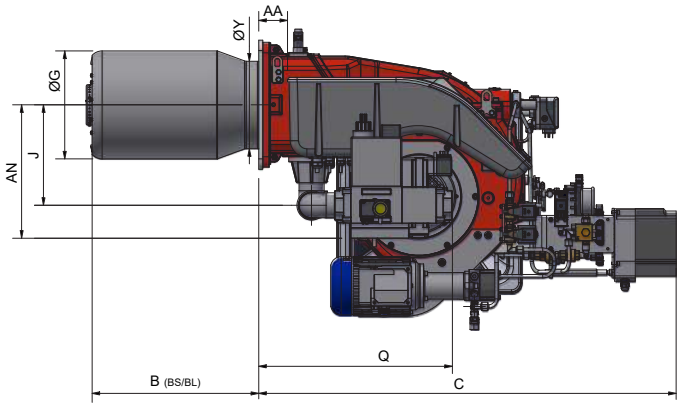
GAS / LIGHT OIL

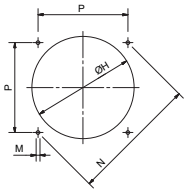
TECHNICAL SPECIFICATIONS

Type	Model	Power kW min	Power kW max	Power supply	Fan motor kW	Pump motor kW	Gas connections	Level of noise emissions dBA
E115X	MG.xx.xR.IT.A.0.xx	300	1.150	230/400 V 3N ac	2,2	0,55	1"½ - 2"- DN65 - DN80	< 75
E150X	MG.xx.xR.IT.A.1.xx	250	1.550	230/400 V 3N ac	2,2	0,55	1"½ - 2"- DN65 - DN80	< 75
E180X	MG.xx.xR.IT.A.1.xx	320	1.800	230/400 V 3N ac	3,0	0,55	1"½ - 2"- DN65 - DN80	< 75

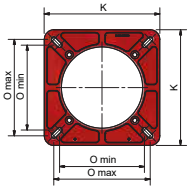
For information on choosing the length of the blast tube, refer to the Technical Information booklet.



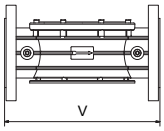




BOILER RECOMMENDED DRILLING TEMPLATE



BURNER FLANGE



DN65 - DN80

PACKAGING DIMENSIONS* (mm)

Type	l	p	h	kg
E115X	1730	1280	1020	160
E150X	1730	1280	1020	160
E180X**	1730	1280	1020	160

***INDICATIVE VALUES**
**** INDICATIVE VALUES (REFERRED TO THE MODEL WITH DN80 GAS TRAIN)**

DIMENSIONS* (mm)

Type	Model	Overall dimensions																						
		AA	AN	B BS	B BL	C	CC	D	F	G	H	J	K	L	M	N	O min	O max	P	Q	U	V	W	Y
E115X	MG.xx.SR.IT.A.0.40	69	321	305	390	1002	353	942	361	204	240	243	300	453	M10	330	220	250	233	454	539	-	663	210
E115X	MG.xx.SR.IT.A.0.50	69	320	305	390	1002	353	936	361	204	240	241	300	453	M10	330	220	250	233	465	525	-	663	210
E115X	MG.xx.SR.IT.A.0.65	69	407	305	390	1002	353	1052	361	204	240	291	300	453	M10	330	220	250	233	529	565	292	663	210
E115X	MG.xx.SR.IT.A.0.80	69	422	305	390	1002	353	1026	361	204	240	233	300	453	M10	330	220	250	233	558	565	310	663	210
E150X	MG.xx.SR.IT.A.1.40	69	321	400	500	1002	353	989	361	259	289	243	300	453	M10	330	220	250	233	454	539	-	663	210
E150X	MG.xx.SR.IT.A.1.50	69	320	400	500	1002	353	979	361	259	289	241	300	453	M10	330	220	250	233	465	525	-	663	210
E150X	MG.xx.SR.IT.A.1.65	69	407	400	500	1002	353	1051	361	259	289	291	300	453	M10	330	220	250	233	529	565	292	663	210
E150X	MG.xx.SR.IT.A.1.80	69	422	400	500	1002	353	1108	361	259	289	233	300	453	M10	330	220	250	233	562	565	310	663	210
E180X	MG.xx.SR.IT.A.1.40	69	321	400	500	1002	353	989	361	259	289	243	300	453	M10	330	220	250	233	454	539	-	663	210
E180X	MG.xx.SR.IT.A.1.50	69	320	400	500	1002	353	979	361	259	289	241	300	453	M10	330	220	250	233	465	525	-	663	210
E180X	MG.xx.SR.IT.A.1.65	69	407	400	500	1002	353	1051	361	259	289	291	300	453	M10	330	220	250	233	529	565	292	663	210
E180X	MG.xx.SR.IT.A.1.80	69	422	400	500	1002	353	1108	361	259	289	235	300	453	M10	330	220	250	233	558	565	310	663	210

***INDICATIVE VALUES**

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

MECHANICAL OPERATION

Model	Gas train	Operation
MG.PR.SR.IT.A.0.40	1"½	PR (*)
MG.PR.SR.IT.A.0.50	2"	PR (*)
MG.PR.SR.IT.A.0.65	DN65	PR (*)
MG.PR.SR.IT.A.0.80	DN80	PR (*)
MG.PR.SR.IT.A.1.40	1"½	PR (*)
MG.PR.SR.IT.A.1.50	2"	PR (*)
MG.PR.SR.IT.A.1.65	DN65	PR (*)
MG.PR.SR.IT.A.1.80	DN80	PR (*)

ELECTRONIC OPERATION

Model	Gas train	Operation
MG.PR.SR.IT.A.1.40.EC	1"½	PR (*)
MG.PR.SR.IT.A.1.50.EC	2"	PR (*)
MG.PR.SR.IT.A.1.65.EC	DN65	PR (*)
MG.PR.SR.IT.A.1.80 EC	DN80	PR (*)
MG.MD.SR.IT.A.1.40.ES	1"½	MD
MG.MD.SR.IT.A.1.50.ES	2"	MD
MG.MD.SR.IT.A.1.65.ES	DN65	MD
MG.MD.SR.IT.A.1.80 ES	DN80	MD

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.

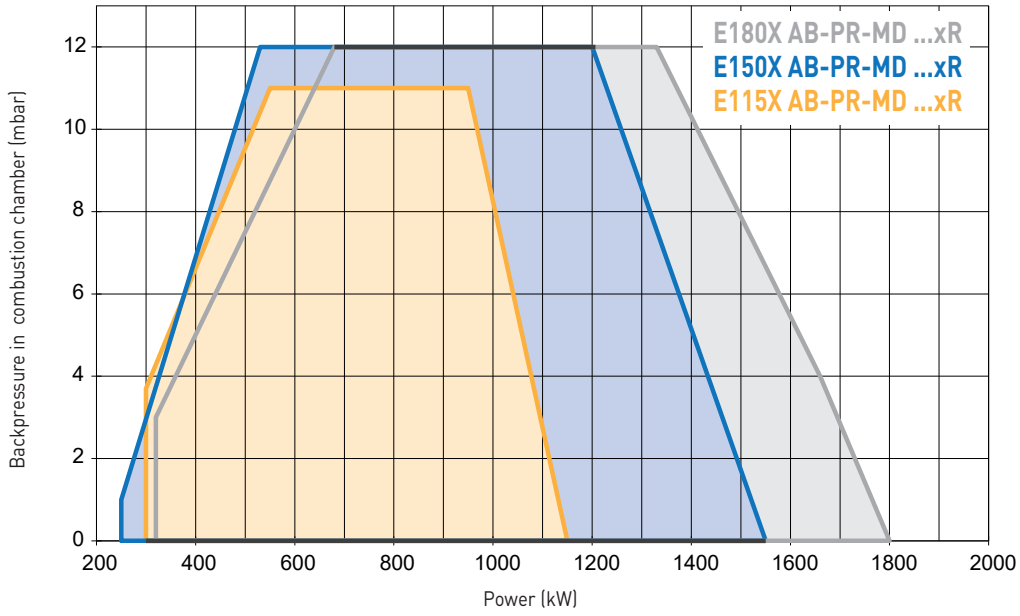
The products comply with European standards EN676 and EN267 and the following directives:
DIRECTIVE GAR 2016/426/EU
DIRECTIVE Low Tension 2014/35/UE
DIRECTIVE Electromagnetic compatibility 2014/30/UE
DIRECTIVE Machinery 2006/42/CE

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, H_2
Burners also compatible with bio-oli

