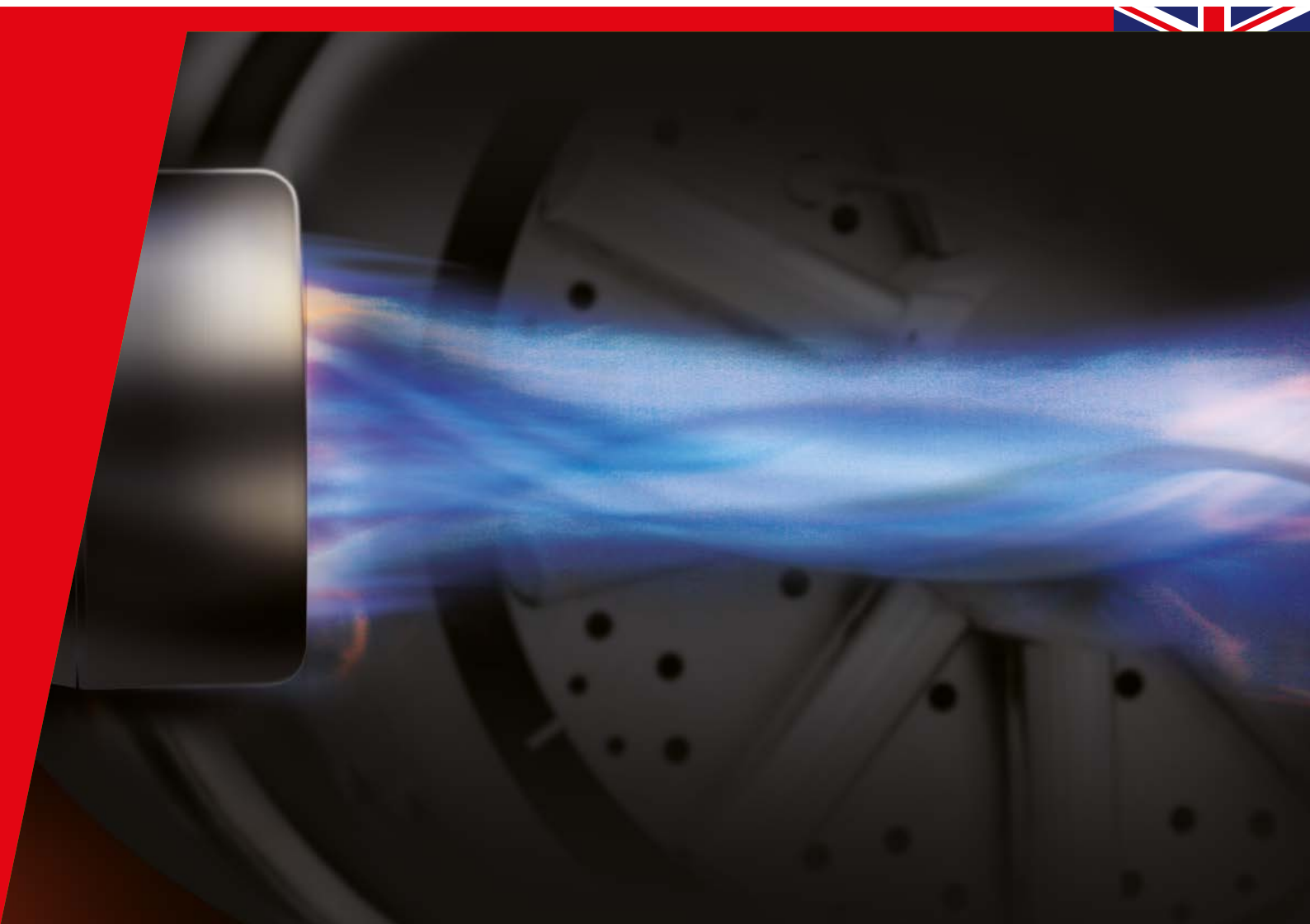




***CIB UNIGAS***

Let's light up tomorrow

CATALOGUE  
2016



[www.cibunigas.it](http://www.cibunigas.it)





**CIB UNIGAS**

Let's light up tomorrow

## ADVANCING TOWARDS THE FUTURE

### WE UNDERSTAND YOUR MARKET

The success of CIB UNIGAS's product, actually exported globally, is due to its adaptability. In fact we are able to adapt our know-how to the different market requests. As a demonstration of the described ability, now the 85% of our turnover comes from exports, in particular from Russia and China.

Our strategic points are the adaptation to different rules, the specific technical and promotional documentations we supply, the ability of fulfill special requirements and the constant participation at international exhibitions.

### QUALITY STANDARDS AND CIB UNIGAS: OUR COMMITMENT

In 1995 CIB UNIGAS was certificated by the TUV, a German institute that certifies the safety and the rule-compliance of products. From that time on, the company adhere to high quality standards in all its industrial processes.

### ADVANCING TOWARDS THE FUTURE

One of the goals of CIB UNIGAS was to strengthen the internal distribution of information and to create a new technical structure for the research and development of new industrial products.

In the new and modern facility, is assembled the nerve centre of the company: General Management, commercial offices, control and research labs and production workshops.

The qualifications of our technicians and the investment in research and human resources, represent the living and continuous engagement to operate in a future assuring stability and dynamism to the company.



### INNOVATION GETS US THERE FIRST

Nowadays the adaptation to the emission standards is no more sufficient to obstruct the increase of the greenhouse effect. For this reason all our products have always guaranteed levels of pollutant emissions decisively below the sector limit imposed by the international regulations. Thanks to its "Zero Emission NO<sub>x</sub>" research project, CIB Unigas is playing a proactive role in the discovery of new technologies in order to create the most environmentally-friendly product possible.

### 213 DAYS AND THEN WE MAKE CHANGES

That is the average time it takes us to update our range of products: a reaction time dictated by our technological research and our constant desire to surpass ourselves.

### PRODUCTION PHILOSOPHY

Everything begins in our research laboratories, where a group of engineers is free to test new materials and technologies with the aim of discover burners always more efficient and environmentally-friendly.

When a prototype is ready, it is underwent to several trials based on parameters that are stricter than the ones required by the market.

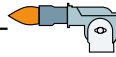
This is the way we produce our products that are appropriate both for industrial and private applications. CIB Unigas's production method, based on excellence and constant updating, does not prevent it from maintaining a formidable operation agility. In fact CIB Unigas is able to offer an infinite range of tailored solutions that are surprisingly competitive in terms of costs and time.

# BURNER IDENTIFICATION

## Type:

### TYPE

NG..., P..., R..., S..., LG..., NGX..., LX..., RX..., LO..., G..., PG...,  
 RG..., N..., PN..., RN..., PBY..., HS..., HP..., HR..., KP..., KR...,  
 TP..., TLX..., TG..., TN..., TPBY..., HTP..., KTP..., URB

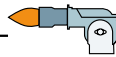


## Model:

**M - . AB . S . IT . A . 0 . 25 . xx**

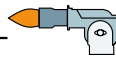
### FUEL

M - NATURAL GAS    N - HEAVY OIL UP TO 50 cSt a 50°C (7°E - 50°C)  
 L - L.P.G            E - HEAVY OIL UP TO 110 cSt a 50°C (15°E - 50°C)  
 B - TOWN GAS       D - HEAVY OIL UP TO 400 cSt a 50°C (50°E a 50°C)  
 C - GAS             H - HEAVY OIL UP TO 4000 cSt a 50°C (530°E - 50°C)  
 G - LIGHT OIL       K - KEROSENE  
 A - BIO DIESEL      MG - DUAL FUEL BURNERS NATURAL GAS - LIGHT OIL  
                           MN - DUAL FUEL BURNERS NATURAL GAS - HEAVY OIL



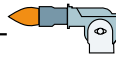
### OPERATION

TN - ON/OFF                    MD - FULLY MODULATING  
 AB - HIGH - LOW FLAME      SP - SOFT START  
 PR - PROGRESSIVE



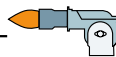
### BLAST TUBE

M - STANDARD                    S - STANDARD                    L - LONG  
 DUAL LENGTH BLAST TUBE



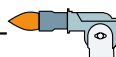
### DESTINATION COUNTRY

IT ITALY  
 ... AVAILABLE FOR OTHER COUNTRIES UPON REQUEST



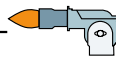
### BURNER MANUFACTURE

A STANDARD	D CHEF
Y SPECIAL	G CONTROL PANEL AND JUNCTION BOX
B BAKERY OVENS	E JUNCTION BOX
C BAKERY OVENS WITH EXTERNAL AIR INLET	Z WITH EXTERNAL AIR INLET



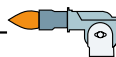
### EQUIPMENT

0 2 GAS VALVES  
 1 2 GAS VALVES + AND LEAKAGE CONTROL  
 M HYDRAULIC RAM  
 P PRE-HEATER  
 L HYDRAULIC RAM AND PRE-HEATER



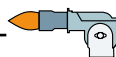
### GAS CONNECTION

10 3/8"	50 2"
15 1/2"	65 DN65
20 3/4"	80 DN80
25 1"	100 DN100
32 1"1/4	125 DN125
40 1"1/2	



### ELECTRONIC VERSION

EA Medium-small burners complete with electronic cam	ES Medium-large burners complete with electronic cam, without O <sub>2</sub> control, without Inverter.
EB Medium-small burners complete with electronic cam and inverter	EO Medium-large burners complete with electronic cam and O <sub>2</sub> control, without Inverter.
EC Medium-small dual fuel burners complete with electronic cam	EI Medium-large burners complete with electronic cam and Inverter, without O <sub>2</sub> control.
ED Medium-small dual fuel burners complete with electronic cam and inverter	EK Medium-large burners complete





## ELECTRONIC BURNERS








Page



## MICRO PROCESSOR CONTROLLED BURNERS







13

GAS AND DUAL FUEL BURNERS NATURAL GAS LOW NO<sub>x</sub> (Class 2 EN676)

	Type	Output kW	Operation	Pag.
	<b>IDEA SERIES</b> NG35 - NG70 - NG90	19÷85	TN AB	34
	<b>IDEA SERIES</b> NG120 - NG140 - NG200	35÷200	TN AB PR MD	39
	<b>IDEA SERIES</b> NG280 - NG350 - NG400 - NG550	65÷570	TN AB PR MD	44
	<b>TECNOPRESS SERIES</b> P61 - P65 - P71 - R75A	160÷2.050	AB PR MD	51
	<b>NOVANTA - CINQUECENTO SERIES</b> R91A - R92A - R93A R512A - R515A - R520A - R525A	480÷8.000	PR MD	59
	<b>MILLE SERIES</b> R1025 - R1030 - R1040	2.550÷13.000	PR MD	67
	<b>MINIFLAM SERIES</b> For kitchens and bakery ovens Tecnopan S5 - S10 - S18 Chef S5	35÷200	TN	71



## GAS AND DUAL FUEL BURNERS NATURAL GAS LOW NO<sub>x</sub> (Class 3 EN676)

	Type	Output kW	Operation	Page
	<b>SERIE IDEA</b> NGX35 - NGX70	21÷65	TN AB	78
	<b>SERIE IDEA</b> NGX120 - NGX200	35÷150	TN AB PR MD	82
	<b>SERIE IDEA</b> NGX280 - NGX350 NGX400 - NGX550	60÷490	TN AB PR MD	86
	<b>SERIE TECNOPRESS</b> LX60 - LX72 - RX75R - RX75	165÷1.800	AB PR MD	93
	<b>SERIE NOVANTA - CINQUECENTO</b> RX92R - RX92 RX515 - RX520	480÷5.800	PR MD	99
	<b>SERIE MILLE</b> RX1025 - RX1030	1.000÷10.600	PR MD	105



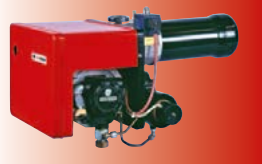





## LIGHT OIL BURNERS

### LIGHT OIL BURNERS LOW NO<sub>x</sub>

	Type	Output kW	Operation	Page
	<b>IDEA SERIES</b> LO35 - LO60 - LO90	14÷85	TN - AB	114
	LOX35 - LOX60 - LOX90	17÷70	TN	
	<b>IDEA SERIES</b> LO140 - LO200	38÷200	TN - AB	118
	LOX140	64÷130	TN	
	<b>IDEA SERIES</b> LO280 - LO400 - LO550	70÷560	TN AB	121
	<b>TECNOPRESS SERIES</b> PG30 - PG60 - PG70 - PG81	105÷1.900	AB PR MD	124
	<b>NOVANTA - CINQUECENTO SERIES</b> RG91 - RG92 - RG93 RG510 - RG515 - RG520 - RG525	550÷8.000	AB PR MD	128
	<b>MILLE SERIES</b> RG1030 - RG1040	2.550÷13.000	PR MD	134
	<b>MINIFLAM SERIES</b> <b>For kitchens and bakery ovens</b> Tecnopan G6 - G10 - G18 Chef G5 - G6	29÷209	TN	137
	<b>MINIFLAM 24 Volt DC SERIES</b> <b>(Direct Current)</b> G6 - G10 - G18	29÷209	TN	139







## HEAVY OIL BURNERS

	Type	Output kW	Operation	Page
	<b>MINIFLAM SERIES</b> Mechanical atomization N18	105÷209	TN	142
	<b>TECNOPRESS SERIES</b> Mechanical atomization PN30 - PN60 - PN70 - PN81	105÷1.900	TN AB PR MD	144
	<b>NOVANTA - CINQUECENTO SERIES</b> Mechanical atomization PN91 - PN92 - PN93 RN510 - RN515 - RN520 - RN525	550÷8.000	AB PR MD	149
	<b>MILLE SERIES</b> Mechanical atomization RN1030 - RN1040	2.550÷13.000	PR MD	155
	<b>TECNOPRESS - NOVANTA - CINQUECENTO SERIES</b> Pneumatic atomization PBY70 - PBY90 - PBY91 - PBY92 - PBY93 RBY510 - RBY515 - RBY520 - RBY525	290÷7.300	PR MD	159
	<b>MILLE SERIES</b> Pneumatic atomization RBY1025 - RBY1030 - RBY1040	2.550÷13.000	PR MD	164








**DUAL FUEL BURNERS NATURAL GAS/LIGHT OIL LOW NO<sub>x</sub> (Class 2 EN676)**






	Type	Output kW	Operation	Page
	<b>MINIFLAM SERIES</b> HS5 - HS10 - HS18	35÷200	TN	170
	<b>TECNOPRESS SERIES</b> HP20 - HP30 - HP60 - HP65 - HP72 HR75A	65÷2.050	AB PR MD	174
	<b>NOVANTA - CINQUECENTO SERIES</b> HR91A - HR92A - HR93A HR512A - HR515A - HR520A - HR525A	480÷8.000	PR MD	182
	<b>MILLE SERIES</b> HR1025 - HR1030 - HR1040	2.550÷13.000	PR MD	189

**DUAL FUEL BURNERS NATURAL GAS/LIGHT OIL LOW NO<sub>x</sub> (Class 3 EN676)**

	Type	Output kW	Operation	Page
	<b>TECNOPRESS SERIES</b> HRX75R	270÷1.200	PR MD	196
	<b>NOVANTA - CINQUECENTO SERIES</b> HRX92 HRX512 - HRX515 - HRX520	480÷5.800 600÷5.800	PR MD	199
	<b>MILLE SERIES</b> HRX1025 - HRX1030	1.000÷10.600	PR MD	204






## DUAL FUEL BURNERS NATURAL GAS/HEAVY OIL


	Type	Output kW	Operation	Page
	<b>TECNOPRESS SERIES</b> <b>Mechanical atomization</b> KP60 - KP72 - KP73	160÷2.050	PR MD	210
	<b>NOVANTA - CINQUECENTO SERIES</b> <b>Mechanical atomization</b> KP91 - KP92 - KP93 KR512 - KR515 - KR520 - KR525	480÷8.000	PR MD	217
	<b>MILLE SERIES</b> <b>Mechanical atomization</b> KR1025 - KR1030 - KR1040	2.550÷13.000	PR MD	227
	<b>TECNOPRESS - NOVANTA - CINQUECENTO SERIES</b> <b>Pneumatic atomization</b> KPBY72 - KPBY73 KPBY91 - KPBY92 - KRBY512 KRBY515 - KRBY520 - KRBY525	291÷8.000	PR MD	232
	<b>MILLE SERIES</b> <b>Pneumatic atomization</b> KRBY1025 - KRBY1030 - KRBY1040	2.550÷13.000	PR MD	238

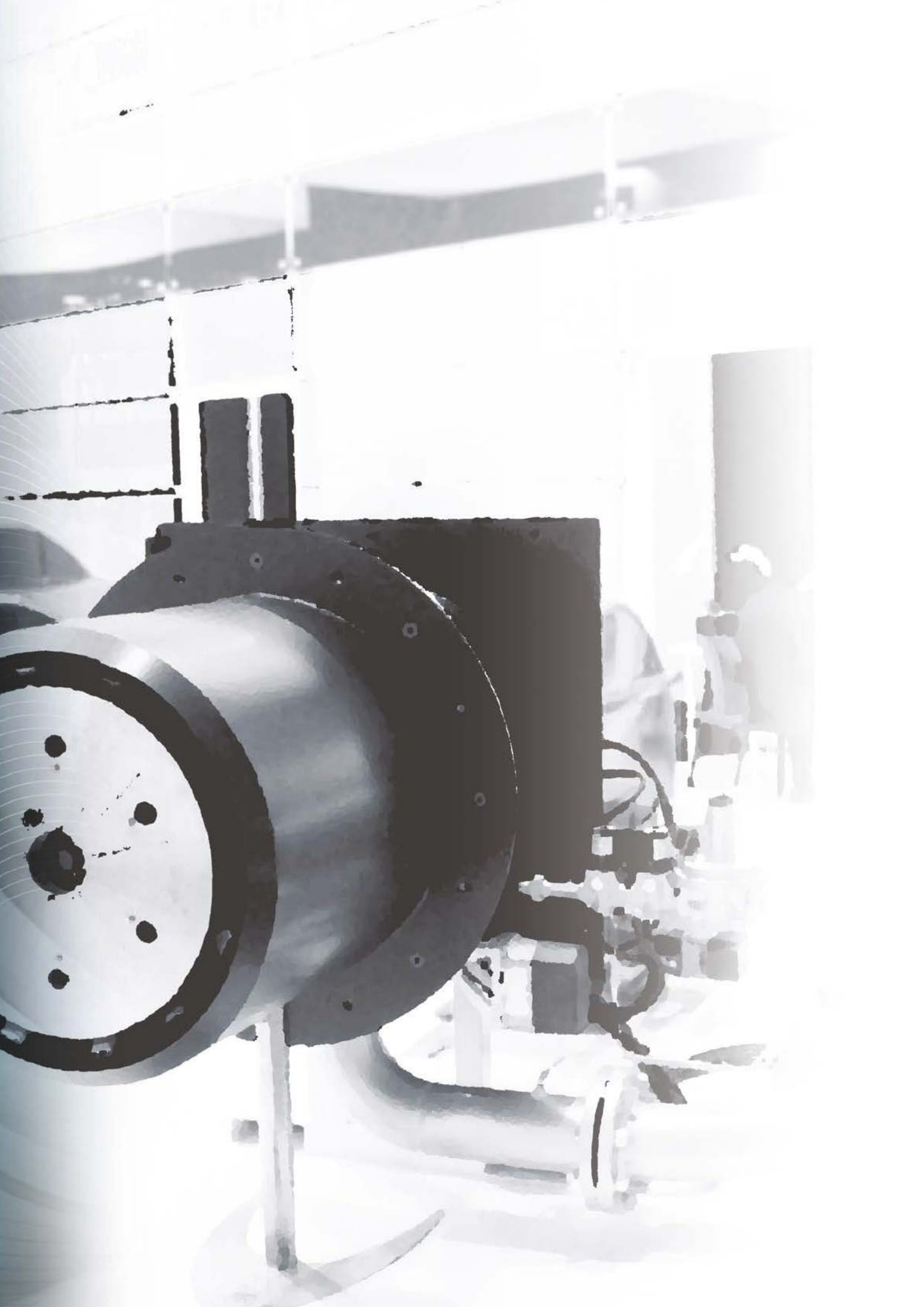


## BURNER FOR INDUSTRIAL APPLICATIONS

	Type	Output kW	Operation	Page
	<b>NOVANTA - CINQUECENTO - MILLE SERIES</b>	264÷19.000	PR MD	243
	<b>DUEMILA SERIES</b>	3.600÷27.000	PR MD	243
	<b>URB SERIES</b>	1.167÷80.000	PR MD	247

## FITTINGS / OPTIONS

		Page
	<b>OPTIONS BURNER</b>	249
	GENERAL OPTIONS BURNERS	250
	OPTIONS GAS BURNERS	253
	OPTIONS LIGHT OIL BURNERS	256
	OPTIONS HEAVY OIL BURNERS	257





## WITH LMV 2... MICRO PROCESSOR

- EA Medium-small burners complete with electronic cam
- EB Medium-small burners complete with electronic cam and inverter
- EC Medium-small dual fuel burners complete with electronic cam
- ED Medium-small dual fuel burners complete with electronic cam and inverter

## WITH LMV 5... MICRO PROCESSOR

- ES Medium-large burners complete with electronic cam, without O<sub>2</sub> control, without Inverter
- EO Medium-large burners complete with electronic cam and O<sub>2</sub> control, without Inverter
- EI Medium-large burners complete with electronic cam and Inverter, without O<sub>2</sub> control
- EK Medium-large burners complete with electronic cam, Inverter and O<sub>2</sub> control



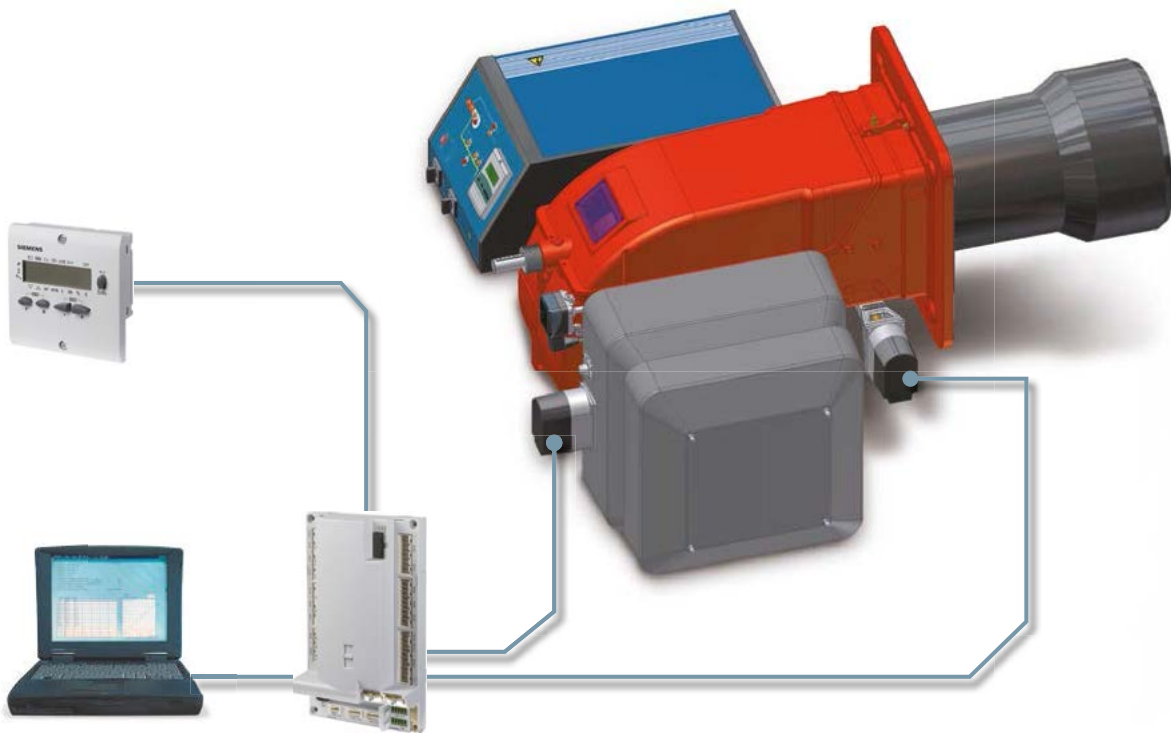
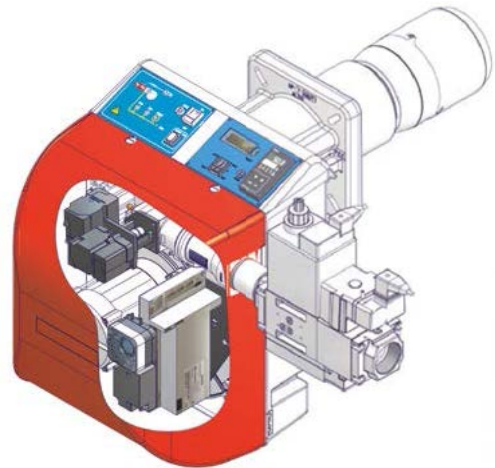
## WITH LMV 2... MICROPROCESSOR for low and medium power burners



CIB UNIGAS S.p.A. can provide small and medium size burners (up to 13.000 kW) with an electronic control system. It can be used both on single fuel burners (gas or light oil) and on dual fuel burners (gas/light oil)

### This system offers many features:

- Reduction of mechanical moving parts
- Built-in flame detection box
- Integrated gas proving system
- Possibility to install different types of flame sensors, so that the electronic cam system can be used on all applications
- Variable speed drive VSD (only on certain versions)
- Error-code display on screen in case of lock-out
- Possibility to program or to exclude the post purge time
- Display of hours run



**Modbus communication**, system, only upon request, through the software (to be quoted separately), except the base version.

**Optimal air/fuel ratio regulation**, with high precision and repeatability of the regulations made.

**Easy programming**, both through the AZL, or the proper software.

# WITH LMV 2... 3... MICROPROCESSOR

## for low and medium power burners



Model	Series	Fuel	LMV20	LMV26	LMV37	AGM60	AZL 21
EA	IDEA (from NG280)	gas	●				●
EA	TECNOPRESS	gas (up to 2")	●				
EA	TECNOPRESS	gas (from DN65)	●				
EA	NOVANTA CINQUECENTO	gas	●				
EA	MILLE	gas	●				
EA	TECNOPRESS	liquid fuel	●				
EA	NOVANTA CINQUECENTO	liquid fuel	●				
EA	MILLE	liquid fuel	●				
EB	TECNOPRESS	gas (up to 2")			●		
EB	TECNOPRESS	gas (from DN65)			●		
EB	NOVANTA CINQUECENTO	gas			●		
EB	MILLE	gas			●		
EB	TECNOPRESS	liquid fuel			●		
EB	NOVANTA CINQUECENTO	liquid fuel			●		
EB	MILLE	liquid fuel			●		
EC	TECNOPRESS	dual fuel burners HR-KP		●			
EC	NOVANTA CINQUECENTO	dual fuel burners HR-KP		●			
EC	MILLE	dual fuel burners HR-KR				●	
EC	TECNOPRESS	dual fuel burners KRBY		●		●	
EC	NOVANTA CINQUECENTO	dual fuel burners KRBY		●		●	
EC	MILLE	dual fuel burners KRBY		●		●	
ED	TECNOPRESS	dual fuel burners HP-KP		●			
ED	NOVANTA CINQUECENTO	dual fuel burners HR-KR		●			
ED	MILLE	dual fuel burners HR-KR		●		●	
ED	TECNOPRESS	dual fuel burners KRBY		●		●	
ED	NOVANTA CINQUECENTO	dual fuel burners KRBY		●		●	
ED	MILLE	dual fuel burners KRBY		●		●	

● = SQM33.711A9





# GAS WITH LMV 20...

## Electronically Operated with Inverter

Complete with leakage control

### Version EA (Idea)



LMV20..



AZL21



Servomotor  
AIR SQN14..



Servomotor  
GAS SQN14..

Series	Burner Type	Extra charge €
GAS	NG280 - NG350 - NG400 - NG550 - NGX350 - NGX400 - NGX550 ...EA	

### Version EA (Tecnopress)



LMV20..



AZL23



Servomotor  
AIR SQM33..



Servomotor  
GAS SQN14..

Series	Burner Type	Extra charge €
GAS	P61...1.32/40/50/65 ...EA LX60...1.32/40/50/65 ...EA	
GAS	P65...1.40/50/65 ...EA LX65...1.40/50/65 ...EA	
GAS	P71...1.50 ...EA* LX72...1.50 ...EA*	
GAS	R75A...1.50 ...EA* RX75R...1.40/50 ...EA* RX75A...1.50 ...EA*	

\* Only gas train up to 2" (DN 50)

# GAS WITH LMV 20...

## Electronically Operated with Inverter

Complete with leakage control



### Version EA (Tecnopress, Novanta, Cinquecento)



LMV20..



AZL23



Servomotor  
AIR SQM33..



Servomotor  
GAS SQM33..

Series	Burner Type	Extra charge €
GAS	P71...1.65/80 ...EA LX72...1.65/80 ...EA	
GAS	R75A...1.65/80 ...EA RX75R...1.65 ...EA RX75...1.65/80 ...EA	
GAS	R91A...1.50/65/80/100 ...EA R92A...1.50/65/80/100 ...EA R93A...1.50/65/80/100 ...EA RX92...1.50/65/80/100 ...EA RX92R...1.50/65/80/100 ... EA	
GAS	R512A...1.50/65/80/100 ...EA R515A...1.50/65/80/100 ...EA R520A...1.50/65/80/100 ...EA R525A...1.50/65/80/100 ...EA RX515...1.50/65/80/100 ...EA RX520...1.50/65/80/100 ...EA	
GAS	R1025...1.65/80/100/125 ...EA* R1030...1.65/80/100/125 ...EA* R1040...1.80/100/125 ...EA* RX1025...1.65/80/100 ...EA* RX1030...1.65/80/100 ...EA*	

\* Servomotor air SQM33.711A9

# GAS WITH LMV 37...

## Electronically Operated with Inverter\*

### Version EB (Tecnopress)



LMV37..



AZL23



Servomotor  
AIR SQM33..



Servomotor  
GAS SQN14..



Inverter

Series	Burner Type	Extra charge €
GAS	P61 - P65 ...EB LX60 ...EB	

### Version EB (Tecnopress, Novanta, Cinquecento)



LMV37..



AZL23



Servomotor  
AIR SQM33..



Servomotor  
GAS SQM33..



Inverter

Series	Burner Type	Extra charge €
GAS	P71 - R75A ...EB LX72 - RX75R - RX75 ...EB	
GAS	R91A - R92A - R93A ...EB RX92 ...EB RX92R ...EB	
GAS	R512A - R515A - R520A - R525A ...EB RX515 - RX520...EB	
GAS	R1025 - R1030 - R1040 ...EB** RX1025 - R1030 ...EB**	

\*\* Servomotor SQM33.711A9 for air

# LIGHT OIL AND HEAVY OIL BURNERS WITH LMV 20...

## Electronically Operated without Inverter



### Version EA (Tecnopress, Novanta, Cinquecento)



LMV20..



AZL23



Servomotor  
AIR SQM33..



Servomotor  
LIGHT OIL-HEAVY OIL  
SQM33..

Series	Burner Type	Extra charge €
LIGHT OIL	PG60 ...EA	
LIGHT OIL	PG70 - PG81 ...EA	
LIGHT OIL	RG75 - RG91 - RG92 - RG93 ...EA	
LIGHT OIL	RG510 - RG515 - RG520 - RG525 ...EA	
LIGHT OIL	RG1030 - RG1040 ...EA*	
HEAVY OIL	PBY70 ...EA	
HEAVY OIL	RBY90 - RBY91 - RBY92 - RBY93 ...EA	
HEAVY OIL	RBY510 - RBY515 - RBY520 - RBY525 ...EA	
HEAVY OIL	RBY1025 - RBY1030 - RBY1040 ...EA*	

\* Servomotor SQM33.711A9 for air, light oil and heavy oil

# LIGHT OIL BURNERS WITH LMV 26... Electronically Operated with Inverter\*

## Version EB (Tecnopress, Novanta, Cinquecento)



LMV26..



AZL23



Servomotor  
AIR SQM33..



Servomotor  
GASOLIO SQM33..



Inverter

Series	Burner Type	Extra charge €
LIGHT OIL	PG60 - PG70 - PG81 ...EB	
LIGHT OIL	RG75 - RG91 - RG92 - RG93 ...EB	
LIGHT OIL	RG510 - RG515 - RG520 - RG525 ...EB	
LIGHT OIL	RG1030 - RG1040 ...EB**	

\*\* Servomotor SQM33.711A9 for air, light oil

# DUAL FUEL BURNERS NATURAL GAS/LIGHT OIL NATURAL GAS/HEAVY OIL WITH LMV 26...

## Electronically Operated without Inverter

Complete with leakage control



### Version EC (Tecnopress, Novanta, Cinquecento)



LMV26..



AZL23



Servomotor  
AIR SQM33..



Servomotor  
GAS  
LIGHT OIL - HEAVY OIL  
SQM33..



\*Servomotor  
HEAVY OIL  
SQM33..

Series	Burner Type	Extra charge €
DUAL FUEL GAS/LIGHT OIL	HP60...1.32/40/50/65 ...EC	
DUAL FUEL GAS/LIGHT OIL	HP72...1.50/65/80 ...EC	
DUAL FUEL GAS/LIGHT OIL	HR75A...1.50/65/80 ...EC HRX75R...1.40/50/65	
DUAL FUEL GAS/LIGHT OIL	HR91A...1.50/65/80/100 ...EC HR92A...1.50/65/80/100 ...EC HR93A...1.50/65/80/100 ...EC	
DUAL FUEL GAS/LIGHT OIL	HR512A...1.50/65/80/100 ...EC HR515A...1.50/65/80/100 ...EC HR520A...1.50/65/80/100 ...EC HR525A...1.50/65/80/100 ...EC HRX92...1.50/65/80/100 HRX512...1.50/65/80/100 ...EC HRX515...1.50/65/80/100 ...EC HRX520...1.50/65/80/100 ...EC	
DUAL FUEL GAS/LIGHT OIL	HR1025 - HR1030...1.65/80/100 ...EC** HR1040...1.80/100/125 ...EC** HRX1025 - HRX1030...1.65/80/100 ...EC**	
DUAL FUEL GAS/HEAVY OIL	KP60 - KP72 - KP73 ...EC KP91 - KP92 - KP93 ...EC KPBY72 - KPBY73 ...EC KPBY91 - KPBY92 ...EC	
DUAL FUEL GAS/HEAVY OIL	KR512 - KR515 - KR520 - KR525 ...EC	
DUAL FUEL GAS/HEAVY OIL	KRBY1030...1.65/80/100 ...EC** KRBY1040...1.80/100/125 ...EC**	

\* Only KPBY version

\*\* Servomotor SQM33.711A9 for air, light oil and heavy oil

# DUAL FUEL BURNERS NATURAL GAS/LIGHT OIL NATURAL GAS/HEAVY OIL WITH LMV 26...



## Electronically Operated with Inverter\*

### Version ED (Tecnopress, Novanta, Cinquecento)



LMV26..



AZL23



Servomotor  
AIR SQM33..



Servomotor  
GAS SQM33..



\*\*Servomotor  
HEAVY OIL  
SQM33..



Inverter

Series	Burner Type	Extra charge €
DUAL FUEL GAS/LIGHT OIL	HP60...1.32/40/50/65 ...ED	
DUAL FUEL GAS/LIGHT OIL	HP72...1.50/65/80 ...ED	
DUAL FUEL GAS/LIGHT OIL	HR75A...1.50/65/80 ...ED HRX75R...1.40/50/65	
DUAL FUEL GAS/LIGHT OIL	HR91A...1.50/65/80/100 ...ED HR92A...1.50/65/80/100 ...ED HR93A...1.50/65/80/100 ...ED HRX91...1.50/65/80/100 HRX92...1.50/65/80/100	
DUAL FUEL GAS/LIGHT OIL	HR512A...1.50/65/80/100 ...ED HR515A...1.50/65/80/100 ...ED HR520A...1.50/65/80/100 ...ED HR525A...1.50/65/80/100 ...ED HRX512...1.50/65/80/100 ...ED HRX515...1.50/65/80/100 ...ED HRX520...1.50/65/80/100 ...ED**	
DUAL FUEL GAS/LIGHT OIL	HR1025 - HR1030...1.65/80/100 ...ED*** HR1040...1.80/100/125 ...ED*** HRX1025 - HRX1030...1.65/80/100 ...ED***	
DUAL FUEL GAS/HEAVY OIL	KP60 - KP72 - KP73...ED KP91 - KP92 - KP93 ...ED KPBY72 - KPBY73 ...ED KPBY91 - KPBY92 ...ED	
DUAL FUEL GAS/HEAVY OIL	KR512 - KR515 - KR520 - KR525 ...ED KRBY512 - KRBY515 - KRBY520 - KRBY525 ...ED	
DUAL FUEL GAS/HEAVY OIL	KRBY1030...1.65/80/100...ED *** KRBY1040...1.80/100/125...ED ***	

\*\* Only KPBY version

\*\*\* Servomotor SQM33.711A9 for air, light oil and heavy oil



# ELECTRONIC SUPERVISION AND CONTROL SYSTEM WITH LMV 5... for medium and high output burners



CIB UNIGAS S.p.A has adopted, in its series of burners, an electronic system of command and control. This innovative system, divided into two types of devices, can be used both for civil and industrial applications (up to 80MW) and for burners which use a single or mixed fuel and with continuous or intermittent operation. This system allows the control of the various elements that play an important role in the correct mixture of the fuel and combustion air.

This solution permits to achieve the maximum precision in the combustion adjustment.

The system can also be expanded through interface with an oxygen control probe and/or a fan speed adjustment inverter in order to improve the performance. In this way we can obtain high savings both in terms of fuel and electric power required.

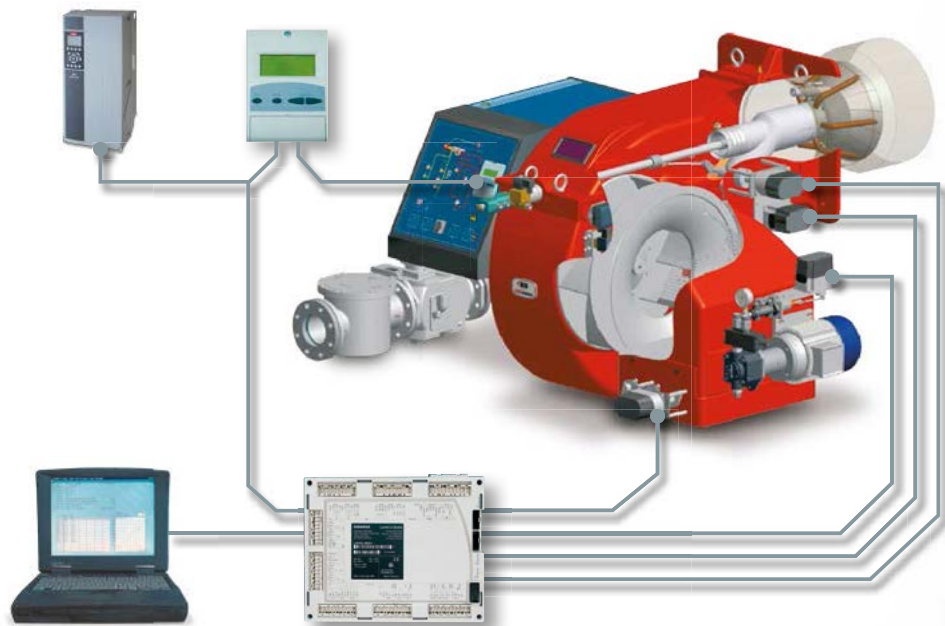
The command and control system is composed of a twin microprocessor electronic unit for the integration of all the burner command and control functions and of a programming and adjustment local unit.

Integrated functions include air/fuel ratio adjustment (with work point configuration possibility), PID temperature or pressure regulator, gas valve leakage control, adjustable cycle times, pre-configured fuel trains, and input/output configuration.

The programming levels are protected by password for the three types of user (manufacturer, servicing personnel, final user); dialogue between the servocontrol and the sensors is performed using twin-channel CAN Bus protocol in order to guarantee the greatest safety and reliability, and the unit can be installed

directly in the machine or inside a separate electric control panel positioned no further away than 100 meters.

Using the appropriate designated optional software, the system can be configured directly by PC.



## Flame control box integrated functions:

- Burner control;
- Electronic cam;
- Power regulator;
- Gas valve leakage control system;
- Oxygen control;
- Inverter control;
- Dialogue with BMS systems or PLC (MOD Bus);
- Burner commissioning and configuration via PC-tool;
- Simple programming with AZL and PC-tool;
- Complete self-diagnostic function (error memory, number of firings, burner operation time, clock, etc.);
- 3 levels of parameter access: (manufacturer, servicing personnel, final user);
- Remote diagnostics;
- All components can be easily interchanged;
- Parameter upgrading with PC-tool;
- Dialogue with MOD Bus protocol.

## WITH LMV 5... MICROPROCESSOR for medium and high output burners



Model	Series	Fuel	LMV51.100	LMV51.300	LMV52
<b>ES</b>	TECNOPRESS - NOVANTA CINQUECENTO - MILLE	gas	•		
<b>ES</b>	TECNOPRESS - NOVANTA CINQUECENTO - MILLE	liquid fuel	•		
<b>ES</b>	TECNOPRESS - NOVANTA CINQUECENTO - MILLE	dual fuel burners	•		
<b>EO</b>	TECNOPRESS - NOVANTA CINQUECENTO - MILLE	gas			•
<b>EO</b>	TECNOPRESS - NOVANTA CINQUECENTO - MILLE	dual fuel burners			•
<b>EI</b>	TECNOPRESS - NOVANTA CINQUECENTO - MILLE	gas		•	
<b>EI</b>	TECNOPRESS - NOVANTA CINQUECENTO - MILLE	liquid fuel		•	
<b>EI</b>	TECNOPRESS - NOVANTA CINQUECENTO - MILLE	dual fuel burners		•	
<b>EK</b>	TECNOPRESS - NOVANTA CINQUECENTO - MILLE	gas			•
<b>EK</b>	TECNOPRESS - NOVANTA CINQUECENTO - MILLE	dual fuel burners			•



						
	AZL 5x	SQM4x air	SQM4x gas	SQM4x liquid fuel	O <sub>2</sub> PROBE	INVERTER
	•	•	•			
	•	•		•		
	•	•	•	•		
	•	•	•		•	
	•	•	•	•	•	
	•	•	•			•
	•	•		•		•
	•	•	•	•		•
	•	•	•		•	•
	•	•	•	•	•	•

# BURNERS WITH LMV 5... Micro Processor

## Version ES (Novanta, Cinquecento, Mille)



LMV51.100



AZL5



SQM4..



SQM4..

### Electronically operated burners without O<sub>2</sub> trim and inverter.

Series	Burner Type	Extra charge €
GAS	P61 - P65 - P71 - R75A ...ES R91A - R92A - R93A - R512A - R515A - R520A - R525A ...ES R1025 - R1030..DN65 - R1030 - R1040 ...ES LX60 - LX72 - RX75R - RX75 ...ES RX92R - RX92 - RX515 - RX520 ...ES RX1025 - RX1030 ...ES	
LIGHT OIL	RG91 - RG92 - RG93 - RG510 - RG515 ...ES RG520 - RG525 - RG1030 - RG1040 ...ES	
HEAVY OIL	PN91 - PN92 - PN93 - RN510 - RN515 ...ES RN520 - RN525 - RN1030 - RN1040 ...ES PBY70 - PBY90 - PBY91 - PBY92 - PBY93 ...ES RBY510 - RBY515 - RBY520 - RBY525 ...ES RBY1025 - RBY1030 - RBY1040 ...ES	

## Version ES (Novanta, Cinquecento, Mille)



LMV51.100



AZL5



SQM4..



SQM4..



SQM4..

### Electronically operated burners without O<sub>2</sub> trim and inverter.

Series	Burner Type	Extra charge €
DUAL FUEL GAS/LIGHT OIL	HR91A - HR92A - HR93A - HR512A - HR515A - HR520A - HR525A ...ES HR1025 - HR1030..DN65 - HR1030 - HR1040 ...ES HRX512 - HRX515 - HRX520 ...ES HRX1025 - HRX1030 ...ES	
DUAL FUEL GAS/HEAVY OIL	KP91 - KP92 - KP93 - KR512 - KR515 - KR520 - KR525 ...ES KR1030 - KR1040 ...ES KRBY1025 - KRBY1030 - KRBY1040 ...ES	



## Version EO (Novanta, Cinquecento, Mille)



LMV52..



AZL5



SQM4..



SQM4..



O<sub>2</sub> PROBE..

**Electronically operated burners with O<sub>2</sub> trim without inverter.  
With oxygen probe**

Series	Burner Type	Extra charge €
GAS	P61 - P65 - P71 - R75A ...EO R91A - R92A - R93A - R512A - R515A - R520A ...EO R525A - R1025 - R1030..DN65 - R1030 - R1040 ...EO LX60 - LX72 - RX75R - RX75 ...EO RX92R - RX92 - RX515 - RX520 ...EO RX1025 - RX1030 ...EO	
LIGHT OIL	RG91 - RG92 - RG93 - RG510 - RG515 - RG520 - RG525 ...EO RG1030 - RG1040 ...EO	

## Version EO (Novanta, Cinquecento, Mille)



LMV52..



AZL5



SQM4..



SQM4..



SQM4..



O<sub>2</sub> PROBE..

**Electronically operated burners complete with inverter without oxygen trim\*.  
With oxygen probe**

Series	Burner Type	Extra charge €
DUAL FUEL GAS/LIGHT OIL	HR91A - HR92A - HR93A - HR512A - HR515A - HR520A ...EO HR525A - HR1025 - HR1030..DN65 - HR1030 - HR1040 ...EO HRX512 - HRX515 - HRX520 ...EO HRX1025 - HRX1030 ...EO	
DUAL FUEL GAS/HEAVY OIL *	KP91 - KP92 - KP93 - KR512 - KR515 - KR520 ...EO KR525 - KR1025 - KR1030..DN65 - KR1030 - KR1040 ...EO	

(\* ) The O<sub>2</sub> trim can be performed only when working with gas.

# GAS WITH LMV 5... Micro Processor

## Version EI (Novanta, Cinquecento, Mille)



LMV51.300



AZL5



SQM4..



SQM4..



INVERTER

**Electronically operated burners complete with inverter\* without oxygen trim.**

Series	Burner Type	Extra charge €
GAS	P61 - P65 - P71 - R75A ...EI R91A - R92A - R93A - R512A - R515A - R520A - R525A ...EI R1025 - R1030..DN65 - R1030 - R1040 ...EI LX60 - LX72 - RX75R - RX75 ...EI RX92R - RX92 - RX515 - RX520 ...EI RX1025 - RX1030 ...EI	
LIGHT OIL	RG91 - RG92 - RG93 - RG510 - RG515 - RG520 - RG525 ...EI RG1030 - RG1040 ...EI	
HEAVY OIL	PN91 - PN92 - PN93 - RN510 - RN515 - RN520 - RN525 ...EI RN1030 - RN1040 ...EI PBY70 - PBY90 - PBY91 - PBY92 - PBY93 ...EI RBY510 - RBY515 - RBY520 - RBY525 ...EI RBY1025 - RBY1030 - RBY1040 ...EI	

## Version EI (Novanta, Cinquecento, Mille)



LMV51.300



AZL5



SQM4..



SQM4..



SQM4..



INVERTER

**Electronically operated burners complete with inverter\* NO oxygen trim.**

Series	Burner Type	Extra charge €
DUAL FUEL GAS/LIGHT OIL	HR91A - HR92A - HR93A - HR512A - HR515A - HR520A - HR525A ...EI HR1025 - HR1030..DN65 - HR1030 - HR1040 ...EI HRX512 - HRX515 - HRX520 ...EI HRX1025 - HRX1030 ...EI	
DUAL FUEL GAS/HEAVY OIL	KP91 - KP92 - KP93 - KR512 - KR515 - KR520 ...EI KR525 - KR1025 - KR1030..DN65 - KR1030 - KR1040 ...EI	



## Version EK (Novanta, Cinquecento, Mille)



LMV52..



AZL5



SQM4..



SQM4..



O<sub>2</sub> PROBE..



INVERTER

**Electronically operated burners complete with inverter O<sub>2</sub> trim.  
With oxygen probe**

Series	Burner Type	Extra charge €
GAS	P61 - P65 - P71 - R75A ...EK R91A - R92A - R93A - R512A - R515A - R520A ...EK R525A - R1025 - R1030..DN65 - R1030 - R1040 ...EK LX60 - LX72 - RX75R - RX75 ...EK RX92R - RX92 - RX515 - RX520 ...EK RX1025 - RX1030 ...EK	
LIGHT OIL	RG91 - RG92 - RG93 - RG510 - RG515 ...EK RG520 - RG525- RG1030 - RG1040 ...EK	

## Version EK (Novanta, Cinquecento, Mille)



LMV52..



AZL5



SQM4..



SQM4..



SQM4..



O<sub>2</sub> PROBE..



INVERTER

**Electronically operated burners complete with inverter O<sub>2</sub> trim\*  
With oxygen probe**

Series	Burner Type	Extra charge €
DUAL FUEL GAS/LIGHT OIL	HR91A - HR92A - HR93A - HR512A - HR515A - HR520A ...EK HR525A - HR1025 - HR1030..DN65 - HR1030 - HR1040 ...EK HRX512 - HRX515 - HRX520 ...EK HRX1025 - HRX1030 ...EK	
DUAL FUEL GAS/HEAVY OIL**	KP91 - KP92 - KP93 - KR512 - KR515 - KR520 ...EK KR525 - KR1025 - KR1030..DN65 - KR1030 - KR1040 ...EK KRBY1025 - KRBY1030 - KRBY1040 ...EK	

\* The O<sub>2</sub> trim can be performed only when working with gas.



# gas burners

## idea series

**NG35** - TN  
**NG70** - TN/AB  
**NG90** - TN/AB  
**NG120** - TN  
**NG140** - TN/AB/PR/MD  
**NG200** - TN/AB/PR/MD  
**NG280** - TN/AB/PR/MD  
**NG350** - TN/PR/MD  
**NG400** - TN/PR/MD  
**NG550** - TN/PR/MD

## tecnopress series

**P61** - AB/PR/MD  
**P65** - AB/PR/MD  
**P71** - AB/PR/MD  
**R75A** - AB/PR/MD

### Type

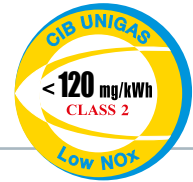
Type	Power Range (kW)
R1040	(from 770 to 5.200 kW)
R1030	(from 770 to 5.200 kW)
R1025	(from 770 to 5.200 kW)
R525A	(from 770 to 5.200 kW)
R520A	(from 600 to 4.500 kW)
R515A	(from 770 to 5.200 kW)
R512A	(from 600 to 4.500 kW)
R93A	(from 550 to 4.100 kW)
R92A	(from 480 to 3.050 kW)
R91A	(from 480 to 2.670 kW)
R75A	(from 320 to 2.050 kW)
P71	(from 300 to 1.650 kW)
P65	(from 270 to 970 kW)
P61	(from 160 to 800 kW)
NG550	(from 160 to 570 kW)
NG400	(from 115 to 420 kW)
NG350	(from 80 to 330 kW)
NG280	(from 65 to 300 kW)
NG200	(from 42 to 200 kW)
NG140	(from 35 to 170 kW)
NG120	(from 60 to 120 kW)
NG90	(from 22 to 85 kW)
NG70	(from 19 to 70 kW)
NG35	(from 20 to 41 kW)





# idea series

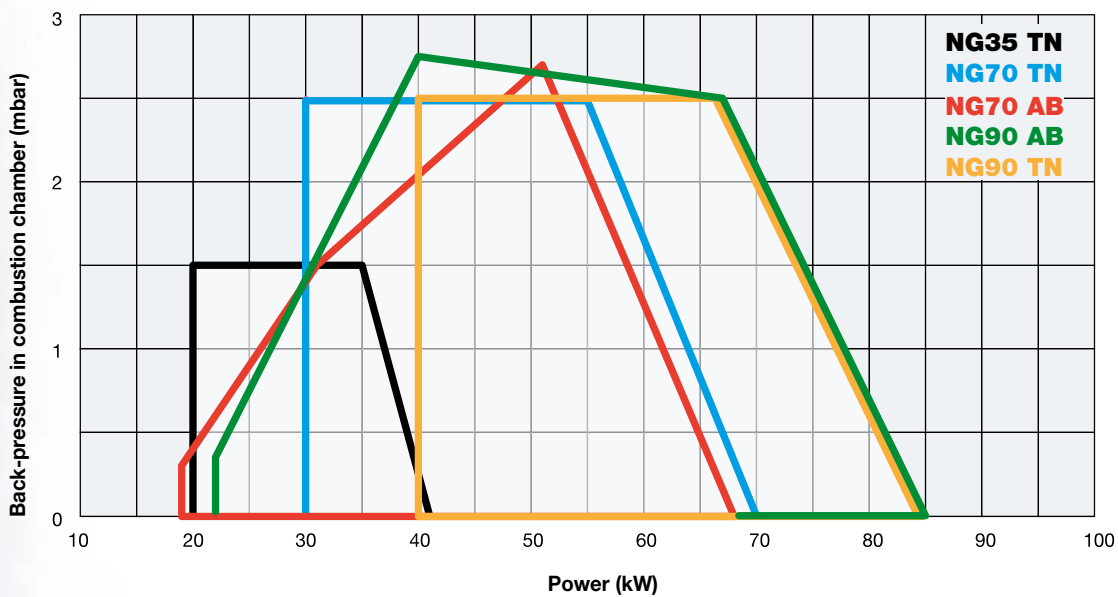
NG35 NG70 NG90



GAS

These gas burners, equipped with tangential ventilation, represent, in terms of dimension and capacity, the smallest burners of the new line IDEA - gas **Low NO<sub>x</sub> Class 2 (< 120 mg/kWh)** and are available in five different aluminium housing.

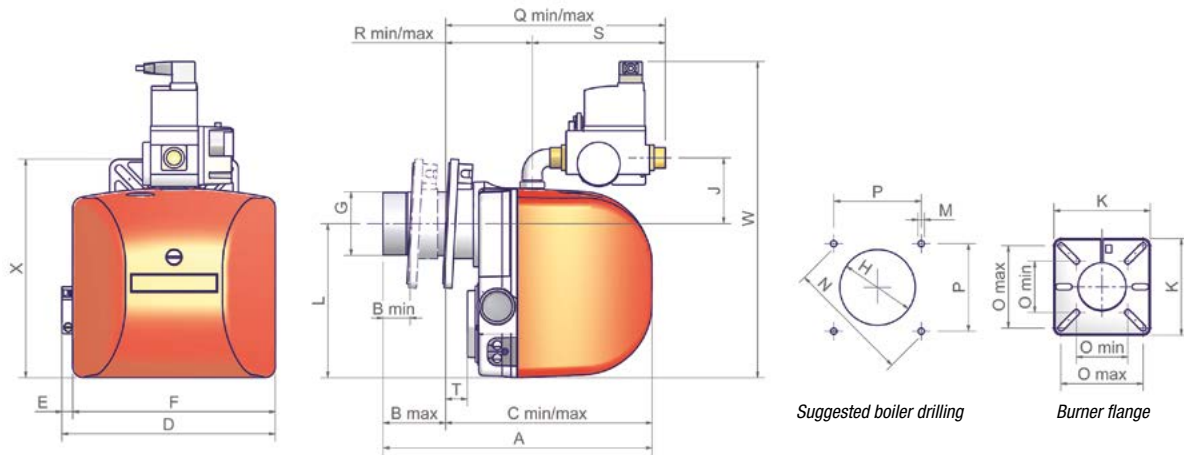
NG35 burners can be arranged to use external combustion air upon request. In this case the burners will be supplied with an airtight air intake that can be linked outside the location of the installation through a duct with an extension up to ten meters.



TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Gas connections Rp
		min.	max.			
NG35	M-.TN.x.IT.A.0.xx	20	41	230 V 1N ac	0,075	1/2"
NG70	M-.TN.x.IT.A.0.xx	30	70	230 V 1N ac	0,1	1/2"
NG70	M-.AB.x.IT.A.0.xx	19	68	230 V 1N ac	0,1	1/2"
NG90	M-.TN.x.IT.A.0.xx	40	85	230 V 1N ac	0,1	1/2" - 3/4"
NG90	M-.AB.x.IT.A.0.xx	22	85	230 V 1N ac	0,1	1/2" - 3/4"

For the configuration of the gas train, see pages 110-111.



Type	Packaging dimensions* (mm)			
	l	p	h	kg
NG35	290	260	490	10
NG70	400	300	520	14
NG90	400	300	520	14

(\*) Approximate values

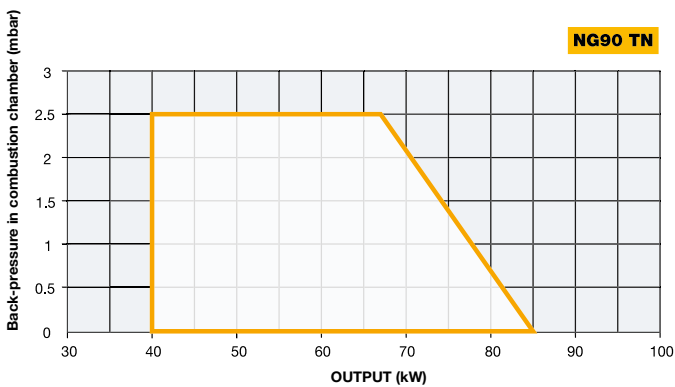
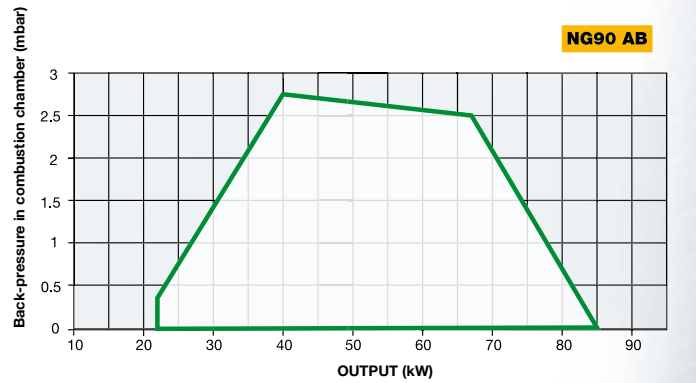
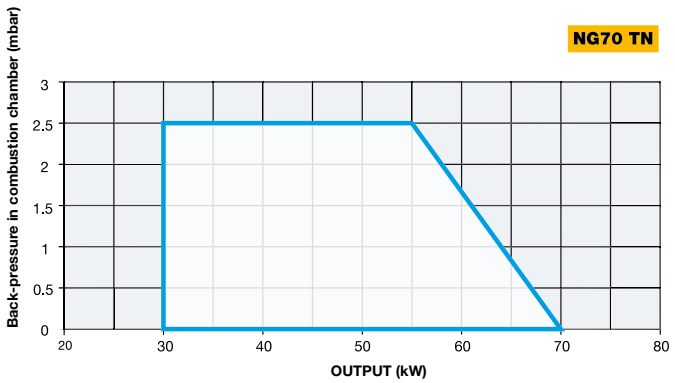
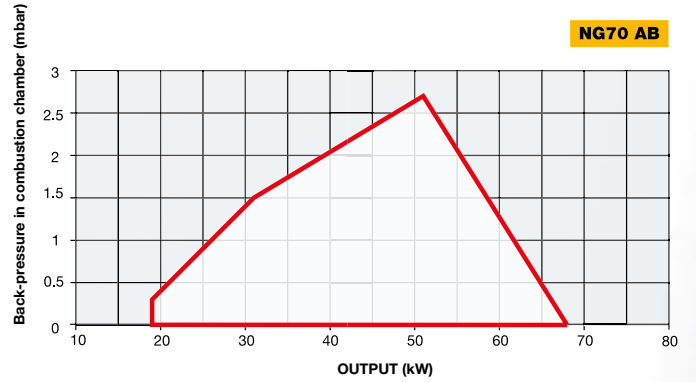
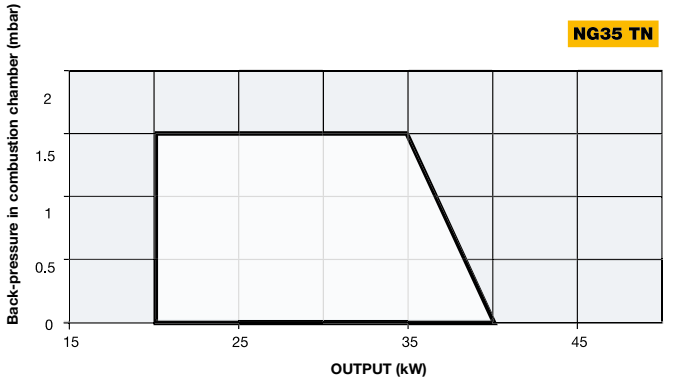
Type	Model	Overall dimensions* (mm)																										
		A		B		C		D	E	F	G	H	J	K	L	M	N	O		P	Q		R		S	T	W	X
		min.	max.	min.	max.	min.	max.											min.	max.		min.	max.	min.	max.	min.			
NG35	M-.TN.S.IT.A.0.10	338	34	78	260	305	269	14	255	80	95	86	162	194	M8	158	86	138	112	277	322	109	154	168	27	400	275	
NG35	M-.TN.L.IT.A.0.10	416	34	156	260	383	269	14	255	80	95	86	162	194	M8	158	86	138	112	277	400	109	232	168	27	400	275	
NG70	M-.xx.S.IT.A.0.10	365	34	78	287	332	305	14	291	80	95	99	162	218	M8	158	86	138	112	285	330	118	163	168	14	438	299	
NG70	M-.xx.L.IT.A.0.10	443	34	156	287	410	305	14	291	80	95	99	162	218	M8	158	86	138	112	285	408	118	241	168	14	438	299	
NG90	M-.xx.S.IT.A.0.10	365	34	70	295	331	305	14	291	80	95	99	162	218	M8	158	86	138	112	293	329	125	203	168	2	438	299	
NG90	M-.xx.L.IT.A.0.10	443	34	148	295	409	305	14	291	80	95	99	162	218	M8	158	86	138	112	293	407	125	239	168	2	438	299	

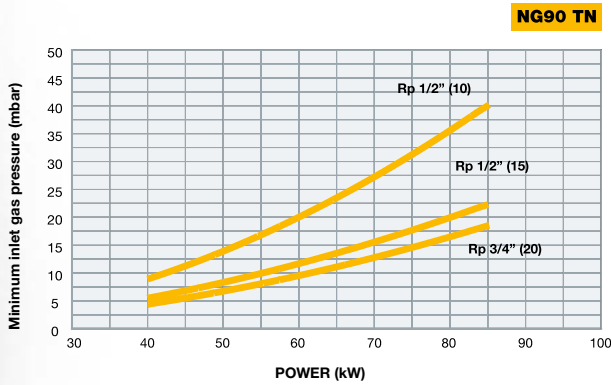
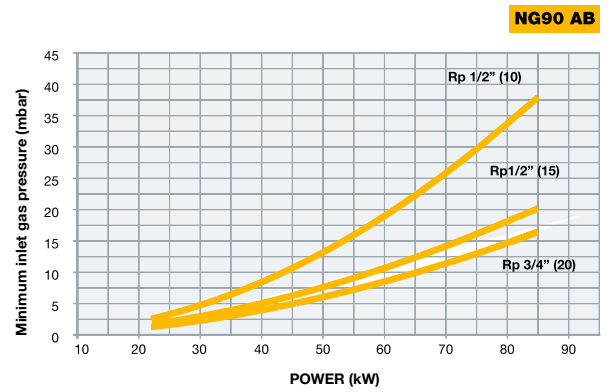
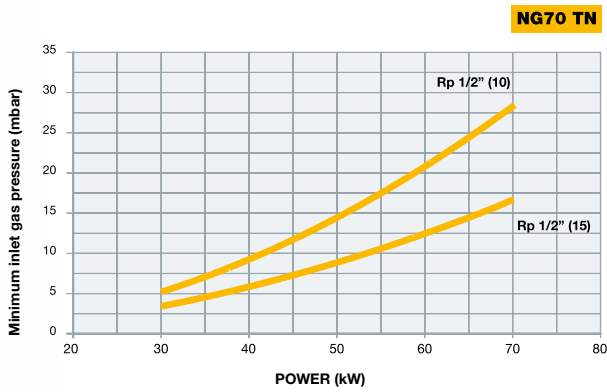
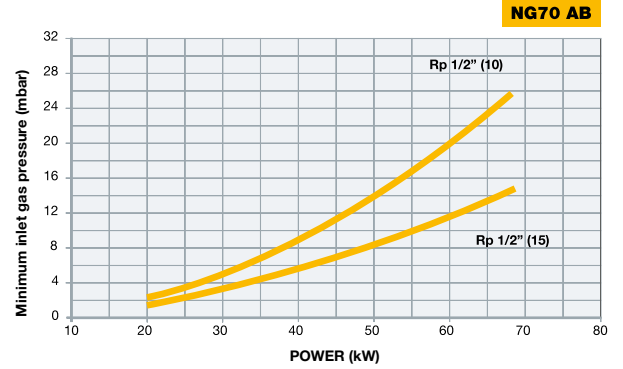
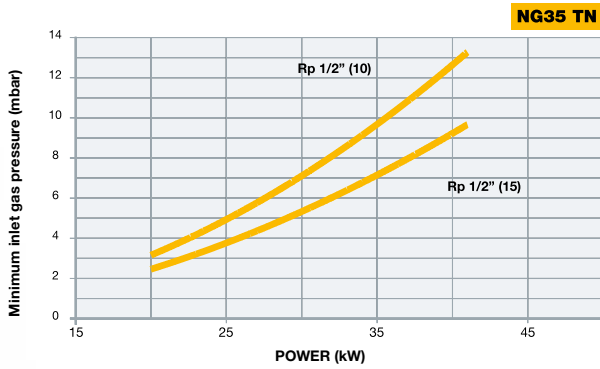
(\*) Approximate values

**MECHANICAL OPERATION**

Model	Gas train	Operation	NG35		NG70		NG90	
			Code	Price €	Code	Price €	Code	Price €
M-.TN.S.IT.A.0.10	1/2"	TN	024010141		025010141		025010341	
M-.TN.L.IT.A.0.10	1/2"	TN	024010241		025010241		025010441	
M-.TN.S.IT.A.0.15	1/2"	TN	024011041		025010941		025010541	
M-.TN.L.IT.A.0.15	1/2"	TN	024011141		025011041		025010641	
M-.TN.S.IT.A.0.20	3/4"	TN	-		-		025010741	
M-.TN.L.IT.A.0.20	3/4"	TN	-		-		025010841	
M-.TN.S.IT.Z.0.10 ♦	1/2"	TN	024010341		-		-	
M-.TN.L.IT.Z.0.10 ♦	1/2"	TN	024010441		-		-	
M-.TN.S.IT.Z.0.15 ♦	1/2"	TN	024011241		-		-	
M-.TN.L.IT.Z.0.15 ♦	1/2"	TN	024011341		-		-	
M-.AB.S.IT.A.0.10	1/2"	AB	-		025010142		025010342	
M-.AB.L.IT.A.0.10	1/2"	AB	-		025010242		025010442	
M-.AB.S.IT.A.0.15	1/2"	AB	-		025010942		025010542	
M-.AB.L.IT.A.0.15	1/2"	AB	-		025011042		025010642	
M-.AB.S.IT.A.0.20	3/4"	AB	-		-		025010742	
M-.AB.L.IT.A.0.20	3/4"	AB	-		-		025010842	

♦ Burner equipped with external air inlet.  
In compliance with DIRECTIVE 2009/142/CE

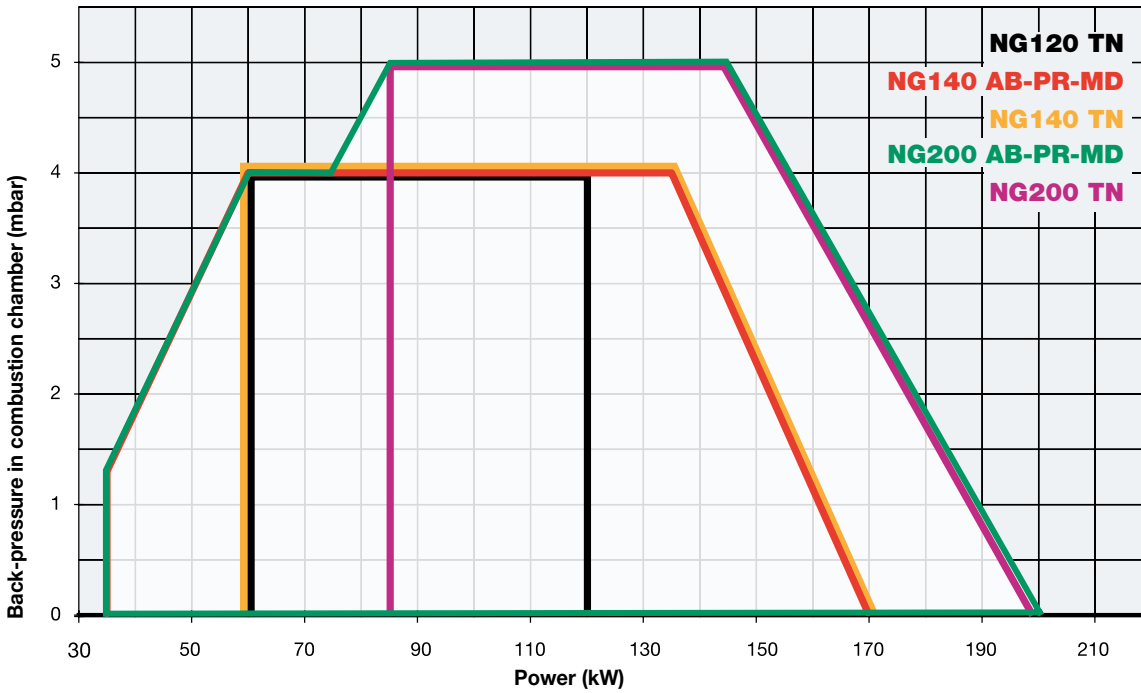




**Attention:** The graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.



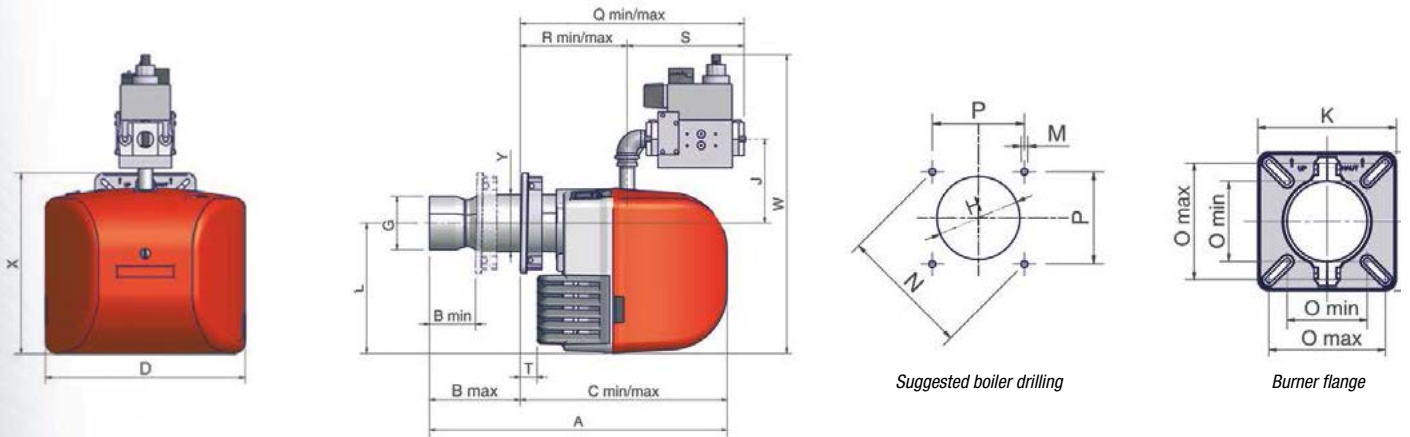
With the new line IDEA **Low NO<sub>x</sub> Class 2 (< 120 mg/kWh)** with tangential ventilation, CIB Unigas presents to the market a new concept of modern and functional burners for small and medium appliances. These burners are particular suitable to work on high efficiency boilers. The burner is designed to be aesthetic and functional but at the same time it gives prominence to innovative technologies.



TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Gas connections Rp
		min.	max.			
<b>NG120</b>	M-.TN.x.IT.A.0.15	60	120	230 V 1N ac	0,18	1/2"
<b>NG140</b>	M-.TN.x.IT.A.0.xx	60	170	230 V 1N ac	0,18	3/4" - 1"
<b>NG140</b>	M-.xx.x.IT.A.0.xx	35	170	230 V 1N ac	0,18	3/4" - 1"
<b>NG200</b>	M-.TN.x.IT.A.0.xx	85	200	230 V 1N ac	0,18	3/4" - 1"
<b>NG200</b>	M-.xx.x.IT.A.0.xx	42	200	230 V 1N ac	0,18	3/4" - 1"

For the configuration of the gas train, see pages 110-111.



Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>NG120/140/200 S</b>	600	370	400	25
<b>NG120/140/200 L</b>	750	370	400	25

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																								
		A	B		C		D	G	H	J	K	L	M	N	O		P		Q		R		S	T	W	X
		min. max.		min. max.											min. max.	min. max.	min. max.	min. max.	min. max.	min.						
<b>NG120</b>	M-.xx.S.IT.A.0.15	560	85	170	390	475	374	101	128	161	188	245	M8	188	109	158	133	382	467	202	287	180	32	537	340	Ø108
<b>NG120</b>	M-.xx.L.IT.A.0.15	660	85	270	390	575	374	101	128	161	188	245	M8	188	109	158	133	382	567	202	387	180	32	537	340	Ø108
<b>NG140</b>	M-.xx.S.IT.A.0.20	560	85	170	390	475	374	101	128	161	188	245	M8	188	109	158	133	382	467	202	287	180	32	537	340	Ø108
<b>NG140</b>	M-.xx.L.IT.A.0.20	660	85	270	390	575	374	101	128	161	188	245	M8	188	109	158	133	382	567	202	387	180	32	537	340	Ø108
<b>NG140</b>	M-.xx.S.IT.A.0.25	560	85	170	390	475	374	101	128	161	188	245	M8	188	109	158	133	426	511	202	287	224	32	565	340	Ø108
<b>NG140</b>	M-.xx.L.IT.A.0.25	660	85	270	390	575	374	101	128	161	188	245	M8	188	109	158	133	426	611	202	387	224	32	565	340	Ø108
<b>NG200</b>	M-.xx.S.IT.A.0.20	560	85	170	390	475	374	117	137	161	188	245	M8	188	109	158	133	382	467	202	287	180	32	537	340	Ø108
<b>NG200</b>	M-.xx.L.IT.A.0.20	660	85	270	390	575	374	117	137	161	188	245	M8	188	109	158	133	382	567	202	387	180	32	537	340	Ø108
<b>NG200</b>	M-.xx.S.IT.A.0.25	560	85	170	390	475	374	117	137	161	188	245	M8	188	109	158	133	426	511	202	287	224	32	565	340	Ø108
<b>NG200</b>	M-.xx.L.IT.A.0.25	660	85	270	390	575	374	117	137	161	188	245	M8	188	109	158	133	426	611	202	387	224	32	565	340	Ø108

(\*) Approximate values




**MECHANICAL OPERATION**

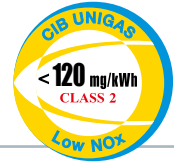
Model	Gas train	Operation	NG120		NG140		NG200	
			Code	Price €	Code	Price €	Code	Price €
M-.TN.S.IT.A.0.15	½"	TN	026010141		-		-	
M-.TN.L.IT.A.0.15	½"	TN	026010241		-		-	
M-.TN.S.IT.A.0.20	¾"	TN	-		026010341		026010941	
M-.TN.L.IT.A.0.20	¾"	TN	-		026010441		026011041	
M-.TN.S.IT.A.0.25	1"	TN	-		026010541		026011141	
M-.TN.L.IT.A.0.25	1"	TN	-		026010641		026011241	
M-.AB.S.IT.A.0.20	¾"	AB	-		026010342		026010942	
M-.AB.L.IT.A.0.20	¾"	AB	-		026010442		026011042	
M-.AB.S.IT.A.0.25	1"	AB	-		026010542		026011142	
M-.AB.L.IT.A.0.25	1"	AB	-		026010642		026011242	
M-.PR.S.IT.A.0.25	1"	PR	-		026010543		026011143	
M-.PR.L.IT.A.0.25	1"	PR	-		026010643		026011243	
M-.MD.S.IT.A.0.25	1"	MD(*)	-		026010544		026011144	
M-.MD.L.IT.A.0.25	1"	MD(*)	-		026010644		026011244	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).

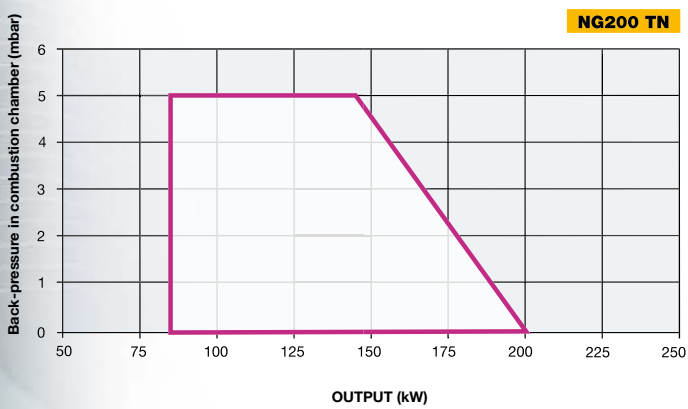
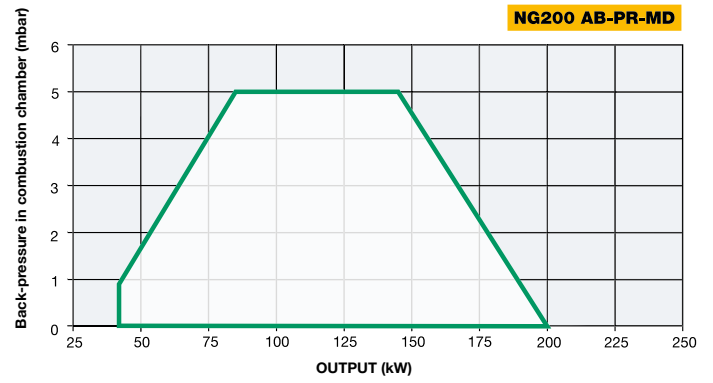
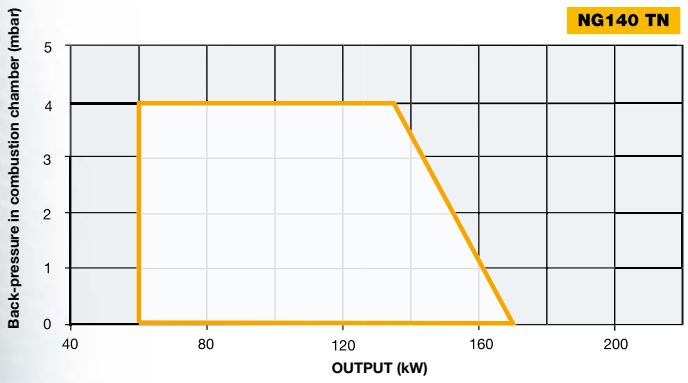
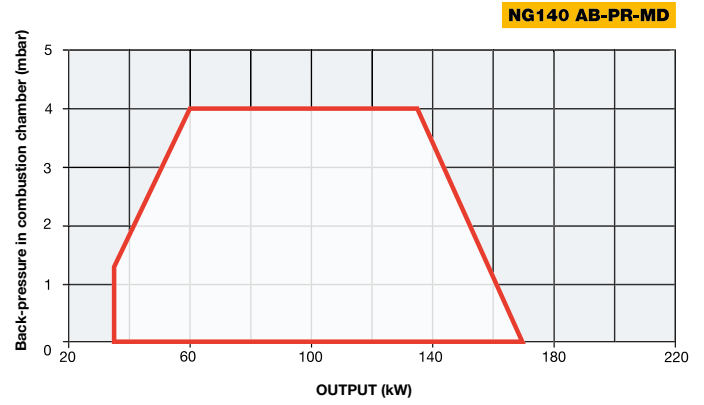
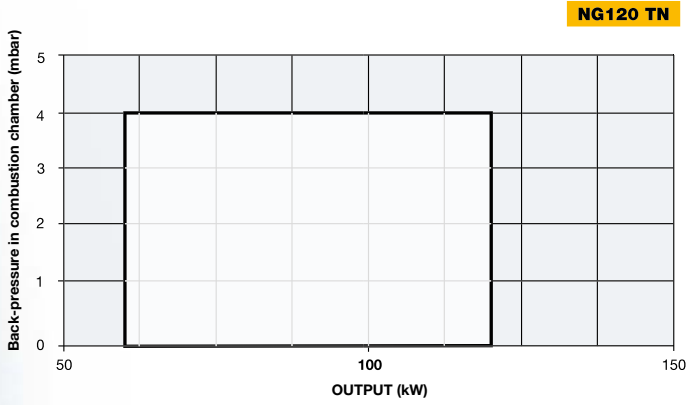
In compliance with DIRECTIVE 2009/142/CE

# idea series

NG120 NG140 NG200

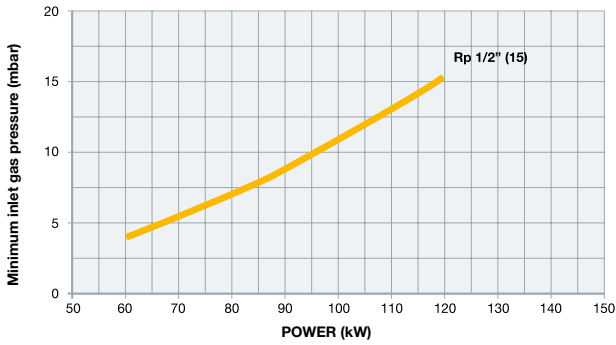


GAS

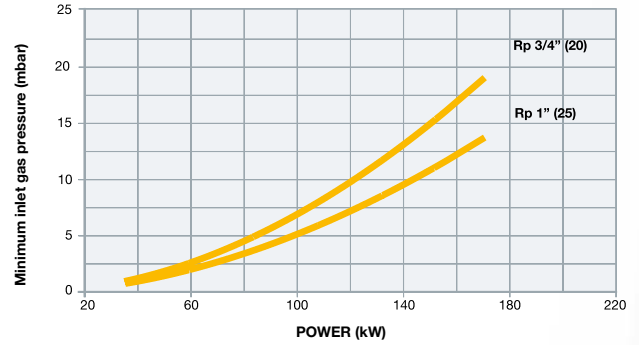




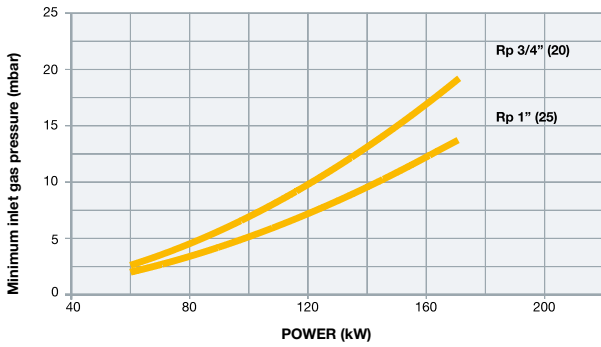
**NG120 TN**



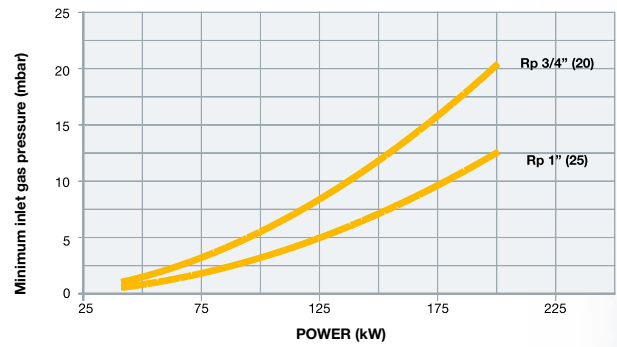
**NG140 AB-PR-MD**



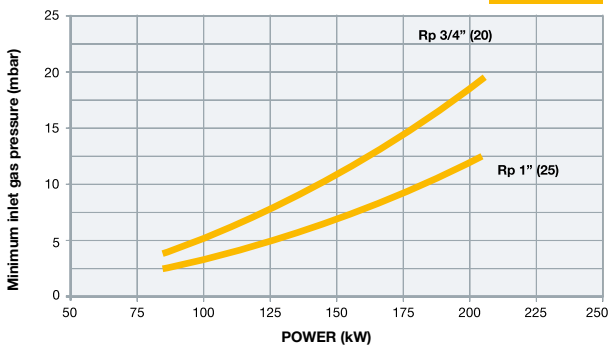
**NG140 TN**



**NG200 AB-PR-MD**



**NG200 TN**



**Attention:** The graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.

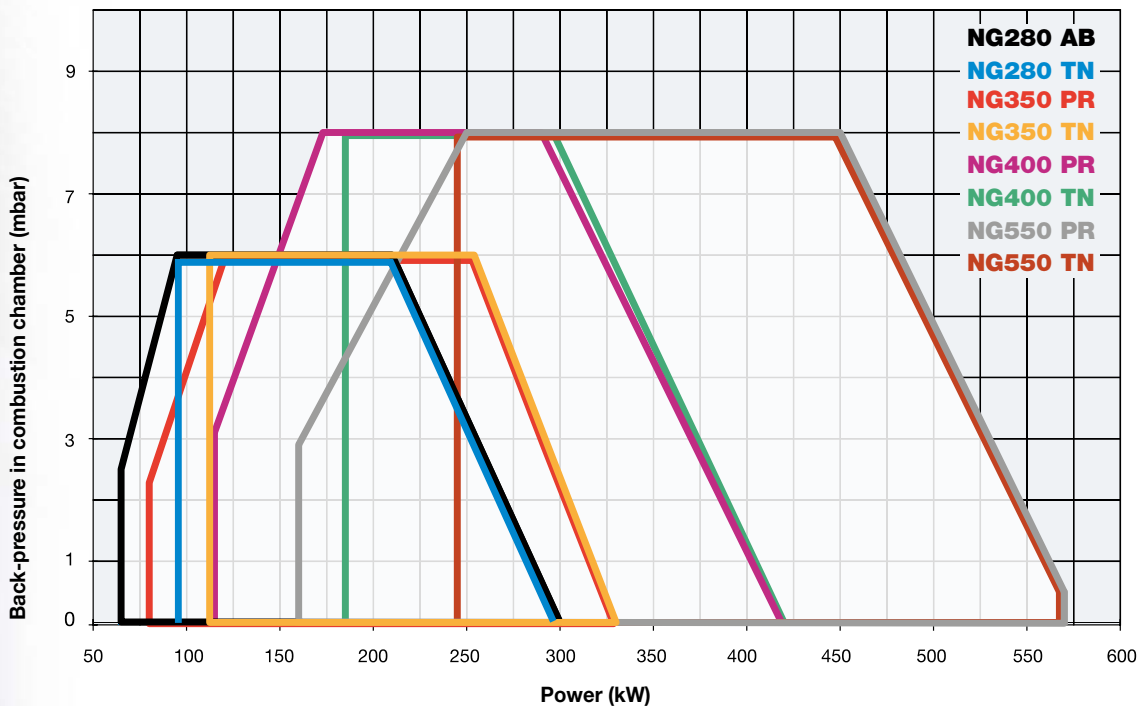
# idea series

NG280 NG350 NG400 NG550



GAS

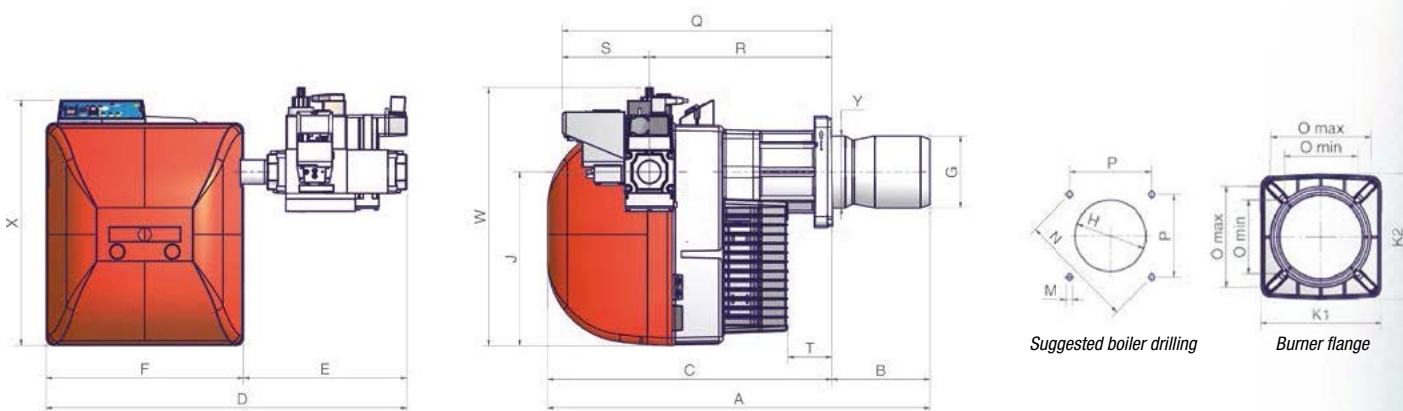
With the new line **IDEA Low NO<sub>x</sub> Class 2 (< 120 mg/kWh)** with tangential ventilation, CIB Unigas presents to the market a new concept of modern and functional burners for small and medium appliances. These burners, which are the most powerful of the range IDEA, are particularly suitable to work on boilers with high back pressure.



TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Gas connections Rp
		min.	max.			
NG280	M-.TN.x.IT.A.0.xx	95	300	230 V 1N ac	0,25	1" - 1"1/4 - 1"1/2
NG280	M-.xx.x.IT.A.0.xx	65	300	230 V 1N ac	0,25	1" - 1"1/4 - 1"1/2
NG350	M-.TN.M.IT.A.0.xx	115	330	230 V 1N ac	0,37	1" - 1"1/4 - 1"1/2
NG350	M-.xx.M.IT.A.0.xx	80	330	230 V 1N ac	0,37	1" - 1"1/4 - 1"1/2
NG400	M-.TN.M.IT.A.0.xx	185	420	230 V 1N ac	0,37	1" - 1"1/4 - 1"1/2 - 2"
NG400	M-.xx.M.IT.A.0.xx	115	420	230 V 1N ac	0,37	1" - 1"1/4 - 1"1/2 - 2"
NG550	M-.TN.x.IT.A.0.xx	245	570	230 V 1N ac	0,62	1"1/4 - 1"1/2 - 2"
NG550	M-.xx.x.IT.A.0.xx	160	570	230 V 1N ac	0,62	1"1/4 - 1"1/2 - 2"

For the configuration of the gas train, see pages 110-111.



Type	Packaging dimensions* (mm)			
	l	p	h	kg
NG280/350/400	1120	440	580	42
NG550	1200	460	630	55

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																								
		A		B		C	D	E	F	G	H	J	K		M	N	O		P	Q	R	S	T	W	X	Y
		stand.	exten.	stand.	exten.								1	2			min.	max.								
NG280	M-.TN.x.IT.A.0.25/32	733	878	163	308	570	596	200	396	117	137	348	215	223	M10	219	131	179	155	541	366	175	128	508	491	108
NG280	M-.xx.x.IT.A.0.40	733	878	163	308	570	726	330	396	117	137	348	215	223	M10	219	131	179	155	541	366	175	128	517	491	108
NG350	M-.xx.M.IT.A.0.25/32	748	878	178	308	570	596	200	396	125	164	348	215	223	M10	219	131	179	155	541	366	175	89	508	491	144
NG350	M-.xx.M.IT.A.0.40	748	878	178	308	570	726	330	396	125	164	348	215	223	M10	219	131	179	155	541	366	175	89	517	491	144
NG400	M-.xx.M.IT.A.0.25/32	768	898	198	328	570	596	200	396	144	164	348	215	223	M10	219	131	179	155	541	366	175	89	508	491	144
NG400	M-.xx.M.IT.A.0.40	768	898	198	328	570	726	330	396	144	164	348	215	223	M10	219	131	179	155	541	366	175	89	517	491	144
NG400	M-.xx.M.IT.A.0.50	768	898	198	328	570	726	330	396	144	164	348	215	223	M10	219	131	179	155	541	366	175	89	567	491	144
NG550	M-.xx.x.IT.A.0.32	843	943	253	353	590	671	245	426	158	178	384	241	241	M10	247	157	192	174	552	377	175	69	543	533	155
NG550	M-.xx.x.IT.A.0.40	843	943	253	353	590	744	318	426	158	178	384	241	241	M10	247	157	192	174	552	377	175	69	553	533	155
NG550	M-.xx.x.IT.A.0.50	843	943	253	353	590	744	318	426	158	178	384	241	241	M10	247	157	192	174	552	377	175	69	603	533	155

\* Approximate values

**MECHANICAL OPERATION**

Model	Gas train	Operation	NG280		NG350	
			Code	Price €	Code	Price €
M-.TN.S.IT.A.0.25	1"	TN	027011741		-	
M-.TN.L.IT.A.0.25	1"	TN	027011841		-	
M-.TN.S.IT.A.0.32	1"¼	TN	027011941		-	
M-.TN.L.IT.A.0.32	1"¼	TN	027012041		-	
M-.TN.S.IT.A.0.40	1"½	TN	027012141		-	
M-.TN.L.IT.A.0.40	1"½	TN	027012241		-	
M-.AB.S.IT.A.0.25	1"	AB	027011742		-	
M-.AB.L.IT.A.0.25	1"	AB	027011842		-	
M-.AB.S.IT.A.0.32	1"¼	AB	027011942		-	
M-.AB.L.IT.A.0.32	1"¼	AB	027012042		-	
M-.AB.S.IT.A.0.40	1"½	AB	027012142		-	
M-.AB.L.IT.A.0.40	1"½	AB	027012242		-	
M-.PR.S.IT.A.0.25	1"	PR	027011743		-	
M-.PR.L.IT.A.0.25	1"	PR	027011843		-	
M-.PR.S.IT.A.0.32	1"¼	PR	027011943		-	
M-.PR.L.IT.A.0.32	1"¼	PR	027012043		-	
M-.PR.S.IT.A.0.40	1"½	PR	027012143		-	
M-.PR.L.IT.A.0.40	1"½	PR	027012243		-	
M-.MD.S.IT.A.0.25	1"	MD	027011744		-	
M-.MD.L.IT.A.0.25	1"	MD	027011844		-	
M-.MD.S.IT.A.0.32	1"¼	MD	027011944		-	
M-.MD.L.IT.A.0.32	1"¼	MD	027012044		-	
M-.MD.S.IT.A.0.40	1"½	MD	027012144		-	
M-.MD.L.IT.A.0.40	1"½	MD	027012244		-	
M-.TN.M.IT.A.0.25	1"	TN	-		027010141	
M-.TN.M.IT.A.0.32	1"¼	TN	-		027010241	
M-.TN.M.IT.A.0.40	1"½	TN	-		027010341	
M-.PR.M.IT.A.0.25	1"	PR	-		027010143	
M-.PR.M.IT.A.0.32	1"¼	PR	-		027010243	
M-.PR.M.IT.A.0.40	1"½	PR	-		027010343	
M-.MD.M.IT.A.0.25	1"	MD(*)	-		027010144	
M-.MD.M.IT.A.0.32	1"¼	MD(*)	-		027010244	
M-.MD.M.IT.A.0.40	1"½	MD(*)	-		027010344	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).  
In compliance with DIRECTIVE 2009/142/CE



## MECHANICAL OPERATION

Model	Gas train	Operation	NG400		NG550	
			Code	Price €	Code	Price €
M-.TN.M.IT.A.0.25	1"	TN	027010441	-	-	-
M-.TN.M.IT.A.0.32	1"¼	TN	027010541	-	-	-
M-.TN.M.IT.A.0.40	1"½	TN	027010641	-	-	-
M-.TN.M.IT.A.0.50	2"	TN	027010741	-	-	-
M-.PR.M.IT.A.0.25	1"	PR	027010443	-	-	-
M-.PR.M.IT.A.0.32	1"¼	PR	027010543	-	-	-
M-.PR.M.IT.A.0.40	1"½	PR	027010643	-	-	-
M-.PR.M.IT.A.0.50	2"	PR	027010743	-	-	-
M-.MD.M.IT.A.0.25	1"	MD(*)	027010444	-	-	-
M-.MD.M.IT.A.0.32	1"¼	MD(*)	027010544	-	-	-
M-.MD.M.IT.A.0.40	1"½	MD(*)	027010644	-	-	-
M-.MD.M.IT.A.0.50	2"	MD(*)	027010744	-	-	-
M-.TN.S.IT.A.0.32	1"¼	TN	-	-	028010141	-
M-.TN.L.IT.A.0.32	1"¼	TN	-	-	028010241	-
M-.TN.S.IT.A.0.40	1"½	TN	-	-	028010341	-
M-.TN.L.IT.A.0.40	1"½	TN	-	-	028010441	-
M-.TN.S.IT.A.0.50	2"	TN	-	-	028010541	-
M-.TN.L.IT.A.0.50	2"	TN	-	-	028010641	-
M-.PR.S.IT.A.0.32	1"¼	PR	-	-	028010143	-
M-.PR.L.IT.A.0.32	1"¼	PR	-	-	028010243	-
M-.PR.S.IT.A.0.40	1"½	PR	-	-	028010343	-
M-.PR.L.IT.A.0.40	1"½	PR	-	-	028010443	-
M-.PR.S.IT.A.0.50	2"	PR	-	-	028010543	-
M-.PR.L.IT.A.0.50	2"	PR	-	-	028010643	-
M-.MD.S.IT.A.0.32	1"¼	MD(*)	-	-	02801014428	-
M-.MD.L.IT.A.0.32	1"¼	MD(*)	-	-	02801024428	-
M-.MD.S.IT.A.0.40	1"½	MD(*)	-	-	02801034428	-
M-.MD.L.IT.A.0.40	1"½	MD(*)	-	-	02801044428	-
M-.MD.S.IT.A.0.50	2"	MD(*)	-	-	02801054428	-
M-.MD.L.IT.A.0.50	2"	MD(*)	-	-	02801064428	-

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).  
In compliance with DIRECTIVE 2009/142/CE

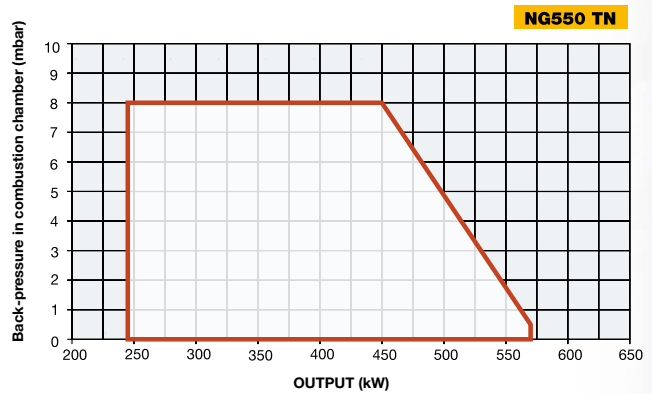
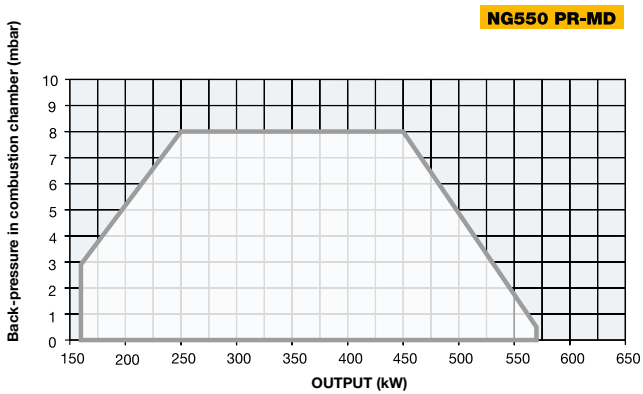
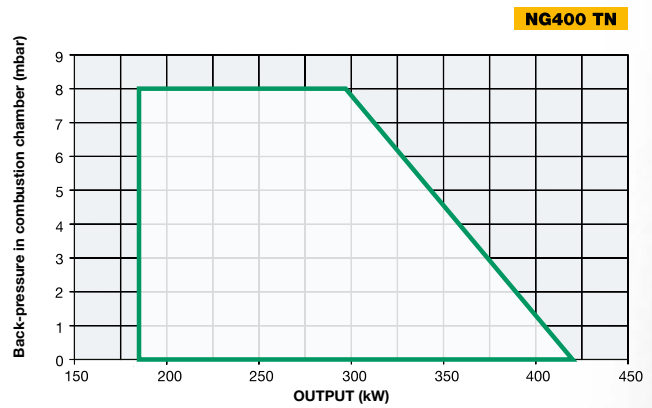
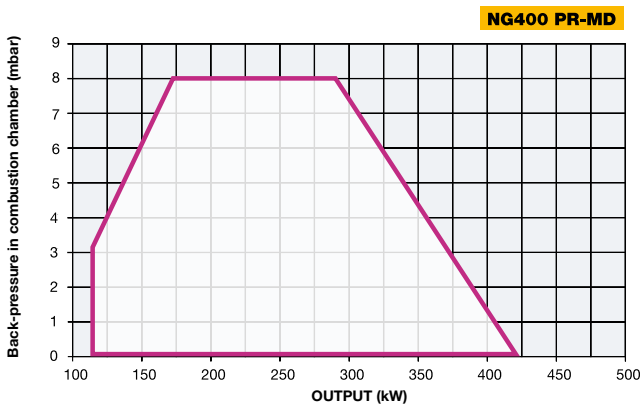
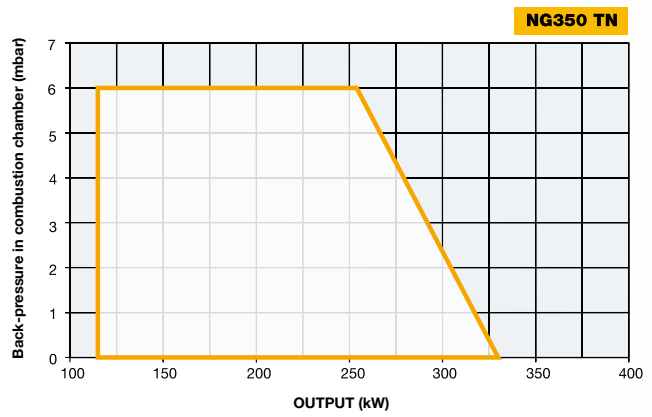
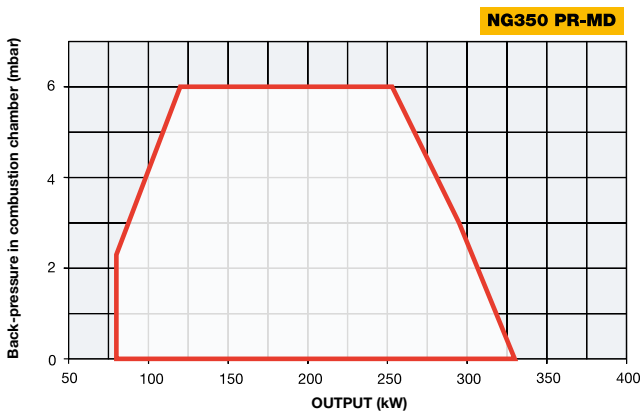
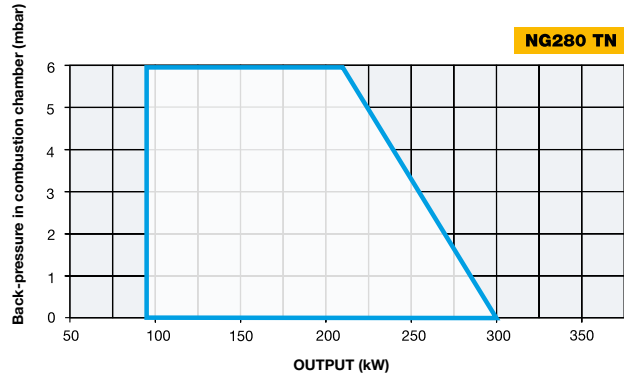
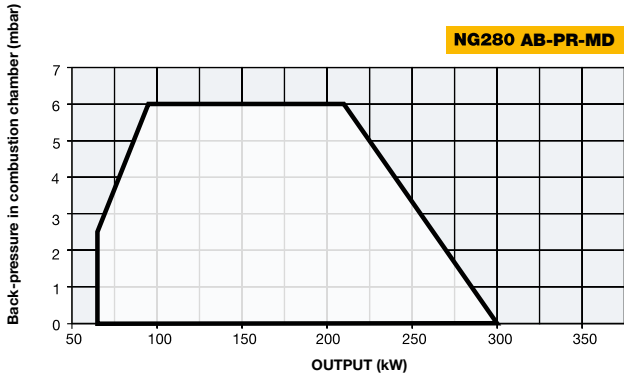
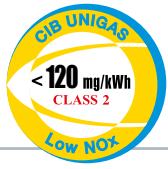
**ELECTRONIC OPERATION**

Model	Gas train	Operation	NG280		NG350	
			Code	Price €	Code	Price €
M-.PR.S.IT.A.1.25.EA	1"	PR	02701175A		-	
M-.PR.L.IT.A.1.25.EA	1"	PR	02701185A		-	
M-.PR.S.IT.A.1.32.EA	1"¼	PR	02701195A		-	
M-.PR.L.IT.A.1.32.EA	1"¼	PR	02701205A		-	
M-.PR.S.IT.A.1.40.EA	1"½	PR	02701215A		-	
M-.PR.L.IT.A.1.40.EA	1"½	PR	02701225A		-	
M-.MD.S.IT.A.1.25.EA	1"	MD(*)	02701175E		-	
M-.MD.L.IT.A.1.25.EA	1"	MD(*)	02701185E		-	
M-.MD.S.IT.A.1.32.EA	1"¼	MD(*)	02701195E		-	
M-.MD.L.IT.A.1.32.EA	1"¼	MD(*)	02701205E		-	
M-.MD.S.IT.A.1.40.EA	1"½	MD(*)	02701215E		-	
M-.MD.L.IT.A.1.40.EA	1"½	MD(*)	02701225E		-	
M-.PR.M.IT.A.1.25.EA	1"	PR	-		02701015A	
M-.PR.M.IT.A.1.32.EA	1"¼	PR	-		02701025A	
M-.PR.M.IT.A.1.40.EA	1"½	PR	-		02701035A	
M-.MD.M.IT.A.1.25.EA	1"	MD(*)	-		02701015E	
M-.MD.M.IT.A.1.32.EA	1"¼	MD(*)	-		02701025E	
M-.MD.M.IT.A.1.40.EA	1"½	MD(*)	-		02701035E	

Model	Gas train	Operation	NG400		NG550	
			Code	Price €	Code	Price €
M-.PR.M.IT.A.1.25.EA	1"	PR	02701045A		-	
M-.PR.M.IT.A.1.32.EA	1"¼	PR	02701055A		-	
M-.PR.M.IT.A.1.40.EA	1"½	PR	02701065A		-	
M-.PR.M.IT.A.1.50.EA	2"	PR	02701075A		-	
M-.MD.M.IT.A.1.25.EA	1"	MD(*)	02701045E		-	
M-.MD.M.IT.A.1.32.EA	1"¼	MD(*)	02701055E		-	
M-.MD.M.IT.A.1.40.EA	1"½	MD(*)	02701065E		-	
M-.MD.M.IT.A.1.50.EA	2"	MD(*)	02701075E		-	
M-.PR.S.IT.A.1.32.EA	1"¼	PR	-		02801015A	
M-.PR.L.IT.A.1.32.EA	1"¼	PR	-		02801025A	
M-.PR.S.IT.A.1.40.EA	1"½	PR	-		02801035A	
M-.PR.L.IT.A.1.40.EA	1"½	PR	-		02801045A	
M-.PR.S.IT.A.1.50.EA	2"	PR	-		02801055A	
M-.PR.L.IT.A.1.50.EA	2"	PR	-		02801065A	
M-.MD.S.IT.A.1.32.EA	1"¼	MD(*)	-		02801015E	
M-.MD.L.IT.A.1.32.EA	1"¼	MD(*)	-		02801025E	
M-.MD.S.IT.A.1.40.EA	1"½	MD(*)	-		02801035E	
M-.MD.L.IT.A.1.40.EA	1"½	MD(*)	-		02801045E	
M-.MD.S.IT.A.1.50.EA	2"	MD(*)	-		02801055E	
M-.MD.L.IT.A.1.50.EA	2"	MD(*)	-		02801065E	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).  
In compliance with DIRECTIVE 2009/142/CE



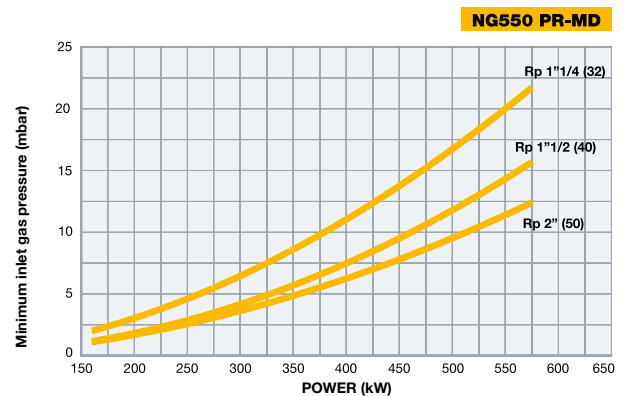
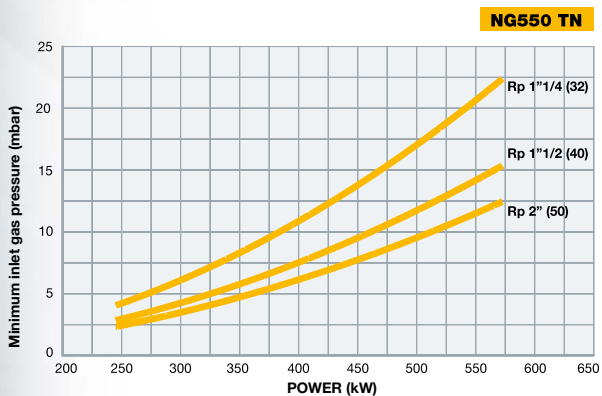
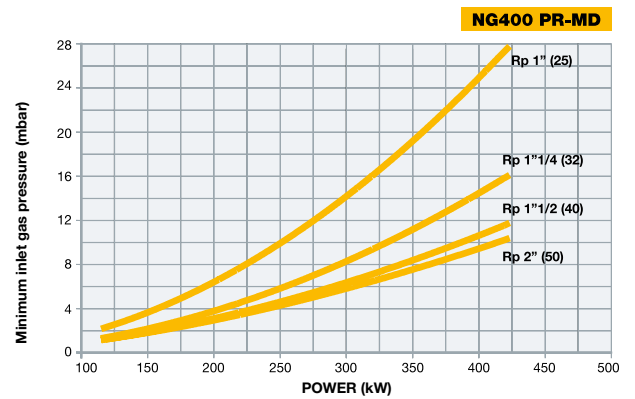
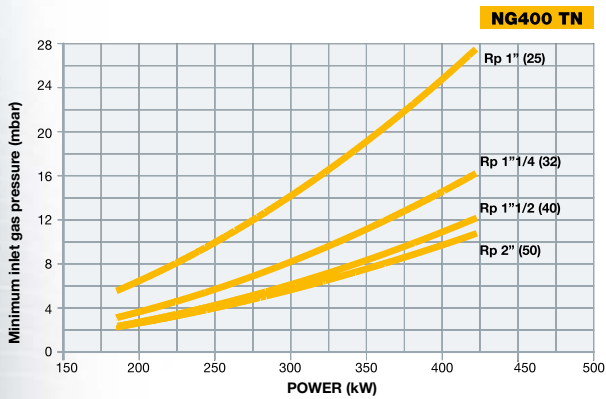
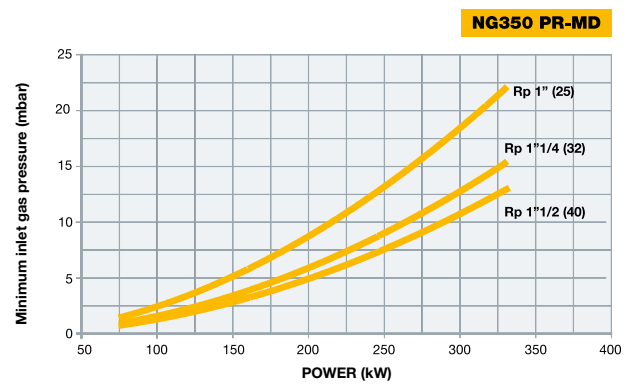
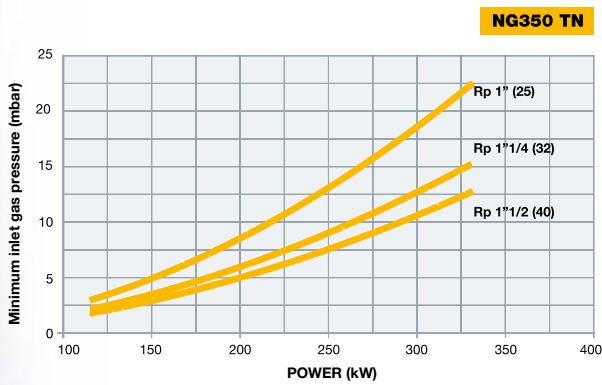
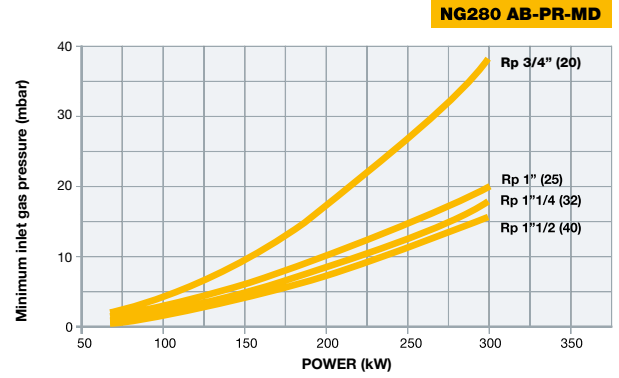
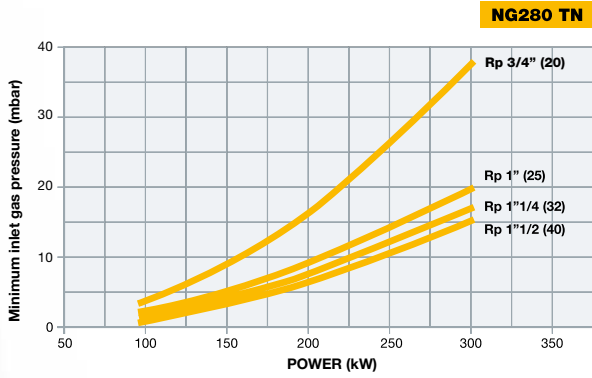


# idea series

NG280 NG350 NG400 NG550



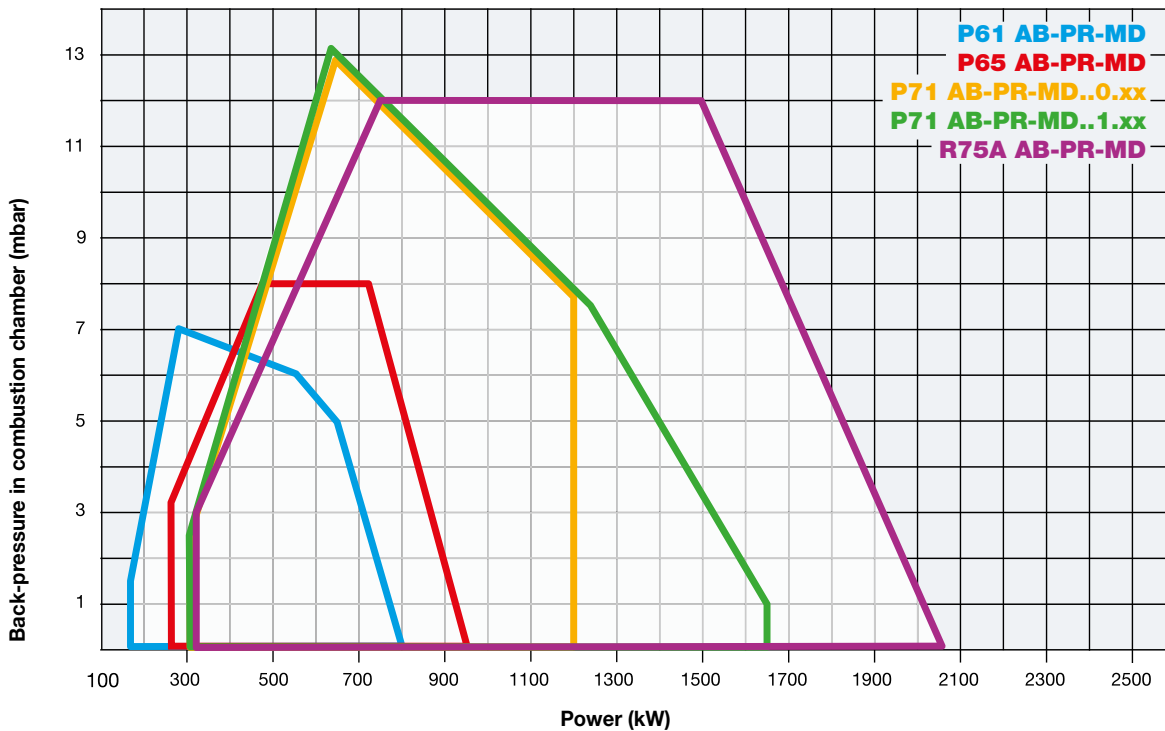
GAS



Attention: the graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.