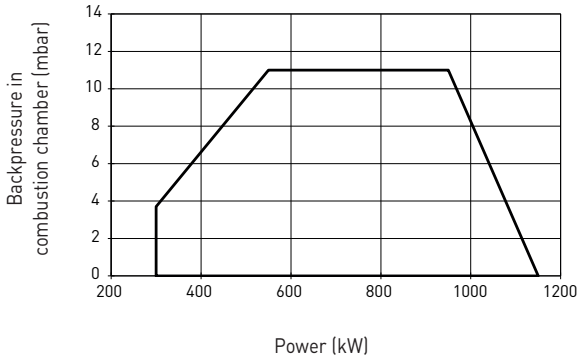
PERFORMANCE CURVES

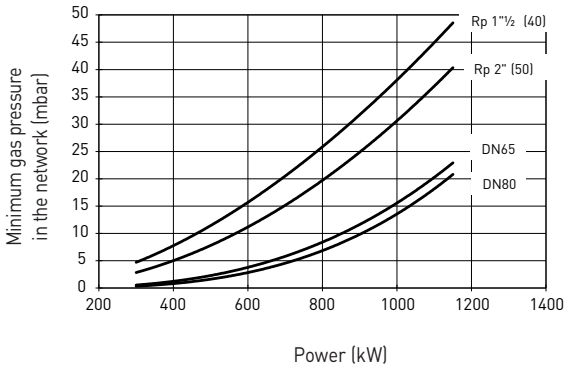


PERFORMANCE CURVES

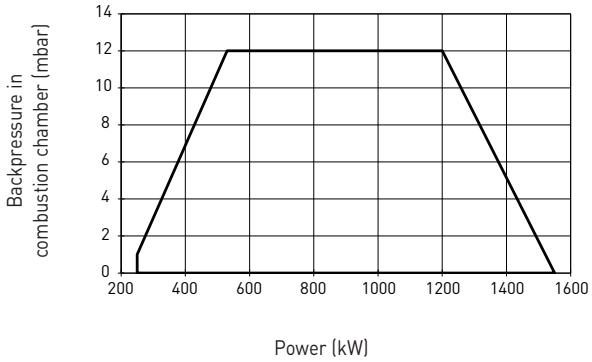
PRESSURE IN THE NETWORK

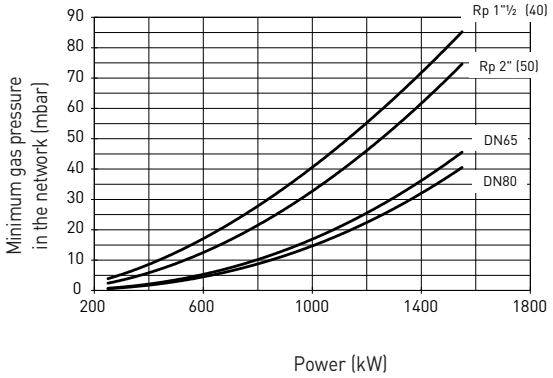
E115X AB-PR-MD ...xR



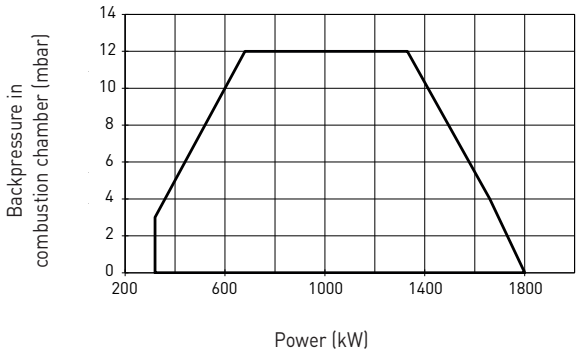


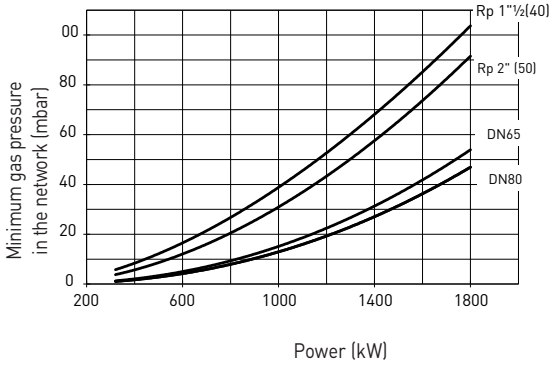
E150X AB-PR-MD ...xR





E180X 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 MJ/Stm³ and density 0.714 kg/Stm³, (Stm³ 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 mi nimum 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.

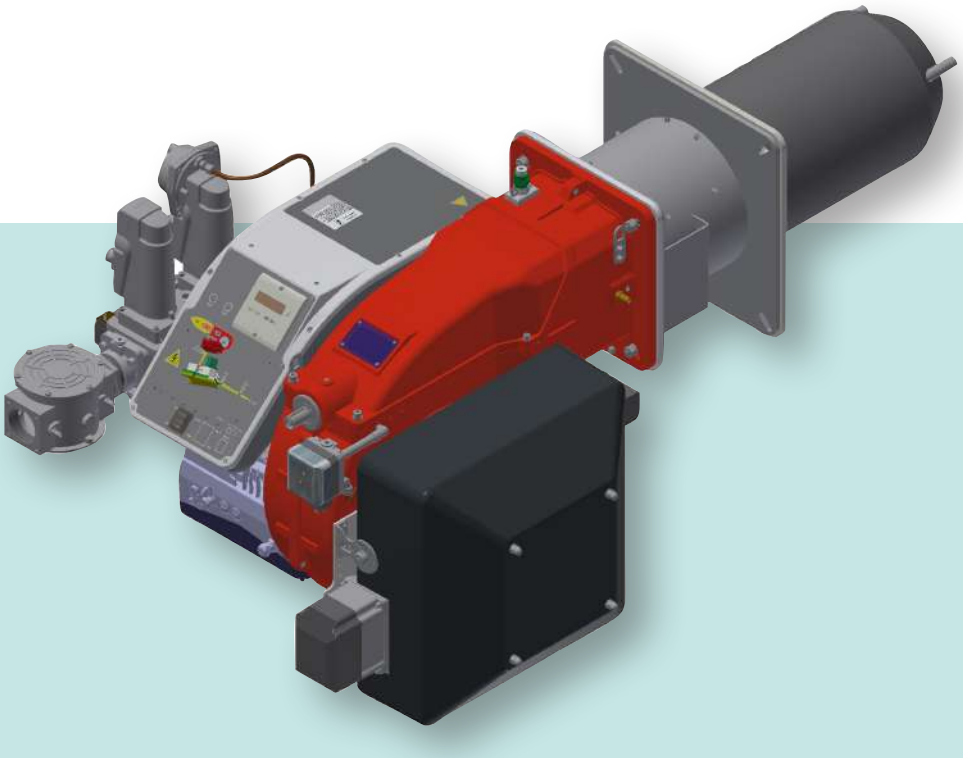
HEAD V

E140V
E170V

Ultra Low NOx

Low emissions (Class 4 - EN676)

Wide modulation range



GAS

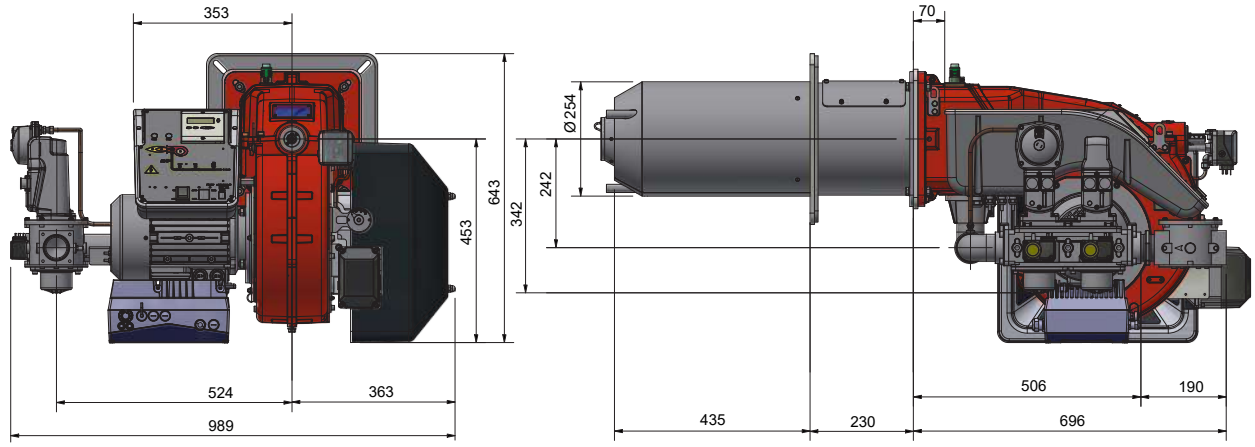
TECHNICAL SPECIFICATIONS

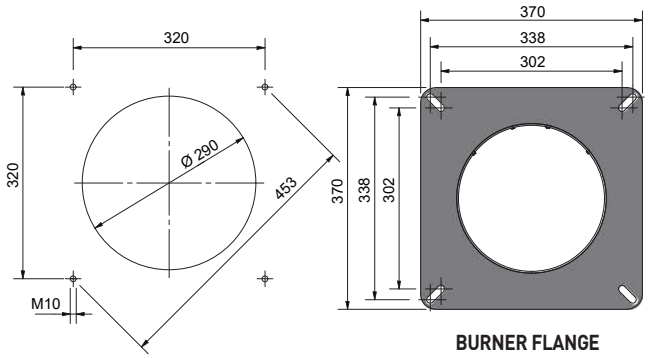
Type	Model	Power kW min	Power kW max	Power supply single-phase electricity auxiliary	Power supply three-phase electric motor	Fan motor kW	Gas connections	Level of noise emissions dBA
E140V	M-.xx.S.IT.A.1.xxx	360	1.450	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	2,2	1"½ - 2" - DN65 - DN80-DN100	82
E170V	M-.xx.S.IT.A.1.xxx	550	1.650	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	3	1"½ - 2" - DN65 - DN80-DN100	82

DIMENSIONS* (mm)

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

E170V M-.PR.SR.IT.A.1.50.EB





BOILER RECOMMENDED DRILLING TEMPLATE

BURNER FLANGE

PACKAGING DIMENSIONS* (mm)

Tipo	l	p	h	kg
E140V	1465	815	800	125
E170V	1465	815	800	125

*VALORI INDICATIVI

ELECTRONIC OPERATION

Model	Gas train	Operation
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.1.40.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

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

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.