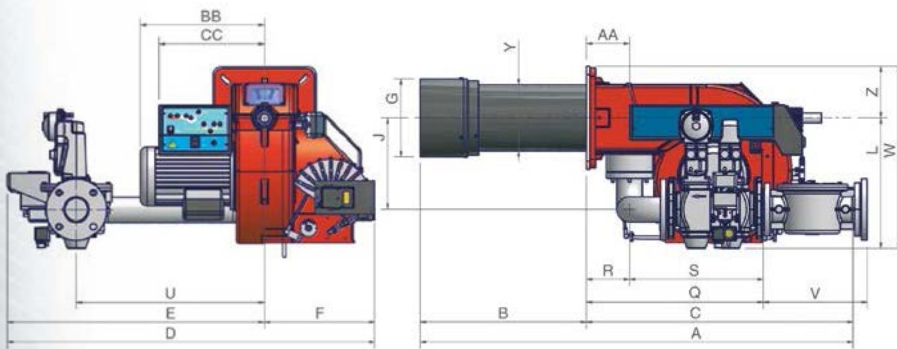
The burners of the series TECNOPRESS **Low NO<sub>x</sub> Class 2 (< 120 mg/kWh)** cover a wide range of application, from 160 to 2050 kW, and are suitable for heating generators with negative or positive back pressure.  
The bell-shaped combustion head is able to produce high performance flame.



### TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Gas connections Rp
		min.	max.			
<b>P61</b>	M-.xx.x.IT.A.0.xx	160	800	230/400 V 3N ac	1,1	1"1/4 - 1"1/2 - 2" - DN65
<b>P65</b>	M-.xx.x.IT.A.0.xx	270	970	230/400 V 3N ac	1,5	1"1/2 - 2" - DN65
<b>P71</b>	M-.xx.x.IT.A.0.xx	300	1.200	230/400 V 3N ac	2,2	1"1/2 - 2" - DN65 - DN80
<b>P71</b>	M-.xx.x.IT.A.1.xx	300	1.650	230/400 V 3N ac	2,2	1"1/2 - 2" - DN65 - DN80
<b>R75A</b>	M-.xx.S.IT.A.1.xx	320	2.050	230/400 V 3N ac	3,0	2" - DN65 - DN80

For the configuration of the gas train, see pages 110-111.



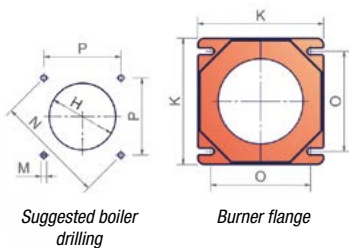
Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>P61*</b>	1200	670	540	60
<b>P65*</b>	1280	850	760	100
<b>P71*</b>	1280	850	760	120
<b>R75A**</b>	1280	850	760	125

(\*) Approximate values (regarding model with gas train DN 65)

(\*\*) Approximate values (regarding model with gas train DN 80)

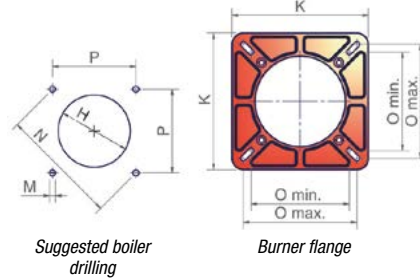
**P61**

**P65 - P71 - R75A**



Suggested boiler drilling

Burner flange



Suggested boiler drilling

Burner flange

Type	Model	Overall dimensions* (mm)																												
		AS	AL	AA	B(S*)	B(L*)	BB	C	CC	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	U	V	W	Y	Z	
		min. max.																												
<b>P61</b>	M-.xx.x.IT.A.0.32	1079	1169	99	343	433	314	736	298	812	500	312	184	204	210	240	344	M10	269	190	190	190	341	112	229	444	-	464	162	120
<b>P61</b>	M-.xx.x.IT.A.0.40	1079	1169	99	343	433	314	736	298	812	500	312	184	204	210	240	344	M10	269	190	190	190	439	112	327	444	-	464	162	120
<b>P61</b>	M-.xx.x.IT.A.0.50	1079	1169	99	343	433	314	736	298	812	500	312	184	204	210	240	344	M10	269	190	190	190	447	112	335	444	-	464	162	120
<b>P61</b>	M-.xx.x.IT.A.0.65	1079	1169	99	343	433	314	736	298	997	685	312	184	204	250	240	420	M10	269	190	190	190	515	112	403	540	313	540	162	120
<b>P65</b>	M-.xx.x.IT.A.0.40	1129	1219	130	326	416	373	803	316	900	568	332	184	218	208	300	376	M10	330	216	250	233	457	130	327	519	-	531	198	155
<b>P65</b>	M-.xx.x.IT.A.0.50	1129	1219	130	326	416	373	803	316	900	568	332	184	218	208	300	376	M10	330	216	250	233	465	130	335	519	-	531	198	155
<b>P65</b>	M-.xx.x.IT.A.0.65	1129	1219	130	326	416	373	803	316	998	666	332	184	218	275	300	393	M10	330	216	250	233	533	130	403	565	313	548	198	155
<b>P71</b>	M-.xx.x.IT.A.1.40	1188	1298	130	385	495	373	803	316	1026	694	332	234	264	208	300	376	M10	330	216	250	233	457	130	327	519	-	531	198	155
<b>P71</b>	M-.xx.x.IT.A.1.50	1188	1298	130	385	495	373	803	316	1026	694	332	234	264	208	300	376	M10	330	216	250	233	465	130	335	519	-	531	198	155
<b>P71</b>	M-.xx.x.IT.A.1.65	1188	1298	130	385	495	373	803	316	1104	772	332	234	264	275	300	393	M10	330	216	250	233	533	130	403	565	313	548	198	155
<b>P71</b>	M-.xx.x.IT.A.1.80	1188	1298	130	385	495	373	803	316	1106	774	332	234	264	275	300	407	M10	330	216	250	233	574	130	444	565	344	562	198	155
<b>R75A</b>	M-.xx.S.IT.A.1.50	1429	-	138	503	-	374	926	330	1062	700	362	254	270	229	300	420	M10	330	216	250	233	465	130	335	525	-	575	210	155
<b>R75A</b>	M-.xx.S.IT.A.1.65	1429	-	138	503	-	374	926	330	1139	777	362	254	270	296	300	420	M10	330	216	250	233	533	130	403	570	313	575	210	155
<b>R75A</b>	M-.xx.S.IT.A.1.80	1429	-	138	503	-	374	926	330	1141	779	362	254	270	296	300	428	M10	330	216	250	233	574	130	444	570	344	583	210	155

(\*) Approximate values


**MECHANICAL OPERATION**

Model	Gas train	Operation	P61		P65	
			Code	Price €	Code	Price €
M-.AB.S.IT.A.0.32	1"¼	AB	004013942		-	
M-.AB.L.IT.A.0.32	1"¼	AB	004014042		-	
M-.AB.S.IT.A.0.40	1"½	AB	004014142		008011542	
M-.AB.L.IT.A.0.40	1"½	AB	004014242		008012042	
M-.AB.S.IT.A.0.50	2"	AB	004014342		008010942	
M-.AB.L.IT.A.0.50	2"	AB	004014442		008011042	
M-.AB.S.IT.A.0.65	DN65	AB	004014542		008011142	
M-.AB.L.IT.A.0.65	DN65	AB	004014642		008011242	
M-.PR.S.IT.A.0.32	1"¼	PR	004013943		-	
M-.PR.L.IT.A.0.32	1"¼	PR	004014043		-	
M-.PR.S.IT.A.0.40	1"½	PR	004014143		008011543	
M-.PR.L.IT.A.0.40	1"½	PR	004014243		008012043	
M-.PR.S.IT.A.0.50	2"	PR	004014343		008010943	
M-.PR.L.IT.A.0.50	2"	PR	004014443		008011043	
M-.PR.S.IT.A.0.65	DN65	PR	004014543		008011143	
M-.PR.L.IT.A.0.65	DN65	PR	004014643		008011243	
M-.MD.S.IT.A.0.32	1"¼	MD(*)	004013944		-	
M-.MD.L.IT.A.0.32	1"¼	MD(*)	004014044		-	
M-.MD.S.IT.A.0.40	1"½	MD(*)	004014144		008011544	
M-.MD.L.IT.A.0.40	1"½	MD(*)	004014244		008012044	
M-.MD.S.IT.A.0.50	2"	MD(*)	004014344		008010944	
M-.MD.L.IT.A.0.50	2"	MD(*)	004014444		008011044	
M-.MD.S.IT.A.0.65	DN65	MD(*)	004014544		008011144	
M-.MD.L.IT.A.0.65	DN65	MD(*)	004014644		008011244	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).

In compliance with DIRECTIVE 2009/142/CE

### MECHANICAL OPERATION

Model	Gas train	Operation	P71		R75A	
			Code	Price €	Code	Price €
M-.AB.S.IT.A.0.40	1"½	AB	008014142	-	-	-
M-.AB.L.IT.A.0.40	1"½	AB	008014242	-	-	-
M-.AB.S.IT.A.0.50	2"	AB	008014342	-	-	-
M-.AB.L.IT.A.0.50	2"	AB	008014442	-	-	-
M-.AB.S.IT.A.0.65	DN65	AB	008014542	-	-	-
M-.AB.L.IT.A.0.65	DN65	AB	008014642	-	-	-
M-.AB.S.IT.A.0.80	DN80	AB	008014742	-	-	-
M-.AB.L.IT.A.0.80	DN80	AB	008014842	-	-	-
M-.PR.S.IT.A.0.40	1"½	PR	008014143	-	-	-
M-.PR.L.IT.A.0.40	1"½	PR	008014243	-	-	-
M-.PR.S.IT.A.0.50	2"	PR	008014343	-	-	-
M-.PR.L.IT.A.0.50	2"	PR	008014443	-	-	-
M-.PR.S.IT.A.0.65	DN65	PR	008014543	-	-	-
M-.PR.L.IT.A.0.65	DN65	PR	008014643	-	-	-
M-.PR.S.IT.A.0.80	DN80	PR	008014743	-	-	-
M-.PR.L.IT.A.0.80	DN80	PR	008014843	-	-	-
M-.MD.S.IT.A.0.40	1"½	MD(*)	008014144	-	-	-
M-.MD.L.IT.A.0.40	1"½	MD(*)	008014244	-	-	-
M-.MD.S.IT.A.0.50	2"	MD(*)	008014344	-	-	-
M-.MD.L.IT.A.0.50	2"	MD(*)	008014444	-	-	-
M-.MD.S.IT.A.0.65	DN65	MD(*)	008014544	-	-	-
M-.MD.L.IT.A.0.65	DN65	MD(*)	008014644	-	-	-
M-.MD.S.IT.A.0.80	DN80	MD(*)	008014744	-	-	-
M-.MD.L.IT.A.0.80	DN80	MD(*)	008014844	-	-	-
M-.AB.S.IT.A.1.40	1"½	AB	008014152	-	-	-
M-.AB.L.IT.A.1.40	1"½	AB	008014252	-	-	-
M-.AB.S.IT.A.1.50	2"	AB	008014352	-	030010452	-
M-.AB.L.IT.A.1.50	2"	AB	008014452	-	-	-
M-.AB.S.IT.A.1.65	DN65	AB	008014552	-	030010552	-
M-.AB.L.IT.A.1.65	DN65	AB	008014652	-	-	-
M-.AB.S.IT.A.1.80	DN80	AB	008014752	-	030010652	-
M-.AB.L.IT.A.1.80	DN80	AB	008014852	-	-	-
M-.PR.S.IT.A.1.40	1"½	PR	008014153	-	-	-
M-.PR.L.IT.A.1.40	1"½	PR	008014253	-	-	-
M-.PR.S.IT.A.1.50	2"	PR	008014353	-	030010453	-
M-.PR.L.IT.A.1.50	2"	PR	008014453	-	-	-
M-.PR.S.IT.A.1.65	DN65	PR	008014553	-	030010553	-
M-.PR.L.IT.A.1.65	DN65	PR	008014653	-	-	-
M-.PR.S.IT.A.1.80	DN80	PR	008014753	-	030010653	-
M-.PR.L.IT.A.1.80	DN80	PR	008014853	-	-	-
M-.MD.S.IT.A.1.40	1"½	MD(*)	008014154	-	-	-
M-.MD.L.IT.A.1.40	1"½	MD(*)	008014254	-	-	-
M-.MD.S.IT.A.1.50	2"	MD(*)	008014354	-	030010454	-
M-.MD.L.IT.A.1.50	2"	MD(*)	008014454	-	-	-
M-.MD.S.IT.A.1.65	DN65	MD(*)	008014554	-	030010554	-
M-.MD.L.IT.A.1.65	DN65	MD(*)	008014654	-	-	-
M-.MD.S.IT.A.1.80	DN80	MD(*)	008014754	-	030010654	-
M-.MD.L.IT.A.1.80	DN80	MD(*)	008014854	-	-	-

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).

In compliance with DIRECTIVE 2009/142/CE


**ELECTRONIC OPERATION**

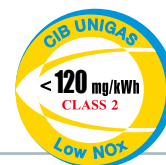
Model	Gas train	Operation	P61		P65	
			Code	Price €	Code	Price €
M-.PR.S.IT.A.1.32.EA	1"¼	PR	00401395A		-	
M-.PR.L.IT.A.1.32.EA	1"¼	PR	00401405A		-	
M-.PR.S.IT.A.1.40.EA	1"½	PR	00401415A		00801155A	
M-.PR.L.IT.A.1.40.EA	1"½	PR	00401425A		00801205A	
M-.PR.S.IT.A.1.50.EA	2"	PR	00401435A		00801095A	
M-.PR.L.IT.A.1.50.EA	2"	PR	00401445A		00801105A	
M-.PR.S.IT.A.1.65.EA	DN65	PR	00401455A		00801115A	
M-.PR.L.IT.A.1.65.EA	DN65	PR	00401465A		00801125A	
M-.MD.S.IT.A.1.32.EA	1"¼	MD(*)	00401395E		-	
M-.MD.L.IT.A.1.32.EA	1"¼	MD(*)	00401405E		-	
M-.MD.S.IT.A.1.40.EA	1"½	MD(*)	00401415E		00801155E	
M-.MD.L.IT.A.1.40.EA	1"½	MD(*)	00401425E		00801205E	
M-.MD.S.IT.A.1.50.EA	2"	MD(*)	00401435E		00801095E	
M-.MD.L.IT.A.1.50.EA	2"	MD(*)	00401445E		00801105E	
M-.MD.S.IT.A.1.65.EA	DN65	MD(*)	00401455E		00801115E	
M-.MD.L.IT.A.1.65.EA	DN65	MD(*)	00401465E		00801125E	
M-.MD.S.IT.A.1.32.ES	1"¼	MD(*)	00401395S		-	
M-.MD.L.IT.A.1.32.ES	1"¼	MD(*)	00401405S		-	
M-.MD.S.IT.A.1.40.ES	1"½	MD(*)	00401415S		00801155S	
M-.MD.L.IT.A.1.40.ES	1"½	MD(*)	00401425S		00801205S	
M-.MD.S.IT.A.1.50.ES	2"	MD(*)	00401435S		00801095S	
M-.MD.L.IT.A.1.50.ES	2"	MD(*)	00401445S		00801105S	
M-.MD.S.IT.A.1.65.ES	DN65	MD(*)	00401455S		00801115S	
M-.MD.L.IT.A.1.65.ES	DN65	MD(*)	00401465S		00801125S	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).

In compliance with DIRECTIVE 2009/142/CE

# tecnopress series

P61 P65 P71 R75A



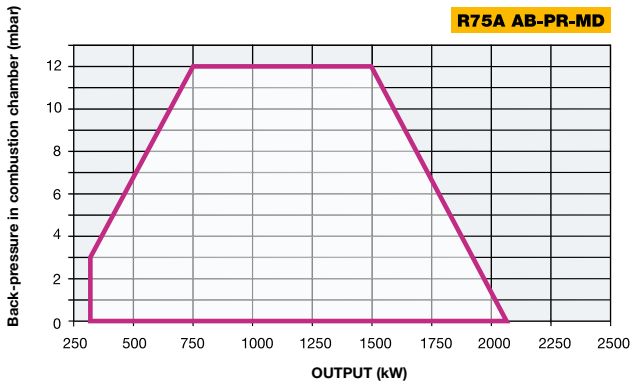
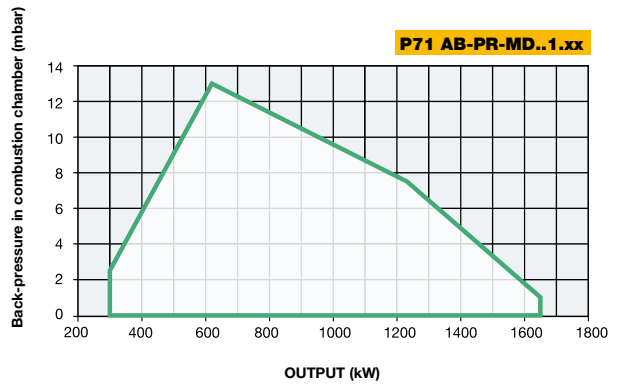
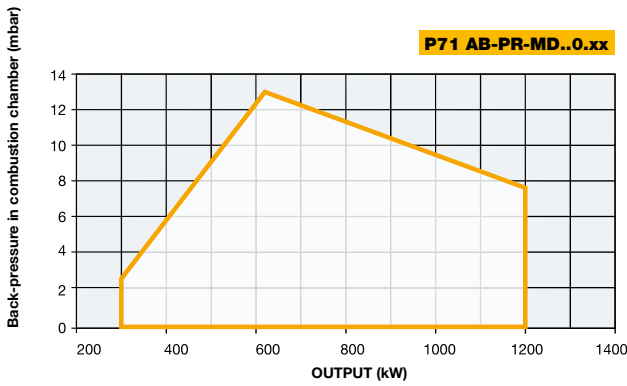
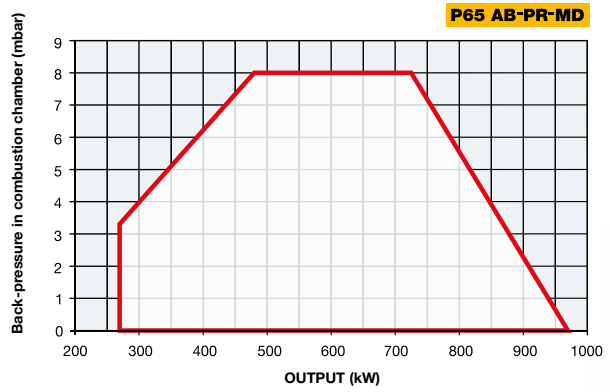
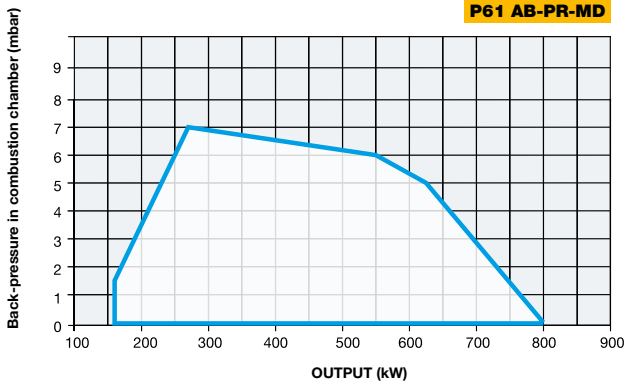
GAS

Model	Gas train	Operation	P71		R75A	
			Code	Price €	Code	Price €
M-.PR.S.IT.A.1.40.EA	1"½	PR	00801415A		-	
M-.PR.L.IT.A.1.40.EA	1"½	PR	00801425A		-	
M-.PR.S.IT.A.1.50.EA	2"	PR	00801435A		03001045A	
M-.PR.L.IT.A.1.50.EA	2"	PR	00801445A		-	
M-.PR.S.IT.A.1.65.EA	DN65	PR	00801455A		03001055A	
M-.PR.L.IT.A.1.65.EA	DN65	PR	00801465A		-	
M-.PR.S.IT.A.1.80.EA	DN80	PR	00801475A		03001065A	
M-.PR.L.IT.A.1.80.EA	DN80	PR	00801485A		-	
M-.MD.S.IT.A.1.40.EA	1"½	MD(*)	00801415E		-	
M-.MD.L.IT.A.1.40.EA	1"½	MD(*)	00801425E		-	
M-.MD.S.IT.A.1.50.EA	2"	MD(*)	00801435E		03001045A	
M-.MD.L.IT.A.1.50.EA	2"	MD(*)	00801445E		-	
M-.MD.S.IT.A.1.65.EA	DN65	MD(*)	00801455E		03001055A	
M-.MD.L.IT.A.1.65.EA	DN65	MD(*)	00801465E		-	
M-.MD.S.IT.A.1.80.EA	DN80	MD(*)	00801475E		03001065A	
M-.MD.L.IT.A.1.80.EA	DN80	MD(*)	00801485E		-	
M-.MD.S.IT.A.1.40.ES	1"½	MD(*)	00801415S		-	
M-.MD.L.IT.A.1.40.ES	1"½	MD(*)	00801425S		-	
M-.MD.S.IT.A.1.50.ES	2"	MD(*)	00801435S		03001045S	
M-.MD.L.IT.A.1.50.ES	2"	MD(*)	00801445S		-	
M-.MD.S.IT.A.1.65.ES	DN65	MD(*)	00801455S		03001055S	
M-.MD.L.IT.A.1.65.ES	DN65	MD(*)	00801465S		-	
M-.MD.S.IT.A.1.80.ES	DN80	MD(*)	00801475S		03001065S	
M-.MD.L.IT.A.1.80.ES	DN80	MD(*)	00801485S		-	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).

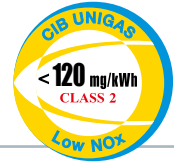
In compliance with DIRECTIVE 2009/142/CE





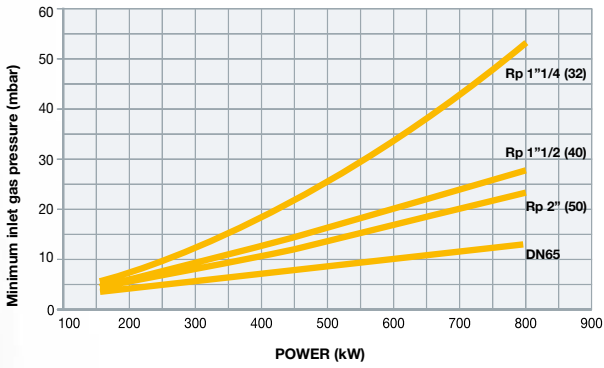
# tecnopress series

P61 P65 P71 R75A

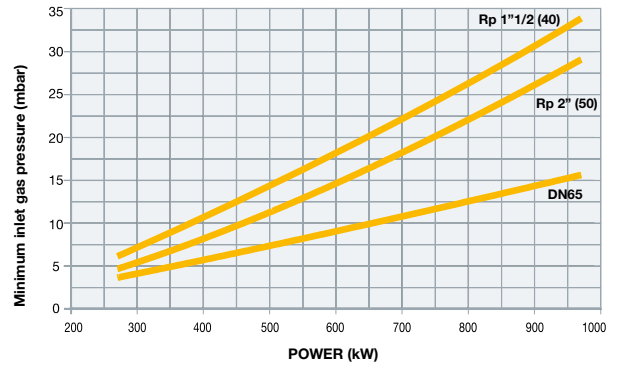


GAS

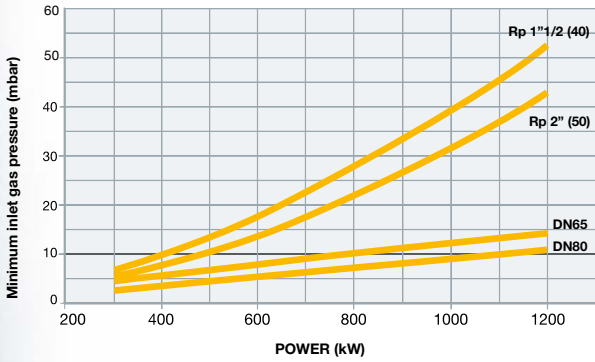
**P61 AB-PR-MD**



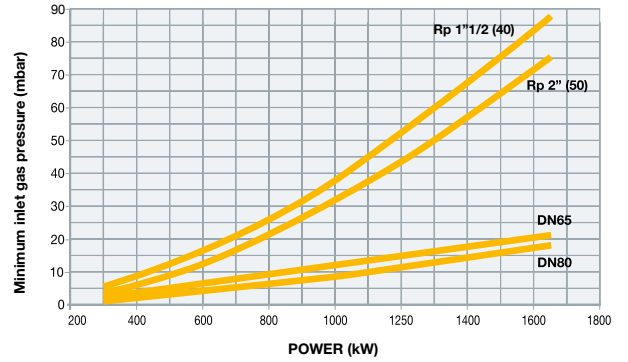
**P65 AB-PR-MD**



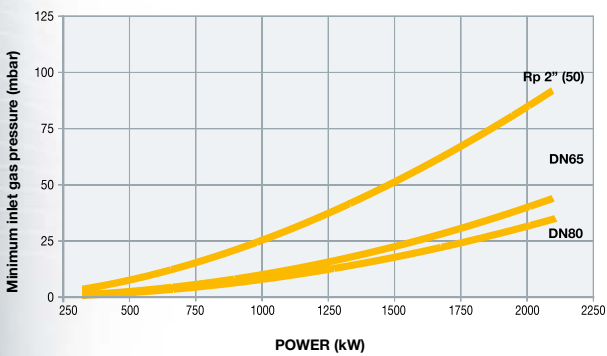
**P71 AB-PR-MD..0.xx**



**P71 AB-PR-MD..1.xx**



**R75A AB-PR-MD**



Attention: the graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.



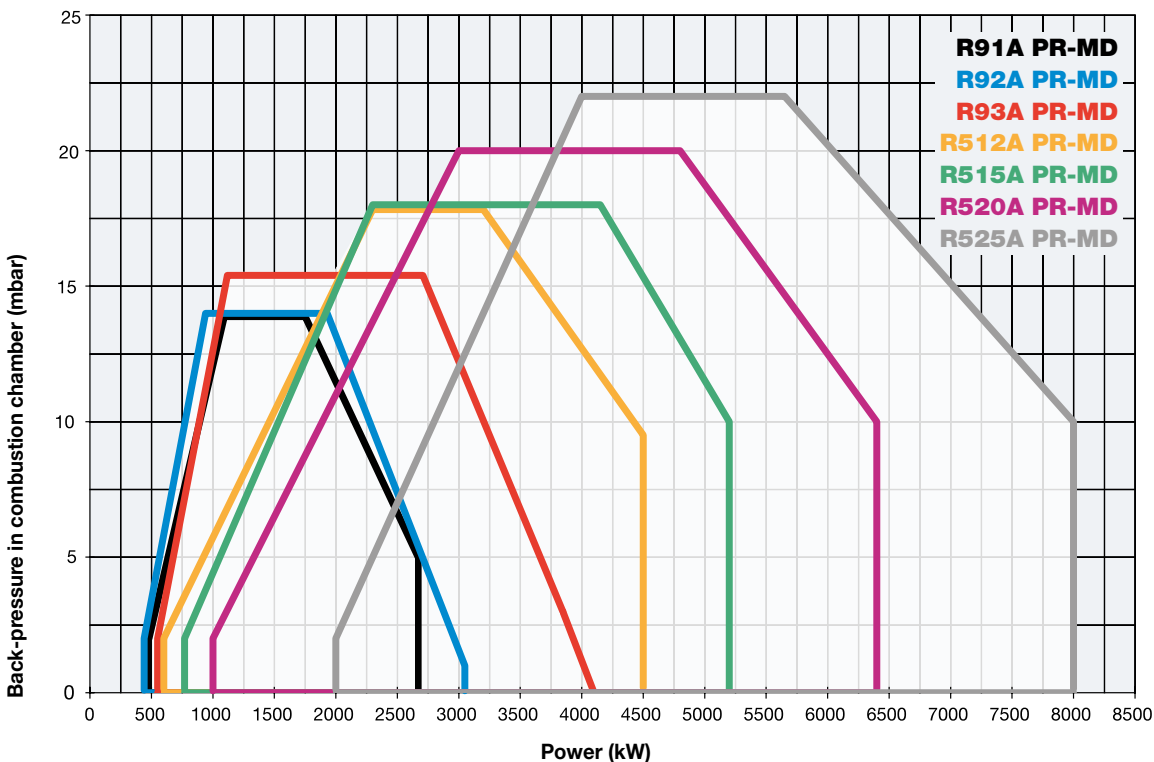
# novanta-cinquecento series

R91A R92A R93A R512A R515A R520A R525A

This range of medium output burners **Low NO<sub>x</sub> Class 2 (< 120 mg/kWh)**, made in aluminum, was studied and developed to get high performance and efficiency combined with low emissions. The 90 and 500 series with a maximum power of 4100 kW and 8000 kW, respectively, are in this selection of product that is particularly competitive. The user-friendly application and maintenance are the strengths of these burners.

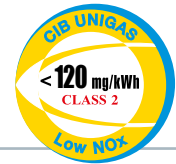


Electronic set up (optional)



# novanta-cinquecento series

R91A R92A R93A R512A R515A R520A R525A

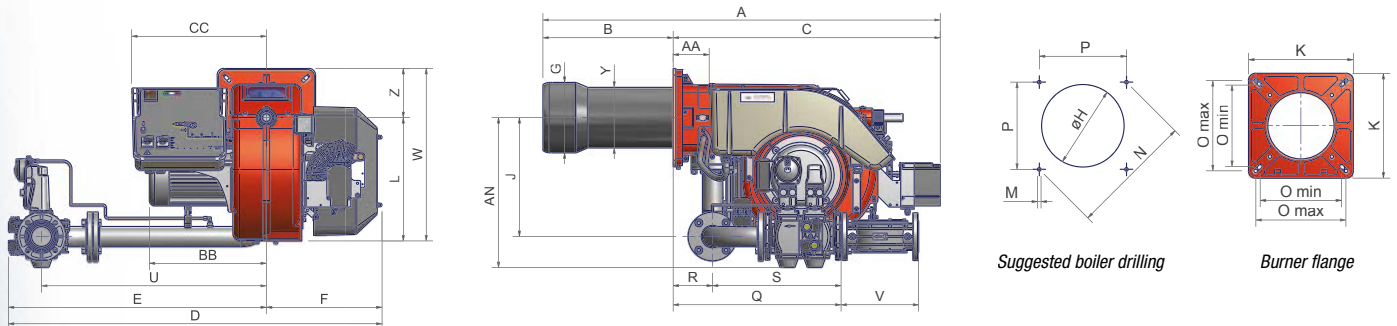


GAS

## TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Gas connections Rp
		min.	max.			
<b>R91A</b>	M-.xx.S.IT.A.1.xxx	480	2.670	230/400 V 3N ac	4,0	2" - DN65 - 80 - 100
<b>R92A</b>	M-.xx.S.IT.A.1.xxx	480	3.050	230/400 V 3N ac	5,5	2" - DN65 - 80 - 100
<b>R93A</b>	M-.xx.S.IT.A.1.xxx	550	4.100	230/400 V 3N ac	7,5	2" - DN65 - 80 - 100

For the configuration of the gas train, see pages 110-111.



Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>R91A</b>	1730	1280	1020	250
<b>R92A</b>	1730	1280	1020	260
<b>R93A</b>	1730	1280	1020	300

(\* Approximate values (regarding model with gas train DN 100))

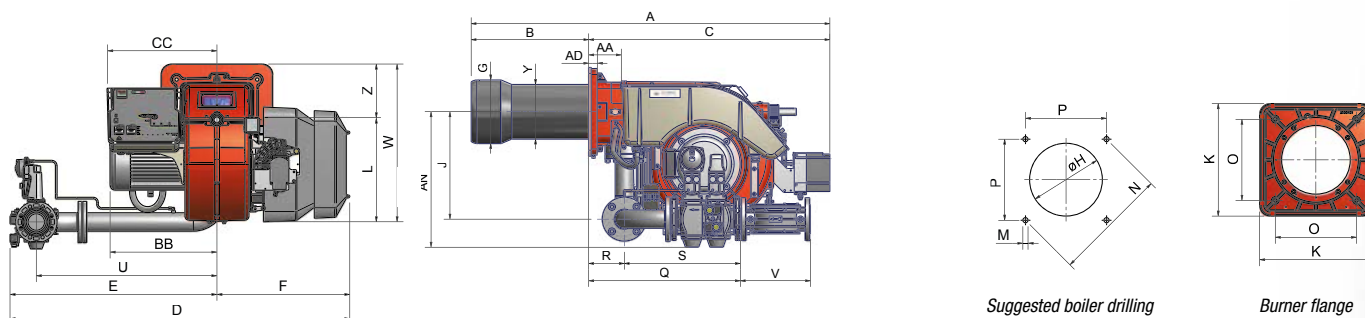
Type	Model	Overall dimensions* (mm)																											
		A	AA	AN	B	BB	C	CC	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	U	V	W	Y	Z	
		min. max.																											
<b>R91A</b>	M-.xx.S.IT.A.1.50	1495	135	550	490	441	1005	507	1160	765	435	265	295	447	360	464	M12	424	280	310	300	532	148	384	624	190	649	228	185
<b>R91A</b>	M-.xx.S.IT.A.1.65	1495	135	564	490	441	1005	507	1406	971	435	265	295	447	360	464	M12	424	280	310	300	632	148	484	846	292	649	228	185
<b>R91A</b>	M-.xx.S.IT.A.1.80	1495	135	579	490	441	1005	507	1437	1002	435	265	295	447	360	464	M12	424	280	310	300	683	148	535	875	313	649	228	185
<b>R91A</b>	M-.xx.S.IT.A.1.100	1495	135	592	490	441	1005	507	1520	1085	435	265	295	447	360	464	M12	424	280	310	300	790	148	642	942	353	649	228	185
<b>R92A</b>	M-.xx.S.IT.A.1.50	1495	135	550	490	441	1005	507	1160	725	435	269	299	447	360	464	M12	424	280	310	300	532	148	384	624	190	649	228	185
<b>R92A</b>	M-.xx.S.IT.A.1.65	1495	135	564	490	441	1005	507	1406	971	435	269	299	442	360	464	M12	424	280	310	300	632	148	484	846	292	649	228	185
<b>R92A</b>	M-.xx.S.IT.A.1.80	1495	135	579	490	441	1005	507	1437	1002	435	269	299	447	360	464	M12	424	280	310	300	683	148	535	875	313	649	228	185
<b>R92A</b>	M-.xx.S.IT.A.1.100	1495	135	592	490	441	1005	507	1520	1859	435	269	299	447	360	464	M12	424	280	310	300	790	148	642	942	353	649	228	185
<b>R93A</b>	M-.xx.S.IT.A.1.50	1500	135	550	495	493	1005	507	1160	725	435	304	344	447	360	464	M12	424	280	310	300	532	148	384	624	190	649	228	185
<b>R93A</b>	M-.xx.S.IT.A.1.65	1500	135	564	495	493	1005	507	1406	971	435	304	344	447	360	464	M12	424	280	310	300	632	148	484	846	292	649	228	185
<b>R93A</b>	M-.xx.S.IT.A.1.80	1500	135	579	495	493	1005	507	1520	1002	435	304	344	447	360	464	M12	424	280	310	300	683	148	535	875	313	649	228	185
<b>R93A</b>	M-.xx.S.IT.A.1.100	1500	135	592	495	493	1005	507	1160	1085	435	304	344	447	360	464	M12	424	280	310	300	790	148	642	942	353	649	228	185

(\* Approximate values)

### TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Gas connections Rp
		min.	max.			
<b>R512A</b>	M-.xx.S.IT.A.1.xxx	600	4.500	230/400 V 3N ac	9,2	2" - DN65 - 80 - 100
<b>R515A</b>	M-.xx.S.IT.A.1.xxx	770	5.200	230/400 V 3N ac	11,0	2" - DN65 - 80 - 100
<b>R520A</b>	M-.xx.S.IT.A.1.xxx	1.000	6.400	230/400 V 3N ac	15,0	2" - DN65 - 80 - 100
<b>R525A</b>	M-.xx.S.IT.A.1.xxx	2.000	8.000	400 V 3N ac	18,5	DN65 - 80 - 100

For the configuration of the gas train, see pages 110-111.



Suggested boiler drilling

Burner flange

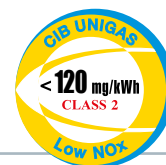
Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>R512A</b>	1570	1350	1120	300
<b>R515A</b>	1570	1350	1120	300
<b>R520A</b>	1570	1350	1120	350
<b>R525A</b>	1720	1500	1150	400

(\* Approximate values (regarding model with gas train DN 100))

Type	Model	Overall dimensions* (mm)																											
		A	AA	AD	AN	B	BB	C	CC	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	U	V	W	Y	Z
<b>R512A</b>	M-.xx.S.IT.A.1.50	1683	220	35	595	530	517	1153	532	1590	946	644	340	380	494	540	494	M14	552	390	390	763	149	614	845	190	764	328	270
<b>R512A</b>	M-.xx.S.IT.A.1.65	1683	220	35	611	530	517	1153	532	1613	969	644	340	380	494	540	494	M14	552	390	390	636	149	487	845	292	764	328	270
<b>R512A</b>	M-.xx.S.IT.A.1.80	1683	220	35	626	530	517	1153	532	1645	1002	644	340	380	494	540	494	M14	552	390	390	687	149	538	875	313	764	328	270
<b>R512A</b>	M-.xx.S.IT.A.1.100	1683	220	35	595	530	517	1153	532	1726	1082	644	340	380	494	540	494	M14	552	390	390	791	149	642	942	353	764	328	270
<b>R515A</b>	M-.xx.S.IT.A.1.50	1683	220	35	595	530	517	1153	532	1590	946	644	380	420	494	540	494	M14	552	390	390	763	149	614	845	190	764	328	270
<b>R515A</b>	M-.xx.S.IT.A.1.65	1683	220	35	611	530	517	1153	532	1613	969	644	380	420	494	540	494	M14	552	390	390	636	149	487	845	292	764	328	270
<b>R515A</b>	M-.xx.S.IT.A.1.80	1683	220	35	626	530	517	1153	532	1645	1002	644	380	420	494	540	494	M14	552	390	390	687	149	538	875	313	764	328	270
<b>R515A</b>	M-.xx.S.IT.A.1.100	1683	220	35	639	530	517	1153	532	1726	1082	644	380	420	494	540	494	M14	552	390	390	791	149	642	942	353	764	328	270
<b>R520A</b>	M-.xx.S.IT.A.1.50	1683	220	35	595	530	517	1153	532	1590	946	644	400	440	494	540	494	M14	552	390	390	755	149	614	844	190	764	328	270
<b>R520A</b>	M-.xx.S.IT.A.1.65	1683	220	35	611	530	517	1153	532	1613	669	644	400	440	494	540	494	M14	552	390	390	636	149	487	845	292	764	328	270
<b>R520A</b>	M-.xx.S.IT.A.1.80	1683	220	35	626	530	517	1153	532	1645	1002	644	400	440	494	540	494	M14	552	390	390	687	149	538	875	313	764	328	270
<b>R520A</b>	M-.xx.S.IT.A.1.100	1683	220	35	639	530	517	1153	532	1726	1082	644	400	440	494	540	494	M14	552	390	390	791	149	642	942	353	764	328	270
<b>R525A</b>	M-.xx.S.IT.A.1.65	1683	220	35	611	530	650	1153	650	1613	669	644	434	484	494	540	494	M14	552	390	390	636	149	487	845	292	764	328	270
<b>R525A</b>	M-.xx.S.IT.A.1.80	1683	220	35	626	530	650	1153	650	1645	1002	644	434	484	494	540	494	M14	552	390	390	687	149	538	875	313	764	328	270
<b>R525A</b>	M-.xx.S.IT.A.1.100	1683	220	35	639	530	650	1153	650	1726	1082	644	434	484	494	540	494	M14	552	390	390	791	149	642	942	353	764	328	270

# novanta-cinquecento series

R91A R92A R93A R512A R515A R520A R525A



GAS

## MECHANICAL OPERATION

Model	Gas train	Operation	R91A		R92A	
			Code	Price €	Code	Price €
M-.PR.S.IT.A.1.50	2"	PR	012014853		012015253	
M-.PR.S.IT.A.1.65	DN65	PR	012014953		012015353	
M-.PR.S.IT.A.1.80	DN80	PR	012015053		012015453	
M-.PR.S.IT.A.1.100	DN100	PR	012015153		012015553	
M-.MD.S.IT.A.1.50	2"	MD(*)	012014854		012015254	
M-.MD.S.IT.A.1.65	DN65	MD(*)	012014954		012015354	
M-.MD.S.IT.A.1.80	DN80	MD(*)	012015054		012015454	
M-.MD.S.IT.A.1.100	DN100	MD(*)	012015154		012015554	

Model	Gas train	Operation	R93A	
			Code	Price €
M-.PR.S.IT.A.1.50	2"	PR	012015653	
M-.PR.S.IT.A.1.65	DN65	PR	012015753	
M-.PR.S.IT.A.1.80	DN80	PR	012015853	
M-.PR.S.IT.A.1.100	DN100	PR	012015953	
M-.MD.S.IT.A.1.50	2"	MD(*)	012015654	
M-.MD.S.IT.A.1.65	DN65	MD(*)	012015754	
M-.MD.S.IT.A.1.80	DN80	MD(*)	012015854	
M-.MD.S.IT.A.1.100	DN100	MD(*)	012015954	

Model	Gas train	Operation	R512A		R515A	
			Code	Price €	Code	Price €
M-.PR.S.IT.A.1.50	2"	PR	029010153		029010553	
M-.PR.S.IT.A.1.65	DN65	PR	029010253		029010653	
M-.PR.S.IT.A.1.80	DN80	PR	029010353		029010753	
M-.PR.S.IT.A.1.100	DN100	PR	029010453		029010853	
M-.MD.S.IT.A.1.50	2"	MD(*)	029010154		029010554	
M-.MD.S.IT.A.1.65	DN65	MD(*)	029010254		029010654	
M-.MD.S.IT.A.1.80	DN80	MD(*)	029010354		029010754	
M-.MD.S.IT.A.1.100	DN100	MD(*)	029010454		029010854	

Model	Gas train	Operation	R520A		R525A	
			Code	Price €	Code	Price €
M-.PR.S.IT.A.1.50	2"	PR	029010953		-	
M-.PR.S.IT.A.1.65	DN65	PR	029011053		029011453	
M-.PR.S.IT.A.1.80	DN80	PR	029011153		029011553	
M-.PR.S.IT.A.1.100	DN100	PR	029011253		029011653	
M-.MD.S.IT.A.1.50	2"	MD(*)	029010954		-	
M-.MD.S.IT.A.1.65	DN65	MD(*)	029011054		029011454	
M-.MD.S.IT.A.1.80	DN80	MD(*)	029011154		029011554	
M-.MD.S.IT.A.1.100	DN100	MD(*)	029011254		029011654	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).  
In compliance with DIRECTIVE 2009/142/CE



# novanta-cinquecento series

R91A R92A R93A R512A R515A R520A R525A

## ELECTRONIC OPERATION

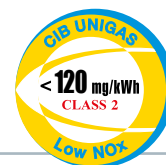
Model	Gas train	Operation	R91A		R92A	
			Code	Price €	Code	Price €
M-.PR.S.IT.A.1.50.EA	2"	PR	01201485A		01201525A	
M-.PR.S.IT.A.1.65.EA	DN65	PR	01201495A		01201535A	
M-.PR.S.IT.A.1.80.EA	DN80	PR	01201505A		01201545A	
M-.PR.S.IT.A.1.100.EA	DN100	PR	01201515A		01201555A	
M-.MD.S.IT.A.1.50.EA	2"	MD(*)	01201485E		01201525E	
M-.MD.S.IT.A.1.65.EA	DN65	MD(*)	01201495E		01201535E	
M-.MD.S.IT.A.1.80.EA	DN80	MD(*)	01201505E		01201545E	
M-.MD.S.IT.A.1.100.EA	DN100	MD(*)	01201515E		01201555E	
M-.MD.S.IT.A.1.50.ES	2"	MD(*)	01201485S		01201525S	
M-.MD.S.IT.A.1.65.ES	DN65	MD(*)	01201495S		01201535S	
M-.MD.S.IT.A.1.80.ES	DN80	MD(*)	01201505S		01201545S	
M-.MD.S.IT.A.1.100.ES	DN100	MD(*)	01201515S		01201555S	

Model	Gas train	Operation	R93A	
			Code	Price €
M-.PR.S.IT.A.1.50.EA	2"	PR	01201565A	
M-.PR.S.IT.A.1.65.EA	DN65	PR	01201575A	
M-.PR.S.IT.A.1.80.EA	DN80	PR	01201585A	
M-.PR.S.IT.A.1.100.EA	DN100	PR	01201595A	
M-.MD.S.IT.A.1.50.EA	2"	MD(*)	01201565E	
M-.MD.S.IT.A.1.65.EA	DN65	MD(*)	01201575E	
M-.MD.S.IT.A.1.80.EA	DN80	MD(*)	01201585E	
M-.MD.S.IT.A.1.100.EA	DN100	MD(*)	01201595E	
M-.MD.S.IT.A.1.50.ES	2"	MD(*)	01201565S	
M-.MD.S.IT.A.1.65.ES	DN65	MD(*)	01201575S	
M-.MD.S.IT.A.1.80.ES	DN80	MD(*)	01201585S	
M-.MD.S.IT.A.1.100.ES	DN100	MD(*)	01201595S	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).  
In compliance with DIRECTIVE 2009/142/CE

# novanta-cinquecento series

R91A R92A R93A R512A R515A R520A R525A



GAS

## ELECTRONIC OPERATION

Model	Gas train	Operation	R512A		R515A	
			Code	Price €	Code	Price €
M-.PR.S.IT.A.1.50.EA	2"	PR	02901015A		02901055A	
M-.PR.S.IT.A.1.65.EA	DN65	PR	02901025A		02901065A	
M-.PR.S.IT.A.1.80.EA	DN80	PR	02901035A		02901075A	
M-.PR.S.IT.A.1.100.EA	DN100	PR	02901045A		02901085A	
M-.MD.S.IT.A.1.50.EA	2"	MD(*)	02901015E		02901055E	
M-.MD.S.IT.A.1.65.EA	DN65	MD(*)	02901025E		02901065E	
M-.MD.S.IT.A.1.80.EA	DN80	MD(*)	02901035E		02901075E	
M-.MD.S.IT.A.1.100.EA	DN100	MD(*)	02901045E		02901085E	
M-.MD.S.IT.A.1.50.ES	2"	MD(*)	02901015S		02901055S	
M-.MD.S.IT.A.1.65.ES	DN65	MD(*)	02901025S		02901065S	
M-.MD.S.IT.A.1.80.ES	DN80	MD(*)	02901035S		02901075S	
M-.MD.S.IT.A.1.100.ES	DN100	MD(*)	02901045S		02901085S	

Model	Gas train	Operation	R520A		R525A	
			Code	Price €	Code	Price €
M-.PR.S.IT.A.1.50.EA	2"	PR	02901095A		-	
M-.PR.S.IT.A.1.65.EA	DN65	PR	02901105A		02901145A	
M-.PR.S.IT.A.1.80.EA	DN80	PR	02901115A		02901155A	
M-.PR.S.IT.A.1.100.EA	DN100	PR	02901125A		02901165A	
M-.MD.S.IT.A.1.50.EA	2"	MD(*)	02901095E		-	
M-.MD.S.IT.A.1.65.EA	DN65	MD(*)	02901105E		02901145E	
M-.MD.S.IT.A.1.80.EA	DN80	MD(*)	02901115E		02901155E	
M-.MD.S.IT.A.1.100.EA	DN100	MD(*)	02901125E		02901165E	
M-.MD.S.IT.A.1.50.ES	2"	MD(*)	02901095S		-	
M-.MD.S.IT.A.1.65.ES	DN65	MD(*)	02901105S		02901145S	
M-.MD.S.IT.A.1.80.ES	DN80	MD(*)	02901115S		02901155S	
M-.MD.S.IT.A.1.100.ES	DN100	MD(*)	02901125S		02901165S	

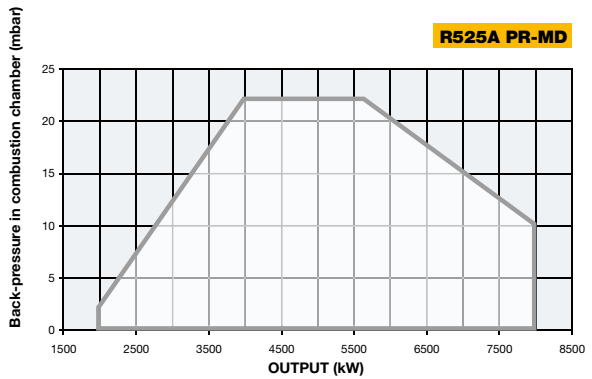
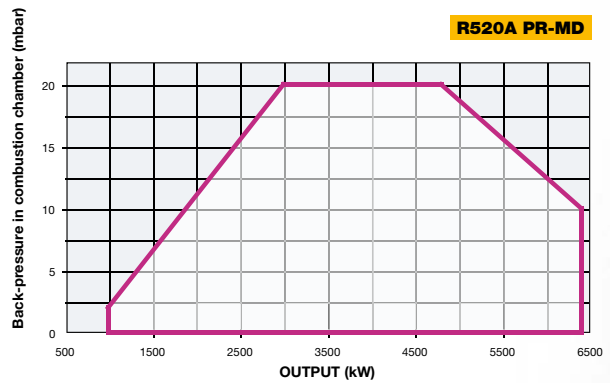
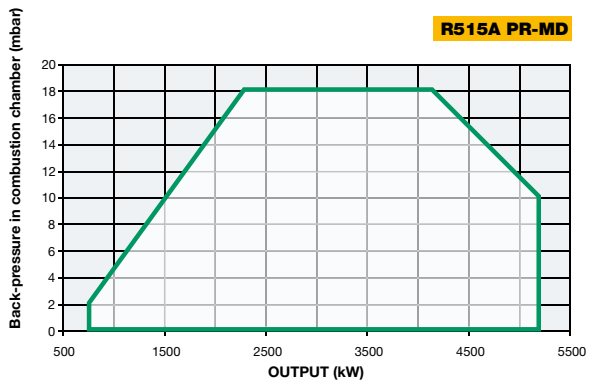
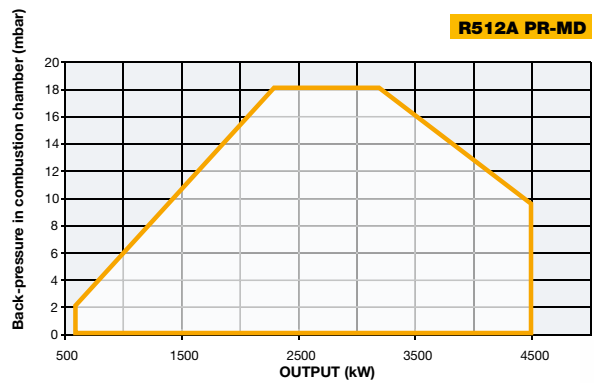
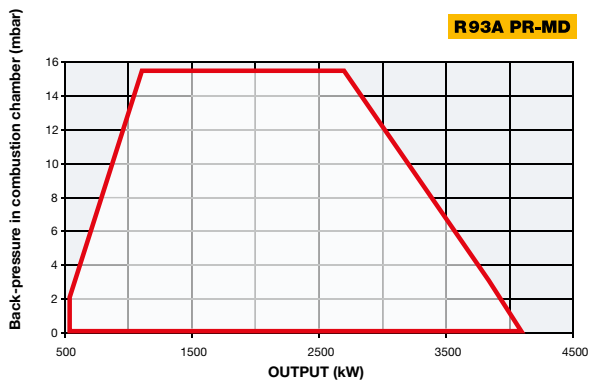
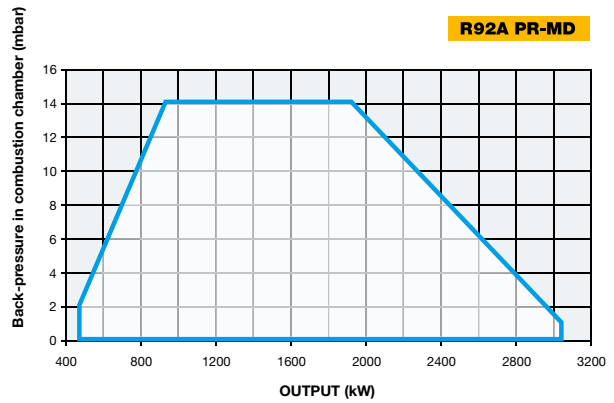
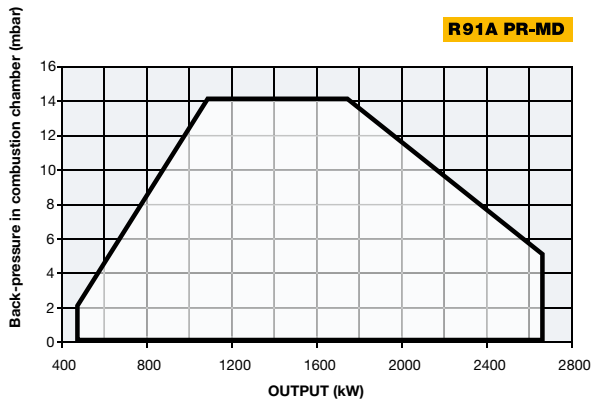
(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).  
In compliance with DIRECTIVE 2009/142/CE





# novanta-cinquecento series

R91A R92A R93A R512A R515A R520A R525A

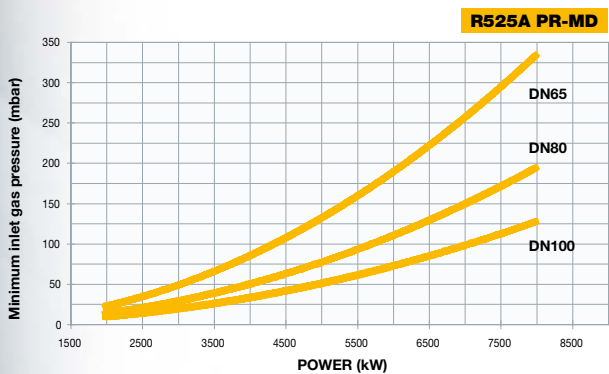
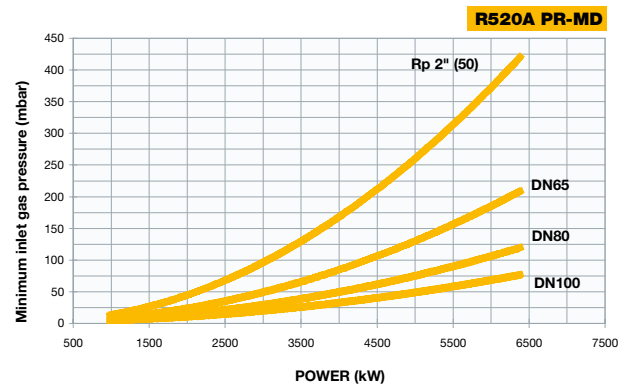
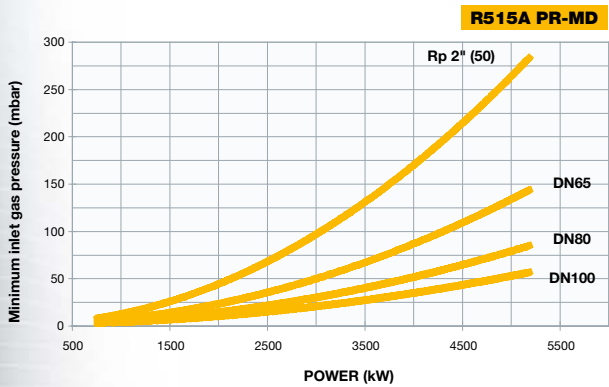
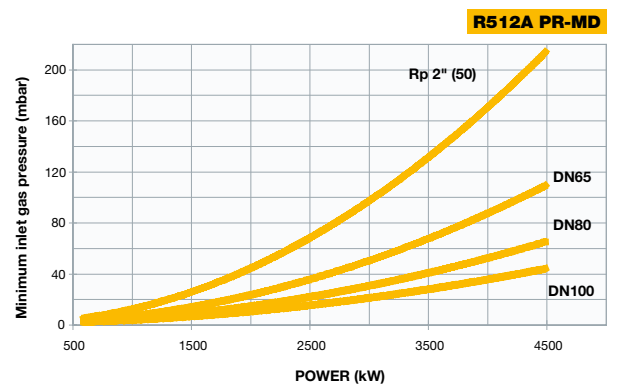
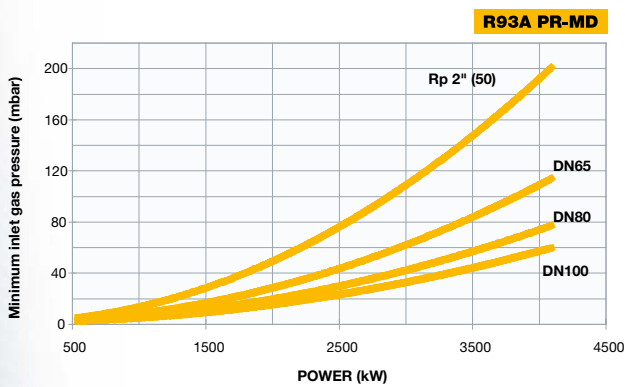
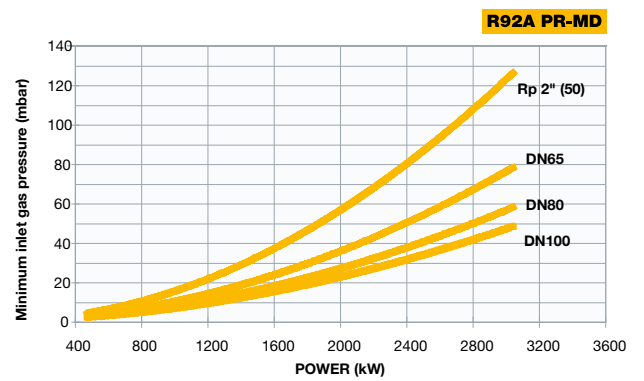
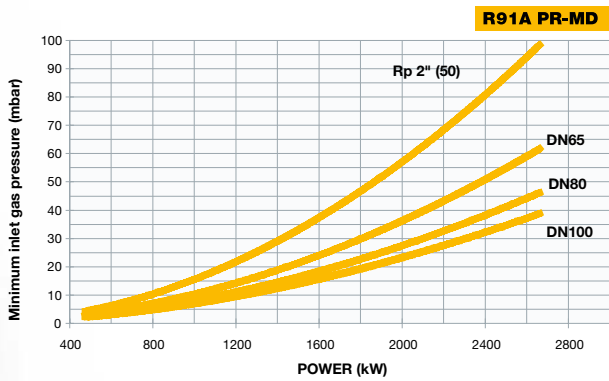


# novanta-cinquecento series

R91A R92A R93A R512A R515A R520A R525A



GAS



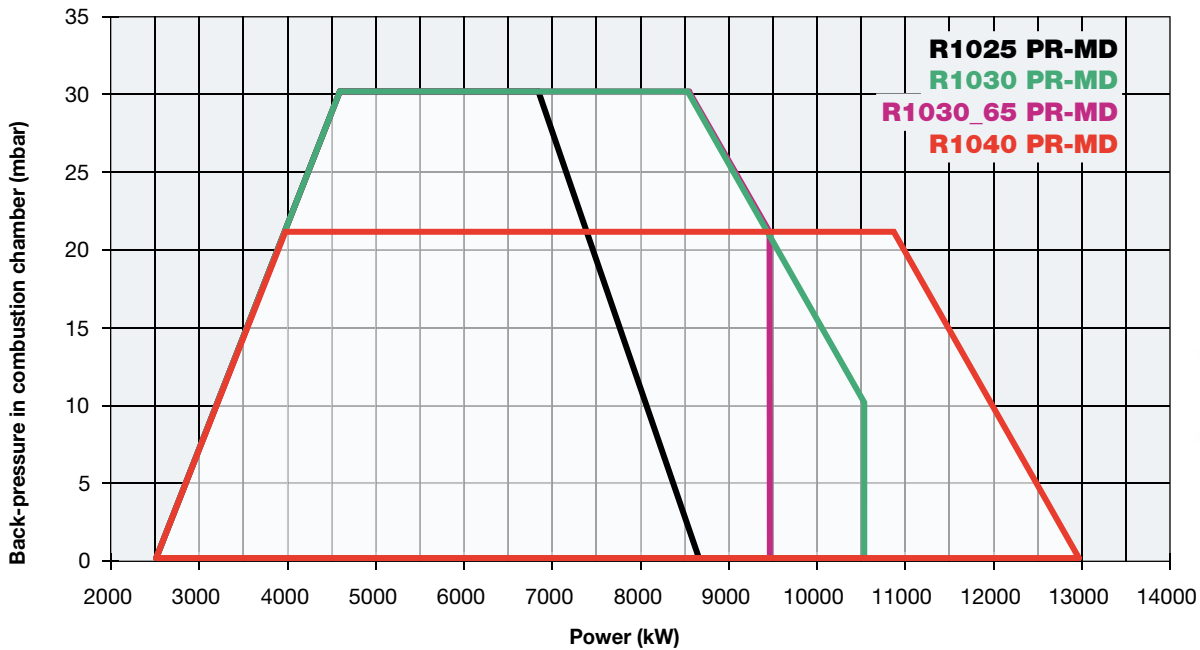
Attention: he graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.



Designed to satisfy the most demanding industrial applications, the array “MILLE series” is the largest of the aluminium monoblock burners. It features an aluminium housing and a backward curved centrifugal impeller. The performance range of this array of product goes from 2550 to 13000 kW and its modulating ratio is 1:3. Higher modulating ratio (up to 1:10) is available, upon request, in those models with mobile combustion head and electronic control unit.



*Electronic set up (optional)*

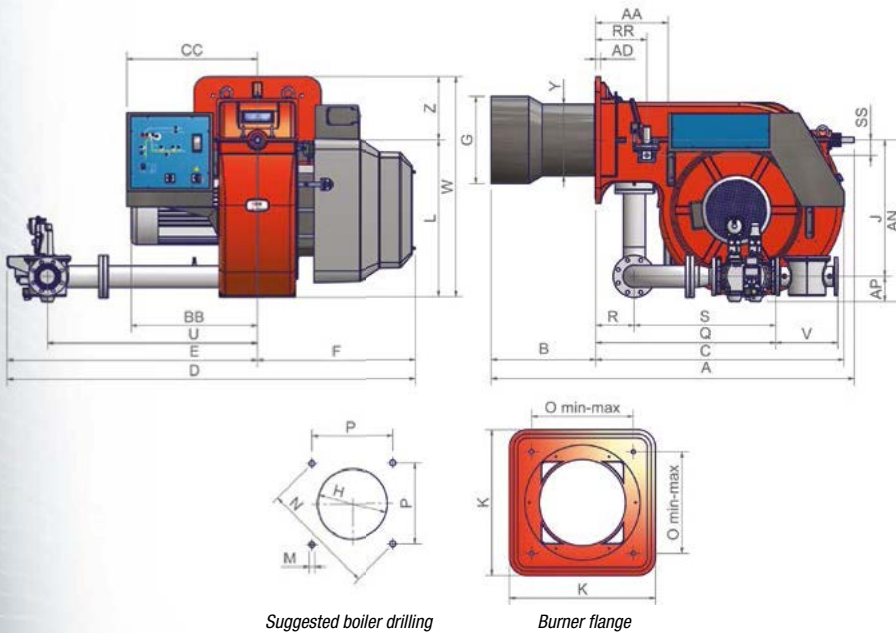


## TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Gas connections Rp
		min.	max.			
<b>R1025</b>	M-.xx.S.IT.A.1.xxx	2.550	8.700	400 V 3N ac	18,5	DN65 - 80 - 100
<b>R1030</b>	M-.xx.S.IT.A.1.65	2.550	9.500	400 V 3N ac	22,0	DN65
<b>R1030</b>	M-.xx.S.IT.A.1.xxx	2.550	10.600	400 V 3N ac	22,0	DN80 - 100
<b>R1040</b>	M-.xx.S.IT.A.1.xxx	2.550	13.000	400 V 3N ac	30,0	DN80 - 100 - 125

For the configuration of the gas train, see pages 110-111.

**N.B. Monoblock burners Duemila series with the capacity up to 19 MW consult ours sales officies.**



Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>R1025/1030</b>	2270	1720	1320	550
<b>R1040</b>	2380	1730	1460	600

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																														
		A	AA	AD	AN	AP	B	BB	C	CC	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	RR	S	SS	U	V	W	Y	Z
<b>R1025</b>	M-.xx.S.IT.A.1.65	1888	377	25	827	118	544	648	1291	680	2121	1299	822	400	450	709	660	816	M16	651	460	460	914	200	265	714	80	1092	292	1146	379	330
<b>R1025</b>	M-.xx.S.IT.A.1.80	1888	377	25	841	132	544	648	1291	680	2123	1301	822	400	450	709	660	816	M16	651	460	460	936	200	265	736	80	1092	322	1146	379	330
<b>R1025</b>	M-.xx.S.IT.A.1.100	1888	377	25	854	145	544	648	1291	680	2139	1317	822	400	450	709	660	816	M16	651	460	460	842	200	265	642	80	1092	382	1146	379	330
<b>R1030</b>	M-.xx.S.IT.A.1.65	1888	377	25	827	118	544	664	1291	680	2121	1299	822	454	504	709	660	816	M16	651	460	460	914	200	265	714	80	1092	292	1146	372	330
<b>R1030</b>	M-.xx.S.IT.A.1.80	1888	377	25	841	132	544	664	1291	680	2123	1301	822	454	504	709	660	816	M16	651	460	460	936	200	265	736	80	1092	322	1146	372	330
<b>R1030</b>	M-.xx.S.IT.A.1.100	1888	377	25	854	145	544	664	1291	680	2139	1317	822	454	504	709	660	816	M16	651	460	460	842	200	265	642	80	1092	382	1146	372	330
<b>R1040</b>	M-.xx.S.IT.A.1.80	1888	377	25	841	132	544	664	1291	680	2123	1301	822	514	564	709	660	816	M16	651	460	460	936	200	265	736	80	1092	322	1146	408	330
<b>R1040</b>	M-.xx.S.IT.A.1.100	1888	377	25	854	145	544	664	1291	680	2139	1317	822	514	564	709	660	816	M16	651	460	460	842	200	265	642	80	1092	382	1146	408	330
<b>R1040</b>	M-.xx.S.IT.A.1.125	1888	377	25	884	175	544	664	1291	680	2254	1432	822	514	564	709	660	816	M16	651	460	460	954	200	265	754	80	1192	480	1146	408	330

(\*) Approximate values



### MECHANICAL OPERATION

Model	Gas train	Operation	R1025		R1030		R1040	
			Code	Price €	Code	Price €	Code	Price €
M-.PR.S.IT.A.1.65	DN65	PR	023011953		023012253		-	
M-.PR.S.IT.A.1.80	DN80	PR	023012053		023012353		023012553	
M-.PR.S.IT.A.1.100	DN100	PR	023012153		023012453		023012653	
M-.PR.S.IT.A.1.125	DN125	PR	-		-		023012753	
M-.MD.S.IT.A.1.65	DN65	PR	023011954		023012254		-	
M-.MD.S.IT.A.1.80	DN80	MD(*)	023012054		023012354		023012554	
M-.MD.S.IT.A.1.100	DN100	MD(*)	023012154		023012454		023012654	
M-.MD.S.IT.A.1.125	DN125	MD(*)	-		-		023012754	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).  
In compliance with DIRECTIVE 2009/142/CE

### ELECTRONIC OPERATION

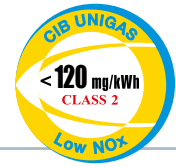
Model	Gas train	Operation	R1025		R1030		R1040	
			Code	Price €	Code	Price €	Code	Price €
M-.PR.S.IT.A.1.65.EA	DN65	PR	02301195A		02301225A		-	
M-.PR.S.IT.A.1.80.EA	DN80	PR	02301205A		02301235A		02301255A	
M-.PR.S.IT.A.1.100.EA	DN100	PR	02301215A		02301245A		02301265A	
M-.PR.S.IT.A.1.125.EA	DN125	PR	-		-		02301275A	
M-.MD.S.IT.A.1.65.EA	DN65	PR	02301195E		02301225E		-	
M-.MD.S.IT.A.1.80.EA	DN80	MD(*)	02301205E		02301235E		02301255E	
M-.MD.S.IT.A.1.100.EA	DN100	MD(*)	02301215E		02301245E		02301265E	
M-.MD.S.IT.A.1.125.EA	DN125	MD(*)	-		-		02301275E	

Model	Gas train	Operation	R1025		R1030		R1040	
			Code	Price €	Code	Price €	Code	Price €
M-.MD.S.IT.A.1.65.ES	DN65	PR	02301025S		02301065S		-	
M-.MD.S.IT.A.1.80.ES	DN80	MD(*)	02301035S		02301075S		02301145S	
M-.MD.S.IT.A.1.100.ES	DN100	MD(*)	02301045S		02301085S		02301155S	
M-.MD.S.IT.A.1.125.ES	DN125	MD(*)	-		-		02301165S	

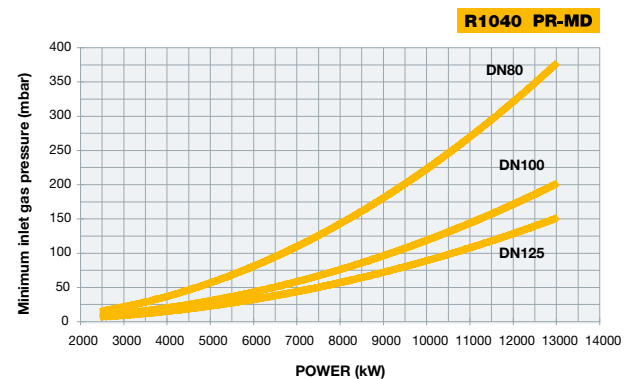
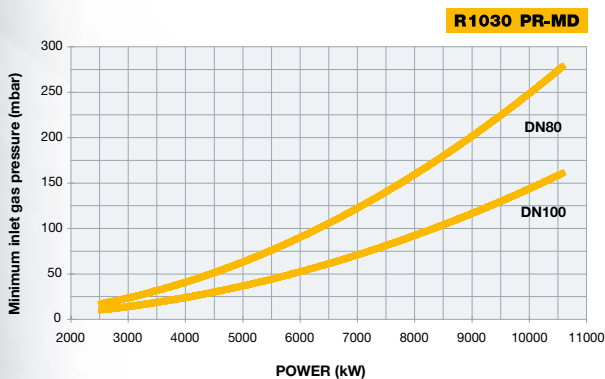
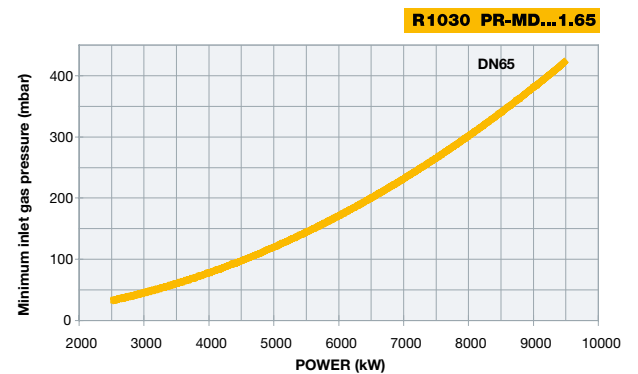
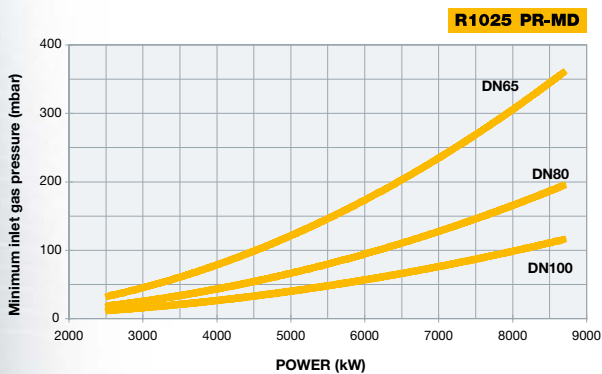
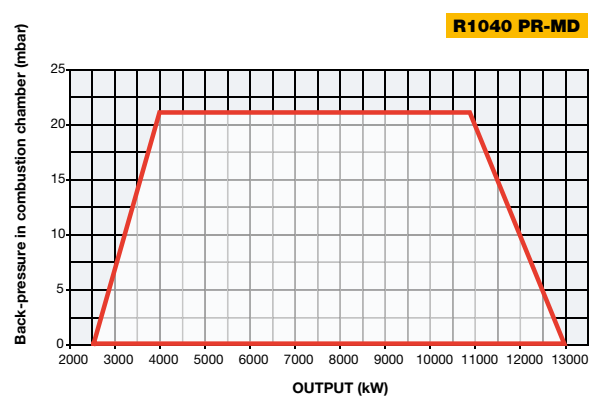
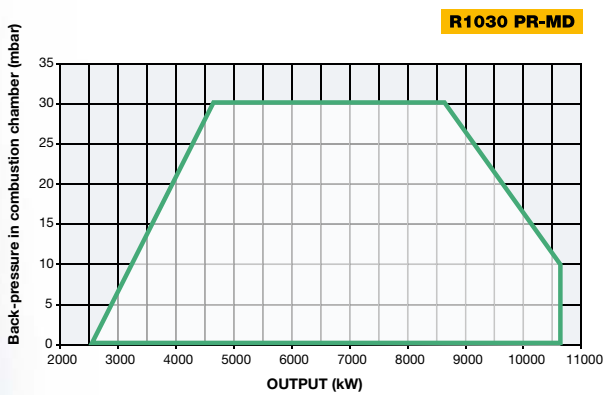
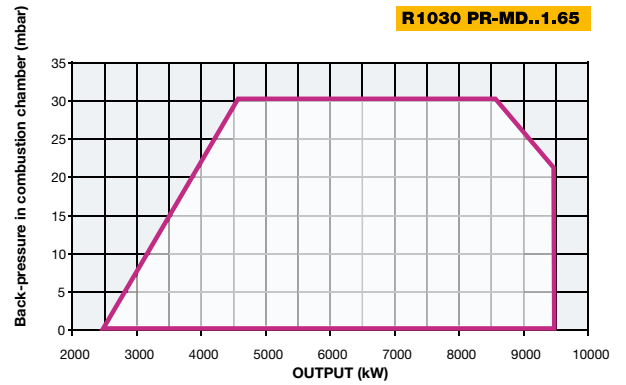
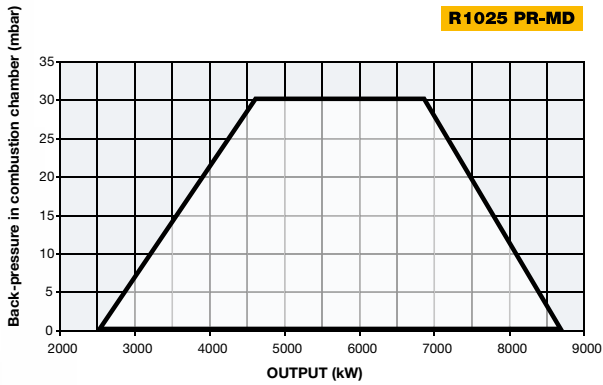
(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).  
In compliance with DIRECTIVE 2009/142/CE

# mille series

R1025 R1030 R1040



GAS



**Attention:** The graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.

This burners series has been produced to work on bakery and rotary ovens. These burners are used, especially, in commercial kitchens, big hotels and restaurants.

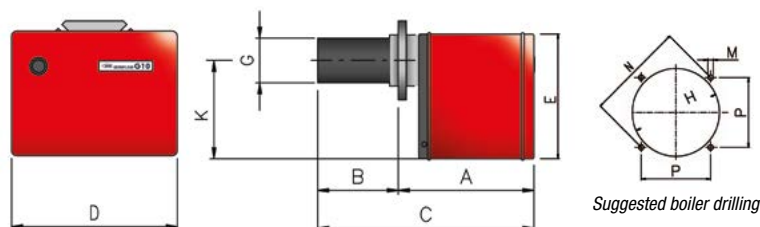
They feature the same main characteristics of the standard burners plus the possibility to manually decrease the output up to 40% on light oil burners, and up to 50% on gas burners. On the burner case we have installed an ON-OFF switch and a switch to regulate the output. These burners are equipped with a double protection shield and a blast tube in thermalsteel for high temperature operation.



## TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Gas connections Rp
		min.	max.			
<b>Tecnopan S5</b>	M-.TN.x.IT.B.0.15	35	70	230 V 1N ac	0,10	1/2"
<b>Tecnopan S10</b>	M-.TN.x.IT.B.0.20	65	120	230 V 1N ac	0,15	3/4"
<b>Tecnopan S18</b>	M-.TN.x.IT.B.0.25	80	200	230 V 1N ac	0,15	1"
<b>Chef S5</b>	M-.TN.S.IT.D.0.15	35	70	230 V 1N ac	0,10	1/2"

For the configuration of the gas train, see pages 110-111.

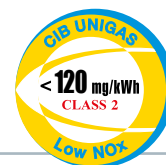


Type	Model	Overall dimensions* (mm)										Burner flange (mm)				Packaging dimensions* (mm)			
		A	B	BL	C	CL	D	E	G	K	H	P min.	P max.	M	N	l	p	h	kg
<b>S5</b>	M-.TN.x.IT.B.0.15	320	0÷80	0÷180	400	500	310	230	80	190	90	85	134	M8	155,5	360	300	560	16,8
<b>S10</b>	M-.TN.x.IT.B.0.20	350	180	275	530	625	340	255	113	210	125	105	134	M8	169,7	420	340	620	22
<b>S18</b>	M-.TN.x.IT.B.0.25	350	205	300	555	650	340	255	126	210	132	105	134	M8	169,7	420	340	620	24
<b>Chef S5</b>	M-.TN.S.IT.D.0.15	320	0÷80	0÷180	400	500	310	230	80	190	90	85	134	M8	155,5	360	300	560	16,8

(\*) Approximate values

# miniflam series

tecnopan S5 S10 S18 chef S5



GAS

## MECHANICAL OPERATION

Model	Gas train	Operation	S5		S10		S18	
			Code	Price €	Code	Price €	Code	Price €
M-.TN.S.IT.B.0.15	1/2"	TN	001010341		-			
M-.TN.L.IT.B.0.15	1/2"	TN	001010441		-			
M-.TN.S.IT.B.0.20	3/4"	TN	-		002010541			
M-.TN.L.IT.B.0.20	3/4"	TN	-		002010641			
M-.TN.S.IT.B.0.25	1"	TN					002010741	
M-.TN.L.IT.B.0.25	1"	TN					002010841	
M-.TN.S.IT.D.0.15	1/2"	TN	001010641		-			

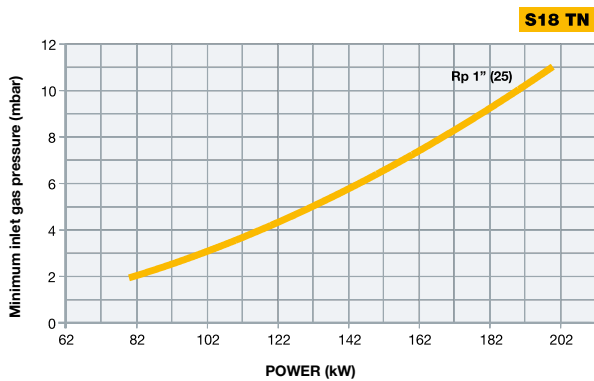
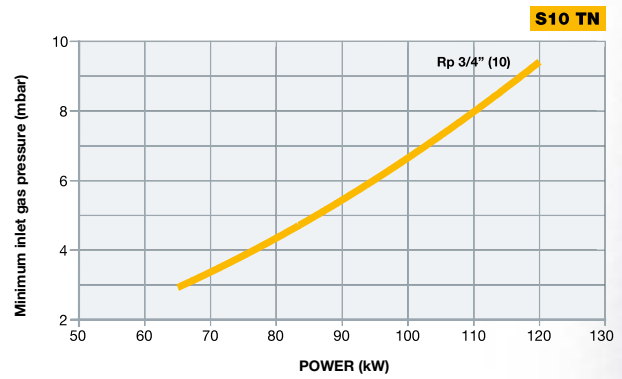
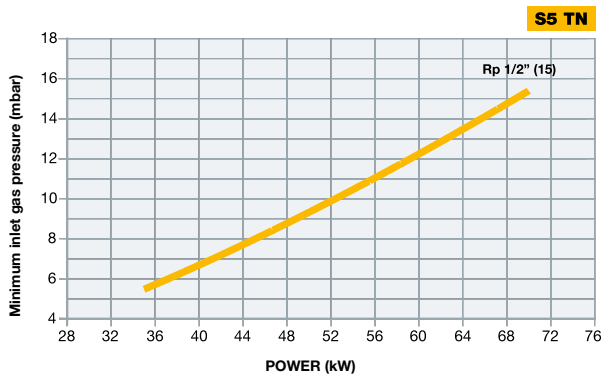
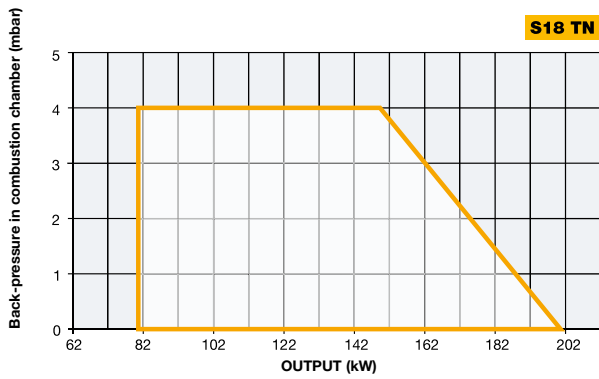
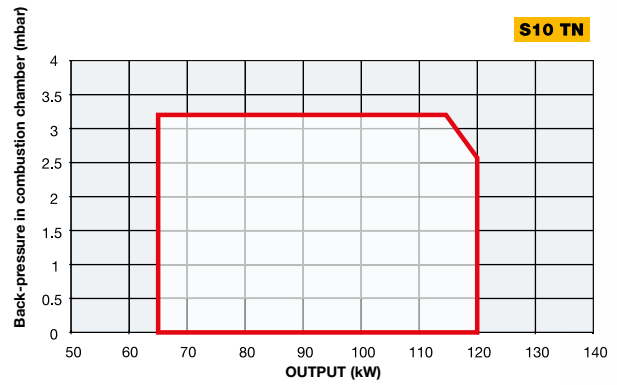
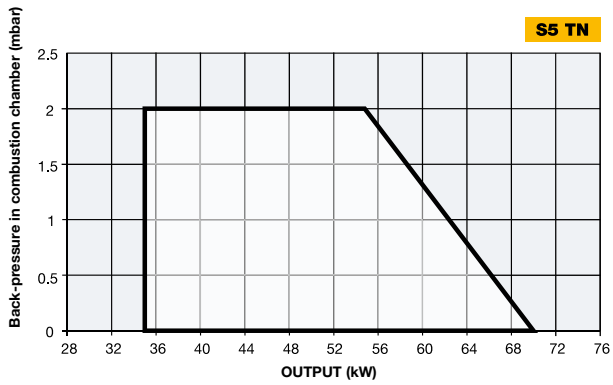
In compliance with DIRECTIVE 2009/142/CE





# miniflam series

tecnopan S5 S10 S18 chef S5

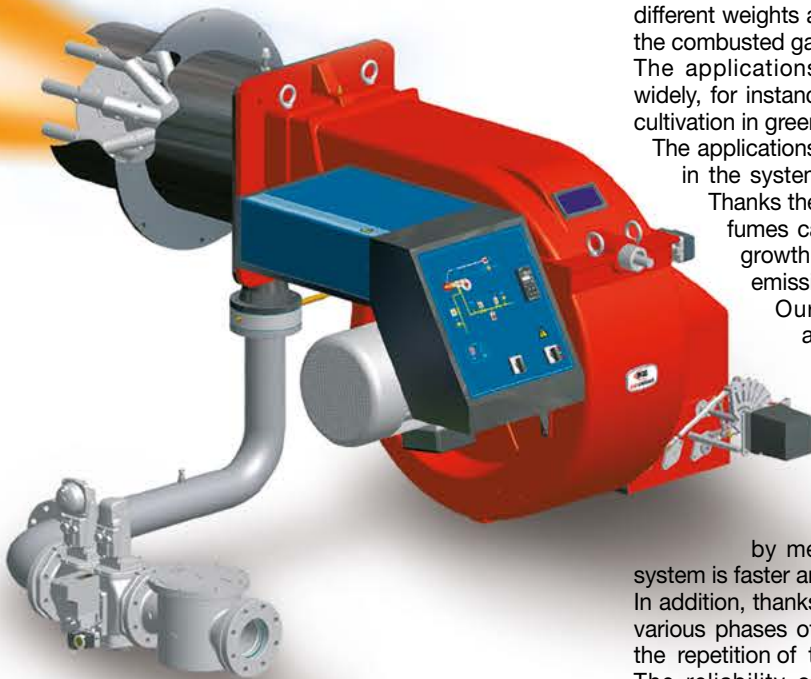


**Attention:** the graph shows the feeding gas pressure versus the desired power output of the burner. To calculate the minimum required gas pressure, however, it's necessary to add combustion chamber backpressure to the value read on the curve.



## CIB UNIGAS and its mission:

Natural gas  
low NO<sub>x</sub> burners  
(natural gas only)



The basis of true progress is the distribution of the advantages it brings, among which improved living standards and the protection of the environment are most certainly included. Well-aware of the vital role it plays in the development of ecologically compatible products and vaunting over forty years of experience in the design and in the manufacturing of burners for civil and industrial applications, CIB UNIGAS S.P.A., ranks among the European leaders of its sector.

The continuous investments in the development of technologically advanced products, which take place in the company research laboratory, have allowed the creation of special burners suited to applications that demand the lowest NO<sub>x</sub> emissions. These burners homologated with the CE Mark (Gas Appliances Directive), by one of the most authoritative European certification agencies in the sector (GASTEC), are used in our entire range of product, starting from our burners for civil applications (27KW) up to our industrial application burners (15MW).

Working closely with our research & development department, our technicians specialized and dedicated to the implementation of these products, have capitalized on the experience accumulated over the years in the field of standard burners (with normal emission) in order to create a parallel range of low environmental impact burners.

**In addition to scrupulously respecting the limits prescribed by the European directives regulating the pollutant emissions, all these models guarantee values amply below those and vaunt emissions of less than 80 mg/KWh (class 3 EN 676) on condition that CIB UNIGAS's recommendation about boiler thermal load value are respected.**

Our low NO<sub>x</sub> burners benefit from the installation of an innovative combustion head that re-distributes the gaseous element according to different weights and in negative pressure zone, in this way letting a part of the combusted gases circulate freely inside.

The applications in which these emission values are required vary widely, for instance such values are required in the systems provided for cultivation in greenhouses.

The applications in which these values are required vary widely, such as in the systems provide for cultivation in greenhouses, for example.

Thanks the special combustion head of our burners the combustion fumes can be used for the injection of the CO<sub>2</sub> required for the growth of plants into the greenhouses without the risk of CO emissions that are dangerous for the personnel working inside.

Our burners can be equipped with the most modern automatic mechanical or electronic modulation system which allows the correct gas/air ratio. In this way, the burners' thermal load can be adapted with precision to the heat required at every moment of the operation guaranteeing optimized performance.

The electronic modulation system makes the fullest use of the fuel/combustion air curve, which proves to be more extended than the curve provided by mechanical modulation as a consequence the electronic

system is faster and more punctual and optimal in the adjustment phase.

In addition, thanks to the presence of the microprocessor that controls the various phases of the process, the most absolute precision is ensured in the repetition of the operation sequences.

The reliability of this product, that has been proven by the close cooperation with some of the most important European boiler manufactures, coupled with the company's remarkable versatility, allow us to supply the widest and most complete offer of low pollutant emission burners for the satisfaction of the most particular and specific consumers' requests.

Precisely due to the particularity of the of the applications for which they have been designed, low NO<sub>x</sub> burners require specific technical skills and experience that CIB UNIGAS S.p.A. is happy to supply thanks to its technical assistance that operates around the world and is regularly re-trained during courses held at the around the world and that is regularly re-trained though courses held at the company's headquarters.

Far from representing mere compliance to the latest standards and regulations or the exclusive consequence of marketing logic, these results have been achieved as part of our mission to improve standards of living because we believe our natural environment to be much more than just an abstract concept and more precisely, the home of our present and future.



# low NOx gas burners

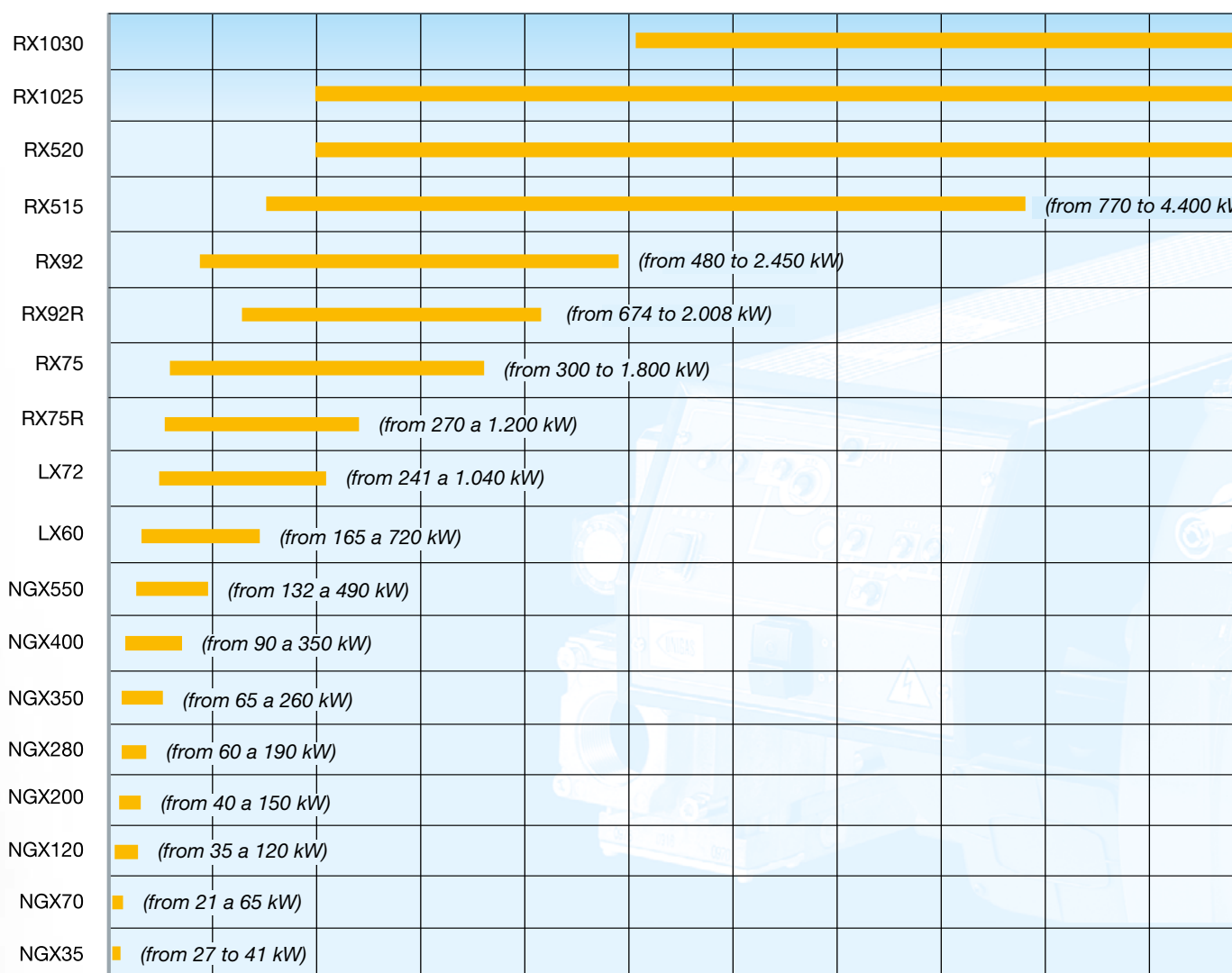
## idea series

**NGX35** - TN  
**NGX70** - TN/AB  
**NGX120** - TN/AB  
**NGX200** - TN/AB/PR/MD  
**NGX280** - TN/AB  
**NGX350** - PR/MD  
**NGX400** - PR/MD  
**NGX550** - PR/MD

## tecnopress series

**LX60** - AB/PR/MD  
**LX72** - AB/PR/MD  
**RX75R** - AB/PR/MD  
**RX75** - AB/PR/MD

### Type





**novanta - cinquecento series**

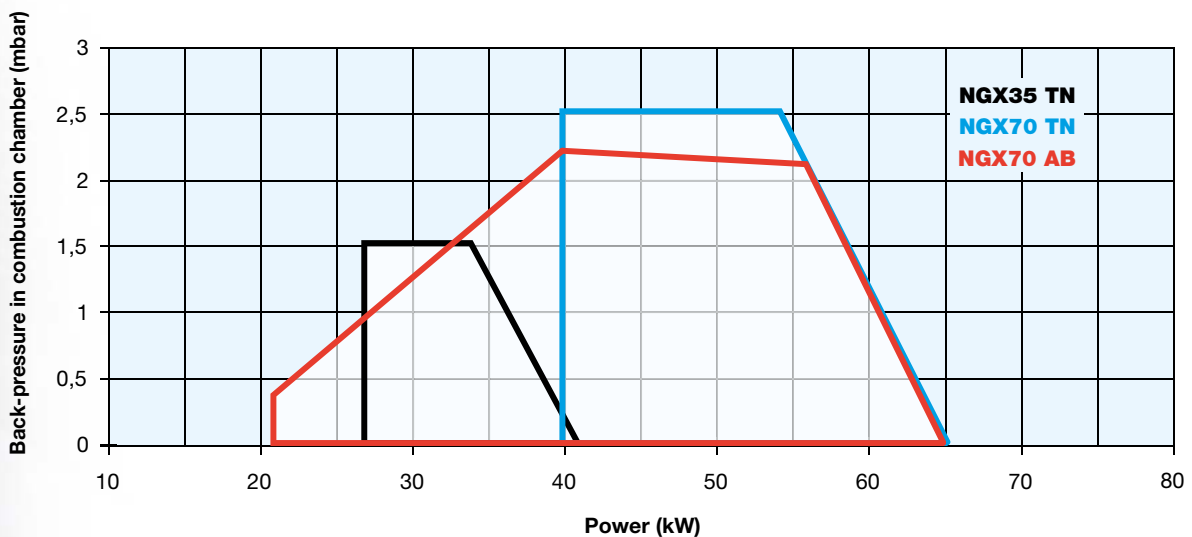
**RX92R** - PR/MD   **RX515** - PR/MD  
**RX92** - PR/MD   **RX520** - PR/MD

**mille series**

**RX1025** - PR/MD  
**RX1030** - PR/MD

										<i>(from 2.550 to 10.600 kW)</i>		
						<i>(from 1.000 to 8.600 kW)</i>						
<i>(from 1.000 to 5.800 kW)</i>												
M)												

The new generation of burners «**IDEA Low NOx class 3 (<80 mg/kWh)**» has been studied and realized to ensure the lowest environmental impact possible. This can be achieved thanks to the new combustion head that allows a staged air flow in order to let the flame burn progressively along the length of the combustion chamber.

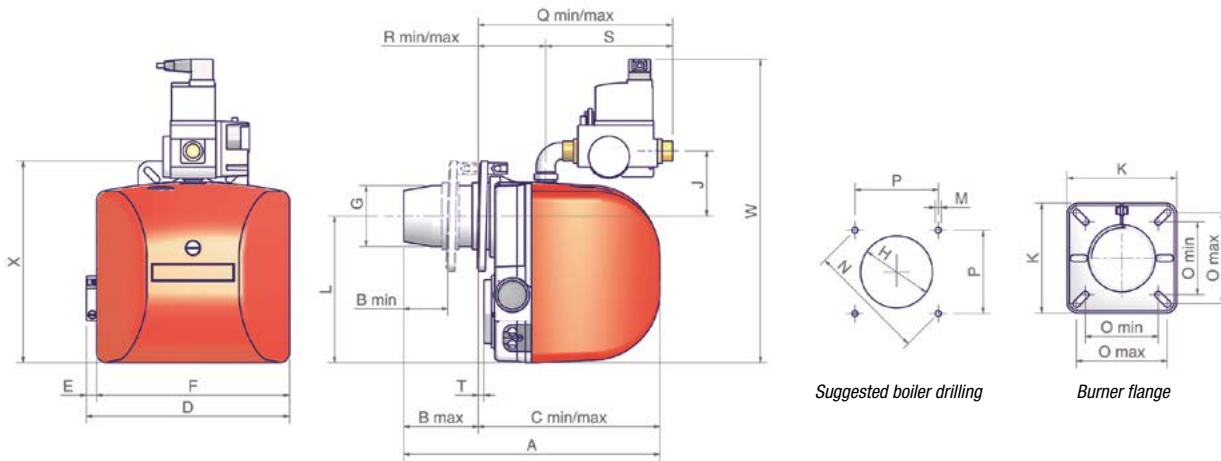




TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Gas connections Rp
		min.	max.			
NGX35	M-.TN.x.IT.A.0.xx	27	41	230 V 1N ac	0,075	1/2"
NGX70	M-.TN.x.IT.A.0.xx	40	65	230 V 1N ac	0,10	1/2" - 3/4"
NGX70	M-.AB.x.IT.A.0.xx	21	65	230 V 1N ac	0,10	1/2" - 3/4"

For the configuration of the gas train, see pages 110-111.



Suggested boiler drilling

Burner flange

Type	Packaging dimensions* (mm)			
	l	p	h	kg
NGX35	290	260	490	10
NGX70	400	300	520	14

(\*) Approximate values

Type	Model	Overall dimensions* (mm)															Boiler drilling* (mm)				Burner flange* (mm)						
		A	B	C	D	E	F	G	J	L	Q	R	S	T	W	X	H	M	N	P	K	O					
		min. max.		min. max.						min. max.		min. max.								min. max.							
NGX35	M-.TN.S.IT.A.0.xx	338	58	98	240	280	269	14	255	80	86	194	257	297	89	129	168	7	400	266	95	M8	153	108	145	96	120
NGX35	M-.TN.L.IT.A.0.xx	418	58	178	240	360	269	14	255	80	86	194	257	417	89	209	168	7	400	266	95	M8	153	108	145	96	120
NGX70	M-.xx.S.IT.A.0.xx	393	76	299	304	14	291	80	99	218	296	130	168	7	438	291	95	M8	153	108	145	96	120				
NGX70	M-.xx.L.IT.A.0.xx	461	76	149	294	377	304	14	291	80	99	218	292	375	125	208	168	7	438	291	95	M8	153	108	145	96	120

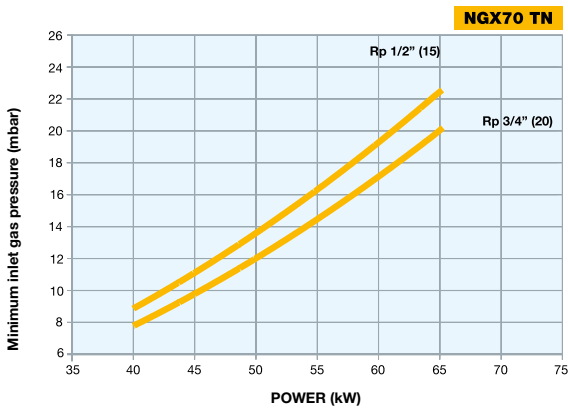
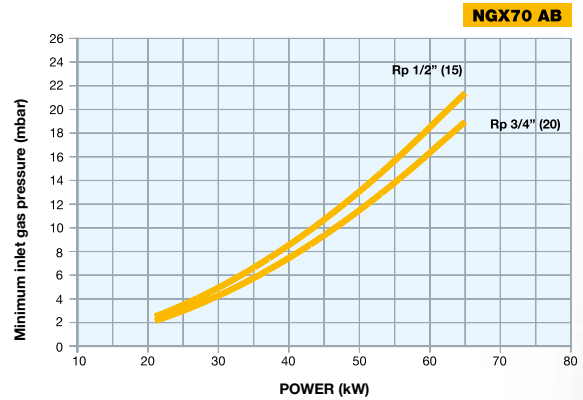
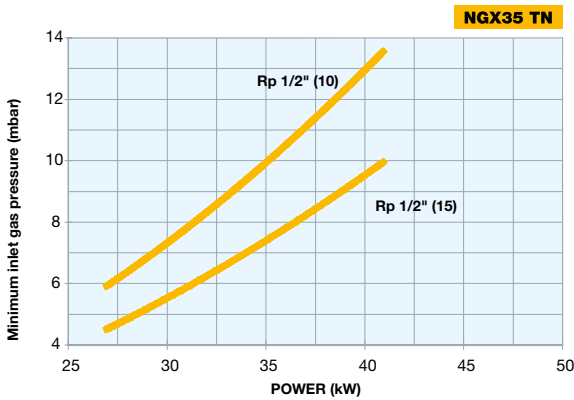
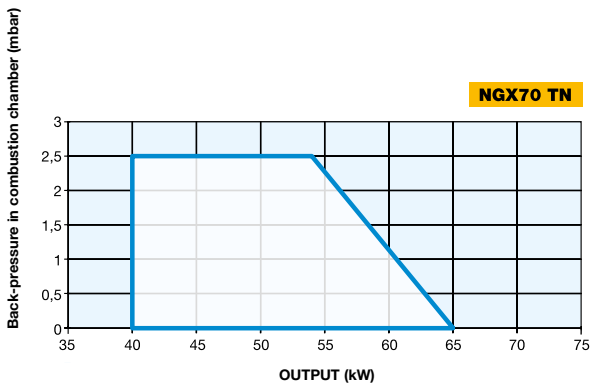
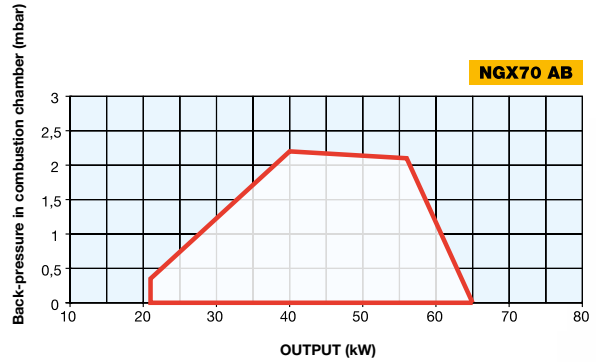
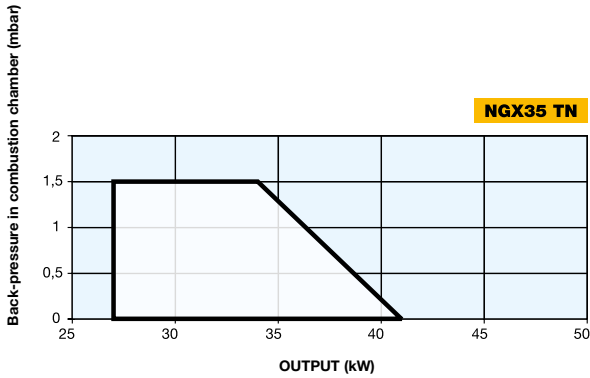
(\*) Approximate values

## MECHANICAL OPERATION

Model	Gas train	Operation	NGX35		NGX70	
			Code	Price €	Code	Price €
M-.TN.S.IT.A.0.10	1/2"	TN	024010541		-	
M-.TN.L.IT.A.0.10	1/2"	TN	024010641		-	
M-.TN.S.IT.A.0.15	1/2"	TN	024011441		025012141	
M-.TN.L.IT.A.0.15	1/2"	TN	024011541		025012241	
M-.TN.S.IT.Z.0.10 ♦	1/2"	TN	024010741		-	
M-.TN.L.IT.Z.0.10 ♦	1/2"	TN	024010841		-	
M-.TN.S.IT.Z.0.15 ♦	1/2"	TN	024011641		-	
M-.TN.L.IT.Z.0.15 ♦	1/2"	TN	024011741		-	
M-.TN.S.IT.A.0.20	3/4"	TN	-		025012341	
M-.TN.L.IT.A.0.20	3/4"	TN	-		025012441	
M-.AB.S.IT.A.0.15	1/2"	AB	-		025012142	
M-.AB.L.IT.A.0.15	1/2"	AB	-		025012242	
M-.AB.S.IT.A.0.20	3/4"	AB	-		025012342	
M-.AB.L.IT.A.0.20	3/4"	AB	-		025012442	

♦ Burner equipped with external air inlet.  
In compliance with DIRECTIVE 2009/142/CE.