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

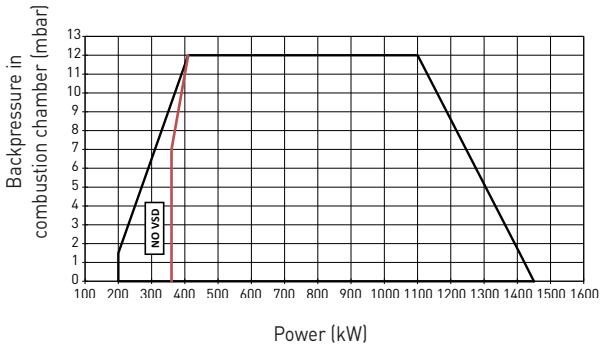
NOx emission level:
- Class 4 (<60 mg/kWh) in gas operation according to EN676

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

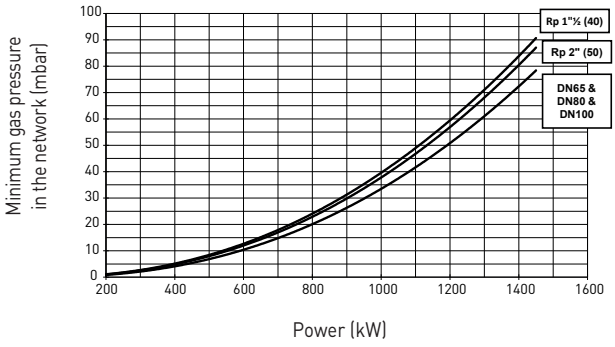
Burners also compatible with GPL, H_2

PERFORMANCE CURVES

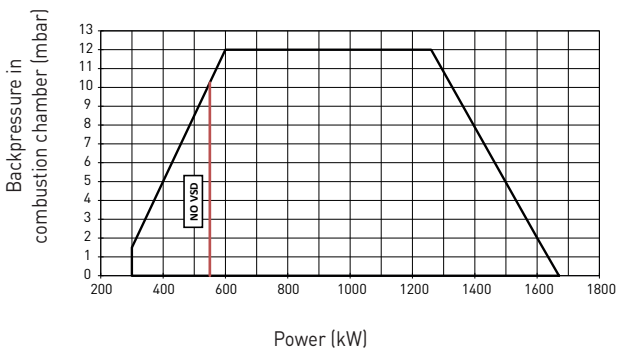
E140V

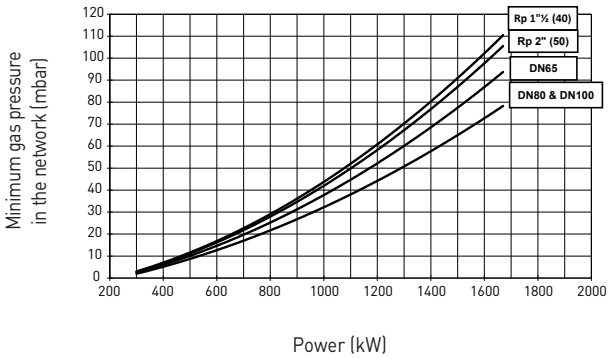


PRESSURE IN THE NETWORK



E170V





Attention:
- The working range values were determined with reference to laboratory tests with natural gas of lower calorific value Hi=34.02 MJ/Stm³ and density 0.714 kg/Stm³, (Stm³ 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 mi nimum 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.

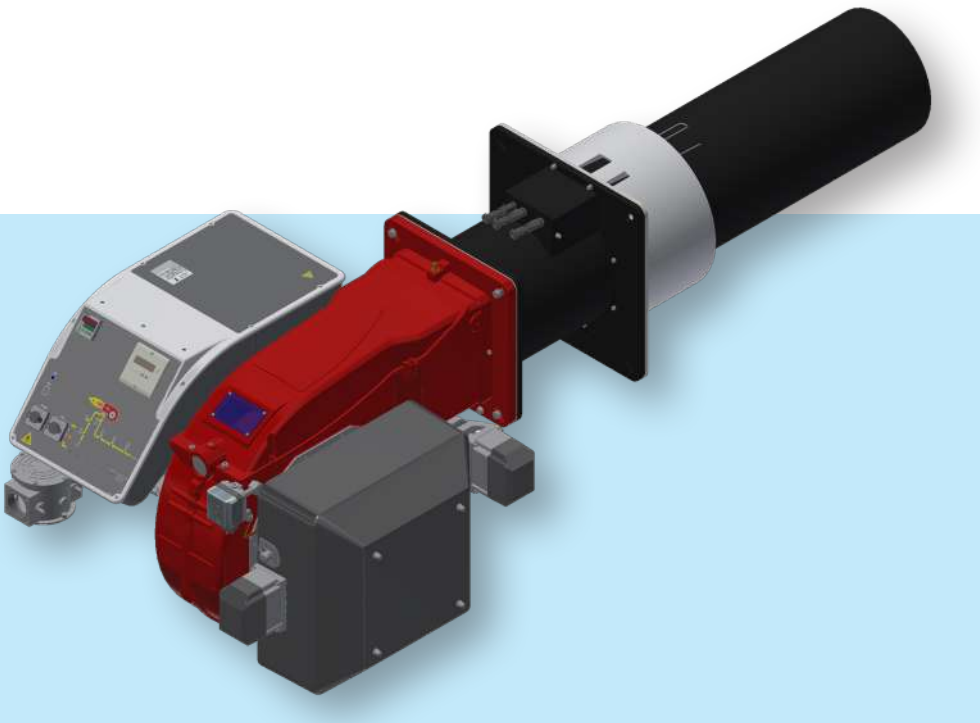
HEAD N

E120N

Ultra Low NOx Premix

Low emissions (Class 4 - EN676)

Wide modulation range

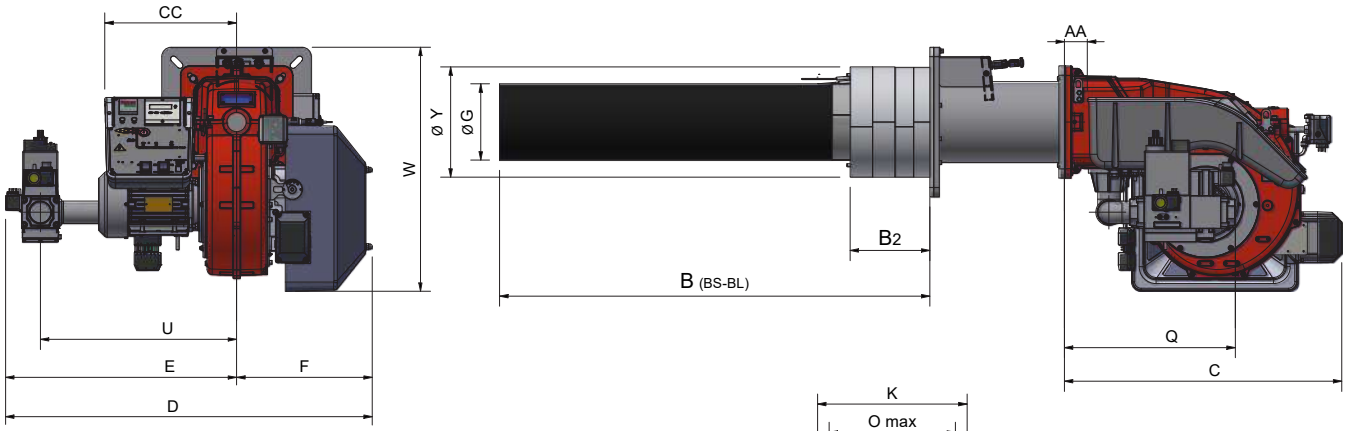


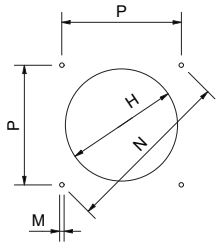
GAS

TECHNICAL SPECIFICATIONS

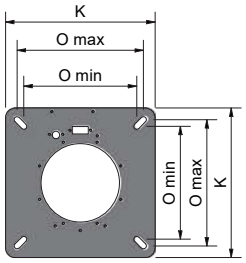
Type	Power kW min	max	Power supply output	Power supply aux	Fan motor kW	Gas connections	Level of noise emissions dBA
E120N	100	1200	400V 3 AC 50 Hz	230V 2 AC 50 Hz	2,2	Rp 1" ½, Rp 2", DN65, DN80	⩽ 80