**Attention:** he graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.

# idea series

NGX120 NGX200



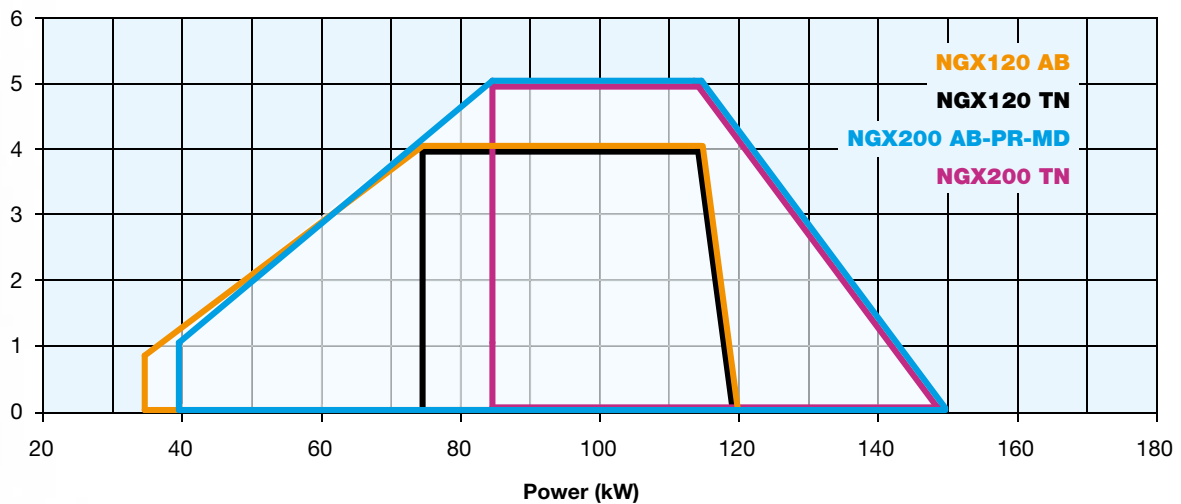
GAS

These burners are suitable for all type of pressurized boilers up to 150 kW. Thanks to the arrangement of the electronic and mechanical components, these burners are easy to use and to maintain and they guarantee performance maximization and optimal air/fuel mixing.

All these features are achieved thanks to the new combustion head that allows a staged air flow in order to let the flame burn progressively along the length of the combustion chamber.



Back-pressure in combustion chamber (mbar)

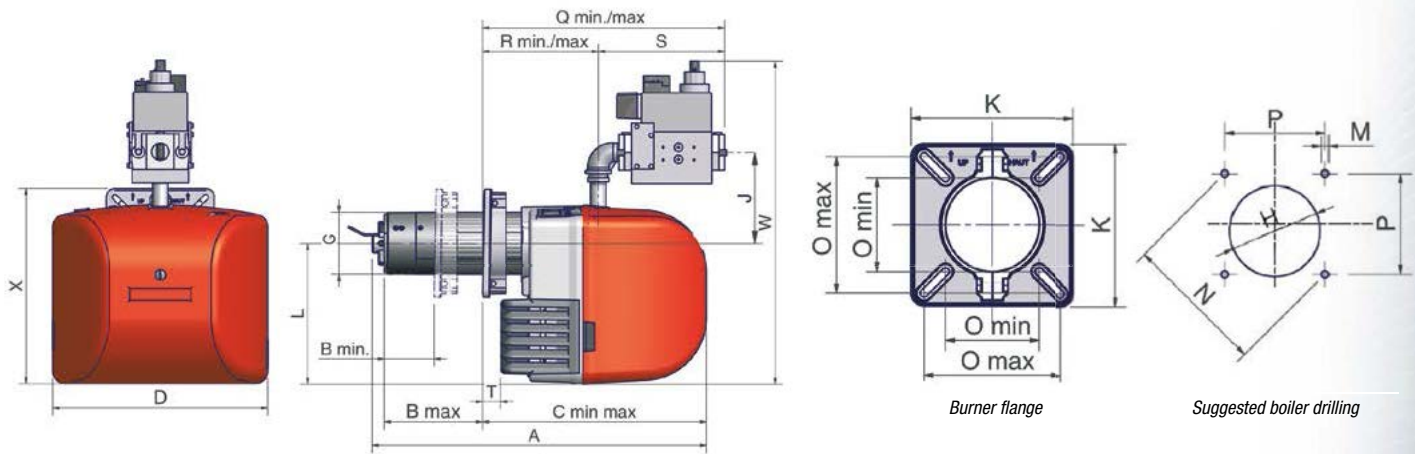




TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Gas connections Rp
		min.	max.			
NGX120	M-.TN.x.IT.A.0.20	75	120	230 V 1N ac	0,18	3/4"
NGX120	M-.AB.x.IT.A.0.20	35	120	230 V 1N ac	0,18	3/4"
NGX200	M-.TN.x.IT.A.0.xx	85	150	230 V 1N ac	0,18	3/4" - 1"
NGX200	M-.xx.x.IT.A.0.xx	40	150	230 V 1N ac	0,18	3/4" - 1"

For the configuration of the gas train, see pages 110-111.



Type	Packaging dimensions* (mm)			
	l	p	h	kg
NGX120..S	600	370	400	24
NGX120..L	750	370	400	25
NGX200..S	600	370	400	24
NGX200..L	750	370	400	25

(\*) Approximate values

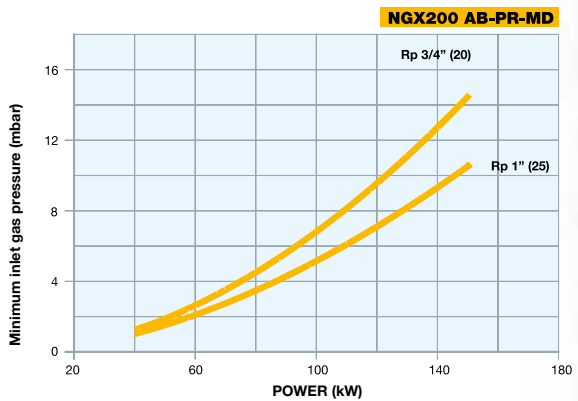
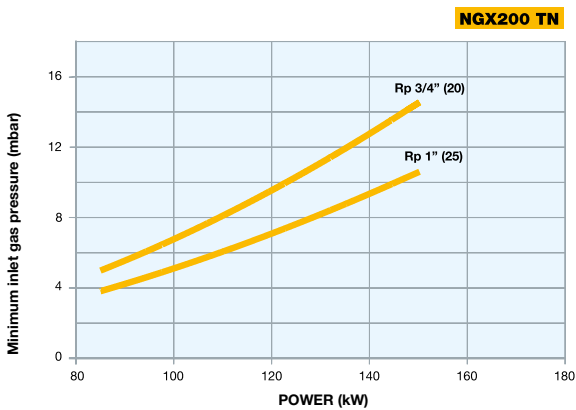
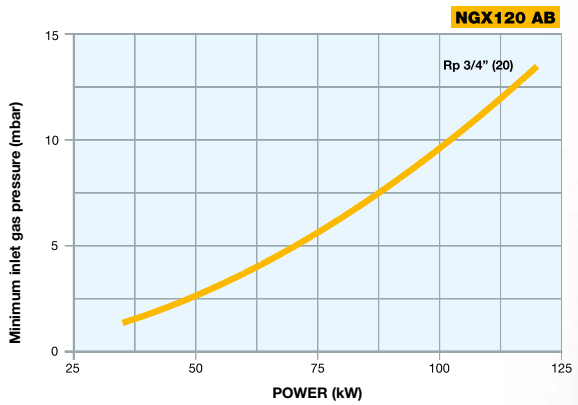
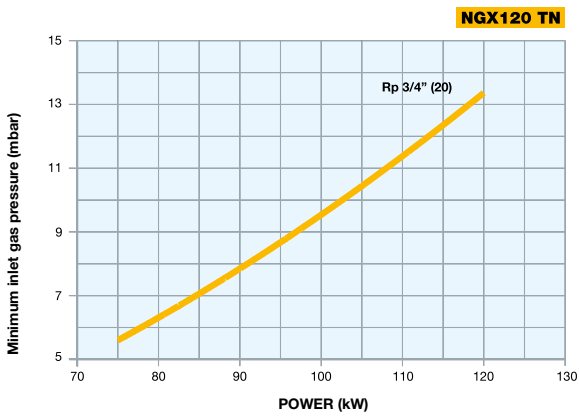
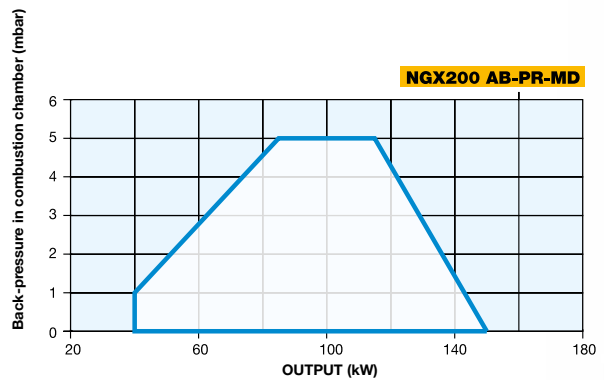
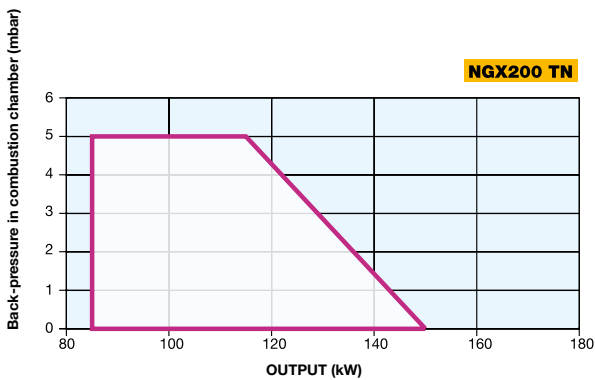
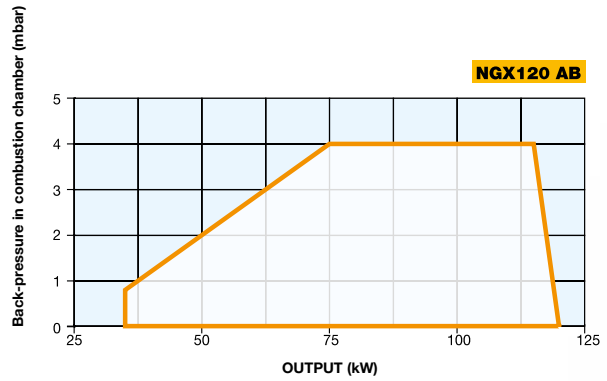
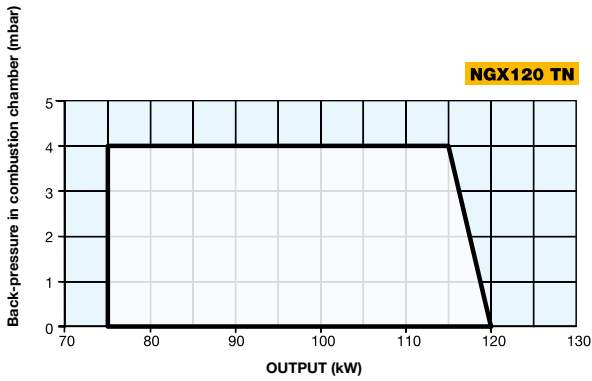
Type	Model	Overall dimensions* (mm)															Boiler drilling* (mm)				Burner flange* (mm)				
		A	B		C		D	G	J	L	Q		R		S	T	W	X	H	M	N	P	K	O	
		min. max.		min. max.						min. max.		min. max.										min. max.			
NGX120	M-.xx.S.IT.A.0.20	581	85	170	390	475	373	108	158	245	421	506	201	286	220	32	560	340	128	M8	188	133	188	108	158
NGX120	M-.xx.L.IT.A.0.20	681	85	270	390	575	373	108	158	245	421	506	201	286	220	32	560	340	128	M8	188	133	188	108	158
NGX200	M-.xx.S.IT.A.0.25	581	85	170	390	475	373	115	158	245	421	506	201	286	220	32	560	340	134	M8	188	133	188	108	158
NGX200	M-.xx.L.IT.A.0.25	681	85	270	390	575	373	115	158	245	421	506	201	286	220	32	560	340	134	M8	188	133	188	108	158

(\*) Approximate values

**MECHANICAL OPERATION**

Model	Gas train	Operation	NGX120		NGX200	
			Code	Price €	Code	Price €
M-.TN.S.IT.A.0.20	¾"	TN	026011341		026011741	
M-.TN.L.IT.A.0.20	¾"	TN	026011441		026011841	
M-.TN.S.IT.A.0.25	1"	TN	-		026011941	
M-.TN.L.IT.A.0.25	1"	TN	-		026012041	
M-.AB.S.IT.A.0.20	¾"	AB	026011342		026011742	
M-.AB.L.IT.A.0.20	¾"	AB	026011442		026011842	
M-.AB.S.IT.A.0.25	1"	AB	-		026011942	
M-.AB.L.IT.A.0.25	1"	AB	-		026012042	
M-.PR.S.IT.A.0.25	1"	PR	-		026011943	
M-.PR.L.IT.A.0.25	1"	PR	-		026012043	
M-.MD.S.IT.A.0.25	1"	MD(*)	-		026011944	
M-.MD.L.IT.A.0.25	1"	MD(*)	-		026012044	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).  
In compliance with DIRECTIVE 2009/142/CE



**Attention:** he graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.

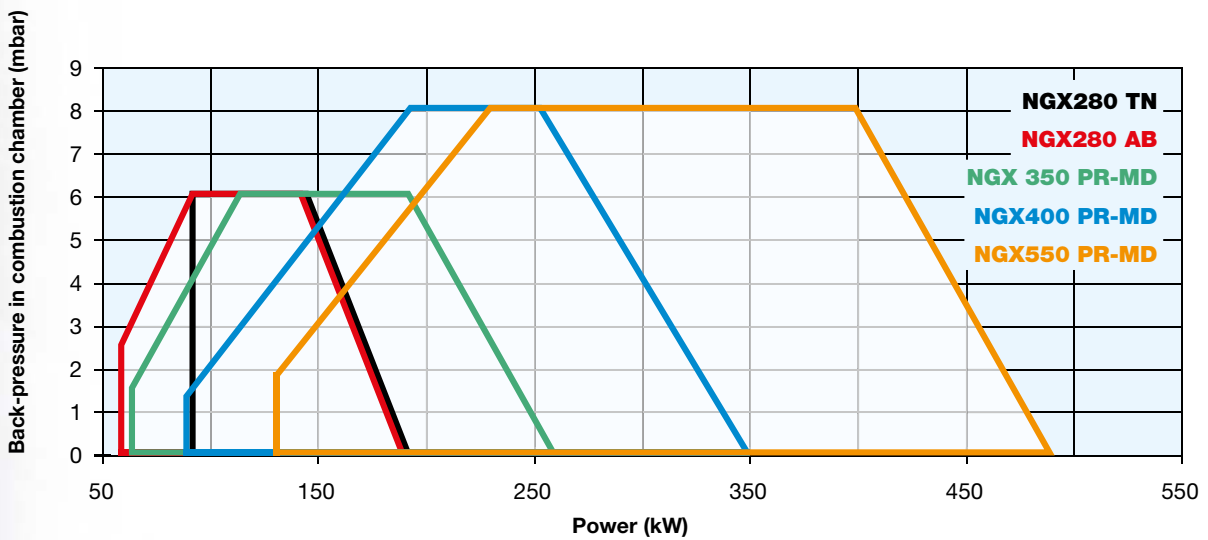
# idea series

NGX280 NGX350 NGX400 NGX550



GAS

The burners of the series IDEA **Low NOx Class 3** (<80 mg/KWh) covering this output range, have been provided with a very advanced and performing combustion head which ensure a stable combustion in all working conditions. The placement of the components inside the burner permits an easy and precise regulation and maintenance.

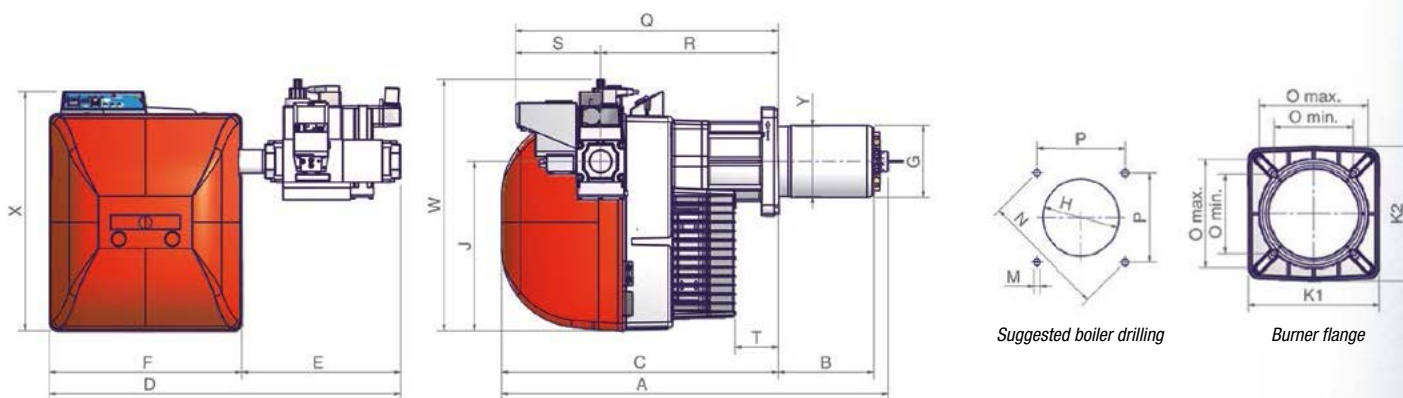




TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Gas connections Rp
		min.	max.			
<b>NGX280</b>	M-.TN.x.IT.A.0.xx	93	190	230 V 1N ac	0,25	1" - 1"1/4 - 1"1/2
<b>NGX280</b>	M-.xx.x.IT.A.0.xx	60	190	230 V 1N ac	0,25	1" - 1"1/4 - 1"1/2
<b>NGX350</b>	M-.xx.x.IT.A.0.xx	65	260	230 V 1N ac	0,37	1" - 1"1/4 - 1"1/2
<b>NGX400</b>	M-.xx.x.IT.A.0.xx	90	350	230 V 1N ac	0,37	1" - 1"1/4 - 1"1/2 - 2"
<b>NGX550</b>	M-.xx.x.IT.A.0.xx	132	490	230 V 1N ac	0,62	1"1/4 - 1"1/2 - 2"

For the configuration of the gas train, see pages 110-111.



Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>NGX280/350/400</b>	1120	440	580	42
<b>NGX550</b>	1200	460	630	55

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																								
		AS	AL	BS	BL	C	D	E	F	G	H	J	K		M	N	O		P	Q	R	S	T	W	X	Y
		1		2		min.		max.																		
<b>NGX280</b>	M-.xx.x.IT.A.0.25/32	754	899	163	308	570	596	200	396	113	164	348	215	223	M10	219	131	179	155	541	366	175	128	508	491	144
<b>NGX280</b>	M-.xx.x.IT.A.0.40	754	899	163	308	570	726	330	396	113	164	348	215	223	M10	219	131	179	155	541	366	175	128	517	491	144
<b>NGX350</b>	M-.xx.x.IT.A.0.25/32	778	908	178	308	570	596	200	396	131	164	348	215	223	M10	219	131	179	155	541	366	175	89	508	491	144
<b>NGX350</b>	M-.xx.x.IT.A.0.40	778	908	178	308	570	726	330	396	131	164	348	215	223	M10	219	131	179	155	541	366	175	89	517	491	144
<b>NGX400</b>	M-.xx.x.IT.A.0.25/32	798	928	198	328	570	596	200	396	148	168	348	215	223	M10	219	131	179	155	541	366	175	89	508	491	144
<b>NGX400</b>	M-.xx.x.IT.A.0.40	798	928	198	328	570	726	330	396	148	168	348	215	223	M10	219	131	179	155	541	366	175	89	517	491	144
<b>NGX400</b>	M-.xx.x.IT.A.0.50	798	928	198	328	570	726	330	396	148	168	348	215	223	M10	219	131	179	155	541	366	175	89	567	491	144
<b>NGX550</b>	M-.xx.x.IT.A.0.32	874	974	253	353	590	671	245	426	168	198	384	241	241	M10	247	157	192	174	552	377	175	69	543	533	155
<b>NGX550</b>	M-.xx.x.IT.A.0.40	874	974	253	353	590	744	318	426	168	198	384	241	241	M10	247	157	192	174	552	377	175	69	553	533	155
<b>NGX550</b>	M-.xx.x.IT.A.0.50	874	974	253	353	590	744	318	426	168	198	384	241	241	M10	247	157	192	174	552	377	175	69	603	533	155

(\*) Approximate values

**MECHANICAL OPERATION**

Model	Gas train	Operation	NGX280		NGX350	
			Code	Price €	Code	Price €
M-.TN.S.IT.A.0.25	1"	TN	027012341		-	
M-.TN.L.IT.A.0.25	1"	TN	027012441		-	
M-.TN.S.IT.A.0.32	1"¼	TN	027012541		-	
M-.TN.L.IT.A.0.32	1"¼	TN	027012641		-	
M-.TN.S.IT.A.0.40	1"½	TN	027012741		-	
M-.TN.L.IT.A.0.40	1"½	TN	027012841		-	
M-.AB.S.IT.A.0.25	1"	AB	027012342		-	
M-.AB.L.IT.A.0.25	1"	AB	027012442		-	
M-.AB.S.IT.A.0.32	1"¼	AB	027012542		-	
M-.AB.L.IT.A.0.32	1"¼	AB	027012642		-	
M-.AB.S.IT.A.0.40	1"½	AB	027012742		-	
M-.AB.L.IT.A.0.40	1"½	AB	027012842		-	
M-.PR.S.IT.A.0.25	1"	PR	027012343		-	
M-.PR.L.IT.A.0.25	1"	PR	027012443		-	
M-.PR.S.IT.A.0.32	1"¼	PR	027012543		-	
M-.PR.L.IT.A.0.32	1"¼	PR	027012643		-	
M-.PR.S.IT.A.0.40	1"½	PR	027012743		-	
M-.PR.L.IT.A.0.40	1"½	PR	027012843		-	
M-.MD.S.IT.A.0.25	1"	MD	027012344		-	
M-.MD.L.IT.A.0.25	1"	MD	027012444		-	
M-.MD.S.IT.A.0.32	1"¼	MD	027012544		-	
M-.MD.L.IT.A.0.32	1"¼	MD	027012644		-	
M-.MD.S.IT.A.0.40	1"½	MD	027012744		-	
M-.MD.L.IT.A.0.40	1"½	MD	027012844		-	
M-.PR.M.IT.A.0.25	1"	PR	-		027010843	
M-.PR.M.IT.A.0.32	1"¼	PR	-		027010943	
M-.PR.M.IT.A.0.40	1"½	PR	-		027011043	
M-.MD.M.IT.A.0.25	1"	MD(*)	-		027010844	
M-.MD.M.IT.A.0.32	1"¼	MD(*)	-		027010944	
M-.MD.M.IT.A.0.40	1"½	MD(*)	-		027011044	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).  
In compliance with DIRECTIVE 2009/142/CE





## MECHANICAL OPERATION

Model	Gas train	Operation	NGX400		NGX550	
			Code	Price €	Code	Price €
M-.PR.M.IT.A.0.25	1"	PR	027011143		-	
M-.PR.M.IT.A.0.32	1"¼	PR	027011243		-	
M-.PR.M.IT.A.0.40	1"½	PR	027011343		-	
M-.PR.M.IT.A.0.50	2"	PR	027011543		-	
M-.PR.S.IT.A.0.32	1"¼	PR	-		028010943	
M-.PR.L.IT.A.0.32	1"¼	PR	-		028011043	
M-.PR.S.IT.A.0.40	1"½	PR	-		028011143	
M-.PR.L.IT.A.0.40	1"½	PR	-		028011243	
M-.PR.S.IT.A.0.50	2"	PR	-		028011343	
M-.PR.L.IT.A.0.50	2"	PR	-		028011443	
M-.MD.M.IT.A.0.25	1"	MD(*)	027011144		-	
M-.MD.M.IT.A.0.32	1"¼	MD(*)	027011244		-	
M-.MD.M.IT.A.0.40	1"½	MD(*)	027011344		-	
M-.MD.M.IT.A.0.50	2"	MD(*)	027011544		-	
M-.MD.S.IT.A.0.32	1"¼	MD(*)	-		028010944	
M-.MD.L.IT.A.0.32	1"¼	MD(*)	-		028011044	
M-.MD.S.IT.A.0.40	1"½	MD(*)	-		028011144	
M-.MD.L.IT.A.0.40	1"½	MD(*)	-		028011244	
M-.MD.S.IT.A.0.50	2"	MD(*)	-		028011344	
M-.MD.L.IT.A.0.50	2"	MD(*)	-		028011444	

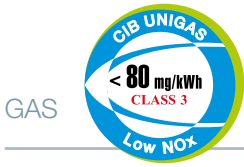
(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).  
In compliance with DIRECTIVE 2009/142/CE

**ELECTRONIC OPERATION**

Model	Gas train	Operation	NGX280		NGX350	
			Code	Price €	Code	Price €
M-.PR.S.IT.A.1.25.EA	1"	PR	02701235A		-	
M-.PR.L.IT.A.1.25.EA	1"	PR	02701245A		-	
M-.PR.S.IT.A.1.32.EA	1"¼	PR	02701255A		-	
M-.PR.L.IT.A.1.32.EA	1"¼	PR	02701265A		-	
M-.PR.S.IT.A.1.40.EA	1"½	PR	02701275A		-	
M-.PR.L.IT.A.1.40.EA	1"½	PR	02701285A		-	
M-.MD.S.IT.A.1.25.EA	1"	MD(*)	02701235E		-	
M-.MD.L.IT.A.1.25.EA	1"	MD(*)	02701245E		-	
M-.MD.S.IT.A.1.32.EA	1"¼	MD(*)	02701255E		-	
M-.MD.L.IT.A.1.32.EA	1"¼	MD(*)	02701265E		-	
M-.MD.S.IT.A.1.40.EA	1"½	MD(*)	02701275E		-	
M-.MD.L.IT.A.1.40.EA	1"½	MD(*)	02701285E		-	
M-.PR.M.IT.A.1.25.EA	1"	PR	-		02701085A	
M-.PR.M.IT.A.1.32.EA	1"¼	PR	-		02701095A	
M-.PR.M.IT.A.1.40.EA	1"½	PR	-		02701105A	
M-.MD.M.IT.A.1.25.EA	1"	MD(*)	-		02701085E	
M-.MD.M.IT.A.1.32.EA	1"¼	MD(*)	-		02701095E	
M-.MD.M.IT.A.1.40.EA	1"½	MD(*)	-		02701105E	

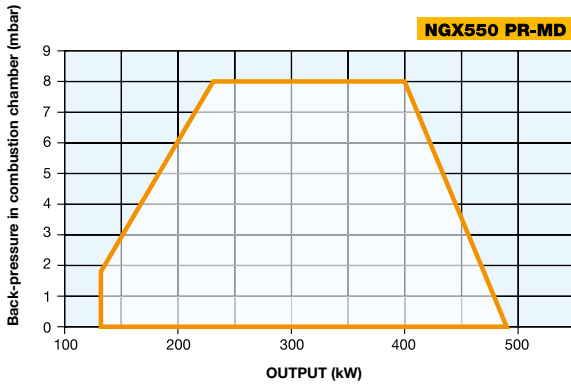
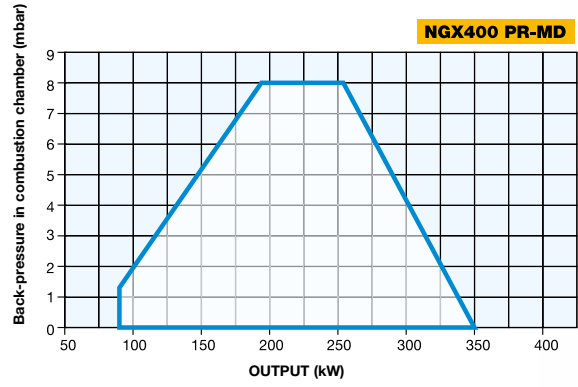
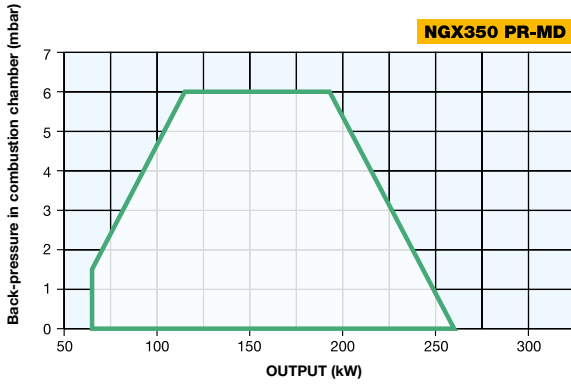
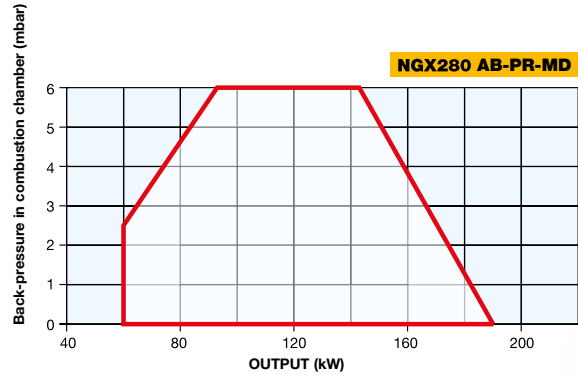
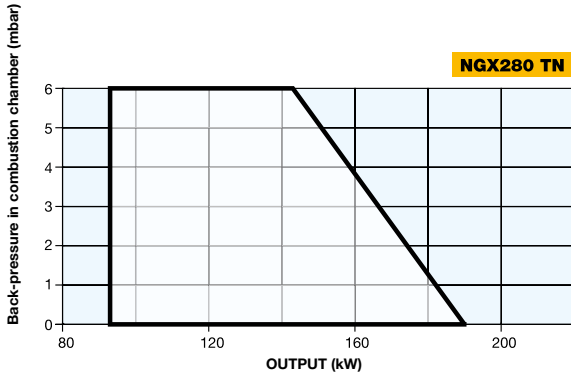
Model	Gas train	Operation	NGX400		NGX550	
			Code	Price €	Code	Price €
M-.PR.M.IT.A.1.25.EA	1"	PR	02701115A		-	
M-.PR.M.IT.A.1.32.EA	1"¼	PR	02701125A		-	
M-.PR.M.IT.A.1.40.EA	1"½	PR	02701135A		-	
M-.PR.M.IT.A.1.50.EA	2"	PR	02701155A		-	
M-.PR.S.IT.A.1.32.EA	1"¼	PR	-		02801095A	
M-.PR.L.IT.A.1.32.EA	1"¼	PR	-		02801105A	
M-.PR.S.IT.A.1.40.EA	1"½	PR	-		02801115A	
M-.PR.L.IT.A.1.40.EA	1"½	PR	-		02801125A	
M-.PR.S.IT.A.1.50.EA	2"	PR	-		02801135A	
M-.PR.L.IT.A.1.50.EA	2"	PR	-		02801145A	
M-.MD.M.IT.A.1.25.EA	1"	MD(*)	02701115E		-	
M-.MD.M.IT.A.1.32.EA	1"¼	MD(*)	02701125E		-	
M-.MD.M.IT.A.1.40.EA	1"½	MD(*)	02701135E		-	
M-.MD.M.IT.A.1.50.EA	2"	MD(*)	02701155E		-	
M-.MD.S.IT.A.1.32.EA	1"¼	MD(*)	-		02801095E	
M-.MD.L.IT.A.1.32.EA	1"¼	MD(*)	-		02801105E	
M-.MD.S.IT.A.1.40.EA	1"½	MD(*)	-		02801115E	
M-.MD.L.IT.A.1.40.EA	1"½	MD(*)	-		02801125E	
M-.MD.S.IT.A.1.50.EA	2"	MD(*)	-		02801135E	
M-.MD.L.IT.A.1.50.EA	2"	MD(*)	-		02801145E	

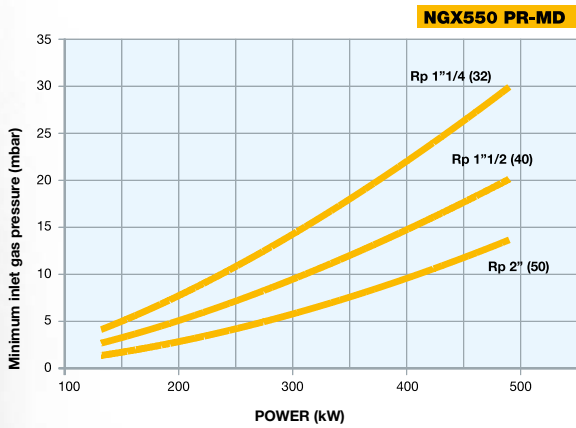
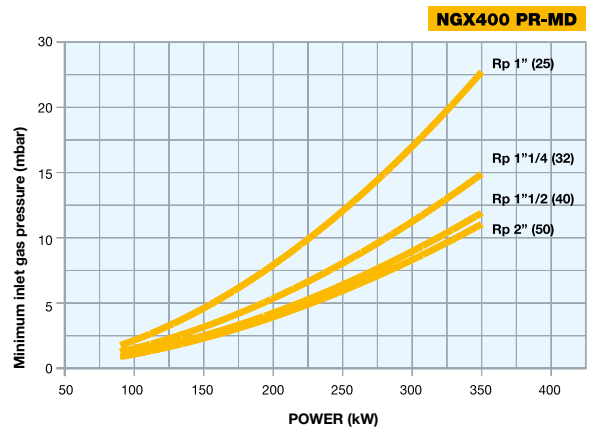
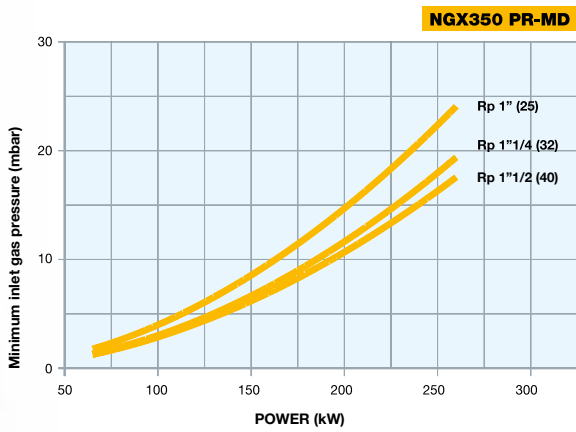
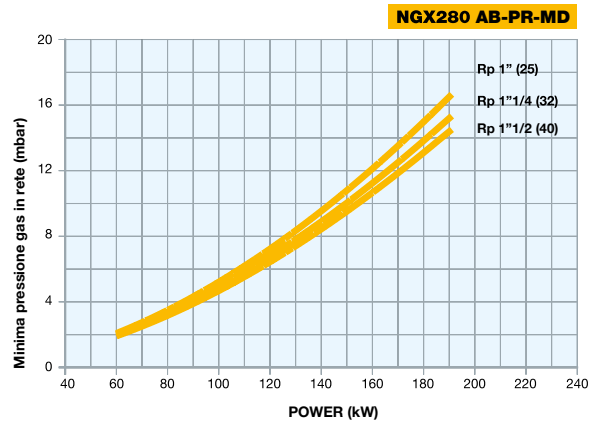
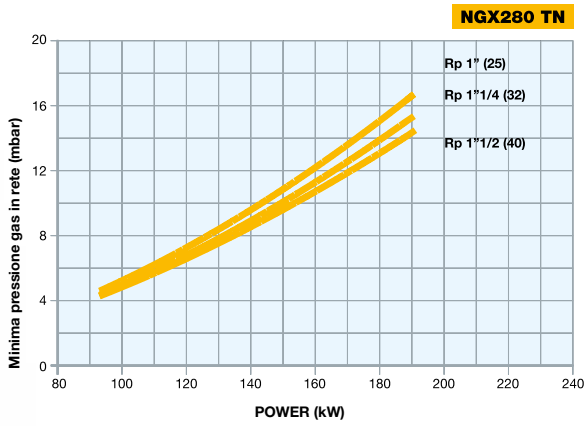
(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).  
In compliance with DIRECTIVE 2009/142/CE



# idea series

NGX280 NGX350 NGX400 NGX550

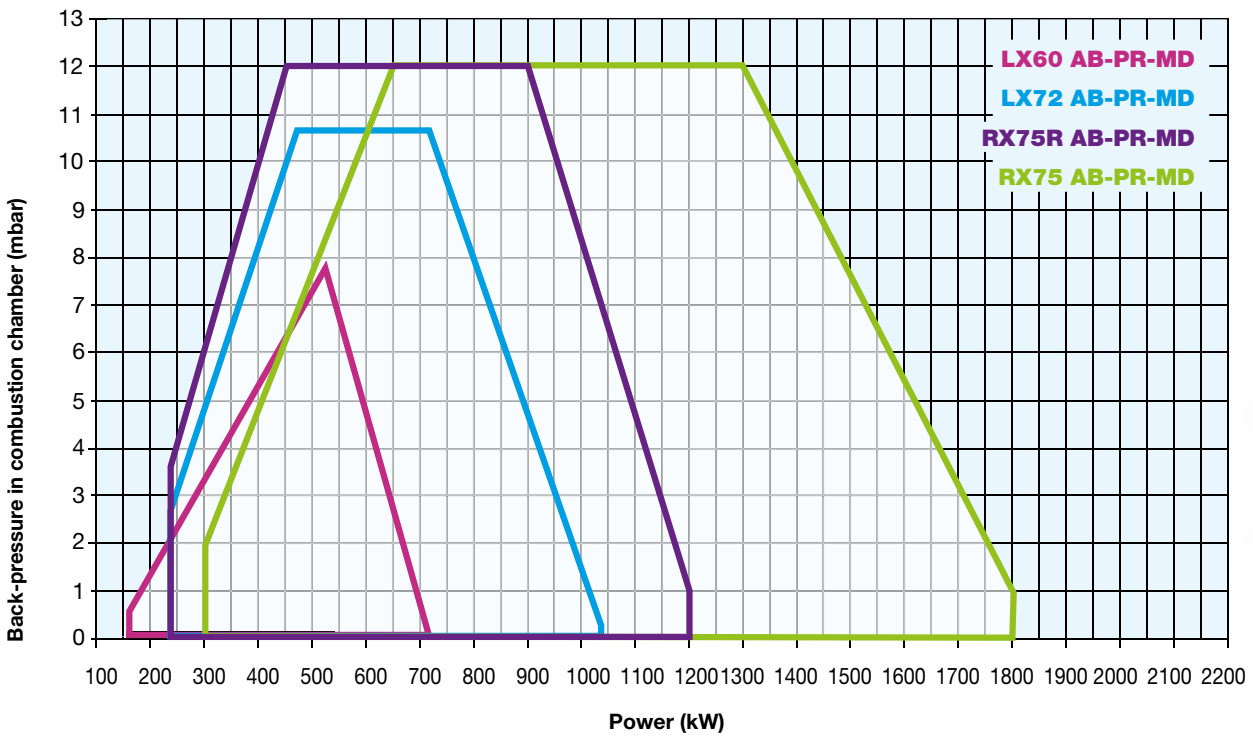




**Attention:** the graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.



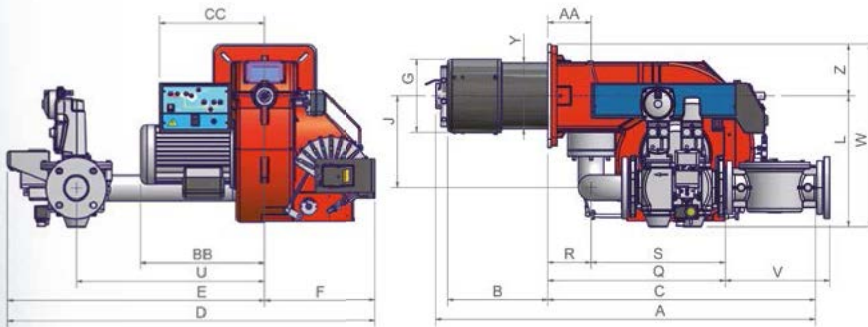
The TECNOPRESS series is part of the range of products of medium capacity. This series is the result of CIB UNIGAS experience in the field of product with performance up to 1800kW. It is characterized by its simple mechanical or electronic regulation system and its easy maintenance which is guaranteed by the accessible location of the components.



## TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Gas connections Rp
		min.	max.			
<b>LX60</b>	M-.xx.x.IT.A.0.xx	165	720	230/400 V 3N ac	1,1	1"1/2 - 2" - DN65
<b>LX72</b>	M-.xx.x.IT.A.0.xx	241	1.040	230/400 V 3N ac	2,2	2" - DN65 - 80
<b>RX75R</b>	M-.xx.x.IT.A.0.xx	270	1.200	230/400 V 3N ac	2,2	1"1/2 - 2" - DN65
<b>RX75</b>	M-.xx.x.IT.A.1.xx	300	1.800	230/400 V 3N ac	3,0	2" - DN65 - 80

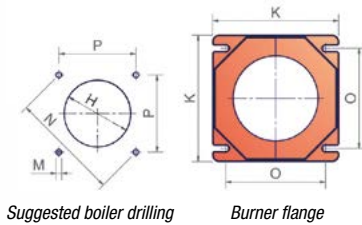
For the configuration of the gas train, see pages 110-111.



Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>LX60</b>	1200	670	540	60
<b>LX72</b>	1280	850	760	110
<b>RX75R</b>	1280	850	760	125
<b>RX75</b>	1280	850	760	125

(\*) Approximate values

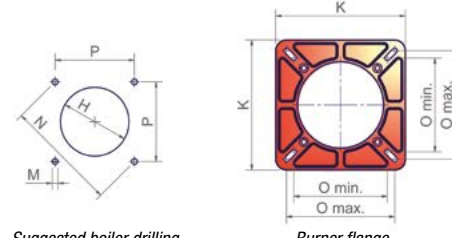
### LX60



Suggested boiler drilling

Burner flange

### LX65 - LX72 - RX75R - RX75



Suggested boiler drilling

Burner flange

Type	Model	Overall dimensions* (mm)																												
		AS	AL	AA	BS	BL	BB	C	CC	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	U	V	W	Y	Z	
		min. max.																												
<b>LX60</b>	M-.xx.x.xx.A.0.40	1026	1206	99	252	432	314	736	298	812	500	312	185	204	210	240	344	M10	269	190	190	190	439	112	327	444	-	464	162	120
<b>LX60</b>	M-.xx.x.xx.A.0.50	1026	1206	99	252	432	314	736	298	812	500	312	185	204	210	240	344	M10	269	190	190	190	447	112	335	444	-	464	162	120
<b>LX60</b>	M-.xx.x.xx.A.0.65	1026	1206	99	252	432	314	736	298	997	685	312	185	204	250	240	420	M10	269	190	190	190	515	112	403	540	313	540	162	120
<b>LX72</b>	M-.xx.x.xx.A.1.50	1139	1224	130	300	385	373	803	316	1104	772	332	219	249	275	300	393	M10	330	216	250	233	533	130	403	565	313	548	198	155
<b>LX72</b>	M-.xx.x.xx.A.1.65	1139	1224	130	300	385	373	803	316	1106	774	332	219	249	275	300	407	M10	330	216	250	233	574	130	444	565	344	562	198	155
<b>LX72</b>	M-.xx.x.xx.A.1.80	1139	1224	130	300	385	373	803	316	1106	774	332	219	249	275	300	407	M10	330	216	250	233	574	130	444	565	344	562	198	155
<b>RX75R</b>	M-.xx.S.IT.A.1.40	1338	1463	138	378	503	374	926	330	1062	700	362	250	280	235	300	420	M10	330	216	250	233	454	127	327	570	313	603	210	155
<b>RX75R</b>	M-.xx.S.IT.A.1.50	1338	1463	138	378	503	374	926	330	1062	700	362	250	280	235	300	420	M10	330	216	250	233	465	127	338	525	-	603	210	155
<b>RX75R</b>	M-.xx.S.IT.A.1.65	1338	1463	138	378	503	374	926	330	1139	777	362	250	280	296	300	420	M10	330	216	250	233	530	127	403	570	313	603	210	155
<b>RX75</b>	M-.xx.S.IT.A.1.40	1338	1463	138	358	483	374	926	330	1062	700	362	270	290	235	330	420	M10	330	-	250	233	454	127	327	525	-	603	210	155
<b>RX75</b>	M-.xx.S.IT.A.1.50	1338	1463	138	358	483	374	926	330	1062	700	362	270	290	235	330	420	M10	330	-	250	233	465	127	338	525	-	603	210	155
<b>RX75</b>	M-.xx.S.IT.A.1.65	1338	1463	138	358	483	374	926	330	1139	777	362	270	290	296	330	420	M10	330	-	250	233	530	127	403	570	313	603	210	155
<b>RX75</b>	M-.xx.S.IT.A.1.80	1338	1463	138	358	483	374	926	330	1141	779	362	270	290	296	330	428	M10	330	-	250	233	571	127	444	570	344	615	210	155

(\*) Approximate values



**MECHANICAL OPERATION**

Model	Gas train	Operation	LX60		LX72	
			Code	Price €	Code	Price €
M-.AB.S.IT.A.0.40	1"½	AB	004012442		-	
M-.AB.L.IT.A.0.40	1"½	AB	004012542		-	
M-.AB.S.IT.A.0.50	2"	AB	004012642		008012842	
M-.AB.L.IT.A.0.50	2"	AB	004012742		008012942	
M-.AB.S.IT.A.0.65	DN65	AB	004012842		008013042	
M-.AB.L.IT.A.0.65	DN65	AB	004012942		008013142	
M-.AB.S.IT.A.0.80	DN80	AB	-		008013242	
M-.AB.L.IT.A.0.80	DN80	AB	-		008013342	
M-.PR.S.IT.A.0.40	1"½	PR	004012443		-	
M-.PR.L.IT.A.0.40	1"½	PR	004012543		-	
M-.PR.S.IT.A.0.50	2"	PR	004012643		008012843	
M-.PR.L.IT.A.0.50	2"	PR	004012743		008012943	
M-.PR.S.IT.A.0.65	DN65	PR	004012843		008013043	
M-.PR.L.IT.A.0.65	DN65	PR	004012943		008013143	
M-.PR.S.IT.A.0.80	DN80	PR	-		008013243	
M-.PR.L.IT.A.0.80	DN80	PR	-		008013343	
M-.MD.S.IT.A.0.40	1"½	MD(*)	004012644		-	
M-.MD.L.IT.A.0.40	1"½	MD(*)	004012744		-	
M-.MD.S.IT.A.0.50	2"	MD(*)	004012844		008012844	
M-.MD.L.IT.A.0.50	2"	MD(*)	004012944		008012944	
M-.MD.S.IT.A.0.65	DN65	MD(*)	004012844		008013044	
M-.MD.L.IT.A.0.65	DN65	MD(*)	004012944		008013144	
M-.MD.S.IT.A.0.80	DN80	MD(*)	-		008013244	
M-.MD.L.IT.A.0.80	DN80	MD(*)	-		008013344	

Model	Gas train	Operation	RX75R		RX75	
			Code	Price €	Code	Price €
M-.AB.S.IT.A.0.40	1"½	AB	030011042		-	
M-.AB.L.IT.A.0.40	1"½	AB	030011642		-	
M-.AB.S.IT.A.0.50	2"	AB	030011142		-	
M-.AB.L.IT.A.0.50	2"	AB	030011742		-	
M-.AB.S.IT.A.0.65	DN65	AB	030011242		-	
M-.AB.L.IT.A.0.65	DN65	AB	030011842		-	
M-.PR.S.IT.A.0.40	1"½	PR	030011043		-	
M-.PR.L.IT.A.0.40	1"½	PR	030011643		-	
M-.PR.S.IT.A.0.50	2"	PR	030011143		-	
M-.PR.L.IT.A.0.50	2"	PR	030011743		-	
M-.PR.S.IT.A.0.65	DN65	PR	030011243		-	
M-.PR.L.IT.A.0.65	DN65	PR	030011843		-	
M-.MD.S.IT.A.0.40	1"½	MD(*)	030011044		-	
M-.MD.L.IT.A.0.40	1"½	MD(*)	030011644		-	
M-.MD.S.IT.A.0.50	2"	MD(*)	030011144		-	
M-.MD.L.IT.A.0.50	2"	MD(*)	030011744		-	
M-.MD.S.IT.A.0.65	DN65	MD(*)	030011244		-	
M-.MD.L.IT.A.0.65	DN65	MD(*)	030011844		-	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).  
In compliance with DIRECTIVE 2009/142/CE

### MECHANICAL OPERATION

Model	Gas train	Operation	RX75R		RX75	
			Code	Price €	Code	Price €
M-.AB.S.IT.A.1.50	2"	AB	-	-	030010752	
M-.AB.L.IT.A.1.50	2"	AB	-	-	030011352	
M-.AB.S.IT.A.1.65	DN65	AB	-	-	030010852	
M-.AB.L.IT.A.1.65	DN65	AB	-	-	030011452	
M-.AB.S.IT.A.1.80	DN80	AB	-	-	030010952	
M-.AB.L.IT.A.1.80	DN80	AB	-	-	030011552	
M-.PR.S.IT.A.1.50	2"	PR	-	-	030010753	
M-.PR.L.IT.A.1.50	2"	PR	-	-	030011353	
M-.PR.S.IT.A.1.65	DN65	PR	-	-	030010853	
M-.PR.L.IT.A.1.65	DN65	PR	-	-	030011453	
M-.PR.S.IT.A.1.80	DN80	PR	-	-	030010953	
M-.PR.L.IT.A.1.80	DN80	PR	-	-	030011553	
M-.MD.S.IT.A.1.50	2"	MD(*)	-	-	030010754	
M-.MD.L.IT.A.1.50	2"	MD(*)	-	-	030011354	
M-.MD.S.IT.A.1.65	DN65	MD(*)	-	-	030010854	
M-.MD.L.IT.A.1.65	DN65	MD(*)	-	-	030011454	
M-.MD.S.IT.A.1.80	DN80	MD(*)	-	-	030010954	
M-.MD.L.IT.A.1.80	DN80	MD(*)	-	-	030011554	

### ELECTRONIC OPERATION

Model	Gas train	Operation	LX60		LX72	
			Code	Price €	Code	Price €
M-.PR.S.IT.A.1.40.EA	1"½	PR	00401245A		-	
M-.PR.L.IT.A.1.40.EA	1"½	PR	00401255A		-	
M-.PR.S.IT.A.1.50.EA	2"	PR	00401265A		00801285A	
M-.PR.L.IT.A.1.50.EA	2"	PR	00401275A		00801295A	
M-.PR.S.IT.A.1.65.EA	DN65	PR	00401285A		00801305A	
M-.PR.L.IT.A.1.65.EA	DN65	PR	00401295A		00801315A	
M-.PR.S.IT.A.1.80.EA	DN80	PR	-		00801325A	
M-.PR.L.IT.A.1.80.EA	DN80	PR	-		00801335A	
M-.MD.S.IT.A.1.40.EA	1"½	MD(*)	00401245E		-	
M-.MD.L.IT.A.1.40.EA	1"½	MD(*)	00401255E		-	
M-.MD.S.IT.A.1.50.EA	2"	MD(*)	00401265E		00801285E	
M-.MD.L.IT.A.1.50.EA	2"	MD(*)	00401275E		00801295E	
M-.MD.S.IT.A.1.65.EA	DN65	MD(*)	00401285E		00801305E	
M-.MD.L.IT.A.1.65.EA	DN65	MD(*)	00401295E		00801315E	
M-.MD.S.IT.A.1.80.EA	DN80	MD(*)	-		00801325E	
M-.MD.L.IT.A.1.80.EA	DN80	MD(*)	-		00801335E	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).  
In compliance with DIRECTIVE 2009/142/CE





# tecnopress series

LX60 LX72 RX75R RX75



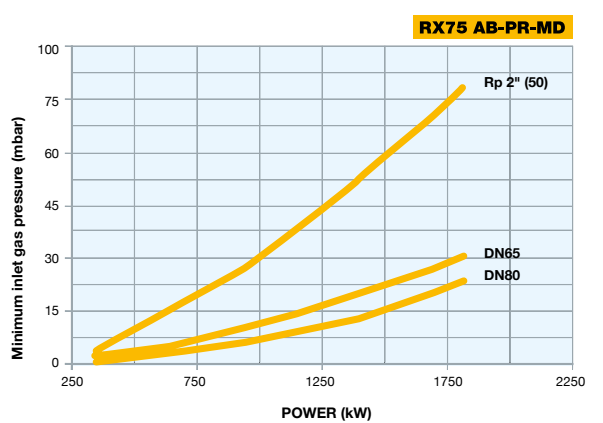
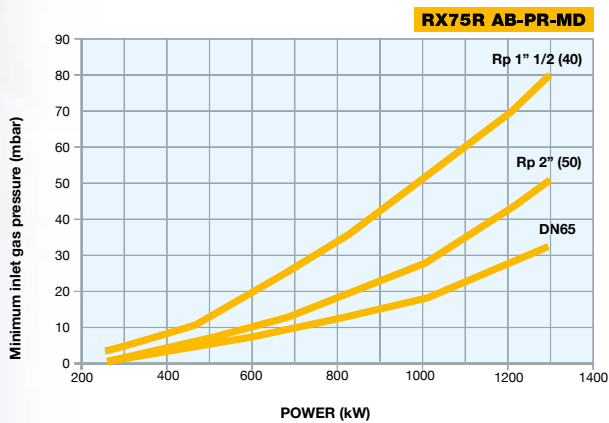
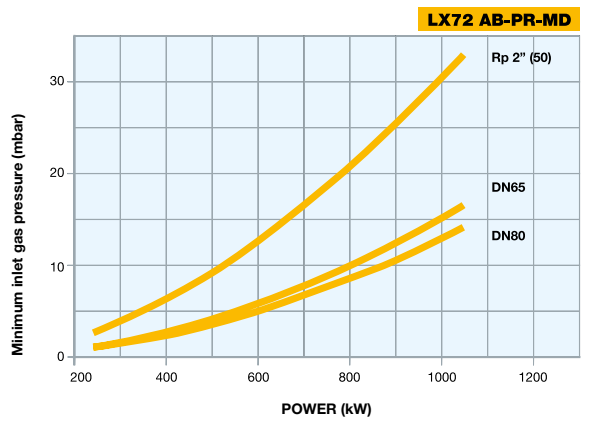
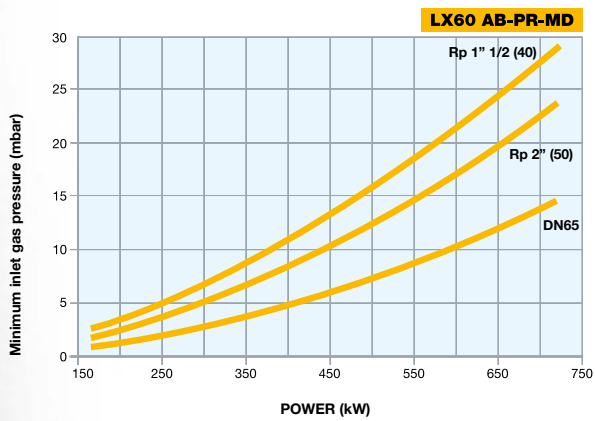
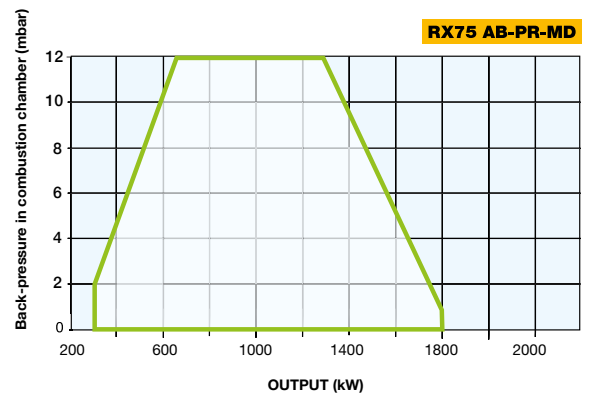
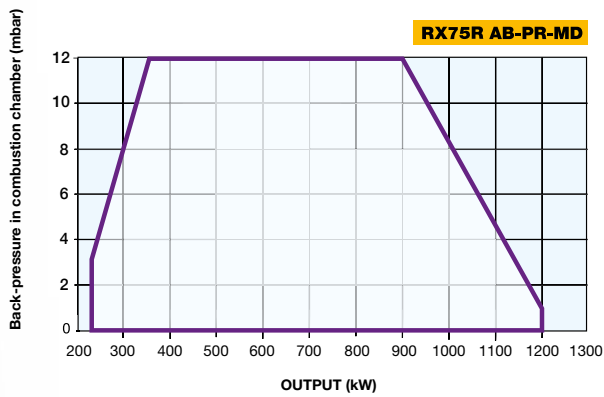
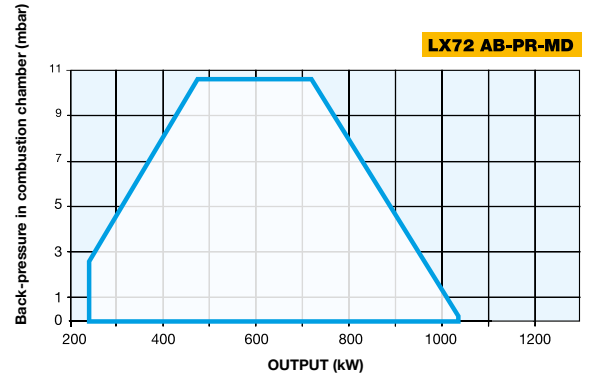
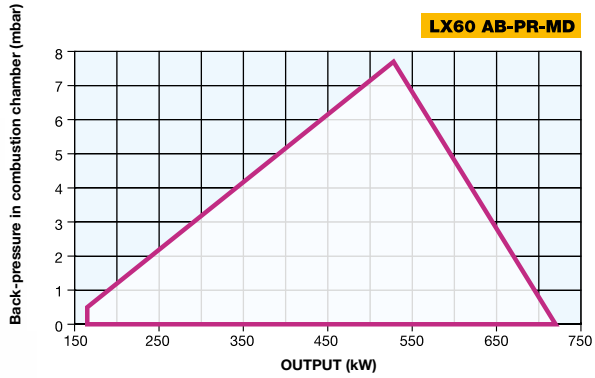
## ELECTRONIC OPERATION

Model	Gas train	Operation	RX75R		RX75	
			Code	Price €	Code	Price €
M-.PR.S.IT.A.1.40.EA	1"½	PR	03001105A		-	
M-.PR.L.IT.A.1.40.EA	1"½	PR	03001165A		-	
M-.PR.S.IT.A.1.50.EA	2"	PR	03001115A		03001075A	
M-.PR.L.IT.A.1.50.EA	2"	PR	03001175A		03001135A	
M-.PR.S.IT.A.1.65.EA	DN65	PR	03001125A		03001085A	
M-.PR.L.IT.A.1.65.EA	DN65	PR	03001185A		03001145A	
M-.PR.S.IT.A.1.80.EA	DN80	PR	-		03001095A	
M-.PR.L.IT.A.1.80.EA	DN80	PR	-		03001155A	
M-.MD.S.IT.A.1.40.EA	1"½	MD(*)	03001105E		-	
M-.MD.L.IT.A.1.40.EA	1"½	MD(*)	03001165E		-	
M-.MD.S.IT.A.1.50.EA	2"	MD(*)	03001115E		03001075E	
M-.MD.L.IT.A.1.50.EA	2"	MD(*)	03001175E		03001135E	
M-.MD.S.IT.A.1.65.EA	DN65	MD(*)	03001125E		03001085E	
M-.MD.L.IT.A.1.65.EA	DN65	MD(*)	03001185E		03001145E	
M-.MD.S.IT.A.1.80.EA	DN80	MD(*)	-		03001095E	
M-.MD.L.IT.A.1.80.EA	DN80	MD(*)	-		03001155E	

Model	Gas train	Operation	LX60		LX72	
			Code	Price €	Code	Price €
M-.MD.S.IT.A.1.40.ES	1"½	MD(*)	00401245S		-	
M-.MD.L.IT.A.1.40.ES	1"½	MD(*)	00401255S		-	
M-.MD.S.IT.A.1.50.ES	2"	MD(*)	00401265S		00801285S	
M-.MD.L.IT.A.1.50.ES	2"	MD(*)	00401275S		00801295S	
M-.MD.S.IT.A.1.65.ES	DN65	MD(*)	00401285S		00801305S	
M-.MD.L.IT.A.1.65.ES	DN65	MD(*)	00401295S		00801315S	
M-.MD.S.IT.A.1.80.ES	DN80	MD(*)	-		00801325S	
M-.MD.L.IT.A.1.80.ES	DN80	MD(*)	-		00801335S	

Model	Gas train	Operation	RX75R		RX75	
			Code	Price €	Code	Price €
M-.MD.S.IT.A.1.40.ES	1"½	MD(*)	03001105S		-	
M-.MD.L.IT.A.1.40.ES	1"½	MD(*)	03001165S		-	
M-.MD.S.IT.A.1.50.ES	2"	MD(*)	03001115S		03001075S	
M-.MD.L.IT.A.1.50.ES	2"	MD(*)	03001175S		03001135S	
M-.MD.S.IT.A.1.65.ES	DN65	MD(*)	03001125S		03001085S	
M-.MD.L.IT.A.1.65.ES	DN65	MD(*)	03001185S		03001145S	
M-.MD.S.IT.A.1.80.ES	DN80	MD(*)	-		03001095S	
M-.MD.L.IT.A.1.80.ES	DN80	MD(*)	-		03001155S	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).  
In compliance with DIRECTIVE 2009/142/CE



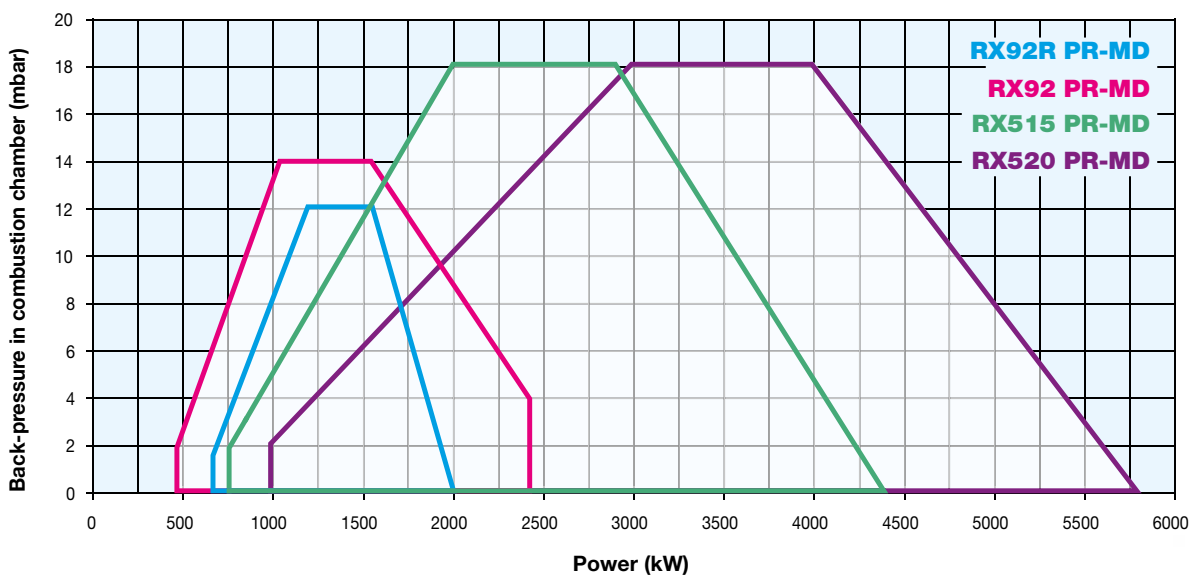
**Attention:** he graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.



# novanta-cinquecento series

RX92R RX92 RX515 RX520

The series NOVANTA and CINQUECENTO **Low NOx Class 3 (< 80 mg/kWh)** have been developed to meet the current and future requests regarding the low emissions of NOx. The innovation of the combustion head allows to achieve substantial improvements in terms of emissions reduction, flame stability and reliability. The perfect mix of air/gas within the combustion head of these burners, guarantees a very uniform flame in all working conditions.



# novanta-cinquecento series

RX92R RX92 RX515 RX520

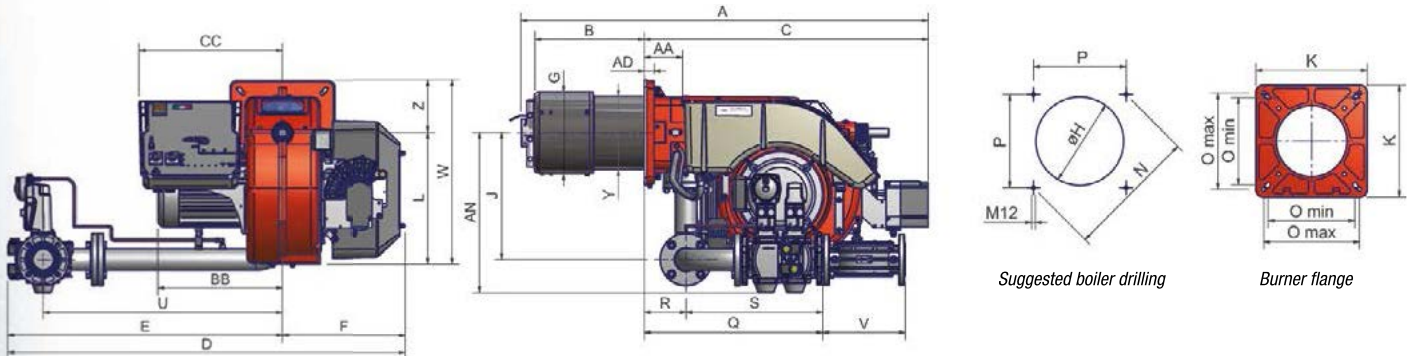


GAS

## TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Gas connections Rp
		min.	max.			
<b>RX92R</b>	M-.xx.S.IT.A.1.xxx	674	2.008	230/400V 3N ac	4	2" - DN65 - 80 - 100
<b>RX92</b>	M-.xx.S.IT.A.1.xxx	480	2.450	230/400 V 3N ac	5,5	2" - DN65 - 80 - 100

For the configuration of the gas train, see pages 110-111.



Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>RX92R</b>	1730	1280	1020	280
<b>RX92</b>	1730	1280	1020	280

(\*) Approximate values

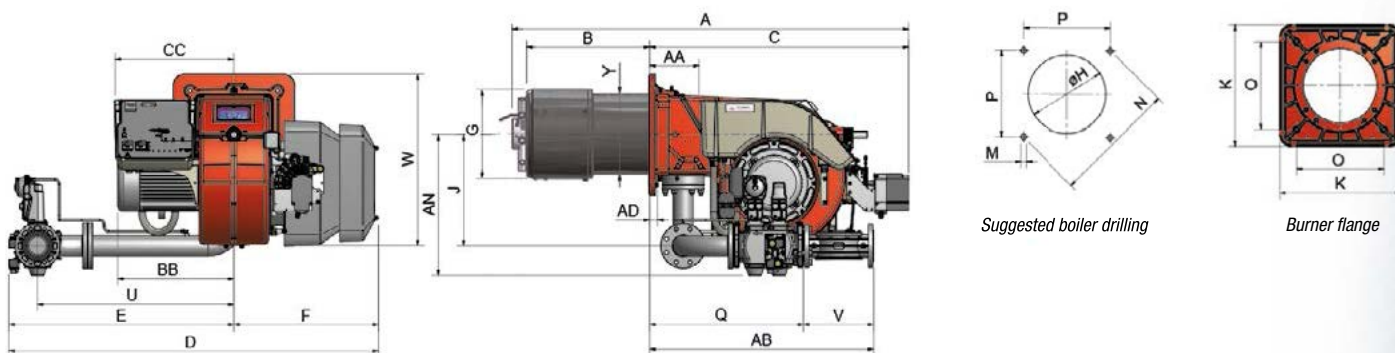
Type	Model	Overall dimensions* (mm)																												
		A	AA	AD	AN	B	BB	C	CC	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	U	V	W	Y	Z	
																			min.	max.										
<b>RX92R</b>	M-.xx.S.IT.A.1.50	1295	135	35	550	290	441	1005	507	1160	725	435	273	303	442	360	464	M12	424	280	310	300	532	148	384	624	190	649	228	185
<b>RX92R</b>	M-.xx.S.IT.A.1.65	1295	135	35	564	290	441	1005	507	1406	971	435	273	303	447	360	464	M12	424	280	310	300	632	148	484	846	292	649	228	185
<b>RX92R</b>	M-.xx.S.IT.A.1.80	1295	135	35	579	290	441	1005	507	1437	1002	435	273	303	447	360	464	M12	424	280	310	300	683	148	535	875	313	649	228	185
<b>RX92R</b>	M-.xx.S.IT.A.1.100	1295	135	35	592	290	441	1005	507	1520	1085	435	273	303	447	360	464	M12	424	280	310	300	790	148	642	942	353	649	228	185
<b>RX92</b>	M-.xx.S.IT.A.1.50	1421	135	35	550	380	441	1005	507	1160	725	435	286	316	447	360	464	M12	424	280	310	300	532	148	384	624	190	649	228	185
<b>RX92</b>	M-.xx.S.IT.A.1.65	1421	135	35	564	380	441	1005	507	1406	971	435	286	316	442	360	464	M12	424	280	310	300	632	148	484	846	292	649	228	185
<b>RX92</b>	M-.xx.S.IT.A.1.80	1421	135	35	579	380	441	1005	507	1431	1002	435	286	316	442	360	464	M12	424	280	310	300	683	148	535	875	313	649	228	185
<b>RX92</b>	M-.xx.S.IT.A.1.100	1421	135	35	592	380	441	1005	507	1520	1085	435	286	316	447	360	464	M12	424	280	310	300	790	148	642	942	353	649	228	185

(\*) Approximate values

### TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Gas connections Rp
		min.	max.			
<b>RX515</b>	M-.xx.S.IT.A.1.xxx	770	4.400	230/400 V 3N ac	11,0	2" - DN65 - 80 - 100
<b>RX520</b>	M-.xx.S.IT.A.1.xxx	1.000	5.800	230/400 V 3N ac	15,0	2" - DN65 - 80 - 100

For the configuration of the gas train, see pages 110-111.



Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>RX515</b>	1720	1500	1150	320
<b>RX520</b>	1720	1500	1150	370

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																											
		A	AA	AD	AN	B	BB	C	CC	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	U	V	W	Y	Z
<b>RX515</b>	M-.xx.S.IT.A.1.50	1683	220	35	595	530	517	1153	532	1590	946	644	305	345	494	540	494	M14	552	390	390	763	149	614	845	190	765	328	270
<b>RX515</b>	M-.xx.S.IT.A.1.65	1683	220	35	611	530	517	1153	532	1613	969	644	305	345	494	540	494	M14	552	390	390	636	149	487	845	292	765	328	270
<b>RX515</b>	M-.xx.S.IT.A.1.80	1683	220	35	626	530	517	1153	532	1645	1002	644	305	345	494	540	494	M14	552	390	390	687	149	538	875	313	765	328	270
<b>RX515</b>	M-.xx.S.IT.A.1.100	1683	220	35	639	530	517	1153	532	1726	1082	644	305	345	494	540	494	M14	552	390	390	791	149	642	942	350	765	328	270
<b>RX520</b>	M-.xx.S.IT.A.1.50	1683	220	35	595	530	517	1153	532	1590	946	644	340	372	494	540	494	M14	552	390	390	763	149	614	845	190	765	328	270
<b>RX520</b>	M-.xx.S.IT.A.1.65	1683	220	35	611	530	517	1153	532	1613	969	644	340	372	494	540	494	M14	552	390	390	636	149	487	845	292	765	328	270
<b>RX520</b>	M-.xx.S.IT.A.1.80	1683	220	35	626	530	517	1153	532	1645	1002	644	340	372	494	540	494	M14	552	390	390	687	149	538	875	313	765	328	270
<b>RX520</b>	M-.xx.S.IT.A.1.100	1683	220	35	639	530	517	1153	532	1726	1082	644	340	372	494	540	494	M14	552	390	390	791	149	642	942	350	765	328	270

(\*) Approximate values

# novanta-cinquecento series

RX92R RX92 RX515 RX520



GAS

## MECHANICAL OPERATION

Model	Gas train	Operation	RX92R		RX92	
			Code	Price €	Code	Price €
M-.PR.S.IT.A.1.50	2"	PR	012017653		012018053	
M-.PR.S.IT.A.1.65	DN65	PR	012017753		012018153	
M-.PR.S.IT.A.1.80	DN80	PR	012017853		012018253	
M-.PR.S.IT.A.1.100	DN100	PR	012017953		012018353	
M-.MD.S.IT.A.1.50	2"	MD(*)	012017654		012018054	
M-.MD.S.IT.A.1.65	DN65	MD(*)	012017754		012018154	
M-.MD.S.IT.A.1.80	DN80	MD(*)	012017854		012018254	
M-.MD.S.IT.A.1.100	DN100	MD(*)	012017954		012018354	

Model	Gas train	Operation	RX515		RX520	
			Code	Price €	Code	Price €
M-.PR.S.IT.A.1.50	2"	PR	029012153		029012553	
M-.PR.S.IT.A.1.65	DN65	PR	029012253		029012653	
M-.PR.S.IT.A.1.80	DN80	PR	029012353		029012753	
M-.PR.S.IT.A.1.100	DN100	PR	029012453		029012853	
M-.MD.S.IT.A.1.50	2"	MD(*)	029012154		029012554	
M-.MD.S.IT.A.1.65	DN65	MD(*)	029012254		029012654	
M-.MD.S.IT.A.1.80	DN80	MD(*)	029012354		029012754	
M-.MD.S.IT.A.1.100	DN100	MD(*)	029012454		029012854	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).  
In compliance with DIRECTIVE 2009/142/CE



# novanta-cinquecento series

RX92R RX92 RX515 RX520

## ELECTRONIC OPERATION

Model	Gas train	Operation	RX92R		RX92	
			Code	Price €	Code	Price €
M-.PR.S.ITA.1.50.EA	2"	PR	01201765A		01201805A	
M-.PR.S.ITA.1.65.EA	DN65	PR	01201775A		01201815A	
M-.PR.S.ITA.1.80.EA	DN80	PR	01201785A		01201825A	
M-.PR.S.ITA.1.100.EA	DN100	PR	01201795A		01201835A	
M-.MD.S.ITA.1.50.EA	2"	MD(*)	01201765E		01201805E	
M-.MD.S.ITA.1.65.EA	DN65	MD(*)	01201775E		01201815E	
M-.MD.S.ITA.1.80.EA	DN80	MD(*)	01201785E		01201825E	
M-.MD.S.ITA.1.100.EA	DN100	MD(*)	01201795E		01201835E	

M-.MD.S.ITA.1.50.ES	2"	MD(*)	01201765S		01201805S	
M-.MD.S.ITA.1.65.ES	DN65	MD(*)	01201775S		01201815S	
M-.MD.S.ITA.1.80.ES	DN80	MD(*)	01201785S		01201825S	
M-.MD.S.ITA.1.100.ES	DN100	MD(*)	01201795S		01201835S	

Model	Gas train	Operation	RX515		RX520	
			Code	Price €	Code	Price €
M-.PR.S.ITA.1.50.EA	2"	PR	02901215A		02901255A	
M-.PR.S.ITA.1.65.EA	DN65	PR	02901225A		02901265A	
M-.PR.S.ITA.1.80.EA	DN80	PR	02901235A		02901275A	
M-.PR.S.ITA.1.100.EA	DN100	PR	02901245A		02901285A	
M-.MD.S.ITA.1.50.EA	2"	MD(*)	02901215E		02901255E	
M-.MD.S.ITA.1.65.EA	DN65	MD(*)	02901225E		02901265E	
M-.MD.S.ITA.1.80.EA	DN80	MD(*)	02901235E		02901275E	
M-.MD.S.ITA.1.100.EA	DN100	MD(*)	02901245E		02901285E	
M-.MD.S.ITA.1.50.ES	2"	MD(*)	02901215S		02901255S	
M-.MD.S.ITA.1.65.ES	DN65	MD(*)	02901225S		02901265S	
M-.MD.S.ITA.1.80.ES	DN80	MD(*)	02901235S		02901275S	
M-.MD.S.ITA.1.100.ES	DN100	MD(*)	02901245S		02901285S	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).

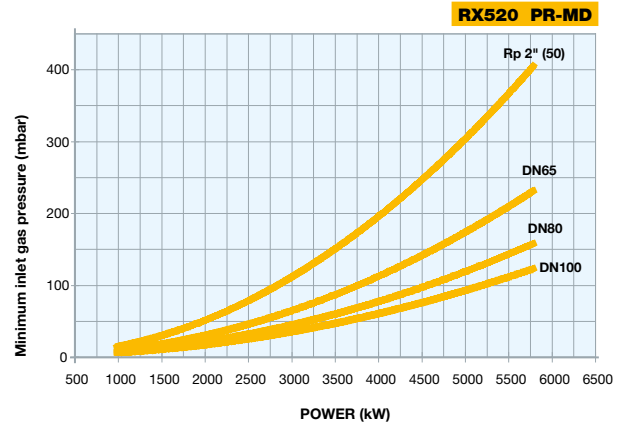
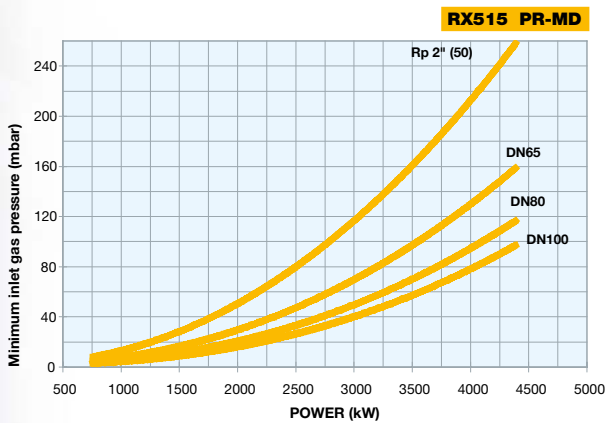
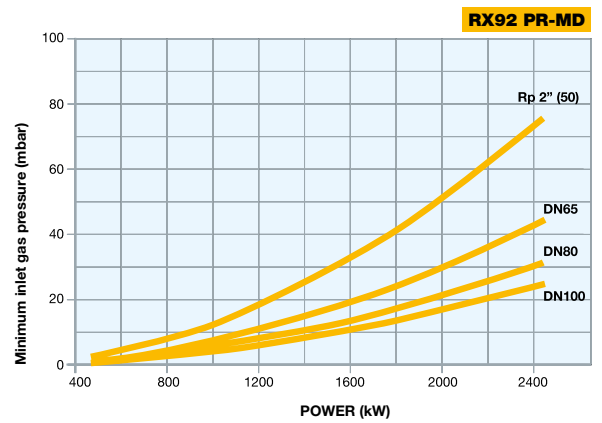
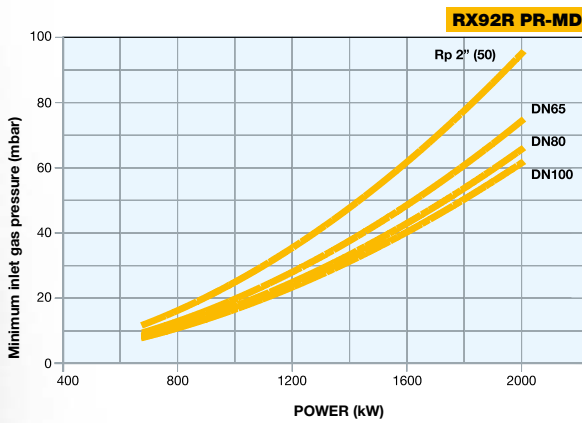
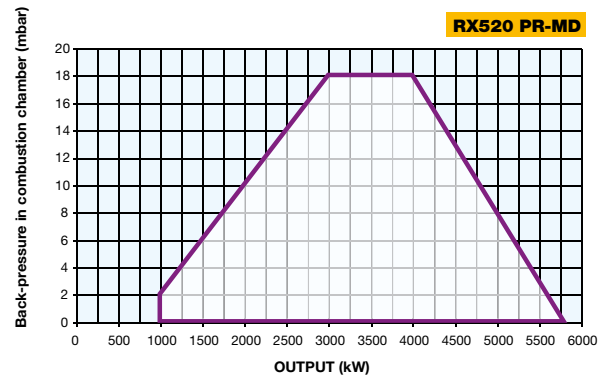
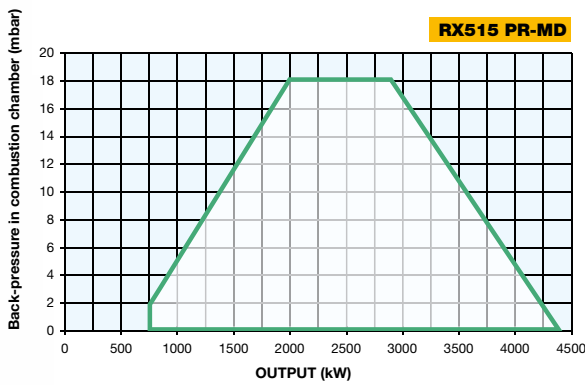
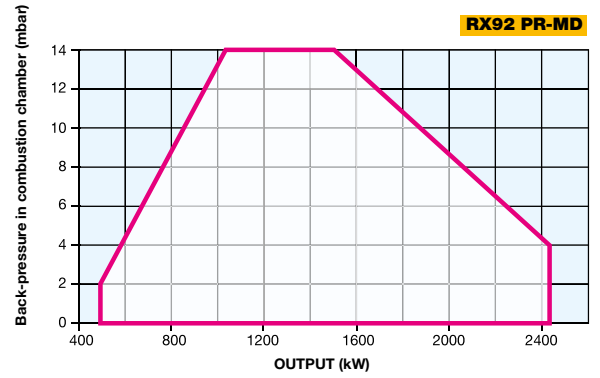
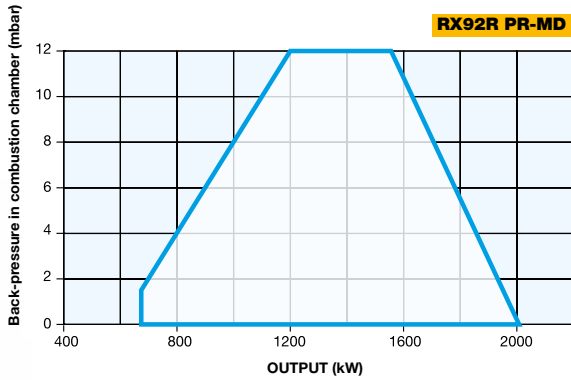
In compliance with DIRECTIVE 2009/142/CE

# novanta-cinquecento series

RX92R RX92 RX515 RX520



GAS

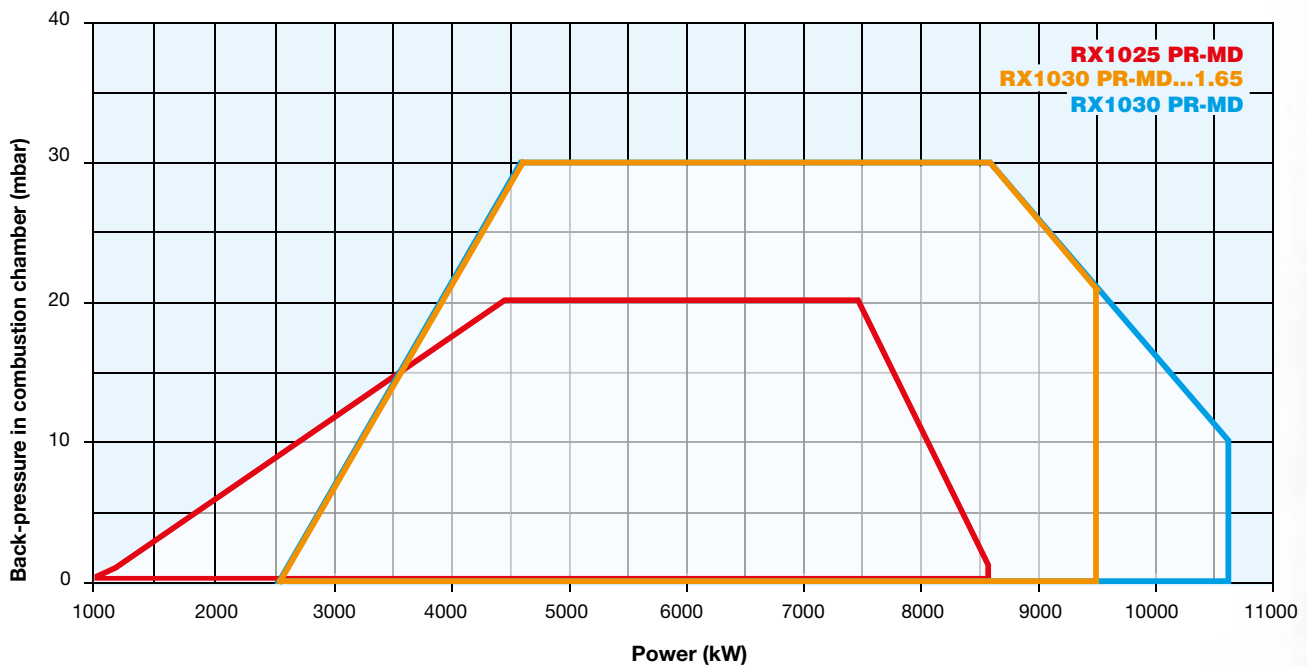


Attention: the graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.





In the series MILLE **Low NO<sub>x</sub> Class 3 (< 80 mg/kWh)**, the reduction of the pollutant emission has been achieved through an advanced study of the air and gas flows within the combustion head, where the mix happens. The results in terms of emission reduction can also be greater when such burners are installed on boilers with suitable combustion chambers and recommended thermal load. In that case the level of emissions is even lower than the normative limit. These burners can be equipped with electronic control box, moveable head, O<sub>2</sub> probe and frequency inverter.

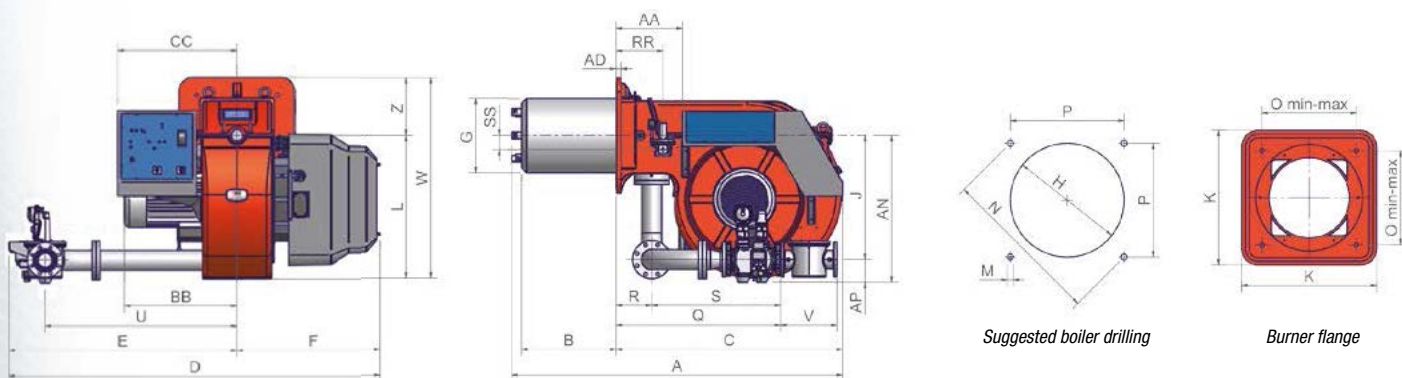


TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Gas connections Rp
		min.	max.			
<b>RX1025</b>	M-.xx.S.IT.A.1.xxx	1.000	8.600	400 V 3N ac	18,5	DN65 - 80 - 100
<b>RX1030</b>	M-.xx.S.IT.A.1.65	2.550	9.500	400 V 3N ac	22,0	DN65
<b>RX1030</b>	M-.xx.S.IT.A.1.xxx	2.550	10.600	400 V 3N ac	22,0	DN80 - 100

For the configuration of the gas train, see pages 110-111

**N.B. Monoblock burners Duemila series with the capacity up to 19 MW consult ours sales offices.**



Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>RX1025</b>	2270	1720	1320	600
<b>RX1030</b>	2500	1720	1320	700

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																														
		A	AA	AD	AN	AP	B	BB	C	CC	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	RR	S	SS	U	V	W	Y	Z
<b>RX1025</b>	M-.xx.S.IT.A.1.65	1891	377	25	827	118	544	641	1294	680	2039	1217	822	425	475	709	660	816	M16	651	460	460	914	200	265	714	80	1092	292	1146	425	330
<b>RX1025</b>	M-.xx.S.IT.A.1.80	1891	377	25	841	132	544	641	1294	680	2041	1219	822	425	475	709	660	816	M16	651	460	460	939	200	265	739	80	1092	322	1146	425	330
<b>RX1025</b>	M-.xx.S.IT.A.1.100	1891	377	25	854	145	544	641	1294	680	2057	1235	822	425	475	709	660	816	M16	651	460	460	842	200	265	642	80	1092	382	1146	425	330
<b>RX1030</b>	M-.xx.S.IT.A.1.65	1891	377	25	827	118	544	657	1294	680	2039	1217	822	454	504	709	660	816	M16	651	460	460	914	200	265	714	80	1092	292	1146	372	330
<b>RX1030</b>	M-.xx.S.IT.A.1.80	1891	377	25	841	132	544	657	1294	680	2041	1219	822	454	504	709	660	816	M16	651	460	460	939	200	265	739	80	1092	322	1146	372	330
<b>RX1030</b>	M-.xx.S.IT.A.1.100	1891	377	25	854	145	544	657	1294	680	2057	1235	822	454	504	709	660	816	M16	651	460	460	842	200	265	642	80	1092	382	1146	372	330

(\*) Approximate values

In compliance with DIRECTIVE 2009/142/CE



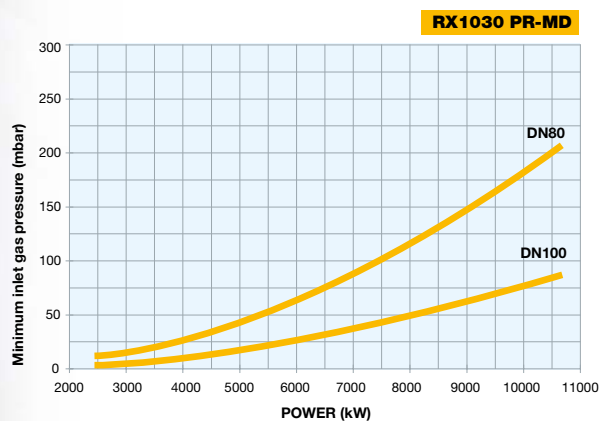
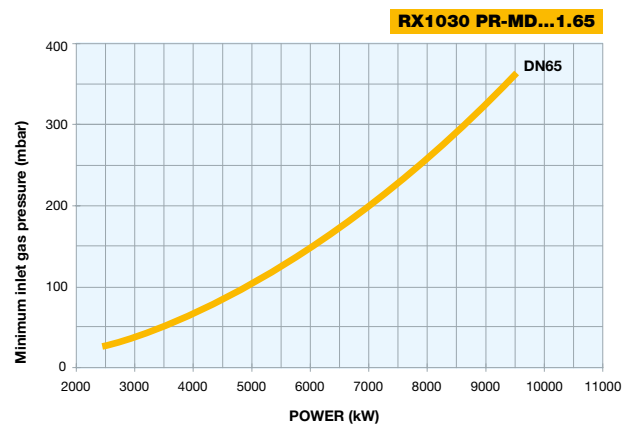
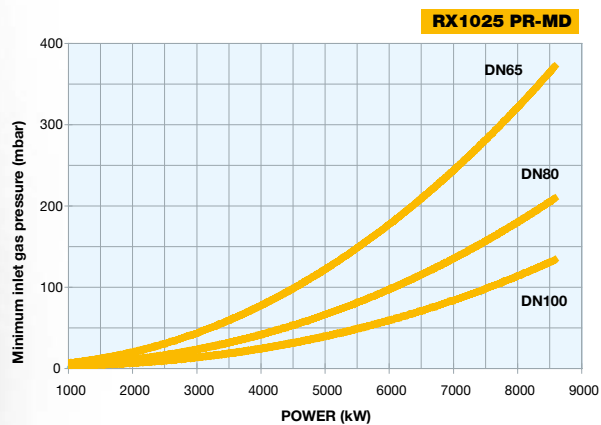
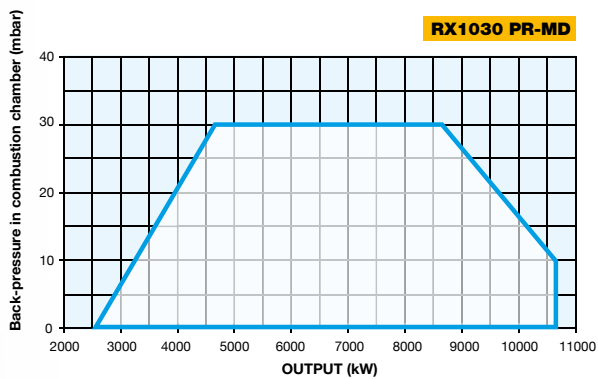
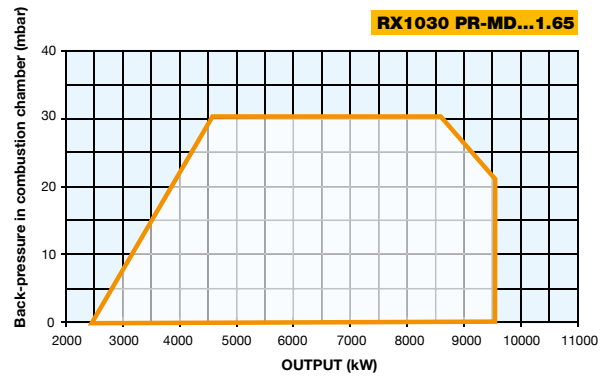
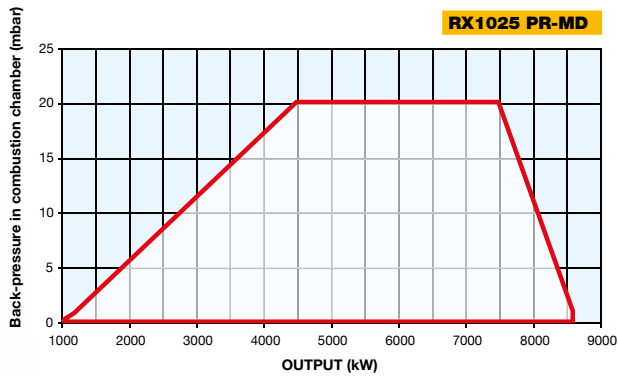
## MECHANICAL OPERATION

Model	Gas train	Operation	RX1025		RX1030	
			Code	Price €	Code	Price €
M-.PR.S.IT.A.1.65	DN65	PR	023012853		023013153	
M-.PR.S.IT.A.1.80	DN80	PR	023012953		023013253	
M-.PR.S.IT.A.1.100	DN100	PR	023013053		023013353	
M-.MD.S.IT.A.1.65	DN65	MD(*)	023012854		023013154	
M-.MD.S.IT.A.1.80	DN80	MD(*)	023012954		023013254	
M-.MD.S.IT.A.1.100	DN100	MD(*)	023013054		023013354	

## ELECTRONIC OPERATION

Model	Gas train	Operation	RX1025		RX1030	
			Code	Price €	Code	Price €
M-.PR.S.IT.A.1.65.EA	DN65	PR	02301285A		02301315A	
M-.PR.S.IT.A.1.80.EA	DN80	PR	02301295A		02301325A	
M-.PR.S.IT.A.1.100.EA	DN100	PR	02301305A		02301335A	
M-.MD.S.IT.A.1.65.EA	DN65	MD(*)	02301285E		02301315E	
M-.MD.S.IT.A.1.80.EA	DN80	MD(*)	02301295E		02301325E	
M-.MD.S.IT.A.1.100.EA	DN100	MD(*)	02301305E		02301335E	
M-.MD.S.IT.A.1.65.ES	DN65	MD(*)	02301285S		02301315S	
M-.MD.S.IT.A.1.80.ES	DN80	MD(*)	02301295S		02301325S	
M-.MD.S.IT.A.1.100.ES	DN100	MD(*)	02301305S		02301335S	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250).  
In compliance with DIRECTIVE 2009/142/CE



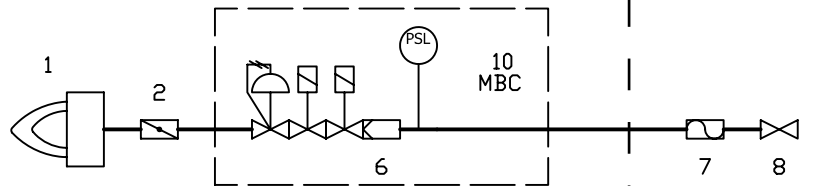
**Attention:** he graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.



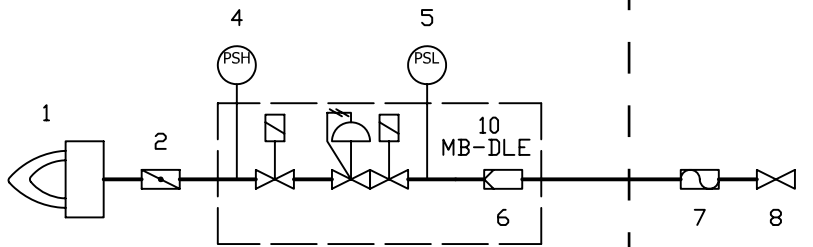
# GAS TRAINS

MANUFACTURER | INSTALLER  
5

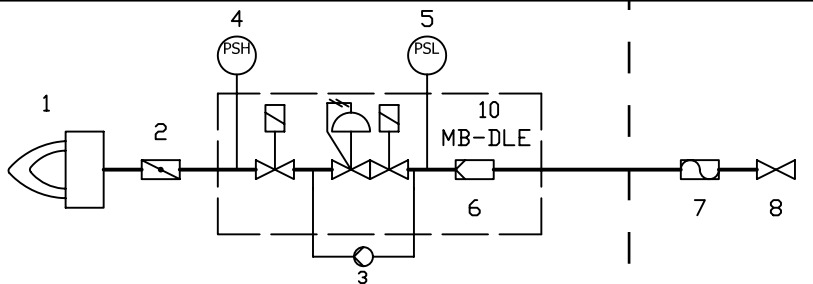
Gas train with valves group MBC  
(2 valves + gas filter + pressure governor) + leakage control VPS504.



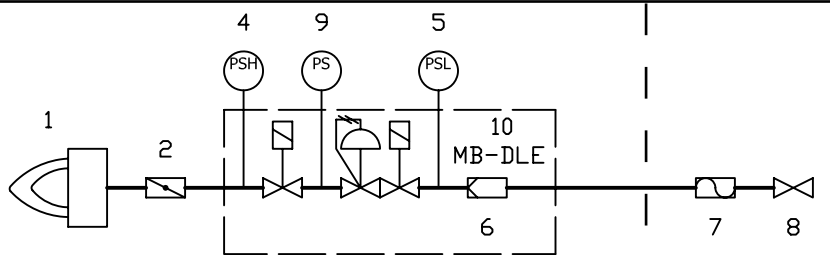
Gas train with valves group MB-DLE  
(2 valves + gas filter + pressure governor).



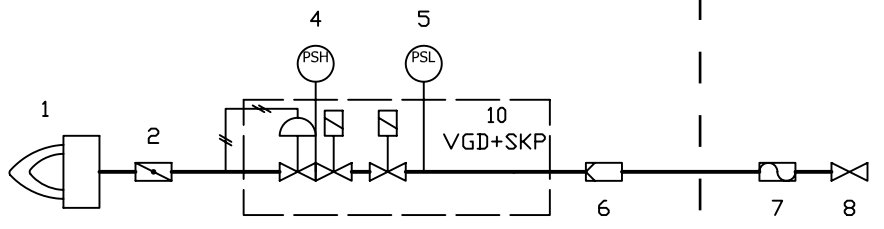
Gas train with valves group MB-DLE  
(2 valves + gas filter + pressure governor) + leakage control VPS504.



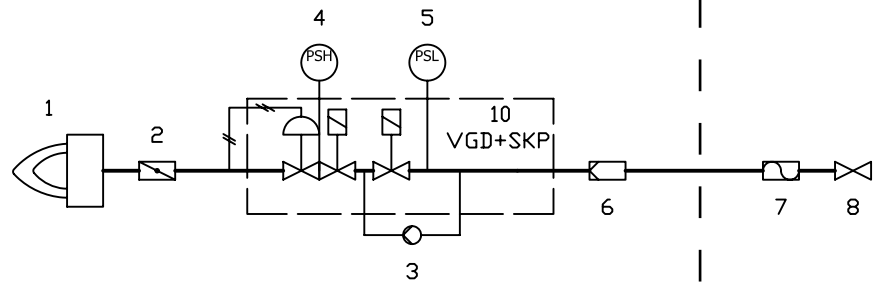
Gas train with valves group MB-DLE  
(2 valves + gas filter + pressure governor) + leakage control pressure switch.



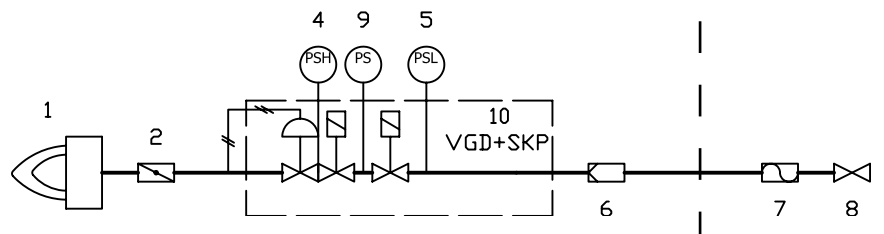
Gas train with valves group VGD  
with built-in gas pressure governor.



Gas train with valves group VGD  
with built-in gas pressure governor +  
leakage control VPS504.

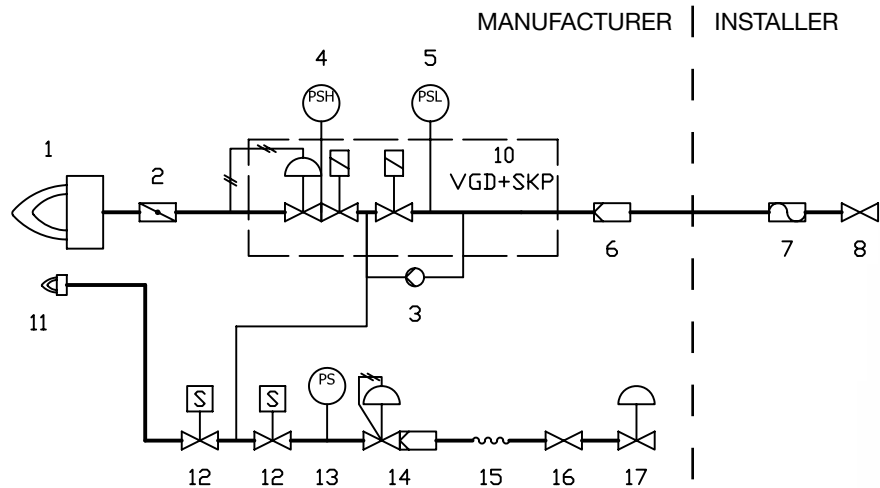


Gas train with valves group VGD  
with built-in gas pressure governor +  
leakage control pressure switch

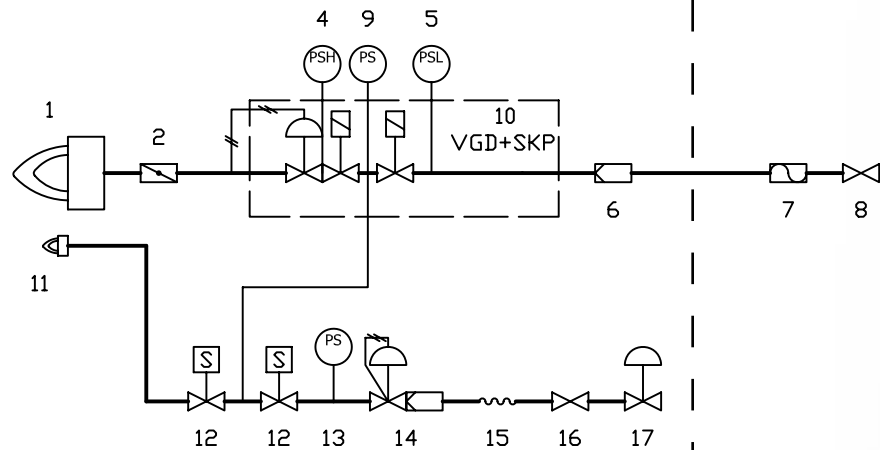




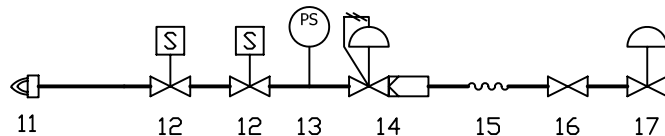
Gas train with valve group VGD, c/w built-in pressure governor+leakage control VPS504. Pilot train with double valve and filter/governor.



Gas train with valve group VGD, c/w built-in pressure governor+leakage control pressure switch. Pilot train with double valve and filter/governor.



Pilot train with double valve and pressure governor with filter.



## KEY

- |  |                                      |
|--|--------------------------------------|
| 1 Burner   | 10 Valves group                      |
| 2 Butterfly valve  | 11 Pilot burner                      |
| 3 Leakage control device (optional if output < 1200 kW)          | 12 Pilot valve                       |
| 4 Maximum gas pressure switch (optional)                         | 13 Pilot minimum gas pressure switch |
| 5 Minimum gas pressure switch                                    | 14 Pilot pressure governor           |
| 6 Gas filter   | 15 Pilot anti-vibrating joint        |
| 7 Anti-vibrating joint   | 16 Pilot manual cut off valve        |
| 8 Manual cut off valve   | 17 Pilot gas reducer (optional)      |
| 9 Leakage control pressure switch (optional if output < 1200 kW) |                                      |



# light oil burners

## idea series

**LO35** - TN  
**LO60** - TN/AB  
**LO90** - TN/AB  
**LO140** - TN/AB

**LO200** - TN/AB  
**LO280** - TN/AB  
**LO400** - TN/AB  
**LO550** - TN/AB

**LOX35** - TN  
**LOX60** - TN  
**LOX90** - TN  
**LOX140** - TN

## tecnopress series

**PG30** - TN/AB/PR/MD  
**PG60** - AB/PR/MD  
**PG70** - AB/PR/MD  
**PG81** - AB/PR/MD

Type	Power Range (kW)
RG1040	
RG1030	
RG525	
RG520	
RG515	(from 1.628 to 5.000 kW)
RG510	(from 1.314 to 3.953 kW)
RG93	(from 550 to 4.100 kW)
RG92	(from 849 to 2.558 kW)
RG91	(from 698 to 2.093 kW)
PG81	(from 264 to 1.900 kW)
PG70	(from 291 to 1.047 kW)
PG60	(from 145 to 791 kW)
PG30	(from 105 to 383 kW)
LO550	(from 160 to 560 kW)
LO400	(from 115 to 420 kW)
LO280	(from 70 to 310 kW)
LO200	(from 38 to 200 kW)
LOX140	(from 64 to 130 kW)
LO140	(from 38 to 160 kW)
LOX90	(from 28 to 70 kW)
LO90	(from 24 to 85 kW)
LOX60	(from 24 to 50 kW)
LO60	(from 25 to 60 kW)
LOX35	(from 17 to 35 kW)
LO35	(from 14 to 41 kW)



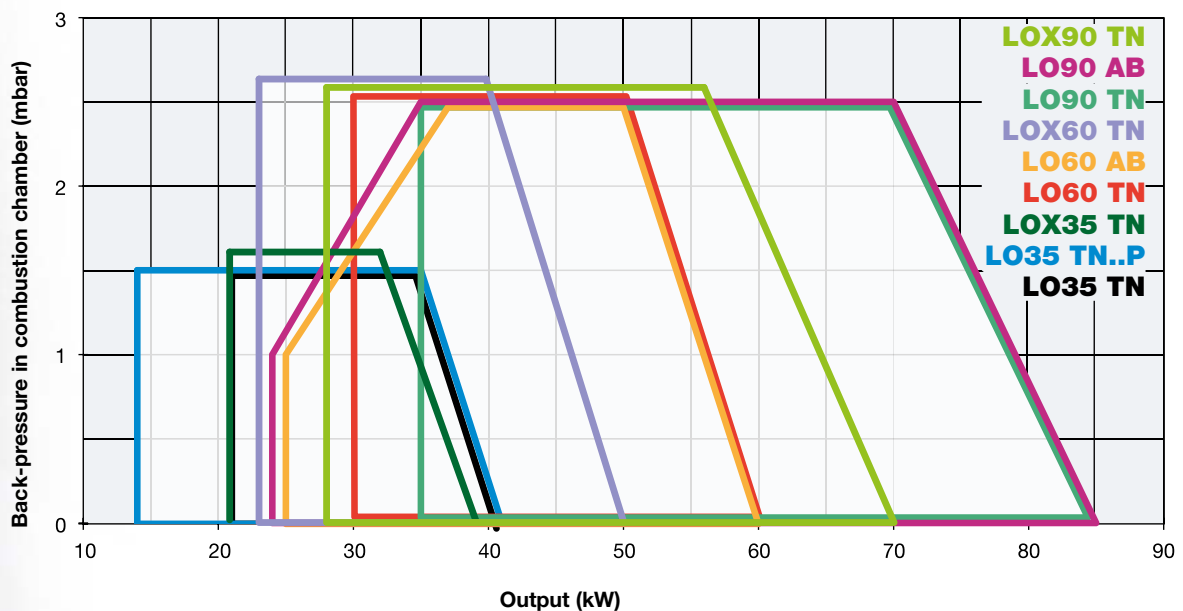


# idea series

LO35 LOX35 LO60 LOX60 LO90 LOX90

LIGHT OIL

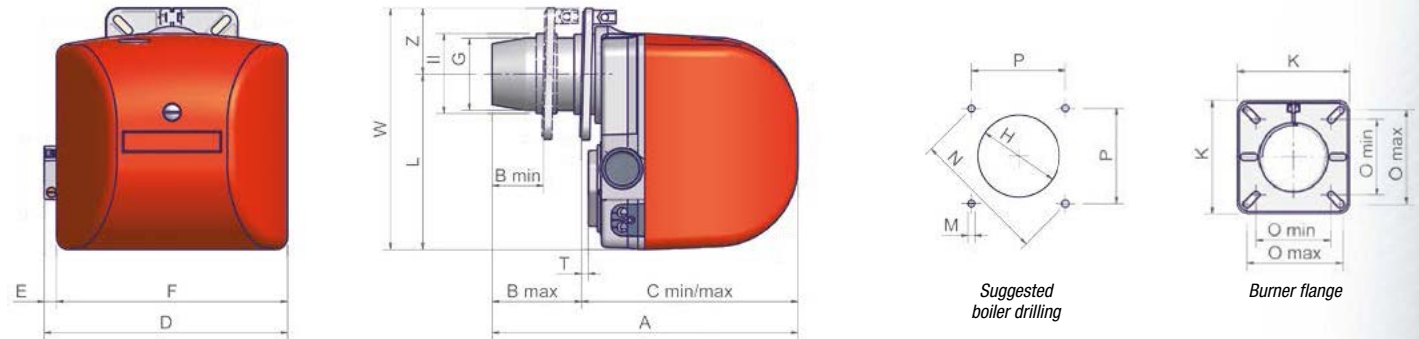
These light oil burners are appropriate for civil users and represent the best solution in term of design and reliability. IDEA burners born with the aim of responding at the market requests always more oriented toward a maximization of the performance combined with an easy installation and maintenance. This request is satisfied by the removable baking plate that is the same for all the IDEA series. Recently, the LOW NO<sub>x</sub> series has been implemented.