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





BOILER RECOMMENDED DRILLING TEMPLATE



BURNER FLANGE

DIMENSIONS* (mm)

Type	DN	Overall dimensions																							
		AA	AN	B SL	B BL	B2	C	CC	D	F	G	H	J	K	L	M	N	O min	O max	P	Q	U	W	Y
E120N	DN50	61	321	1151	-	214	742	353	981	363	204	305	242	400	453	M12	453	302	338	320	457	525	653	295

***INDICATIVE VALUES**

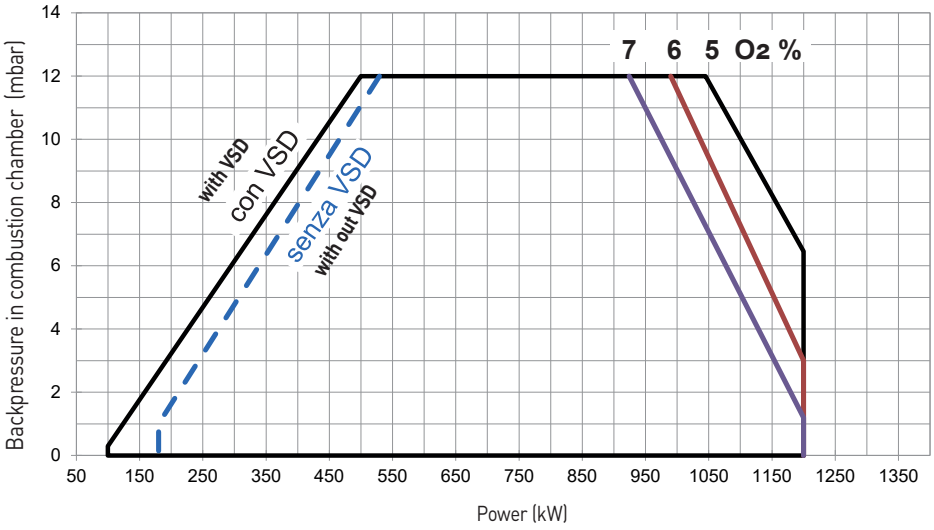
The products comply with European standards EN676 and EN267 and the following directives:
DIRECTIVE GAR 2016/426/EU

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

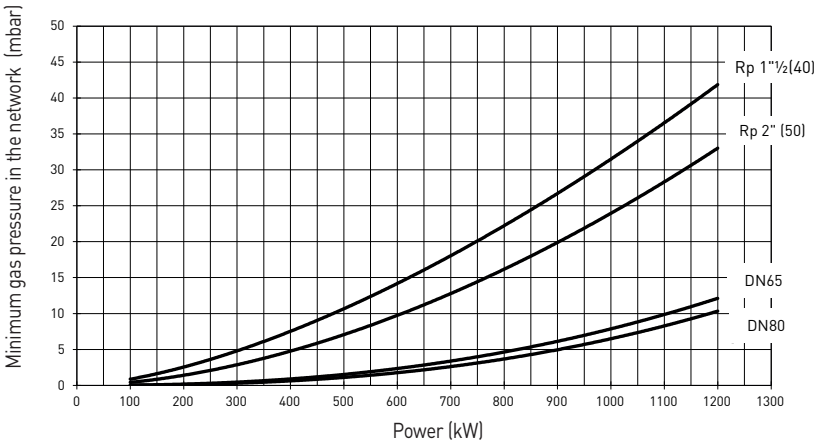
Burners also compatible with GPL, H_2

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

PERFORMANCE CURVES



MINIMUM GAS PRESSURE AT THE BURNER INLET



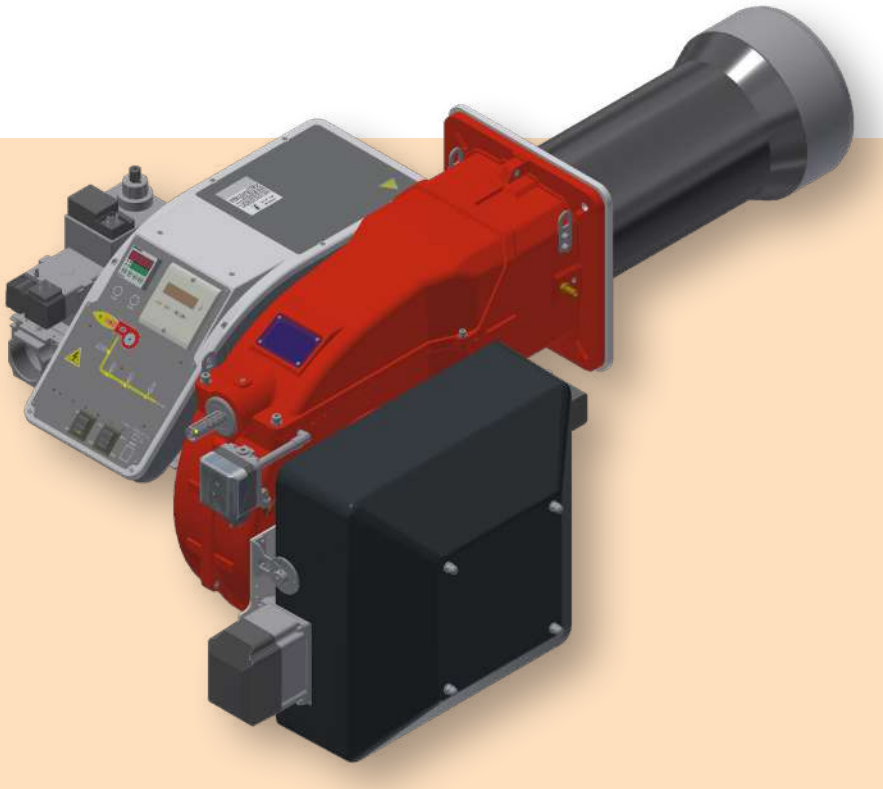
Attention:
- The working range values were determined with reference to laboratory tests with natural gas of lower calorific value Hi=34.02 MJ/Stm³ and density 0.714 kg/Stm³, (Stm³ refers to 1013 mbar and 15° C) and ambient conditions 1013 mbar and 20° C.
- To know the minimum gas pressure in the network, 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 mi nimum 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

E165A ...xR
E205A ...xR

Highly flexible burners

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

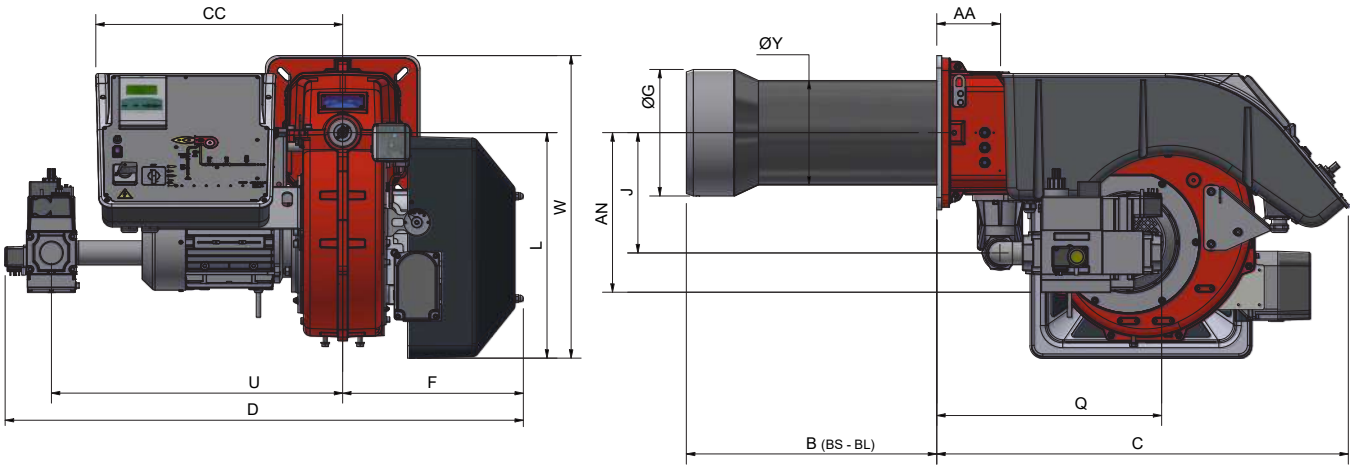


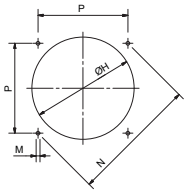
GAS

TECHNICAL SPECIFICATIONS

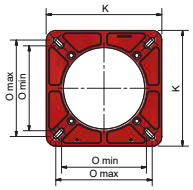
Type	Model	Power kW min	Power kW max	Power supply	Fan motor kW	Gas connections	Level of noise emissions dBA
E165A	M-.xx.xR.IT.A.1.xx	320	1650	230/400 V 3N ac	2,2	1"½ - 2" - DN65 - DN80	< 75
E205A	M-.xx.SR.IT.A.1.xx	340	2050	230/400 V 3N ac	3,0	1"½ - 2" - DN65 - DN80	< 75