TECHNICAL DETAILS

Type	Model	Power kW		Electric power	Fan motor kW
		min.	max.		
L035	G-.TN.x.IT.A	21	41	230 V 1N ac	0,075
L035	G-.TN.x.IT.A.P	14	41	230 V 1N ac	0,075
LOX35	G-.TN.x.IT.A	17	35	230 V 1N ac	0,075
L060	G-.TN.x.IT.A	30	60	230 V 1N ac	0,10
L060	G-.AB.x.IT.A	25	60	230 V 1N ac	0,10
LOX60	G-.TN.x.IT.A	24	50	230 V 1N ac	0,10
L090	G-.TN.x.IT.A	35	85	230 V 1N ac	0,10
L090	G-.AB.x.IT.A	24	85	230 V 1N ac	0,10
LOX90	G-.TN.x.IT.A	28	70	230 V 1N ac	0,10



Type	Packaging dimensions* (mm)			
	l	p	h	kg
L035	290	260	490	10
LOX35	290	260	490	10
L060	400	300	520	14
LOX60	400	300	520	14
L090	400	300	520	14
LOX90	400	300	520	14

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																				
		A	B		C		D	E	F	G	H	II	K	L	M	N	O		P	T	W	Z
		min. max.		min. max.												min.	max.		min.			
L035	G-.TN.S.IT.A	338	58	100	238	280	269	14	255	80	95	88	145	194	M8	153	96	120	108	6	266	72
L035	G-.TN.L.IT.A	416	58	178	238	358	269	14	255	80	95	88	145	194	M8	153	96	120	108	6	266	72
LOX35	G-.TN.S.IT.A	338	58	100	238	280	269	14	255	80	95	88	145	194	M8	153	96	120	108	6	266	72
LOX35	G-.TN.L.IT.A	416	58	178	238	358	269	14	255	80	95	88	145	194	M8	153	96	120	108	6	266	72
L060	G-.xx.S.IT.A	365	58	71	274	307	305	14	291	80	95	88	145	218	M8	153	96	120	108	2	291	72
L060	G-.xx.L.IT.A	443	58	169	274	385	305	14	291	80	95	88	145	218	M8	153	96	120	108	2	291	72
LOX60	G-.TN.S.IT.A	365	58	71	274	307	305	14	291	80	95	88	145	218	M8	153	96	120	108	2	291	72
LOX60	G-.TN.L.IT.A	443	58	169	274	385	305	14	291	80	95	88	145	218	M8	153	96	120	108	2	291	72
L090	G-.xx.S.IT.A	365	58	71	294	307	305	14	291	80	95	88	145	218	M8	153	96	120	108	2	291	72
L090	G-.xx.L.IT.A	443	58	149	294	385	305	14	291	80	95	88	145	218	M8	153	96	120	108	2	291	72
LOX90	G-.TN.S.IT.A	365	58	71	294	307	305	14	291	80	95	88	145	218	M8	153	96	120	108	2	291	72
LOX90	G-.TN.L.IT.A	443	58	149	294	385	305	14	291	80	95	88	145	218	M8	153	96	120	108	2	291	72

(\*) Approximate values

## MECHANICAL OPERATION

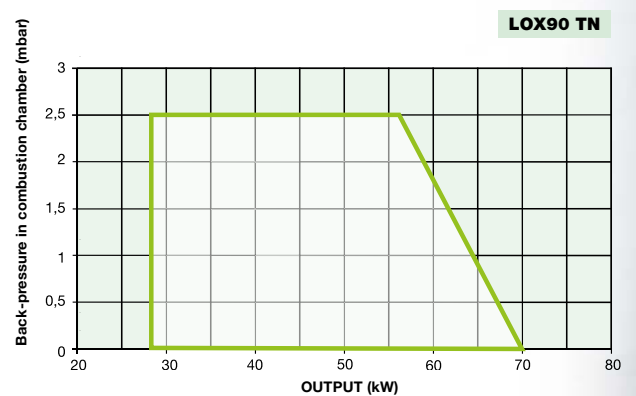
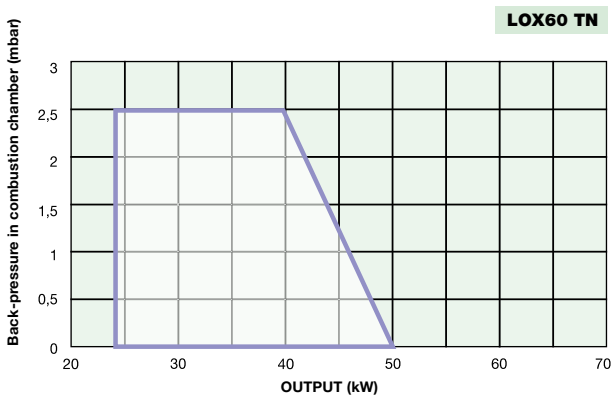
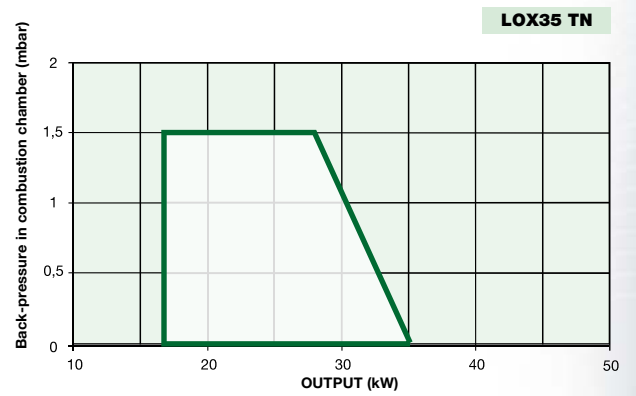
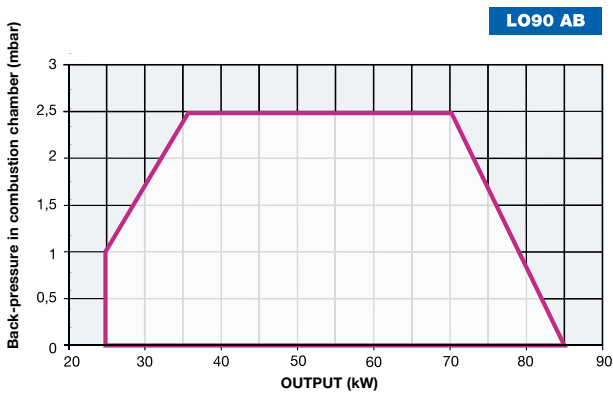
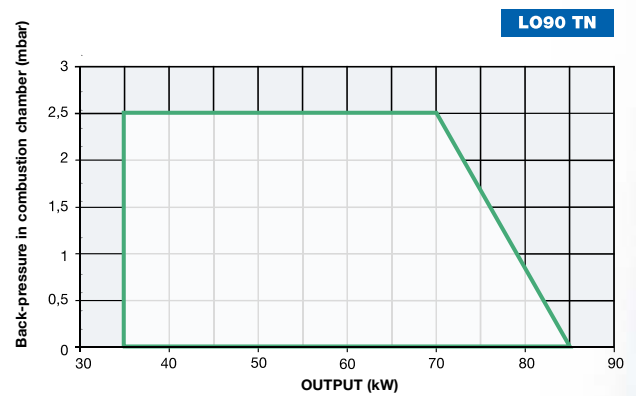
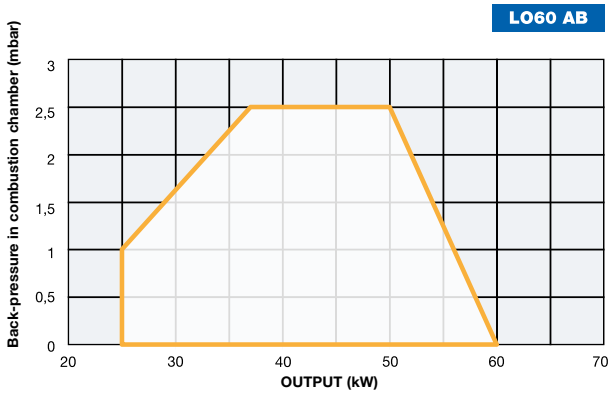
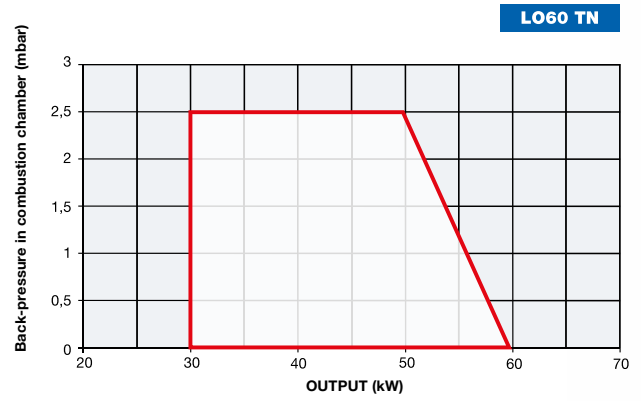
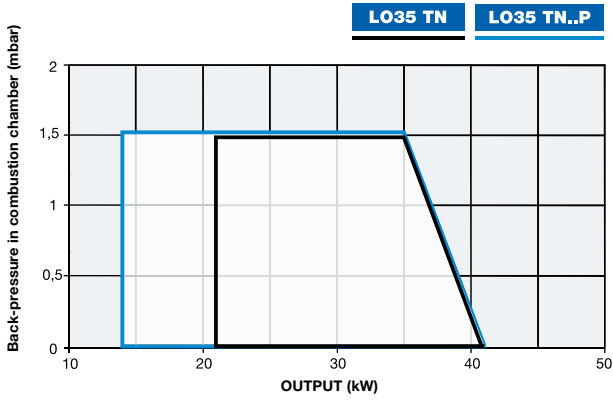
Model	Operation	LO35		LO60		LO90	
		Code	Price €	Code	Price €	Code	Price €
G-.TN.S.IT.A	TN	024050101		025050901		025050101	
G-.TN.L.IT.A	TN	024050201		025051001		025050201	
G-.TN.S.IT.Z ◆	TN	024050501		-		-	
G-.TN.L.IT.Z ◆	TN	024050601		-		-	
G-.TN.S.IT.A.P ❖	TN	024050301		-		-	
G-.TN.L.IT.A.P ❖	TN	024050401		-		-	
G-.TN.S.IT.Z.P ◆❖	TN	024050701		-		-	
G-.TN.L.IT.Z.P ◆❖	TN	024050801		-		-	
G-.AB.S.IT.A	AB	-		025050902		025050102	
G-.AB.L.IT.A	AB	-		025051002		025050202	

		LOX35		LOX60		LOX90	
G-.TN.S.IT.A	TN	024051101		025051901		025052101	
G-.TN.L.IT.A	TN	024050201		025052001		025052201	

◆ Burner equipped with external air inlet

❖ Burner provided with pre-heating system on the atomization group

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

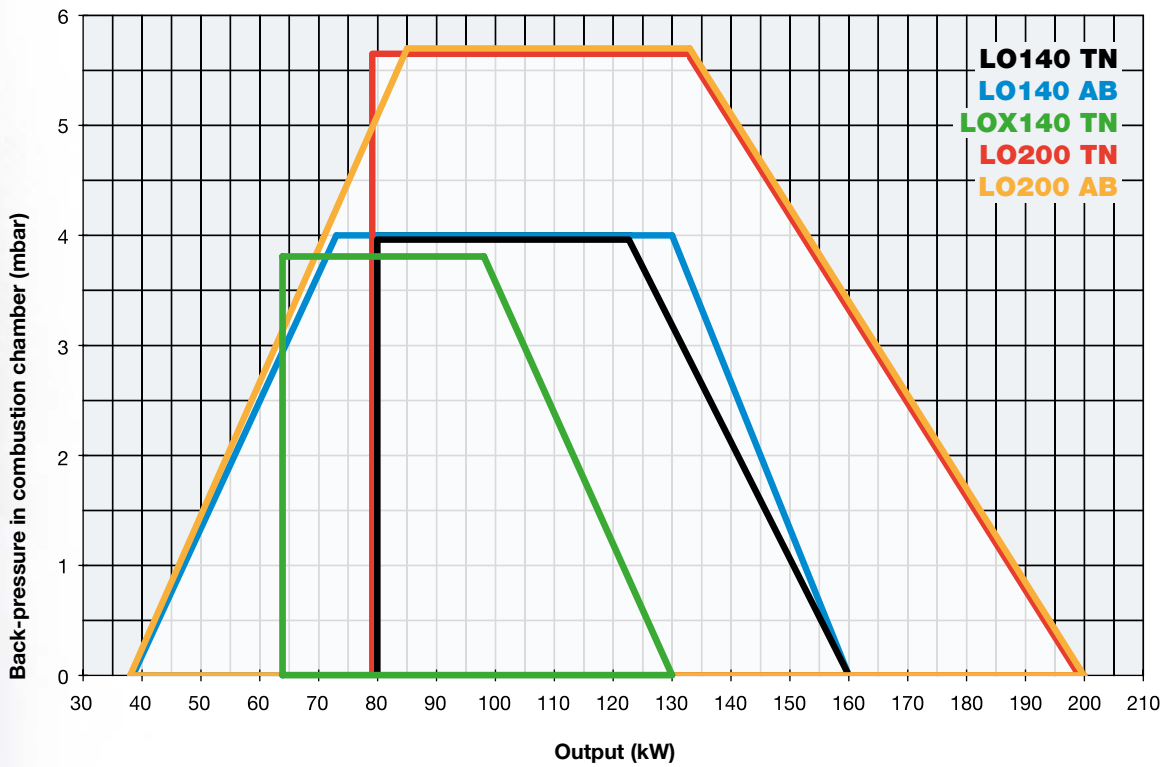


# idea series

LO140 LOX140 LO200

LIGHT OIL

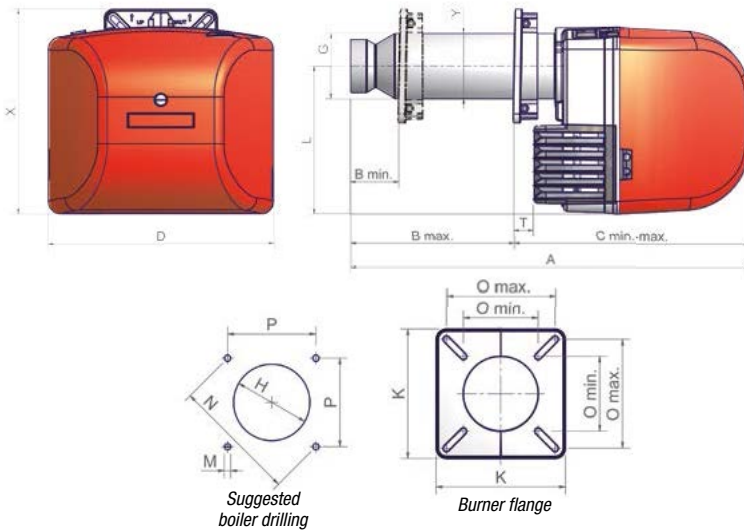
These light oil burners are appropriate for civil users and represent the best solution in term of design and reliability. This series of burners perfectly satisfy the actual market demand, ensuring the maximum efficiency combined with easy installation and maintenance. In fact the removable baking plate of the components makes the technical support easier and quicker. Recently, the LOW NO<sub>x</sub> series has been implemented.





TECHNICAL DETAILS

Type	Model	Power kW		Electric power	Fan motor kW
		min.	max.		
LO140	G-.TN.x.IT.A	80	160	230 V 1N ac	0,18
LO140	G-.AB.x.IT.A	38	160	230 V 1N ac	0,18
LOX140	G-.TN.x.IT.A	64	130	230 V 1N ac	0,18
LO200	G-.TN.x.IT.A	80	200	230 V 1N ac	0,18
LO200	G-.AB.x.IT.A	38	200	230 V 1N ac	0,18



Type	Packaging dimensions* (mm)			
	l	p	h	kg
LO140..S	600	370	400	25
LO140..L	750	370	400	25
LOX140..S	600	370	400	25
LOX140..L	750	370	400	25
LO200..S	600	370	400	25
LO200..L	750	370	400	25

(\* Approximate values)

Type	Model	Overall dimensions* (mm)											Suggested boiler drilling (mm)				Burner flange (mm)		
		A	B		C		D	G	Y	L	T	X	H	M	N	P	K	O	
			min.	max.	min.	max.												min.	max.
LO140	G-.xx.S.IT.A	560	80	170	390	475	373	108	108	244	32	338	128	M8	188	133	188	108	158
LO140	G-.xx.L.IT.A	660	80	270	390	575	373	108	108	244	32	338	128	M8	188	133	188	108	158
LOX140	G-.xx.S.IT.A	560	80	170	390	475	373	108	108	244	32	338	128	M8	188	133	188	108	158
LOX140	G-.xx.L.IT.A	660	80	270	390	575	373	108	108	244	32	338	128	M8	188	133	188	108	158
LO200	G-.xx.S.IT.A	560	65	170	390	475	373	108	108	244	32	338	128	M8	188	133	188	108	158
LO200	G-.xx.L.IT.A	660	65	270	390	575	373	108	108	244	32	338	128	M8	188	133	188	108	158

(\* Approximate values)

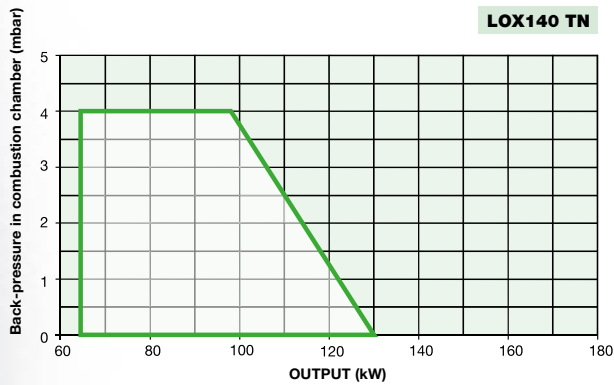
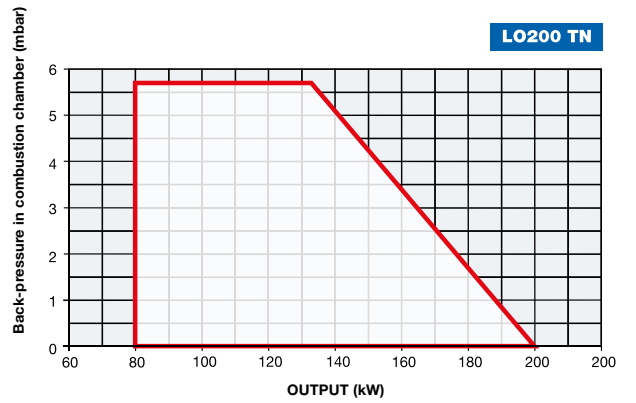
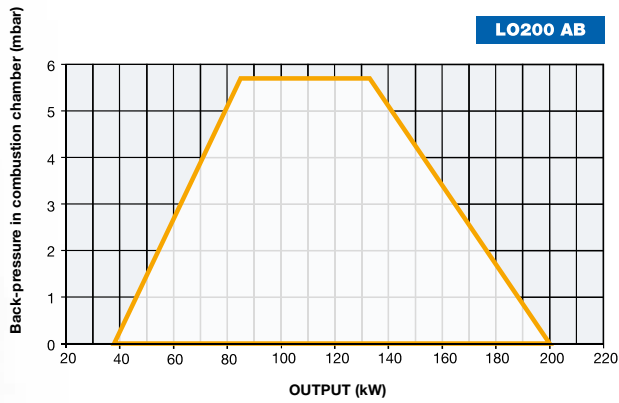
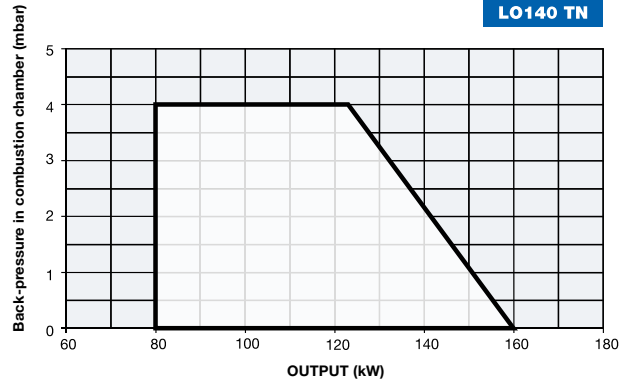
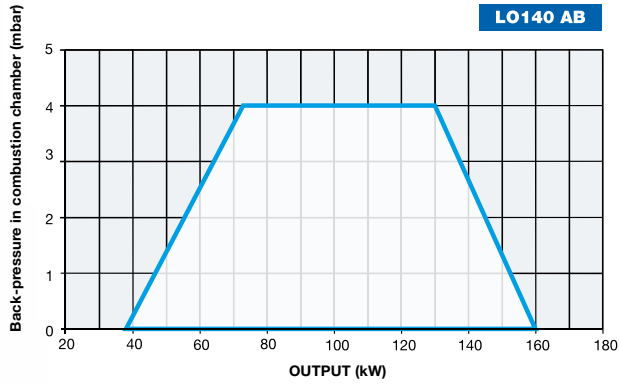
MECHANICAL OPERATION

		LO140			LO200		
Model	Operation	Code	Price €	Code	Price €	Code	Price €
G-.TN.S.IT.A	TN	026050101		026050301			
G-.TN.L.IT.A	TN	026050201		026050401			
G-.AB.S.IT.A	AB	026050102		026050302			
G-.AB.L.IT.A	AB	026050202		026050402			

		LOX140		
Model	Operation	Code	Price €	Code
G-.TN.S.IT.A	TN	026050901		
G-.TN.L.IT.A	TN	026051001		

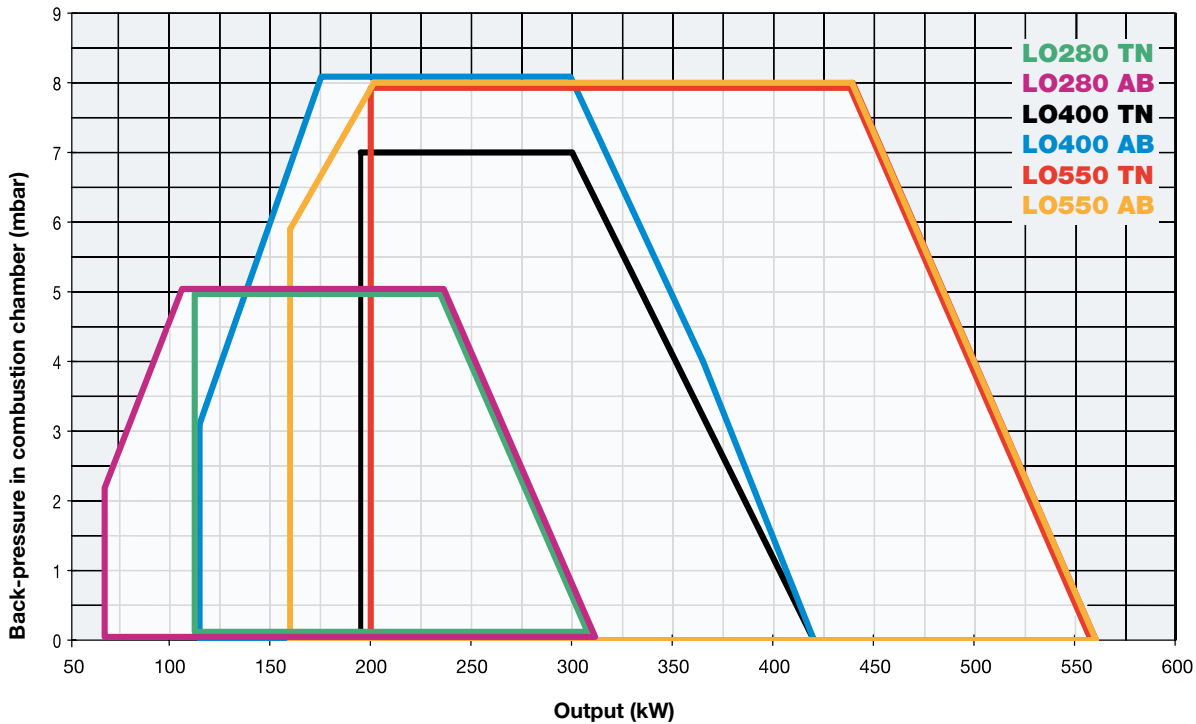
In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE





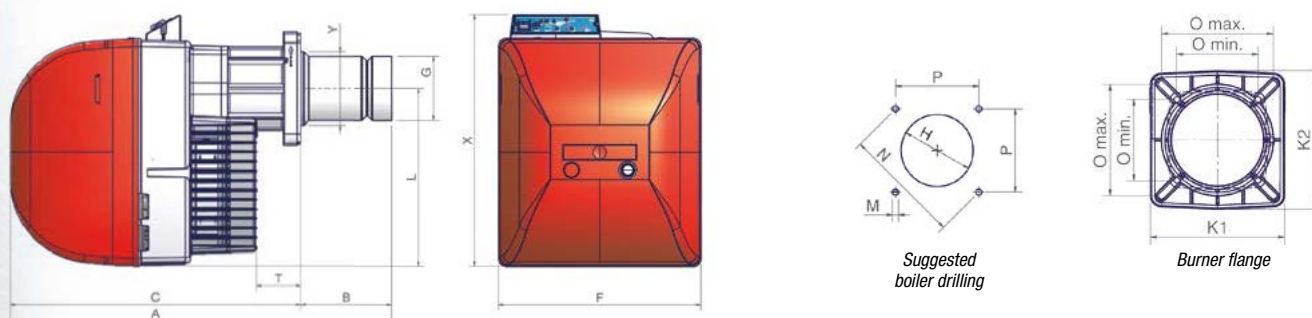


With the introduction of the new line of products "IDEA", CIB UNIGAS is offering a series of small and medium capacity burners designed to be aesthetic but always functional. The compactness and the optimal geometry and quality of all the electronic and mechanical components of the burners, take up a minimum amount of space and guarantee high performance. This version of burners is equipped with a stainless steel blast tube whose length is adjustable according to the boiler measure. Furthermore, it owns a nozzle designed to reduce the air resistance and a special diffuser that can be easily positioned along a graduated gauge. As well as the gas burners also these oil light burners are characterized by some functional devices: universal pre-wired electrical plug connections; mechanical components fixed on a removable backing plate that allows quick maintenance services; a special combustion air intake that maximizes the air pressure; a connection flange of little dimension that reduces the place taken by the burner; the position of the combustion head is adjustable by means of graduated screw.



TECHNICAL DETAILS

Type	Model	Power kW		Electric power	Fan motor kW
		min.	max.		
<b>LO280</b>	G-.TN.x.IT.A	115	310	230 V 1N ac	0,25
<b>LO280</b>	G-.AB.x.IT.A	70	310	230 V 1N ac	0,25
<b>LO400</b>	G-.TN.M.IT.A	195	420	230 V 1N ac	0,37
<b>LO400</b>	G-.AB.M.IT.A	115	420	230 V 1N ac	0,37
<b>LO550</b>	G-.TN.x.IT.A	200	560	230 V 1N ac	0,62
<b>LO550</b>	G-.AB.x.IT.A	160	560	230 V 1N ac	0,62



Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>LO280/350/400</b>	1120	440	580	42
<b>LO550</b>	1200	460	630	55

(\*) Approximate values

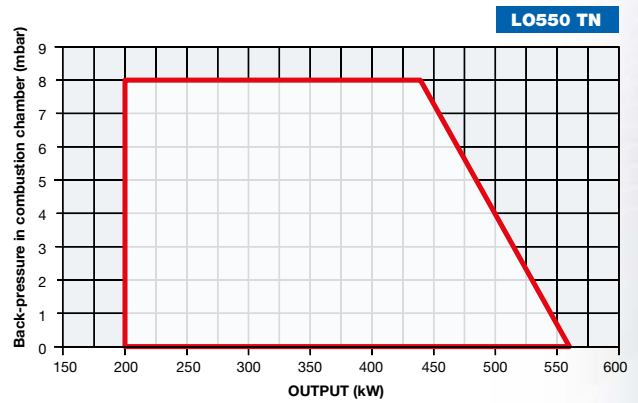
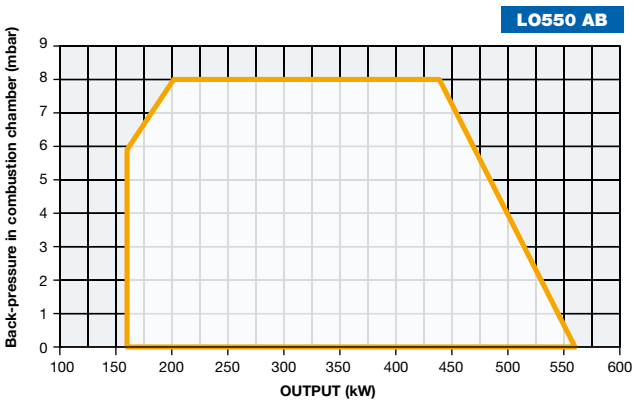
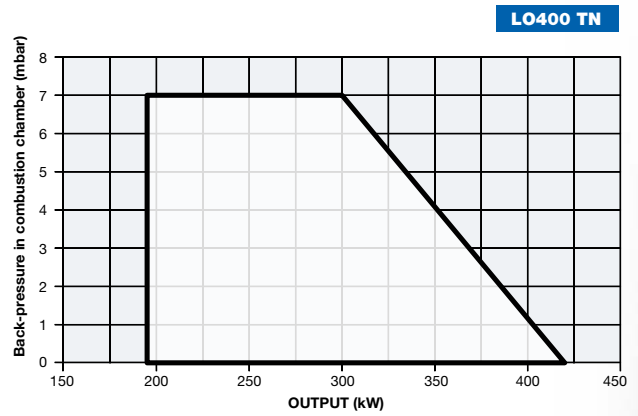
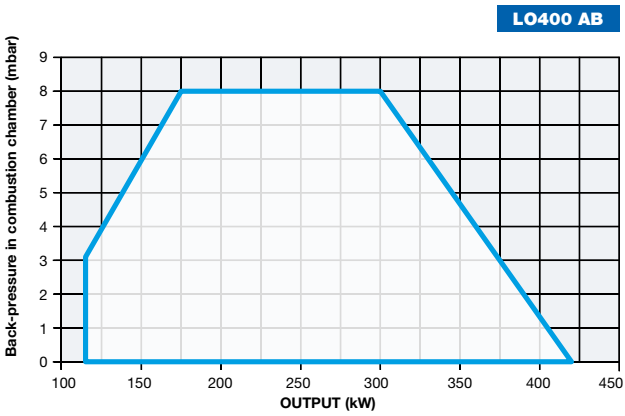
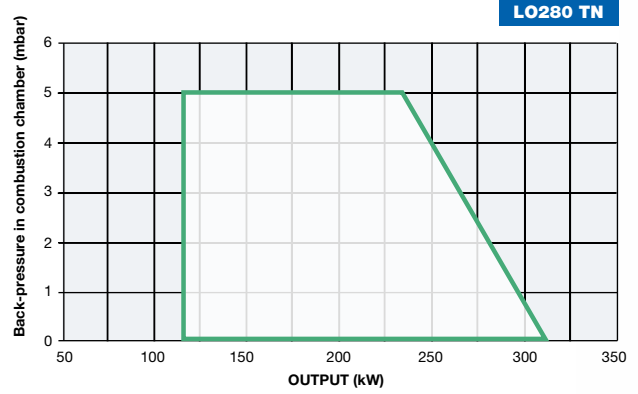
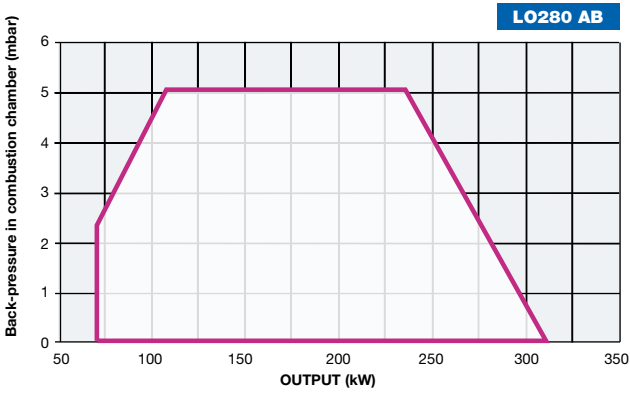
Type	Model	Overall dimensions* (mm)											Suggested boiler drilling (mm)				Burner flange (mm)			
		A	AL	B	BL	C	F	G	Y	L	T	X	H	M	N	P	O min.	O max.	K1	K2
<b>LO280</b>	G-.TN.x.IT.A	733	878	163	308	570	396	108	108	348	128	460	128	M10	219	155	131	179	215	223
<b>LO280</b>	G-.AB.x.IT.A	733	878	163	308	570	396	108	108	348	128	492	128	M10	219	155	131	179	215	223
<b>LO400</b>	G-.xx.x.IT.A	748	878	178	308	570	396	125	144	348	89	491	164	M10	219	155	131	179	215	223
<b>LO550</b>	G-.xx.x.IT.A	843	943	253	353	590	426	155	155	384	69	533	175	M10	247	174	157	192	241	241

(\*) Approximate values

Model	Operation	<b>LO280</b>		<b>LO400</b>		<b>LO550</b>	
		Code	Price €	Code	Price €	Code	Price €
<b>G-.TN.S.IT.A</b>	TN	027050701	-	-	-	028050101	-
<b>G-.TN.L.IT.A</b>	TN	027050801	-	-	-	028050201	-
<b>G-.TN.M.IT.A</b>	TN	-	-	027050301	-	-	-
<b>G-.AB.S.IT.A</b>	AB	027050702	-	-	-	-	-
<b>G-.AB.L.IT.A</b>	AB	027050802	-	-	-	028050102	-
<b>G-.AB.M.IT.A</b>	AB	-	-	027050302	-	028050202	-
<b>G-.AB.S.IT.A.M ▲</b>	AB	-	-	-	-	028050502	-
<b>G-.AB.L.IT.A.M ▲</b>	AB	-	-	-	-	028050602	-
<b>G-.AB.M.IT.A.M ▲</b>	AB	-	-	027050402	-	-	-

▲ Version with hydraulic ram

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE



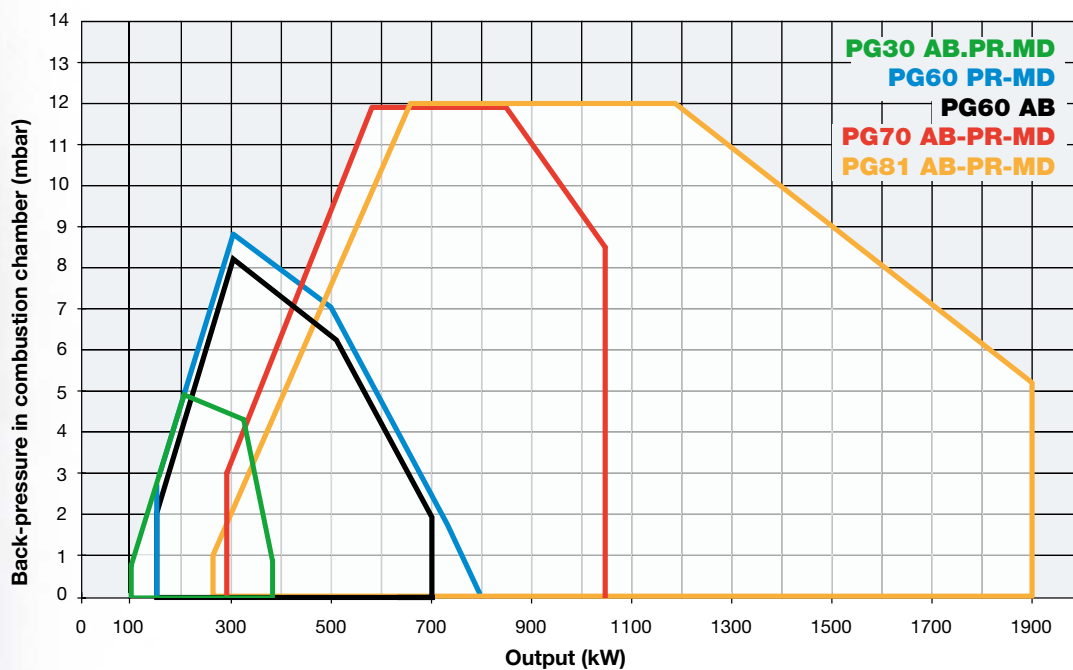
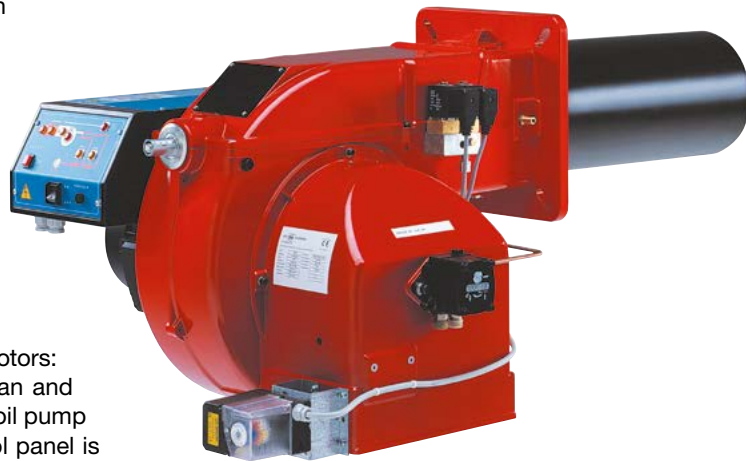
# tecnopress series

PG30 PG60 PG70 PG81

LIGHT OIL

These burners have a capacity between 105 and 1900kW and can be applied to pressurized boilers, generators of hot water and steam and medium size ovens for thermal treatment. Their simple operation combined with the safety guaranteed by the constant tests of these products, which take place in our laboratory, and their conformity to EC directives, makes these burners sophisticated and reliable.

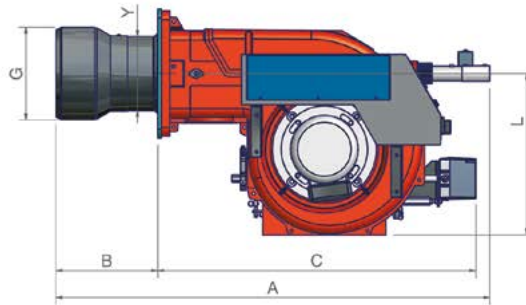
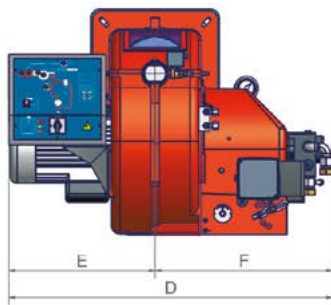
All the burners are equipped with two motors: one necessary for the control of the fan and the other for the activation of the light oil pump through a flexible coupling. The control panel is completed by an electronic control box, equipped with photo resistor, for the control of the flame. The atomization and the fuel supply system includes nozzle, ignition electrodes, flexibles and filters. It is also available a biodiesel version of these model of burners.





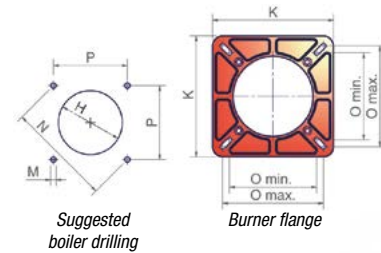
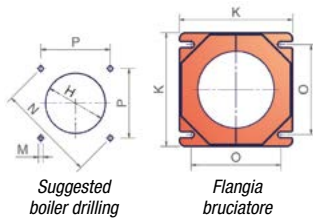
TECHNICAL DETAILS

Type	Model	Power kW		Electric power	Fan motor kW	Pump motor kW
		min.	max.			
<b>PG30</b>	G-.PR.x.IT.A	105	383	230 V 1N ac	0,37	-
<b>PG60</b>	G-.AB.x.IT.A	145	698	230/400 V 3N ac	1,10	-
<b>PG60</b>	G-.PR.x.IT.A	151	791	230/400 V 3N ac	1,10	-
<b>PG70</b>	G-.xx.x.IT.A	291	1.047	230/400 V 3N ac	2,20	-
<b>PG81</b>	G-.xx.x.IT.A	264	1.900	230/400 V 3N ac	3,00	-



**PG30 - PG60**

**PG70 - PG81**



Type	Model	Overall dimensions* (mm)											Suggested boiler drilling (mm)				Burner flange (mm)			Packaging dimensions* (mm)			
		A	AL	B	BL	C	D	E	F	G	Y	L	H	M	N	P	O		K	l	p	h	kg
		min.		max.		min.		max.		min.		max.		min.		max.		min.		max.			
<b>PG30</b>	G-.PR.x.IT.A	662	852	150	340	512	516	267	249	121	131	284	151	M10	219	155	155	155	190	1000	550	460	30
<b>PG60</b>	G-.AB.x.IT.A	874	1072	244	442	630	615	330	285	153	162	350	182	M10	269	190	190	190	240	1200	670	540	65
<b>PG60</b>	G-.xx.x.IT.A	1004	1202	244	442	760	630	330	300	153	162	350	182	M10	269	190	190	190	240	1200	670	540	65
<b>PG70</b>	G-.AB.x.IT.A	995	1145	310	460	685	710	360	350	198	198	375	228	M10	330	233	216	250	300	1280	850	760	82
<b>PG70</b>	G-.xx.x.IT.A	1035	1185	310	460	725	780	360	420	198	198	375	228	M10	330	233	216	250	300	1280	850	760	87
<b>PG81</b>	G-.AB.x.IT.A	1025	1175	340	490	685	765	400	365	234	198	375	264	M10	330	233	216	250	300	1280	850	760	95
<b>PG81</b>	G-.xx.x.IT.A	1165	1315	340	490	825	820	400	420	234	198	375	264	M10	330	233	216	250	300	1280	850	760	100

(\*) Approximate values

### MECHANICAL OPERATION

Model	Operation	PG30		PG60	
		Code	Price €	Code	Price €
G-.AB.S.IT.A	AB	003050102		004050102	
G-.AB.L.IT.A	AB	003050202		004050202	
G-.PR.S.IT.A	PR	003050103		004050103	
G-.PR.L.IT.A	PR	003050203		004050203	
G-.MD.S.IT.A	MD(*)	003050104		004050104	
G-.MD.L.IT.A	MD(*)	003050204		004050204	

Model	Operation	PG70		PG81	
		Code	Price €	Code	Price €
G-.AB.S.IT.A	AB	008050102		008051302	
G-.AB.L.IT.A	AB	008050202		008051402	
G-.PR.S.IT.A	PR	008050103		008051303	
G-.PR.L.IT.A	PR	008050203		008051403	
G-.MD.S.IT.A	MD(*)	008050104		008051304	
G-.MD.L.IT.A	MD(*)	008050204		008051404	

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250)

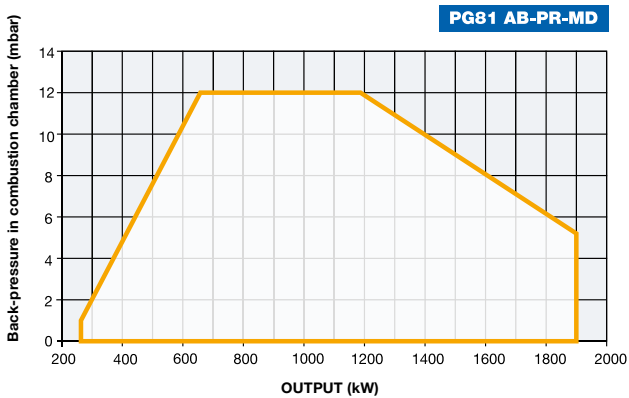
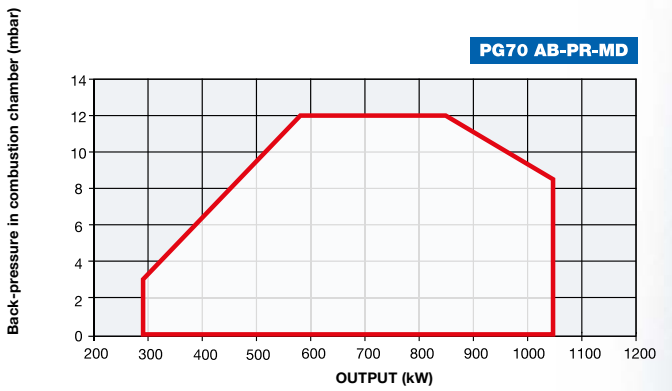
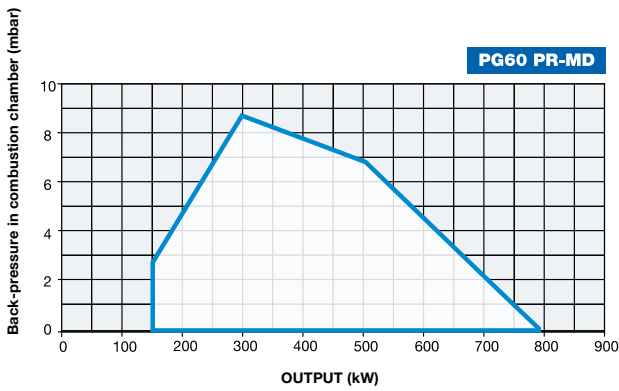
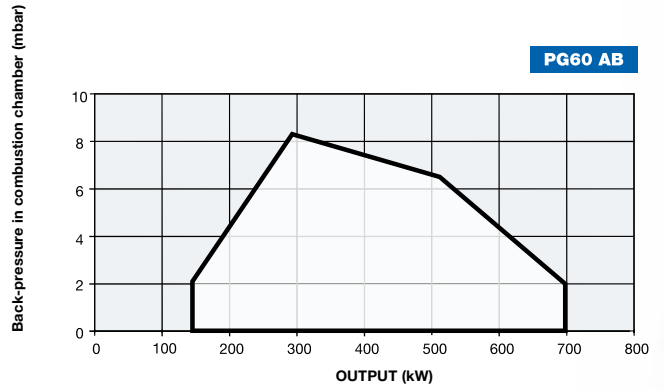
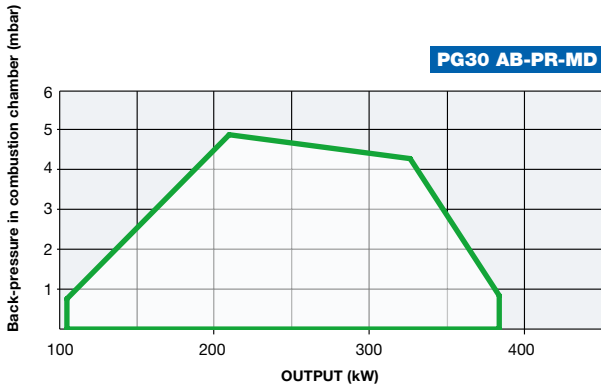
### ELECTRONIC OPERATION

Model	Operation	PG30		PG60	
		Code	Price €	Code	Price €
G-.PR.S.IT.A.EA	PR	00305010A		00405010A	
G-.PR.L.IT.A.EA	PR	00305020A		00405020A	
G-.MD.S.IT.A.EA	MD(*)	00305010E		00405010E	
G-.MD.L.IT.A.EA	MD(*)	00305020E		00405020E	

Model	Operation	PG70		PG81	
		Code	Price €	Code	Price €
G-.PR.S.IT.A.EA	PR	00805010A		00805130A	
G-.PR.L.IT.A.EA	PR	00805020A		00805140A	
G-.MD.S.IT.A.EA	MD(*)	00805010E		00805130E	
G-.MD.L.IT.A.EA	MD(*)	00805020E		00805140E	

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250)



# novanta-cinquecento series

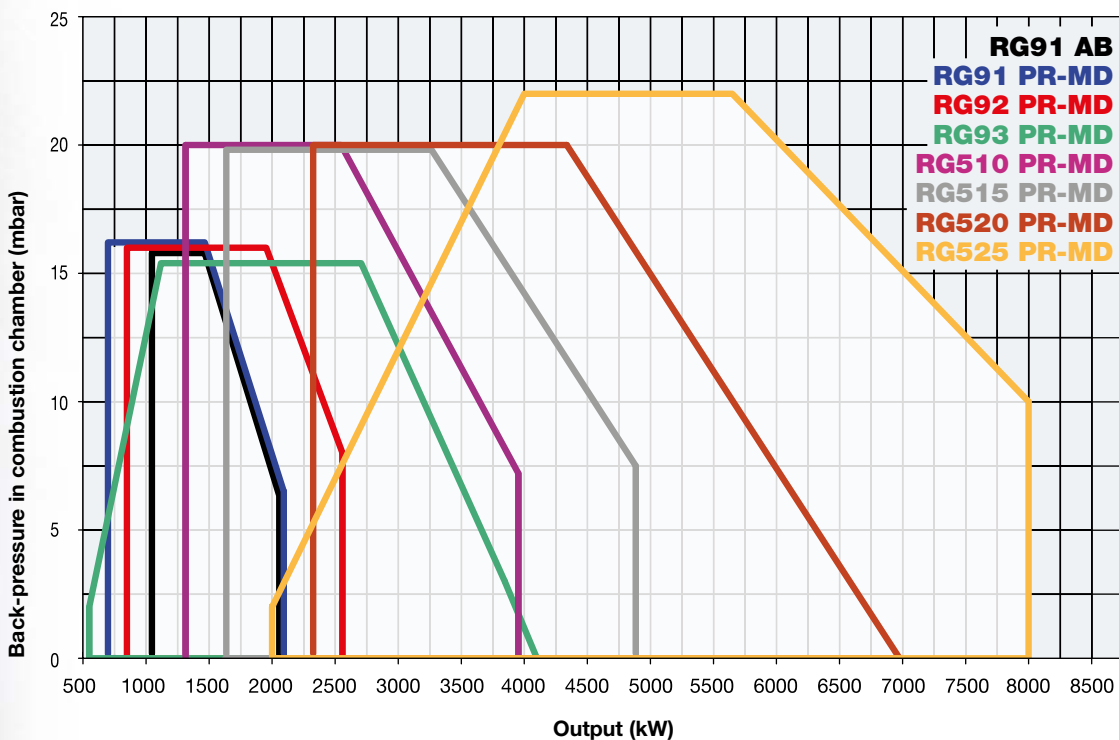
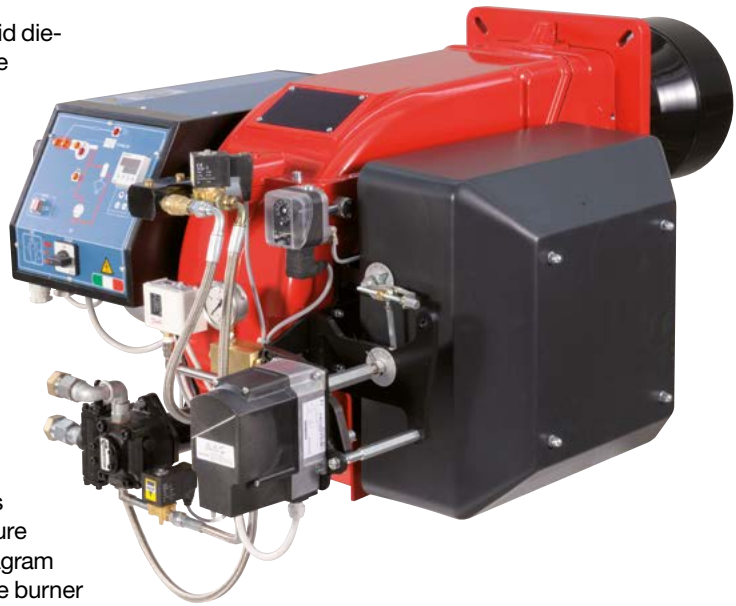
RG91 RG92 RG93 RG510 RG515 RG520 RG525

LIGHT OIL

This series of monoblock burners made of a solid die-cast aluminium housing, represents the outcome of our experience in the field of medium-large capacity burners. This version of burners owns a centrifugal air fan activated by a three phase motor, while the oil pump works through a dedicated motor.

This range is divided into two groups: the series NOVANTA with a capacity up to 4100kW and the series CINQUECENTO that gains a maximum capacity of 8000kW. Both series are equipped with a by-passing nozzle that allows a modulating ratio of 1:3. The light oil output can be adjusted through a pressure regulator which effects on the return pipe line.

All burners have a control panel which includes the control box and the regulators of temperature and pressure. Furthermore they own a mimic diagram with lamps showing the sequential stages of the burner operation.