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

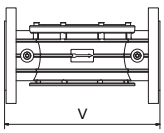




BOILER RECOMMENDED DRILLING TEMPLATE



BURNER FLANGE



DN65 - DN80

PACKAGING DIMENSIONS* (mm)

Type	l	p	h	kg
E165A	1465	815	800	125
E205A**	1465	815	800	125

***INDICATIVE VALUES**
**** INDICATIVE VALUES (REFERRED TO THE MODEL WITH DN80 GAS TRAIN)**

DIMENSIONS* (mm)

Type	Model	Overall dimensions																						
		AA	AN	B BS	B BL	C	CC	D	F	G	H	J	K	L	M	N	O min	O max	P	Q	U	V	W	Y
E165A	M-.xx.xR.IT.A.1.40	69	321	390	500	833	353	1072	361	234	264	243	300	453	M10	330	220	250	233	454	539	-	608	210
E165A	M-.xx.xR.IT.A.1.50	69	320	390	500	833	353	1061	361	234	264	241	300	453	M10	330	220	250	233	465	525	-	608	210
E165A	M-.xx.xR.IT.A.1.65	69	407	390	500	833	353	1139	361	234	264	291	300	453	M10	330	220	250	233	529	565	292	608	210
E165A	M-.xx.xR.IT.A.1.80	69	422	390	500	865	353	1141	361	234	264	296	300	453	M10	330	220	250	233	574	570	310	608	210
E205A	M-.xx.SR.IT.A.1.40	69	321	503	-	833	353	1072	361	254	284	243	300	453	M10	330	220	250	233	454	539	-	608	210
E205A	M-.xx.SR.IT.A.1.50	69	320	503	-	833	353	1061	361	254	284	241	300	453	M10	330	220	250	233	465	525	-	608	210
E205A	M-.xx.SR.IT.A.1.65	69	407	503	-	833	353	1162	361	254	284	291	300	453	M10	330	220	250	233	529	565	292	608	210
E205A	M-.xx.SR.IT.A.1.80	69	422	503	-	865	353	1136	361	254	284	287	300	453	M10	330	220	250	233	558	565	310	608	210

***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.1.40	1"½	AB
M-.AB.SR.IT.A.1.50	2"	AB
M-.AB.SR.IT.A.1.65	DN65	AB
M-.AB.SR.IT.A.1.80	DN80	AB
M-.PR.SR.IT.A.1.40	1"½	PR (*)
M-.PR.SR.IT.A.1.50	2"	PR (*)
M-.PR.SR.IT.A.1.65	DN65	PR (*)
M-.PR.SR.IT.A.1.80	DN80	PR (*)

ELECTRONIC OPERATION

Model	Gas train	Operation
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.1.40.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

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.

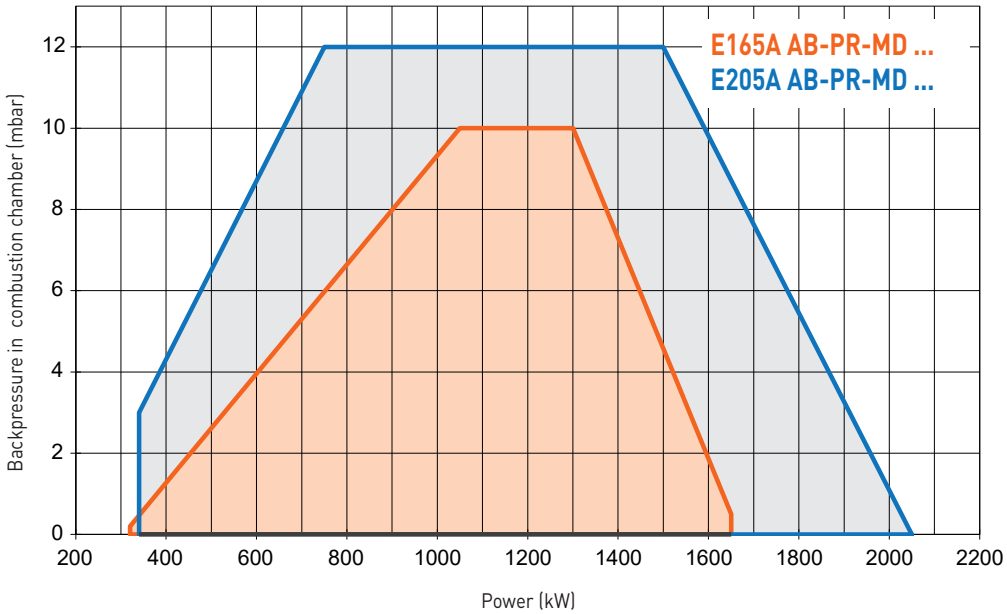
The products comply with European standards EN676 and EN267 and the following directives:
DIRECTIVE GAR 2016/426/EU

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, H_2

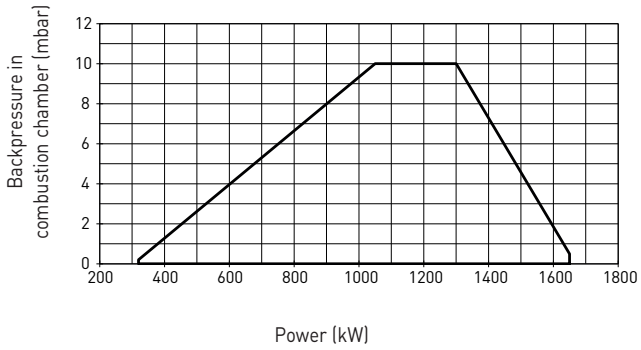
PERFORMANCE CURVES

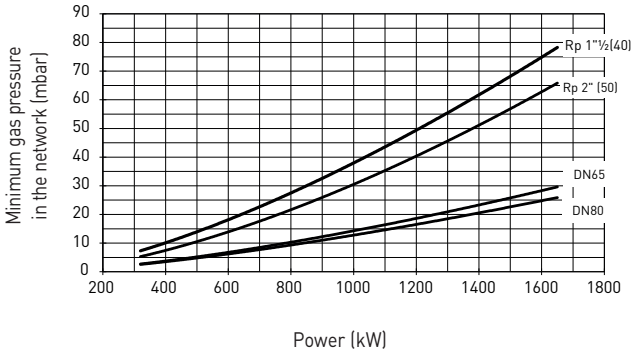


PERFORMANCE CURVES

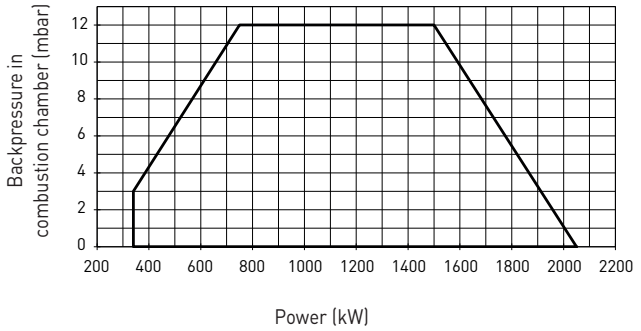
PRESSURE IN THE NETWORK

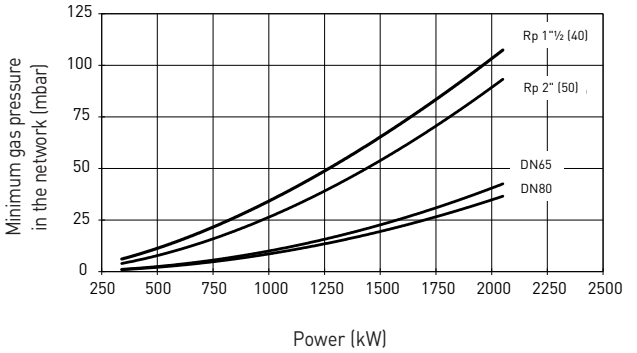
E165A AB-PR-MD...xR





E205A AB-PR-MD...xR





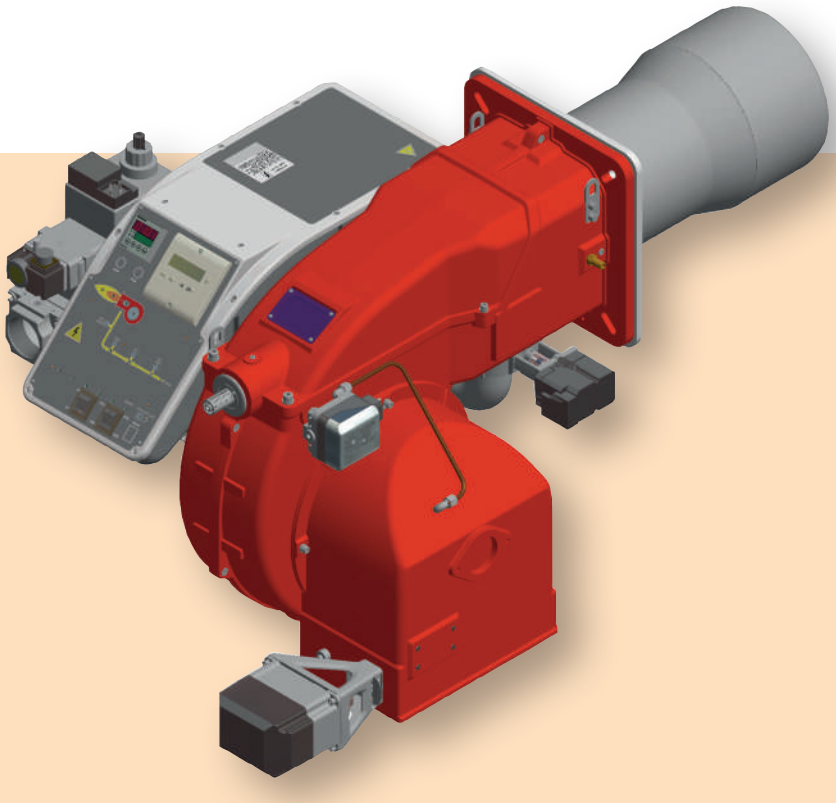
Attention:
- The working range values were determined with reference to laboratory tests with natural gas of lower calorific value Hi=34.02 MJ/Stm³ and density 0.714 kg/Stm³, (Stm³ refers to 1013 mbar and 15° C) and ambient conditions 1013 mbar and 20° C.
- To know the minimum gas pressure in the network, 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 mi nimum 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

E165A ...xP
E205A ...xP

Highly flexible burners

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

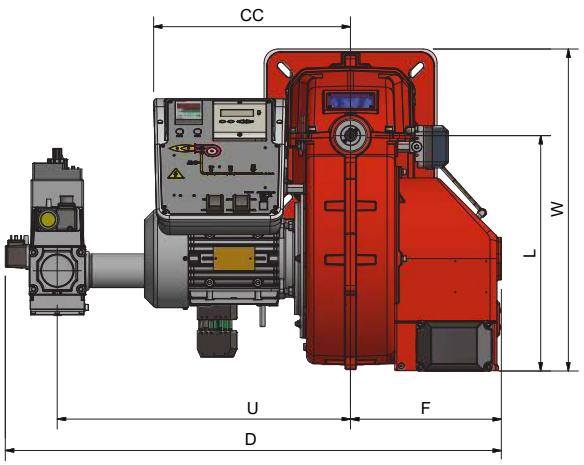


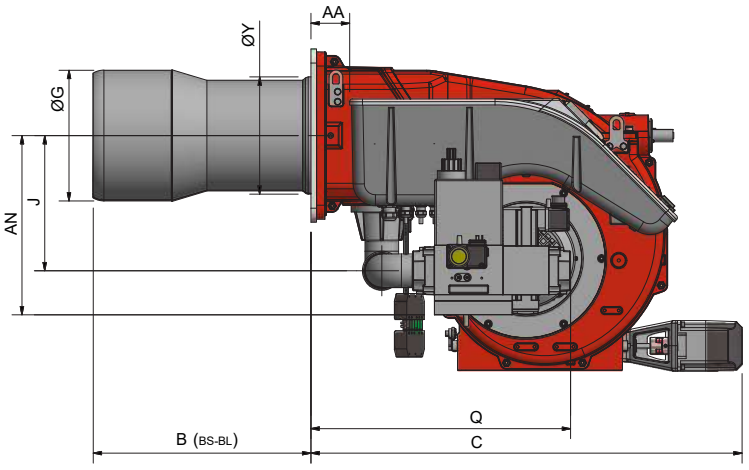
GAS

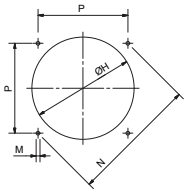
TECHNICAL SPECIFICATIONS

Type	Model	Power kW min	Power kW max	Power supply	Fan motor kW	Gas connections	Level of noise emissions dBA
E165A	M-.xx.xP.IT.A.1.xx	320	1650	230/400 V 3N ac	2,2	1"½ - 2" - DN65 - DN80	< 80
E205A	M-.xx.SP.IT.A.1.xx	340	2050	230/400 V 3N ac	3,0	1"½ - 2" - DN65 - DN80	< 80

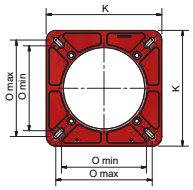
For information on choosing the length of the blast tube, refer to the Technical Information booklet.



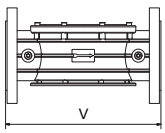




BOILER RECOMMENDED DRILLING TEMPLATE



BURNER FLANGE



DN65 - DN80

PACKAGING DIMENSIONS* (mm)

Type	l	p	h	kg
E165A	1465	815	800	125
E205A**	1465	815	800	125

***INDICATIVE VALUES**
****INDICATIVE VALUES (REFERRED TO THE MODEL WITH DN80 GAS TRAIN)**

DIMENSIONS* (mm)

Type	Model	Overall dimensions																							
		AA	AN	B BS	B BL	C	CC	D	F	G	H	J	K	L	M	N	O min	O max	P	Q	U	V	W	Y
E165A	M-.xx.xP.IT.A.1.40	69	321	390	500	833	353	1045	334	234	264	243	300	420	M10	330	220	250	233	454	539	-	575	210
E165A	M-.xx.xP.IT.A.1.50	69	320	390	500	833	353	1034	334	234	264	241	300	420	M10	330	220	250	233	465	525	-	575	210
E165A	M-.xx.xP.IT.A.1.65	69	407	390	500	854	353	1024	334	234	264	291	300	420	M10	330	220	250	233	529	565	292	575	210
E165A	M-.xx.xP.IT.A.1.80	69	422	390	500	865	353	1026	334	234	264	287	300	420	M10	330	220	250	233	558	565	310	575	210
E205A	M-.xx.SP.IT.A.1.40	69	321	503	-	833	353	1045	334	254	284	243	300	420	M10	330	220	250	233	454	539	-	575	210
E205A	M-.xx.SP.IT.A.1.50	69	320	503	-	833	353	1034	334	254	284	241	300	420	M10	330	220	250	233	465	525	-	575	210
E205A	M-.xx.SP.IT.A.1.65	69	407	503	-	833	353	1024	334	254	284	291	300	420	M10	330	220	250	233	529	565	292	575	210
E205A	M-.xx.SP.IT.A.1.80	69	422	503	-	865	353	1026	334	254	284	287	300	420	M10	330	220	250	233	558	565	310	575	210

***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.1.40	1"½	AB
M-.AB.SP.IT.A.1.50	2"	AB
M-.AB.SP.IT.A.1.65	DN65	AB
M-.AB.SP.IT.A.1.80	DN80	AB
M-.PR.SP.IT.A.1.40	1"½	PR (*)
M-.PR.SP.IT.A.1.50	2"	PR (*)
M-.PR.SP.IT.A.1.65	DN65	PR (*)
M-.PR.SP.IT.A.1.80	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.SP.IT.A.1.40.EA	1"½	PR (*)
M-.PR.SP.IT.A.1.50.EA	2"	PR (*)
M-.PR.SP.IT.A.1.65.EA	DN65	PR (*)
M-.PR.SP.IT.A.1.80.EA	DN80	PR (*)
M-.MD.SP.IT.A.1.40.ES	1"½	MD
M-.MD.SP.IT.A.1.50.ES	2"	MD
M-.MD.SP.IT.A.1.65.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.

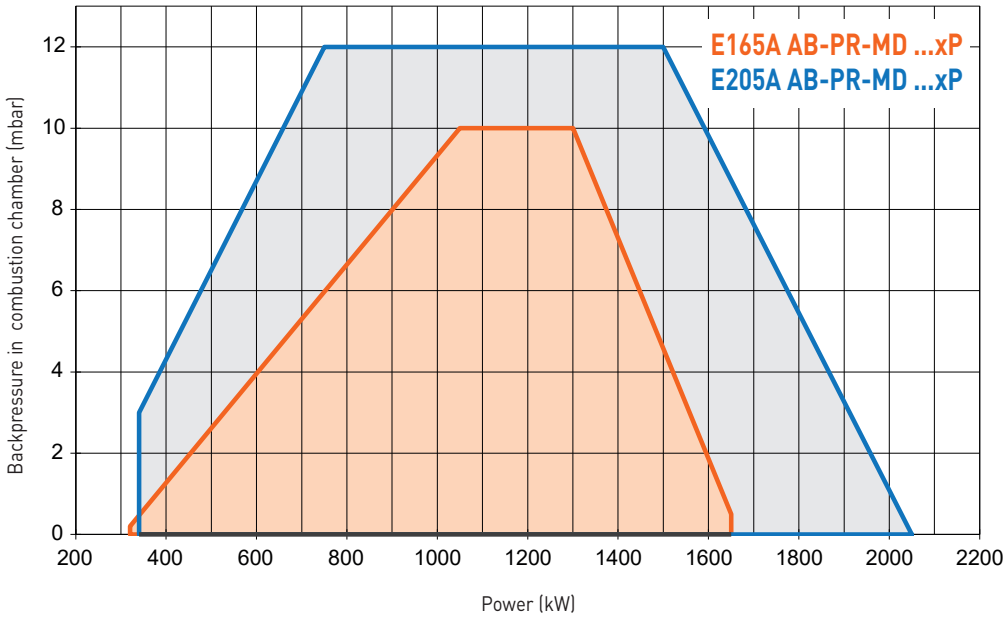
The products comply with European standards EN676 and EN267 and the following directives:
DIRECTIVE GAR 2016/426/EU

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

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, H_2

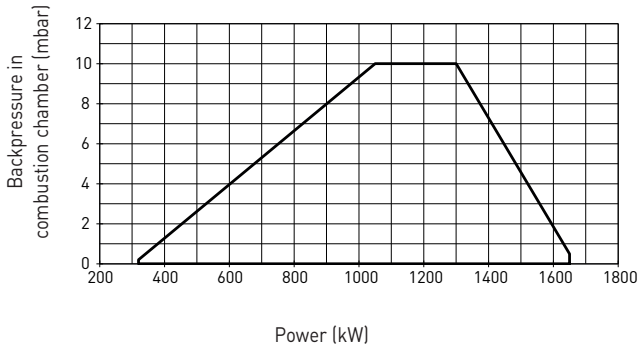
PERFORMANCE CURVES

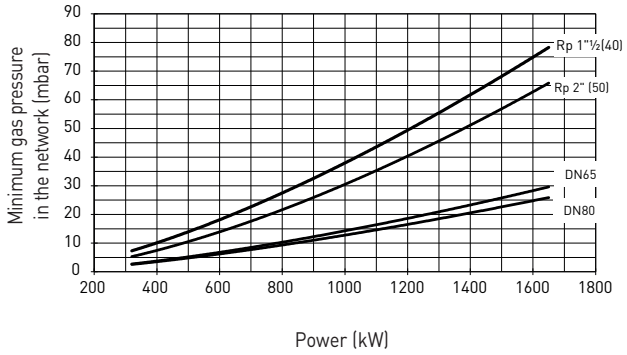


PERFORMANCE CURVES

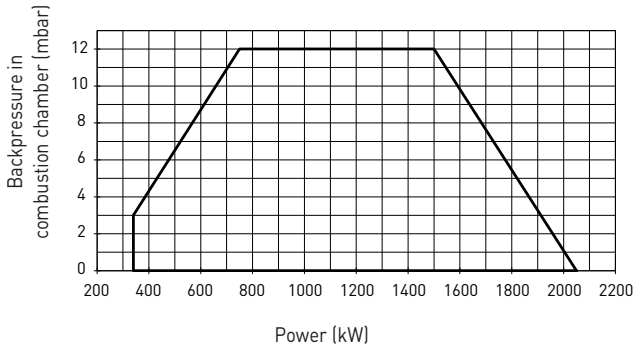
PRESSURE IN THE NETWORK

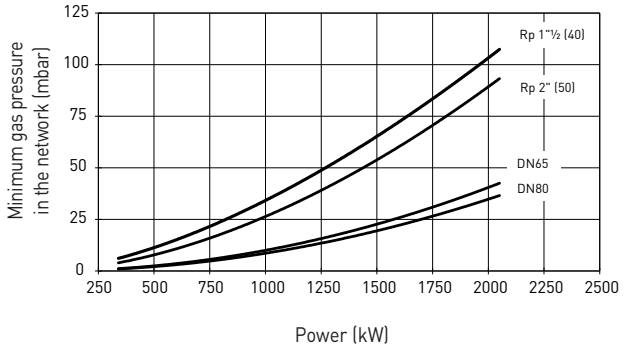
E165A AB-PR-MD...xP





E205A AB-PR-MD...xP





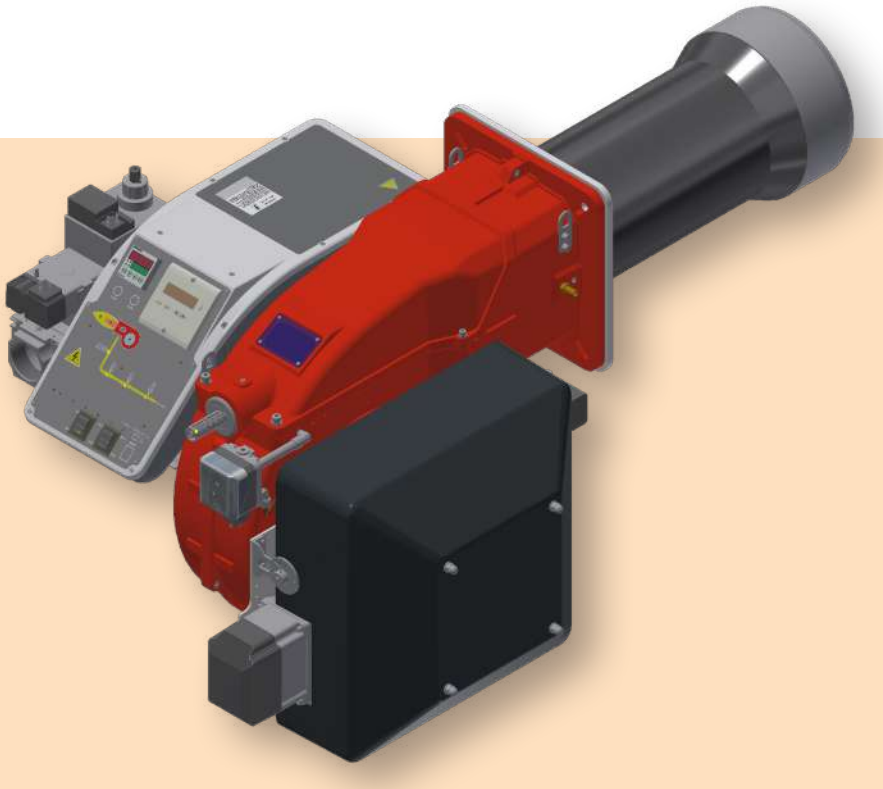
Attention:
- The working range values were determined with reference to laboratory tests with natural gas of lower calorific value Hi=34.02 MJ/Stm³ and density 0.714 kg/Stm³, (Stm³ refers to 1013 mbar and 15° C) and ambient conditions 1013 mbar and 20° C.
- To know the minimum gas pressure in the network, 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 mi nimum 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

E165A ...xR
E205A ...xR

Highly flexible burners

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

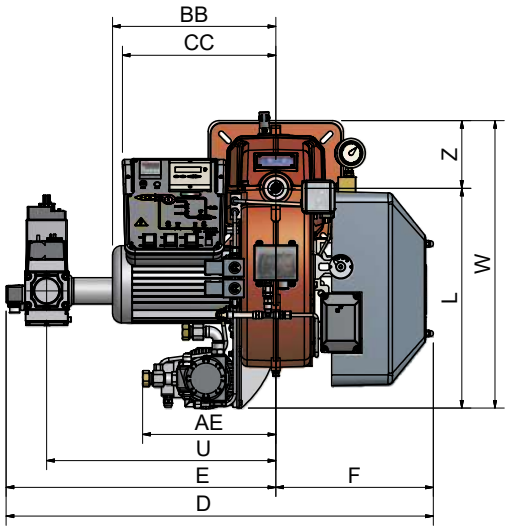


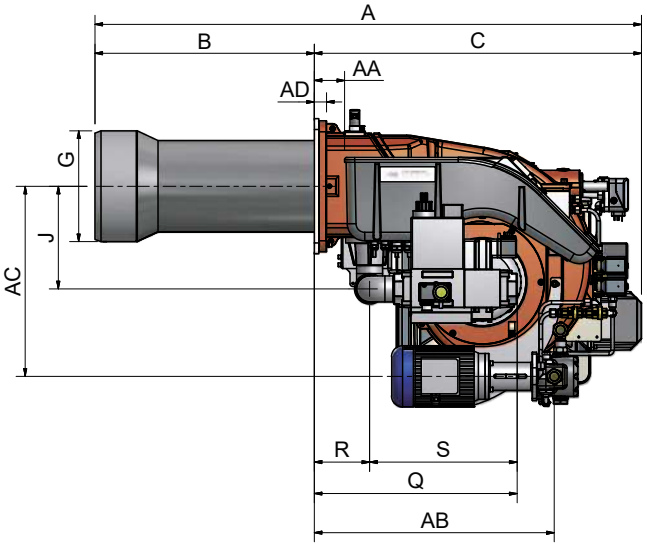
GAS / LIGHT OIL

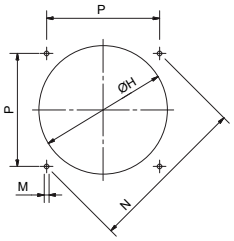
TECHNICAL SPECIFICATIONS

Type	Model	Power kW min	Power kW max	Power supply	Fan motor kW	Gas connections	Level of noise emissions dBA
E165A	MG.xx.SR.IT.A.1.xx	320	1650	230/400 V 3N ac	2,2	1"½ - 2" - DN65 - DN80	< 75
E205A	MG.xx.SR.IT.A.1.xx	340	2050	230/400 V 3N ac	3,0	1"½ - 2" - DN65 - DN80	< 75

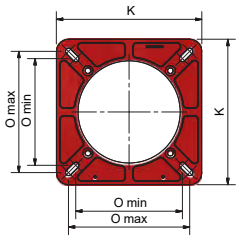
For information on choosing the length of the blast tube, refer to the Technical Information booklet.



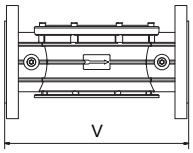




BOILER RECOMMENDED DRILLING TEMPLATE



BURNER FLANGE



PACKAGING DIMENSIONS* (mm)

Type	l	p	h	kg
E165A	1730	1280	1020	160
E205A	1730	1280	1020	160

*INDICATIVE VALUES

DIMENSIONS* (mm)

Type	Model	AA	B	C	CC	D	F	G	H	J	K	L	M	N	O min	O max	P	Q	U	V	W
E165A	MG.xx.SR.IT.A.1.40	69	500	1602	353	989	361	234	264	243	300	508	M10	330	220	220	233	454	539	-	663
E165A	MG.xx.SR.IT.A.1.50	69	500	1602	353	979	361	234	264	241	300	508	M10	330	220	220	233	465	525	-	663
E165A	MG.xx.SR.IT.A.1.65	69	500	1602	353	1051	361	234	264	291	300	508	M10	330	220	220	233	529	565	292	663
E165A	MG.xx.SR.IT.A.1.80	69	500	1602	353	1108	361	234	264	233	300	508	M10	330	220	220	233	574	562	310	663
E205A	MG.xx.SR.IT.A.1.40	69	503	1602	353	989	361	254	284	243	300	508	M10	330	220	220	233	454	539	-	663
E205A	MG.xx.SR.IT.A.1.50	69	503	1602	353	979	361	254	284	241	300	508	M10	330	220	220	233	465	525	-	663
E205A	MG.xx.SR.IT.A.1.65	69	503	1602	353	1051	361	254	284	291	300	508	M10	330	220	220	233	529	565	292	663
E205A	MG.xx.SR.IT.A.1.80	69	503	1602	353	1108	361	254	284	235	300	508	M10	330	220	220	233	558	562	310	663

*INDICATIVE VALUES

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

MECHANICAL OPERATION

Model	Gas train	Operation
MG.PR.SR.IT.A.1.40	1"½	PR (*)
MG.PR.SR.IT.A.1.50	2"	PR (*)
MG.PR.SR.IT.A.1.65	DN65	PR (*)
MG.PR.SR.IT.A.1.80	DN80	PR (*)

ELECTRONIC OPERATION

Model	Gas train	Operation
MG.PR.SR.IT.A.1.40.EC	1"½	PR (*)
MG.PR.SR.IT.A.1.50.EC	2"	PR (*)
MG.PR.SR.IT.A.1.65.EC	DN65	PR (*)
MG.PR.SR.IT.A.1.80.EC	DN80	PR (*)
MG.MD.SR.IT.A.1.40.ES	1"½	MD
MG.MD.SR.IT.A.1.50.ES	2"	MD
MG.MD.SR.IT.A.1.65.ES	DN65	MD
MG.MD.SR.IT.A.1.80.ES	DN80	MD

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.

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

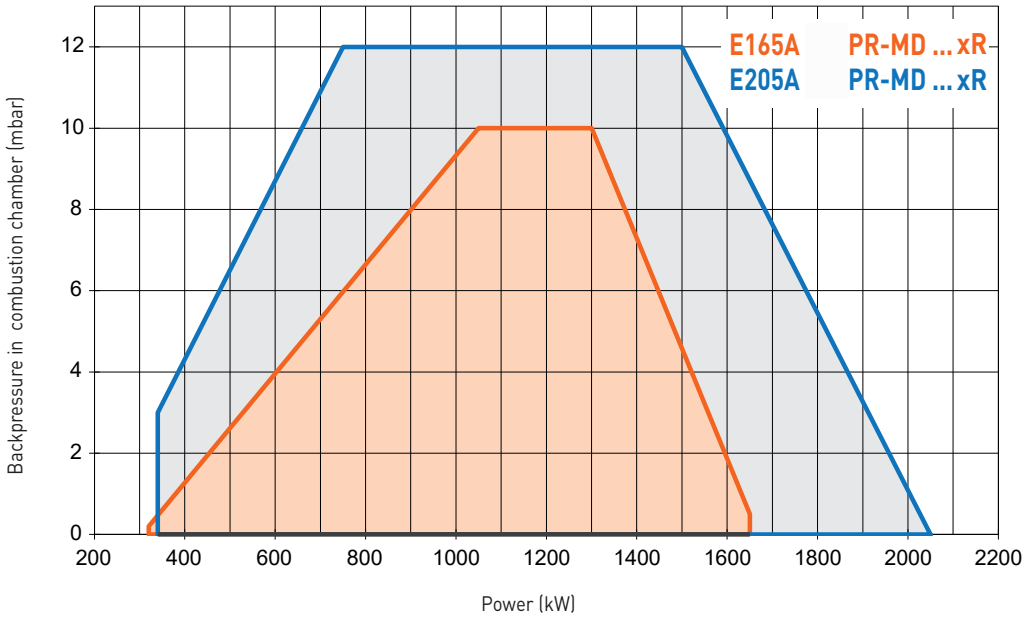
NOx emission level:
- Class 2 (<120 mg/kWh) in gas operation according to EN676
- Class 1 (< 250 mg/kWh) in light oil operation according to EN267

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, H_2

Burners also compatible with bio-oli

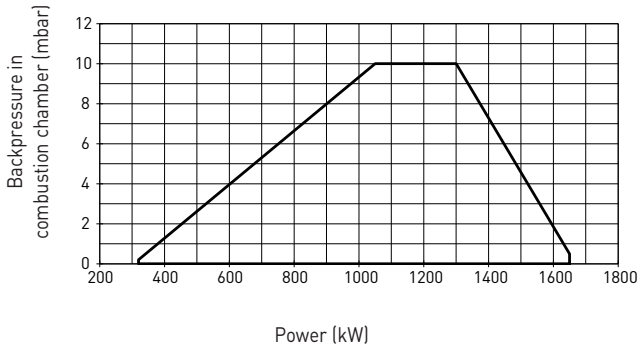
PERFORMANCE CURVES

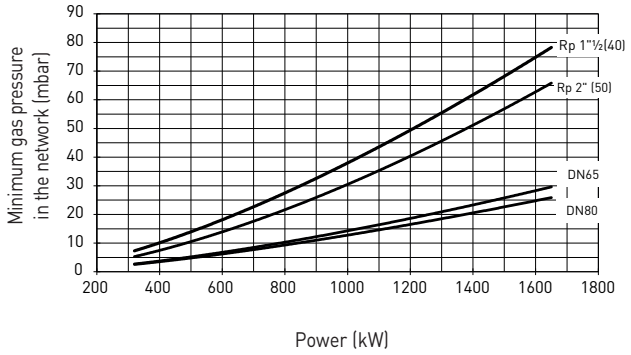


PERFORMANCE CURVES

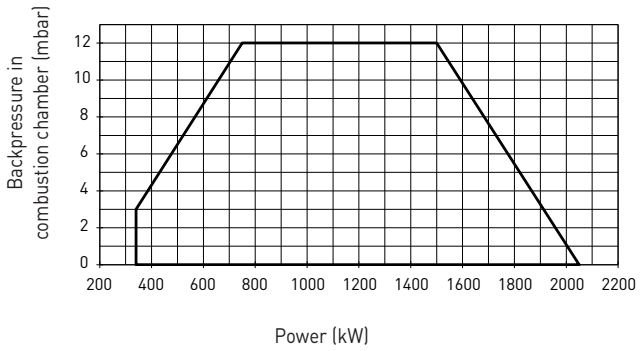
PRESSURE IN THE NETWORK

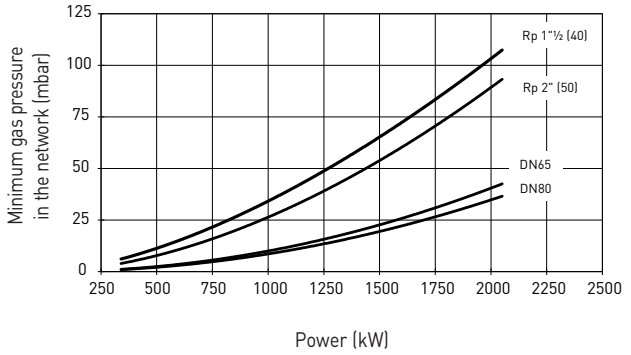
E165A PR-MD...xR





E205A 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 MJ/Stm³ and density 0.714 kg/Stm³, (Stm³ refers to 1013 mbar and 15° C) and ambient conditions 1013 mbar and 20° C.
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cibunigas@cibunigas.com - www.cibunigas.com

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