# novanta-cinquecento series

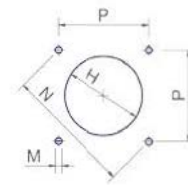
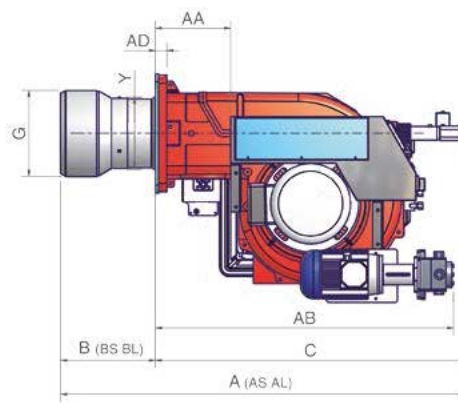
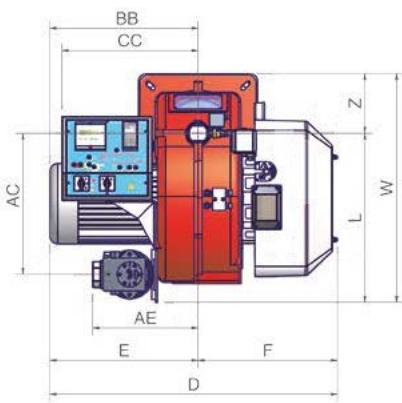
RG91 RG92 RG93 RG510 RG515 RG520 RG525

LIGHT OIL

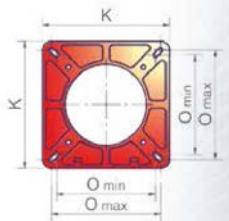


## TECHNICAL DETAILS

Type	Model	Power kW		Electric power	Fan motor kW	Pump motor kW
		min.	max.			
<b>RG91</b>	G-.AB.x.IT.A	1.047	2.093	230/400 V 3N ac	4,0	1,1
<b>RG91</b>	G-.xx.x.IT.A	698	2.093	230/400 V 3N ac	4,0	1,1
<b>RG92</b>	G-.xx.x.IT.A	849	2.558	230/400 V 3N ac	5,5	1,1
<b>RG93</b>	G-.xx.x.IT.A	550	4.100	230/400 V 3N ac	7,5	1,1



Suggested boiler drilling



Burner flange

Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>RG91</b>	1730	1280	1020	230
<b>RG92</b>	1730	1280	1020	270
<b>RG93</b>	1730	1430	1130	290

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																										
		AS	AL	AA	AB	AC	AD	AE	BS	BL	BB	C	CC	D	E	F	G	H	K	L	M	N	O	P	W	Y	Z	
																						min. max.						
<b>RG91</b>	G-.xx.x.IT.A	1259	1432	242	925	436	35	327	300	473	419	959	422	853	419	434	238	268	360	523	M12	424	280	310	300	708	228	185
<b>RG92</b>	G-.xx.x.IT.A	1253	1426	242	925	436	35	327	294	467	419	959	422	853	419	434	266	296	360	523	M12	424	280	310	300	708	228	185
<b>RG93</b>	G-.xx.x.IT.A	1260	1450	242	925	436	35	327	301	491	460	959	422	894	460	434	292	322	360	523	M12	424	280	310	300	708	228	185

(\*) Approximate values

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

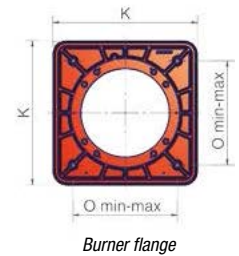
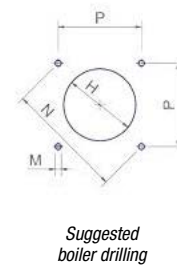
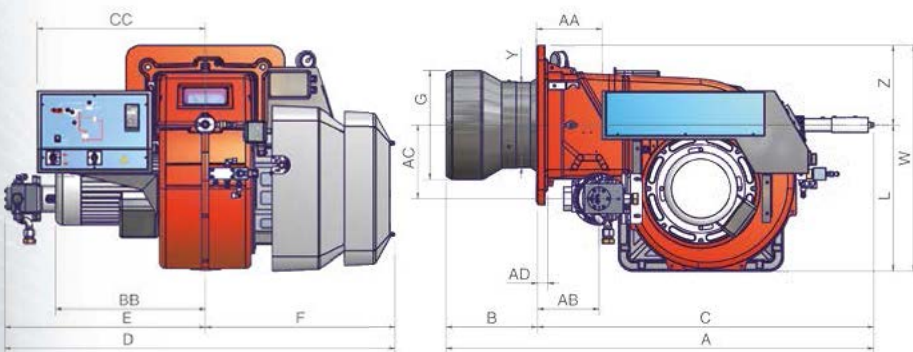
# novanta-cinquecento series

RG91 RG92 RG93 RG510 RG515 RG520 RG525

LIGHT OIL

## TECHNICAL DETAILS

Type	Model	Power kW		Electric power	Fan motor kW	Pump motor kW
		min.	max.			
<b>RG510</b>	G-.xx.x.IT.A	1.314	3.953	230/400 V 3N ac	7,5	1,1
<b>RG515</b>	G-.xx.x.IT.A	1.628	4.884	230/400 V 3N ac	11,0	1,5
<b>RG520</b>	G-.xx.x.IT.A	2.326	6.977	230/400 V 3N ac	15,0	1,5
<b>RG525</b>	G-.xx.x.IT.A	2.000	8.000	400 V 3N ac	18,5	3,0



Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>RG510/515/520</b>	1720	1500	1150	330
<b>RG525</b>	1800	1500	1300	350

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																								
		AS	AL	AA	AB	AC	AD	BS	BL	BB	C	CC	D	E	F	G	H	K	L	M	N	O	P	W	Y	Z
<b>RG510</b>	G-.xx.x.IT.A	1451	1671	219	217	246	35	310	530	468	1141	571	1314	671	643	329	369	540	496	M14	552	390	390	766	328	270
<b>RG515</b>	G-.xx.x.IT.A	1451	1671	219	217	246	35	310	530	508	1141	571	1324	681	643	350	390	540	496	M14	552	390	390	766	328	270
<b>RG520</b>	G-.xx.x.IT.A	1451	1671	219	207	250	35	310	530	508	1141	571	1324	681	643	370	410	540	496	M14	552	390	390	880	328	270
<b>RG525</b>	G-.xx.x.IT.A	1511	1691	219	197	275	35	350	530	650	1161	571	1341	698	643	434	484	540	496	M14	552	390	390	938	434	270

(\*) Approximate values

Conformi alla DIRETTIVA E.M.C. 2004/108/CE e DIRETTIVA B.T. 2006/95/CE



## MECHANICAL OPERATION

		<b>RG91</b>		<b>RG92</b>	
Model	Operation	Code	Price €	Code	Price €
<b>G-.AB.S.IT.A</b>	AB	012050302		-	
<b>G-.AB.L.IT.A</b>	AB	012050402		-	
<b>G-.PR.S.IT.A</b>	PR	012050303		012051103	
<b>G-.PR.L.IT.A</b>	PR	012050403		012051203	
<b>G-.MD.S.IT.A</b>	MD(*)	012050304		012051104	
<b>G-.MD.L.IT.A</b>	MD(*)	012050404		012051204	

		<b>RG93</b>	
Model	Operation	Code	Price €
<b>G-.PR.S.IT.A</b>	PR	012051303	
<b>G-.PR.L.IT.A</b>	PR	012051403	
<b>G-.MD.S.IT.A</b>	MD(*)	012051304	
<b>G-.MD.L.IT.A</b>	MD(*)	012051404	

		<b>RG510</b>		<b>RG515</b>	
Model	Operation	Code	Price €	Code	Price €
<b>G-.PR.S.IT.A</b>	PR	029050103		029050303	
<b>G-.PR.L.IT.A</b>	PR	029050203		029050403	
<b>G-.MD.S.IT.A</b>	MD(*)	029050104		029050304	
<b>G-.MD.L.IT.A</b>	MD(*)	029050204		029050404	

		<b>RG520</b>		<b>RG525</b>	
Model	Operation	Code	Price €	Code	Price €
<b>G-.PR.S.IT.A</b>	PR	029050503		029050703	
<b>G-.PR.L.IT.A</b>	PR	029050603		029050803	
<b>G-.MD.S.IT.A</b>	MD(*)	029050504		029050704	
<b>G-.MD.L.IT.A</b>	MD(*)	029050604		029050804	

Conformi alla DIRETTIVA E.M.C. 2004/108/CE e DIRETTIVA B.T. 2006/95/CE

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250)

# novanta-cinquecento series

RG91 RG92 RG93 RG510 RG515 RG520 RG525

LIGHT OIL

## ELECTRONIC OPERATION

Model	Operation	RG91		RG92		RG93	
		Code	Price €	Code	Price €	Code	Price €
G-.PR.S.IT.A.EA	PR	01205090A		01205110A		01205130A	
G-.PR.L.IT.A.EA	PR	01205100A		01205120A		01205140A	
G-.MD.S.IT.A.EA	MD(*)	01205090E		01205110E		01205130E	
G-.MD.L.IT.A.EA	MD(*)	01205100E		01205120E		01205140E	
G-.MD.S.IT.A.ES	MD(*)	01205090S		01205110S		01205130S	
G-.MD.L.IT.A.ES	MD(*)	01205100S		01205120S		01205140S	

Model	Operation	RG510		RG515		RG520		RG525	
		Code	Price €	Code	Price €	Code	Price €	Code	Price €
G-.PR.S.IT.A.EA	PR	02905010A		02905030A		02905050A		02905070A	
G-.PR.L.IT.A.EA	PR	02905020A		02905040A		02905060A		02905080A	
G-.MD.S.IT.A.EA	MD(*)	02905010E		02905030E		02905050E		02905070E	
G-.MD.L.IT.A.EA	MD(*)	02905020E		02905040E		02905060E		02905080E	
G-.MD.S.IT.A.ES	MD(*)	02905010S		02905030S		02905050S		02905070S	
G-.MD.L.IT.A.ES	MD(*)	02905020S		02905040S		02905060S		02905080S	

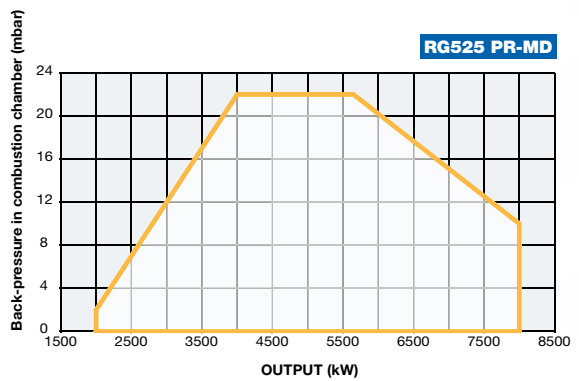
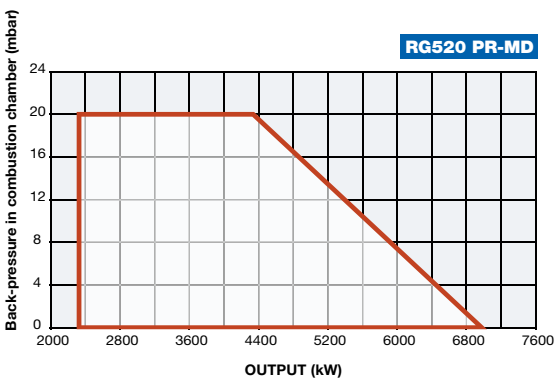
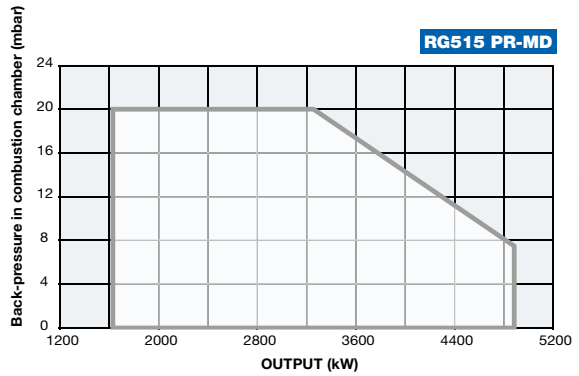
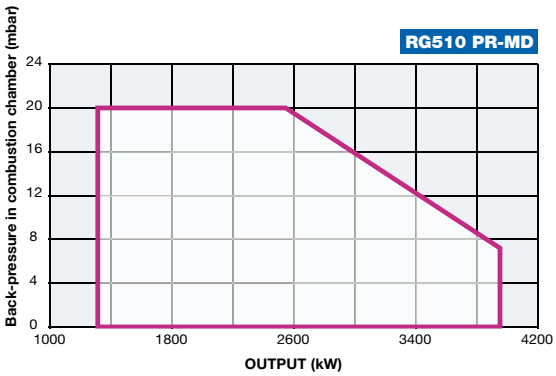
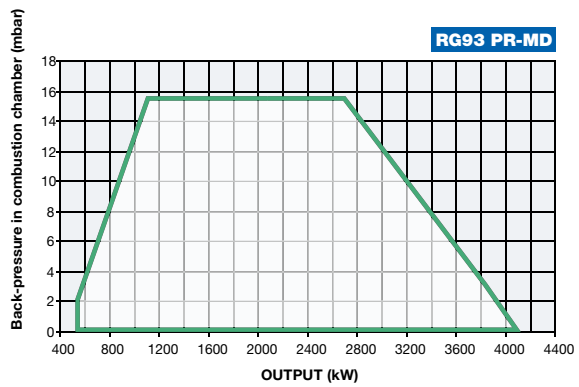
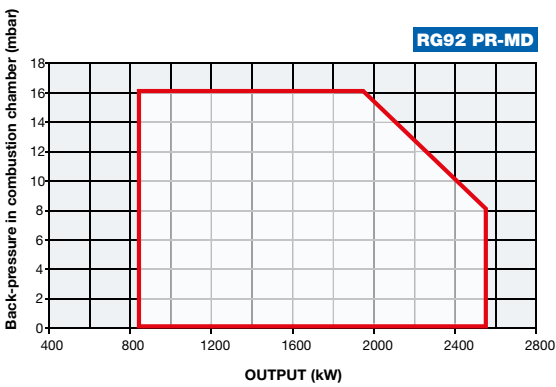
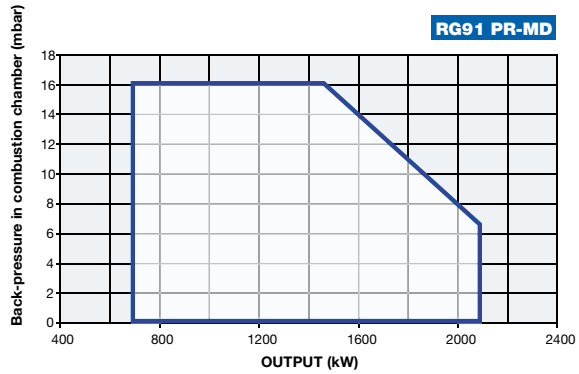
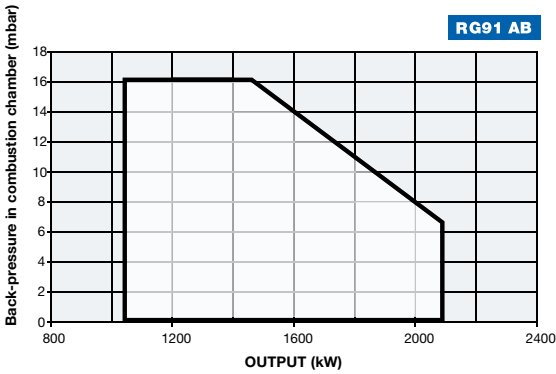
Conformi alla DIRETTIVA E.M.C. 2004/108/CE e DIRETTIVA B.T. 2006/95/CE

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# novanta-cinquecento series

LIGHT OIL

RG91 RG92 RG93 RG510 RG515 RG520 RG525



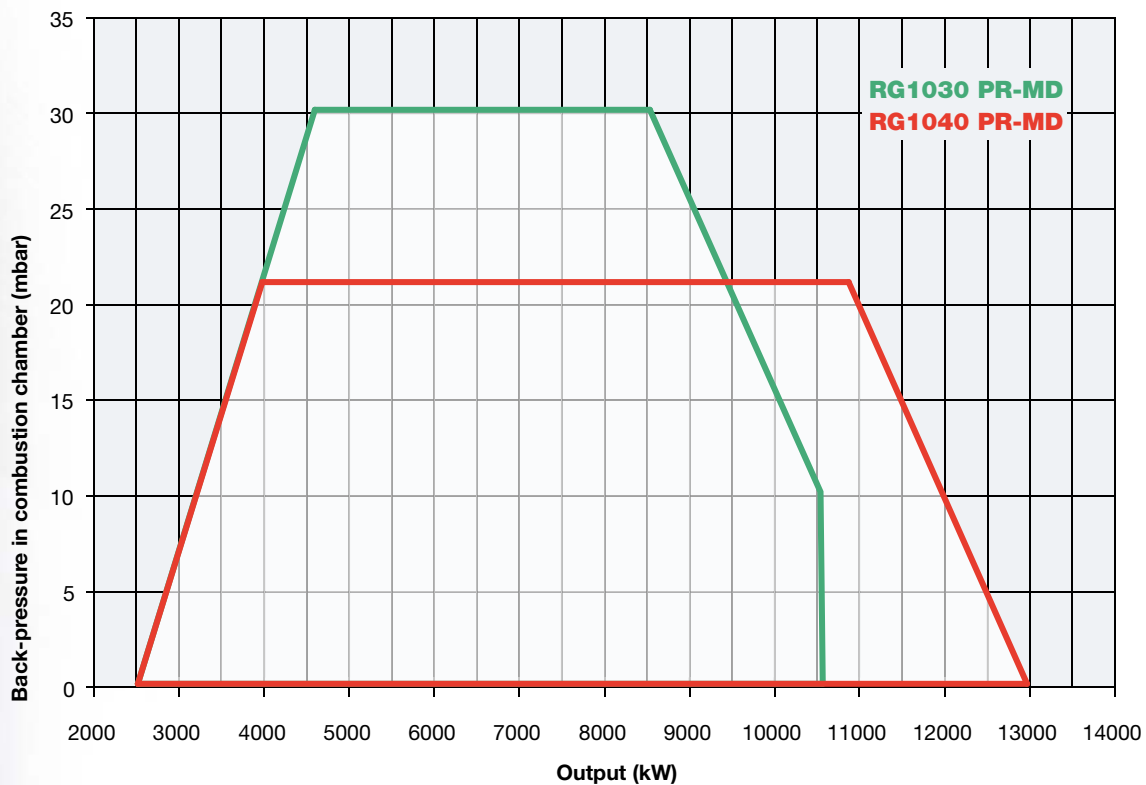
This series of monoblock burners made of a solid die-cast aluminium housing, represents the outcome of our experience in the field of medium-large capacity burners. This version of burners owns a centrifugal air fan activated by a three phase motor, while the oil pump works through a dedicated motor.

This range is divided into two groups: the series NOVANTA with a capacity up to 4100kW and the series CINQUECENTO that gains a maximum capacity of 8000kW. Both series are equipped with a by-passing nozzle that allows a modulating ratio of 1:3. The light oil output can be adjusted through a pressure regulator which effects on the return pipe line.

All burners have a control panel which includes the control box and the regulators of temperature and pressure. Furthermore they own a mimic diagram with lamps showing the sequential stages of the burner operation.



*Allestimento con controllo elettronico (opzionale)*

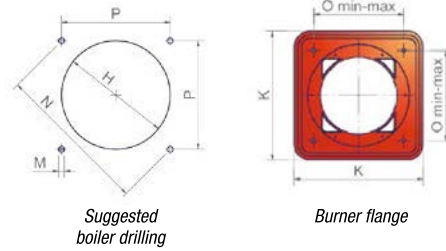
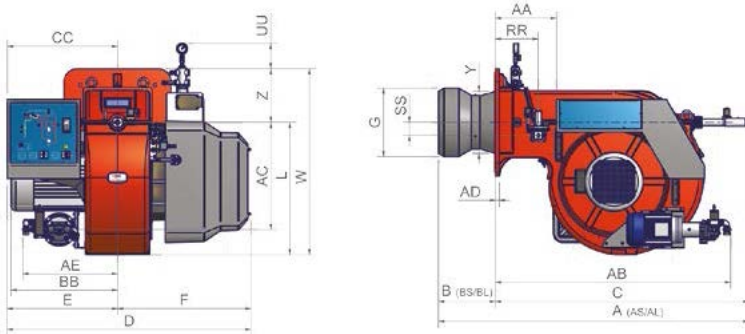




TECHNICAL DETAILS

Type	Model	Power kW		Alimentazione elettrica	Fan motor kW	Pump motor kW
		min.	max.			
<b>RG1030</b>	G-.xx.x.IT.A	2.550	10.600	400 V 3N ac	22	4
<b>RG1040</b>	G-.xx.x.IT.A	2.550	13.000	400 V 3N ac	30	5,5

**N.B. Monoblock burners Duemila series with the capacity up to 19 MW consult ours sales offices.**



Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>RG1030/1040</b>	2270	1720	1320	700

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																												
		A (AS)	A (AL)	AA	AB	AC	AD	AE	B (BS)	B (BL)	BB	C	CC	D	E	F	G	H	K	L	M	N	O	P	RR	SS	UU	W	Y	Z
<b>RG1030</b>	G-.xx.x.IT.A	1914	2108	377	1452	651	25	585	350	544	657	1564	680	1502	680	822	422	472	660	816	M16	651	460	460	265	80	142	1146	379	330
<b>RG1040</b>	G-.xx.x.IT.A	1925	2119	377	1452	651	25	585	350	544	657	1575	680	1502	680	822	671	731*	660	816	M16	651	460	460	265	80	142	1146	404	330

(\*) Approximate values

(\*) Install a counter-flange between the burner and the boiler or in alternative, drill the H hole smaller but higher than the Y point and assemble the blast tube inside the boiler.

**MECHANICAL OPERATION**

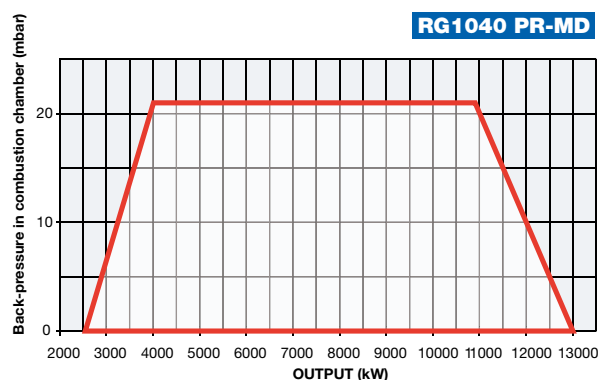
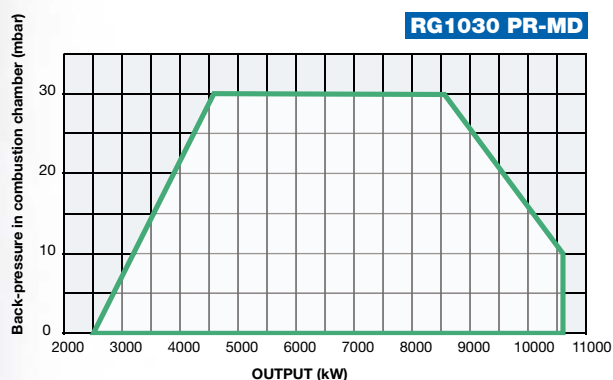
Model	Operation	RG1030		RG1040	
		Code	Price €	Code	Price €
G-.PR.S.IT.A	PR	023050203		023050303	
G-.PR.L.IT.A	PR	023050503		023050603	
G-.MD.S.IT.A	MD(*)	023050204		023050304	
G-.MD.L.IT.A	MD(*)	023050504		023050604	

**ELECTRONIC OPERATION**

Model	Operation	RG1030		RG1040	
		Code	Price €	Code	Price €
G-.PR.S.IT.A.EA	PR	02305070A		02305110A	
G-.PR.L.IT.A.EA	PR	02305080A		02305120A	
G-.MD.S.IT.A.EA	MD(*)	02305070E		02305110E	
G-.MD.L.IT.A.EA	MD(*)	02305080E		02305120E	
G-.MD.S.IT.A.ES	MD(*)	02305020S		02305060S	
G-.MD.L.IT.A.ES	MD(*)	02305050S		02305060S	

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250)







**BURNERS FOR BAKERY OVENS AND KITCHENS**

This series of burners is appropriate to work on bakery and rotary or fixed ovens. These burners are used especially by commercial kitchens, big hotels and restaurants.

They features the same main characteristics of the standard burners plus the possibility to manually decrease the output up to 40% on light oil burners and up to 50% on gas burners.

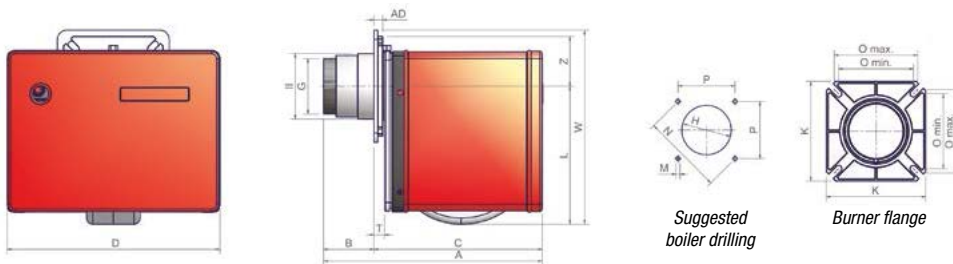
On the burner case we have installed an ON/OFF switch an another switch to regulate the output.

These burners are equipped with a double protection shield and a blast tube in thermalsteel for high temperature operation.



**TECHNICAL DETAILS**

Type	Model	Power kW		Electric power	Fan motor kW
		min.	max.		
<b>Tecnopan G6</b>	G-.TN.x.IT.B	29	70	230 V 1N ac	0,10
<b>Tecnopan G10</b>	G-.TN.x.IT.B	58	116	230 V 1N ac	0,15
<b>Tecnopan G18</b>	G-.TN.x.IT.B	105	209	230 V 1N ac	0,18
<b>Chef G5</b>	G-.TN.S.IT.D	29	35	230 V 1N ac	0,10
<b>Chef G6</b>	G-.TN.S.IT.D	29	70	230 V 1N ac	0,10



Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>G6</b>	360	300	560	15
<b>G10</b>	420	340	630	18
<b>G18</b>	420	340	630	18
<b>G5</b>	360	300	560	15
<b>G6</b>	360	300	560	15

(\*) Approximate values

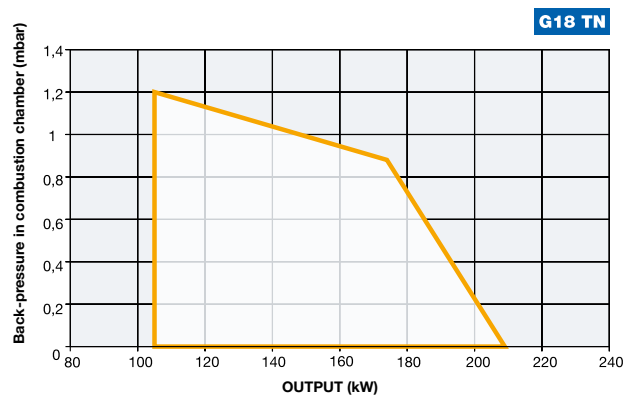
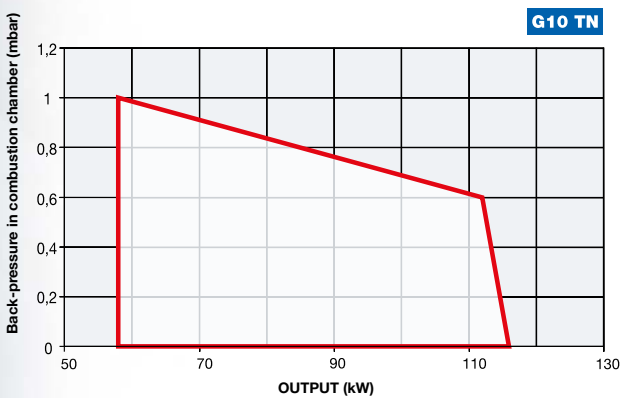
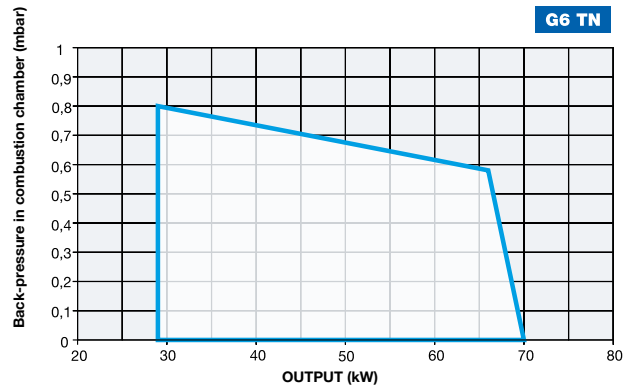
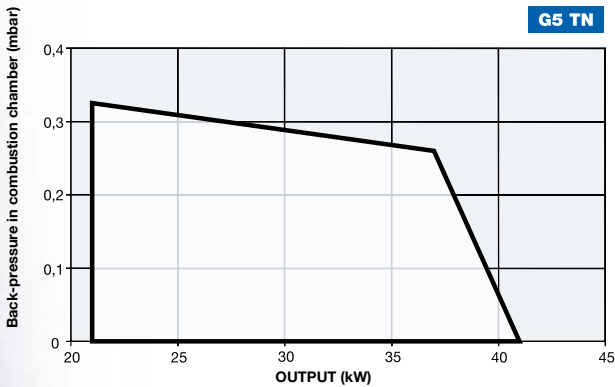
Type	Model	Overall dimensions* (mm)														Burner flange (mm)		Foratura caldaia (mm)				
		AS	AL	AD	BS	BL	CS	CL	D	G	II	L	T	Z	W	K	O	H	P	M	N	
		min. - max.														min.	max.	min.	max.	min.	max.	
<b>G6</b>	G-.TN.x.IT.B	345	455	12	53÷67	53÷177	278÷292	278÷402	310	80	-	187	-	80	265	162	86	138	101	112	M8	156
<b>G10</b>	G-.TN.x.IT.B	351	471	14	81	201	270	270	342	89	105	221	17	80	311	160	120	134	125	132	M8	187
<b>G18</b>	G-.TN.x.IT.B	351	471	14	81	201	270	270	342	115	-	221	17	80	311	160	120	134	134	132	M8	187
<b>G5</b>	G-.TN.x.IT.D	310	-	12	0÷33	-	278÷310	-	310	80	-	187	-	80	265	162	86	138	98	112	M8	156
<b>G6</b>	G-.TN.x.IT.D	310	-	12	0÷33	-	278÷310	-	310	80	-	187	-	80	265	162	86	138	98	112	M8	156

(\*) Approximate values

### MECHANICAL OPERATION

Model	Operation	G5		G6		G10		G18	
		Code	Price €	Code	Price €	Code	Price €	Code	Price €
G-.TN.S.IT.D	TN	001050701		001050801		-		-	
G-.TN.S.IT.B	TN	-		001050501		002050901		002051101	
G-.TN.L.IT.B	TN	-		001050601		002051001		002051201	

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE



# miniflam series

## G6 G10 G18 (24 Volt DC)

LIGHT OIL

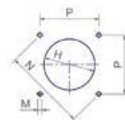
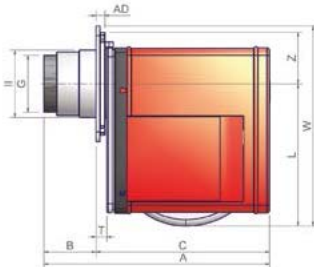
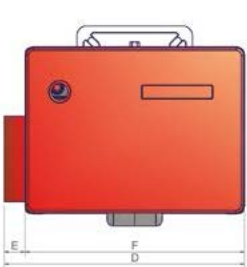
This new range of burners is characterized by the power supply at 24V DC. It covers applications such as dumpsters' cleaners or sprinkler for road-works. These burners derive from the series made for bakery ovens and from this one they take the sturdy construction, a mandatory features in these kind of applications. The components of these burners are the same of the traditional ones and as the latter they maintain an user friendly application and maintenance. The control device, the motor and the solenoid coils have been adapted to the 24 V DC power supply.

These burners are produced in three versions with a capacity range from 29 to 209 kW. With this new series CIB Unigas wants to supply a product suitable for this specific market.

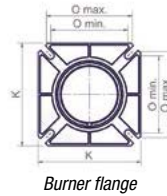


### TECHNICAL DETAILS

Type	Model	Power kW		Electric power	Fan motor kW
		min.	max.		
<b>G6</b>	G-.TN.x.IT.Y	29	70	24V DC	0,11
<b>G10</b>	G-.TN.x.IT.Y	58	116	24V DC	0,18
<b>G18</b>	G-.TN.x.IT.Y	105	209	24V DC	0,18



Suggested boiler drilling



Burner flange

Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>G6</b>	360	300	560	18
<b>G10</b>	420	340	630	21
<b>G18</b>	420	340	630	21

(\*) Approximate values

Type	Model	Overall dimensions* (mm)															Burner flange (mm)			Suggested boiler drilling (mm)				
		AS	AL	AD	BS	BL	C	CL	D	E	F	G	II	L	T	Z	W	K	O	H	P	M	N	
		min. - max.															min. max.							
<b>G6</b>	G-.TN.x.IT.Y	345	455	12	53÷67	53÷177	278÷292	278÷402	375	65	310	80	-	187	-	80	265	162	86	138	101	112	M8	156
<b>G10</b>	G-.TN.x.IT.Y	351	471	14	81	201	270	270	375	33	342	89	105	221	17	80	311	160	120	134	125	132	M8	187
<b>G18</b>	G-.TN.x.IT.Y	351	471	14	81	201	270	270	375	33	342	115	-	221	17	80	311	160	120	134	134	132	M8	187

(\*) Approximate values

### MECHANICAL OPERATION

Model	Operation	<b>G6</b>		<b>G10</b>		<b>G18</b>	
		Code	Price €	Code	Price €	Code	Price €
<b>G-.TN.S.IT.Y</b>	TN	001052201		002054301		002054501	
<b>G-.TN.L.IT.Y</b>	TN	001052301		002054401		002054601	



# heavy oil burners

mechanical atomization

## miniflam series

**N18** - TN

mechanical atomization

## tecnopress series

**PN30** - TN/AB

**PN60** - AB/PR/MD

**PN70** - AB/PR/MD

**PN81** - AB/PR/MD

mechanical atomization

## novanta - cinquecento series

**PN91** - AB/PR/MD

**PN92** - PR/MD

**PN93** - PR/MD

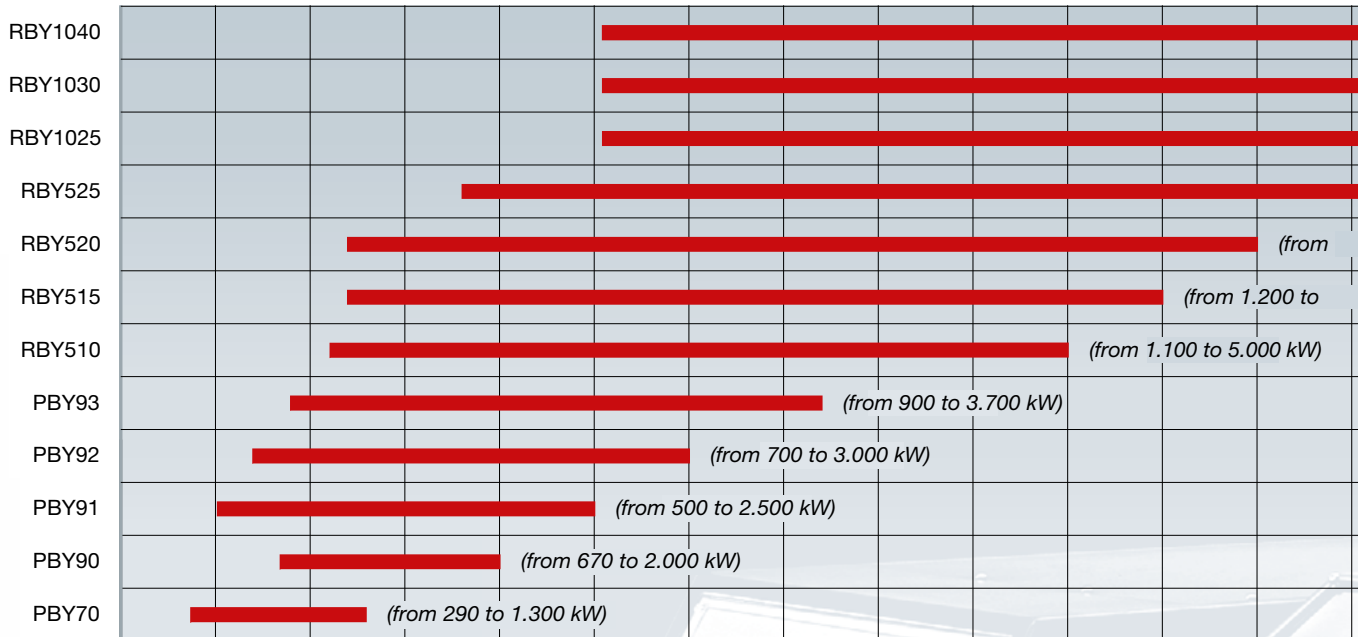
**RN510** - PR/MD

**RN515** - PR/MD

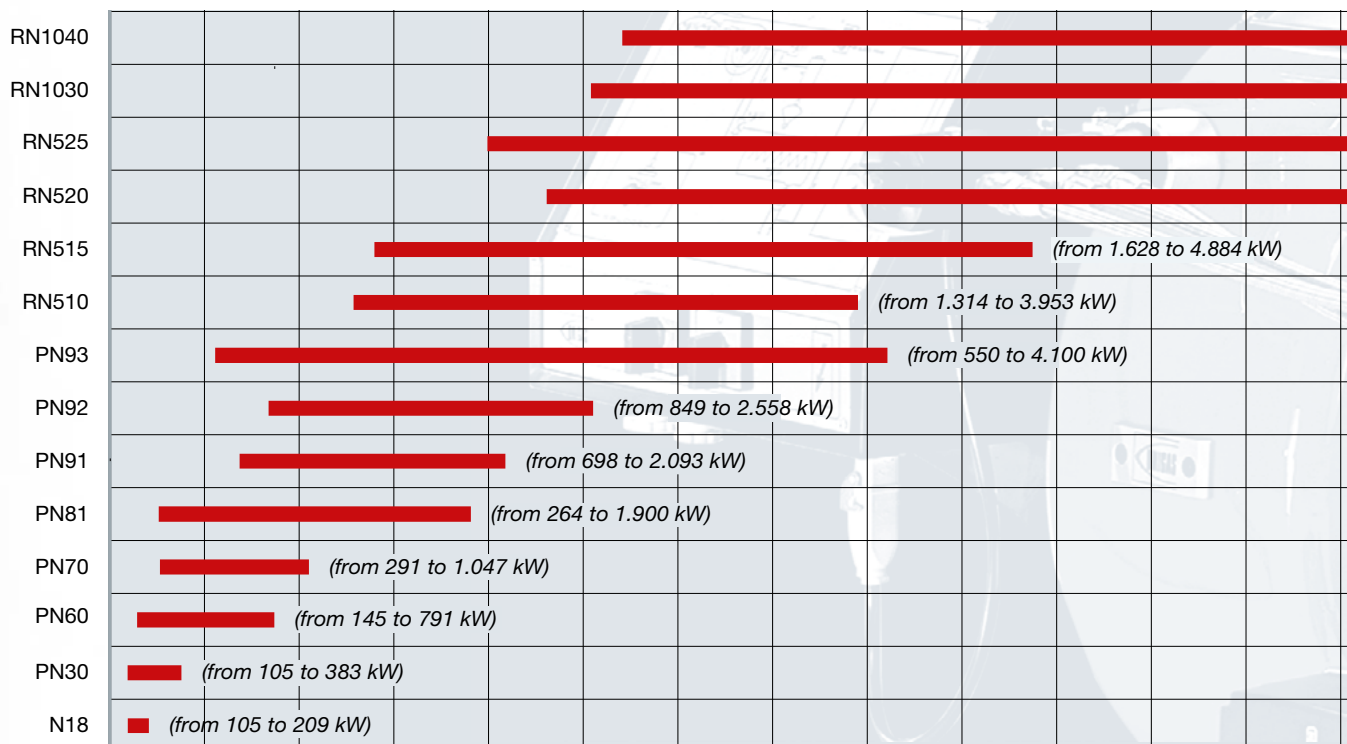
**RN520** - PR/MD

**RN525** - PR/MD

### Type pneumatic atomization



### Type mechanical atomization





mechanical atomization  
**mille series**

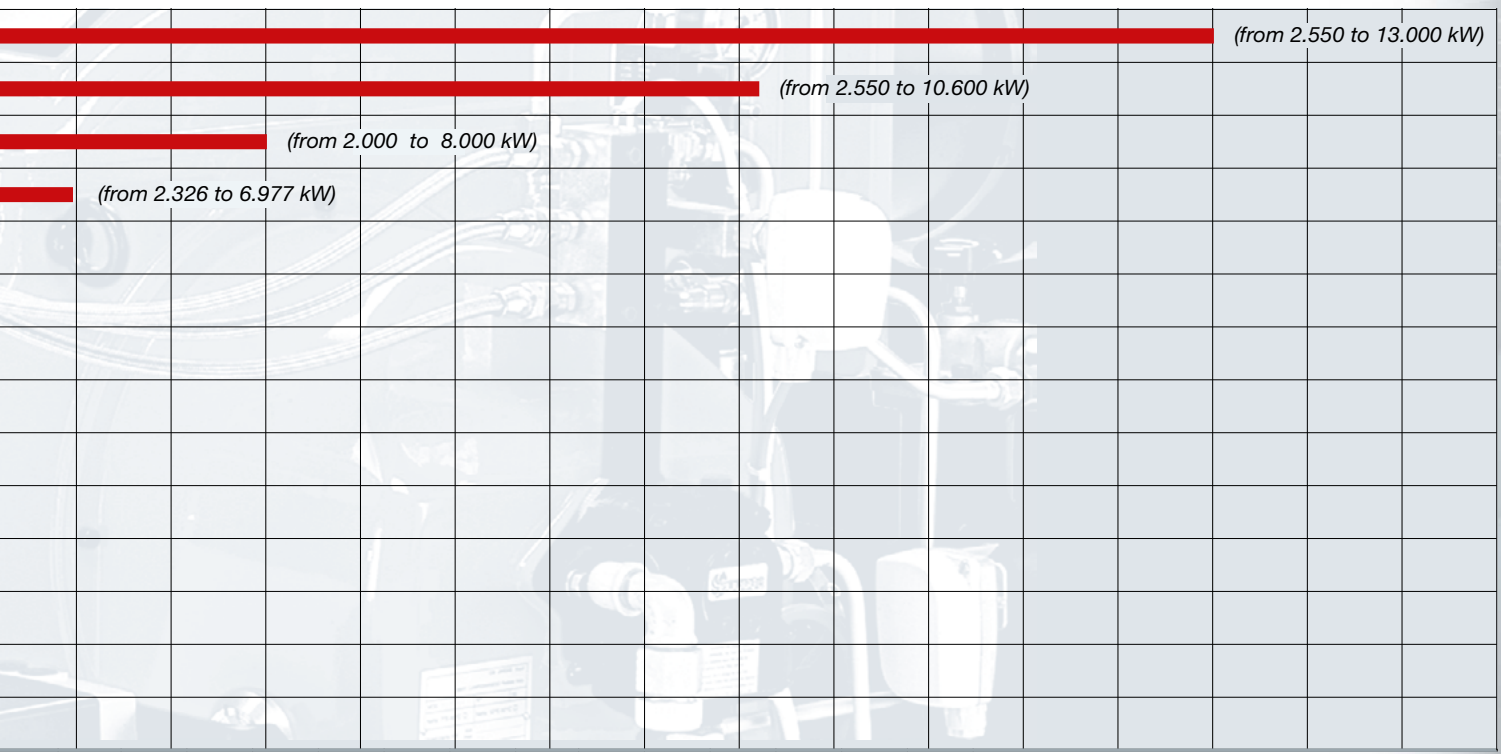
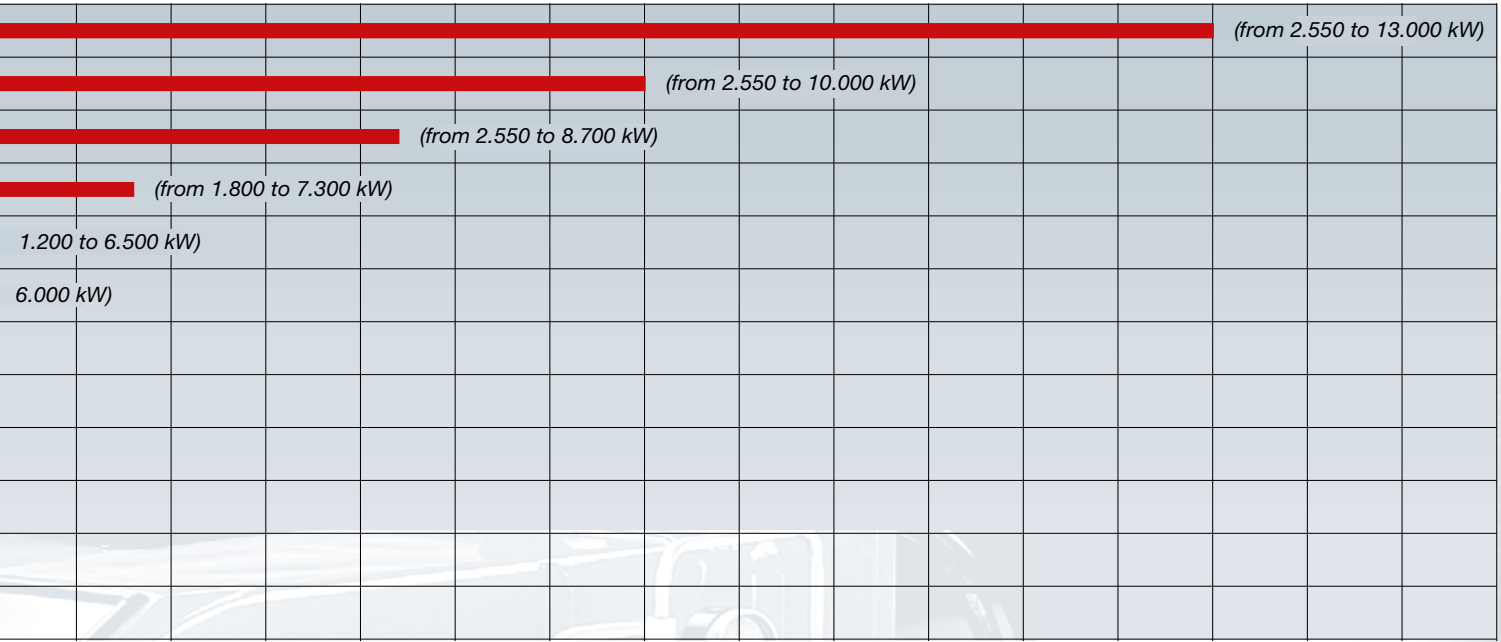
- RN1030** - PR/MD
- RN1040** - PR/MD

pneumatic atomization  
**novanta - cinquecento series**

- PBY70** - PR/MD
- PBY90** - PR/MD
- PBY91** - PR/MD
- PBY92** - PR/MD
- PBY93** - PR/MD
- RB510** - PR/MD
- RB515** - PR/MD
- RB520** - PR/MD
- RB525** - PR/MD

pneumatic atomization  
**mille serie**

- RB1025** - PR/MD
- RB1030** - PR/MD
- RB1040** - PR/MD



# miniflam series

## N18

HEAVY OIL

### MECHANICAL ATOMIZATION

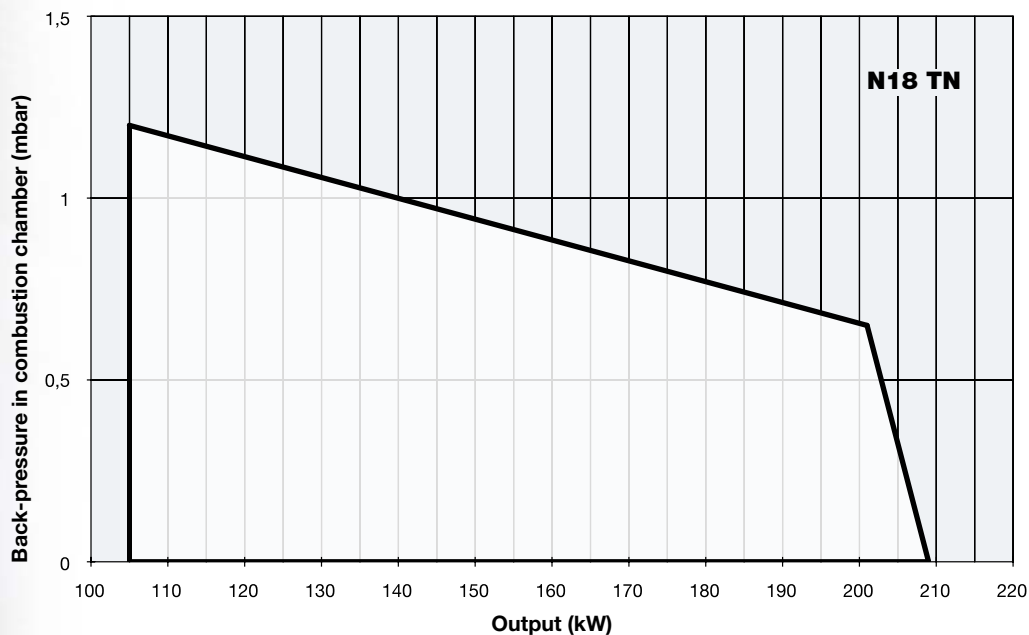
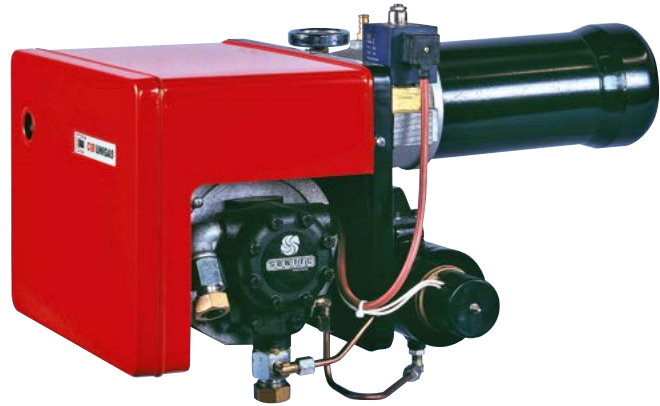
This burner, in the standard version, is suitable to burn oil with a max viscosity of 50 cSt at 50 °C (7° E at 50°). A version adaptable to burn oil with max viscosity of 110 cSt at 50 °C (15° E at 50°), is available upon request.

The oil heater consists of a tank equipped with an electric element while a system of preset thermostats controls the regulation of the fuel temperature in order to ensure the optimum performance of the flue used. The burner is provided with a cover to protect the internal components which is easily removable in case of maintenance interventions.

The links to the electrical supply line and to

the temperature regulators are quite easy and safe thanks to the pre-wired connectors.

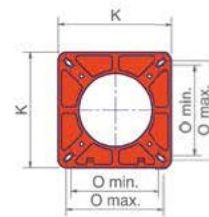
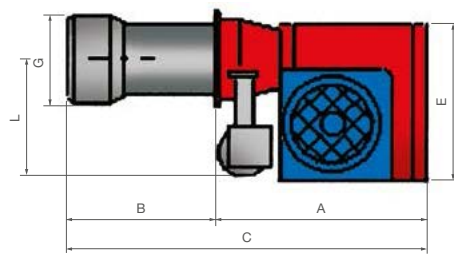
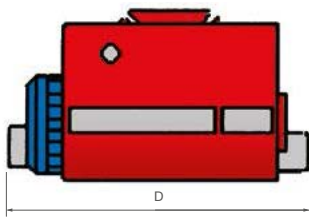
Upon request we can supply the components necessary to ensure that the oil supply line complies with UNI 9248.



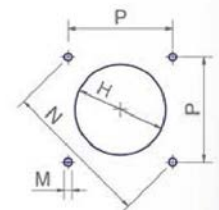


## TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Resistor kW
		min.	max.			
<b>N18</b>	N-.TN.S.IT.A	105	209	230/400 V 3N ac	0,55	1,5



Burner flange



Suggested boiler drilling

Type	Model	Overall dimensions* (mm)							Suggested boiler drilling (mm)				Burner flange (mm)		Packaging dimensions* (mm)				kg
		A	B	C	D	E	G	L	H	M	N	P	K	O	l	p	h		
<b>N18</b>	N-.TN.S.IT.A	400	69÷201	600	480	300	126	270	133	M8	171	121	160	103	130	800	750	560	59

(\*) Approximate values

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

<b>N18</b>			
Model	Operation	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)			
<b>N-.TN.S.IT.A</b>	TN	002060201	
HEAVY OIL 110 cSt at 50°C (15°E at 50°C)			
<b>E-.TN.S.IT.A</b>	TN	002150201	

# tecnopress series

PN30 PN60 PN70 PN81

HEAVY OIL

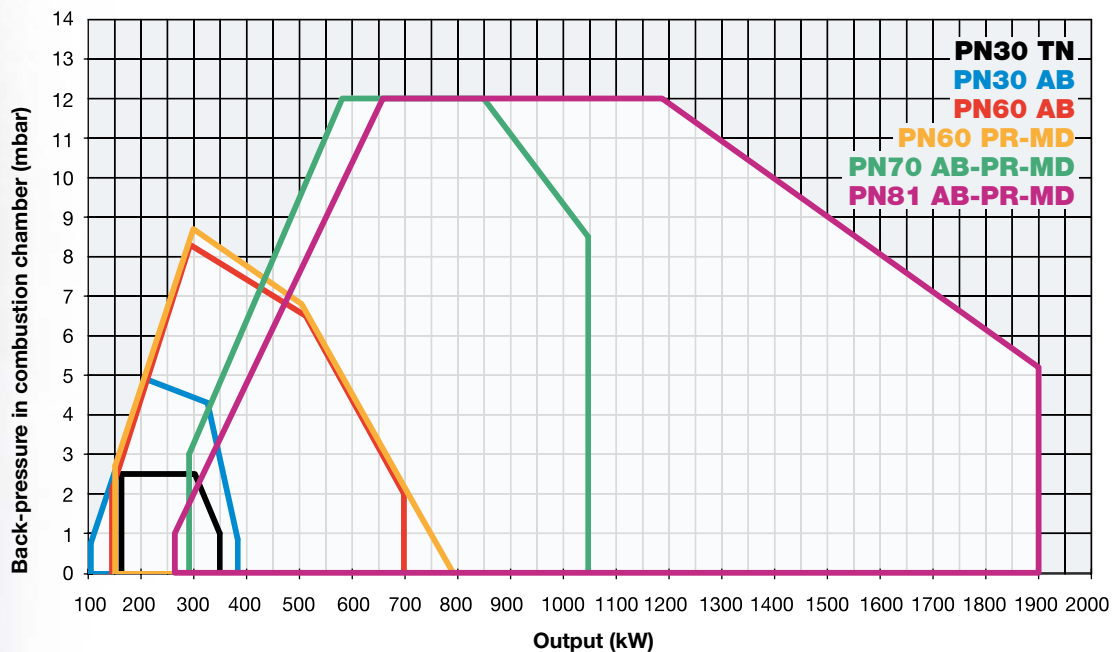
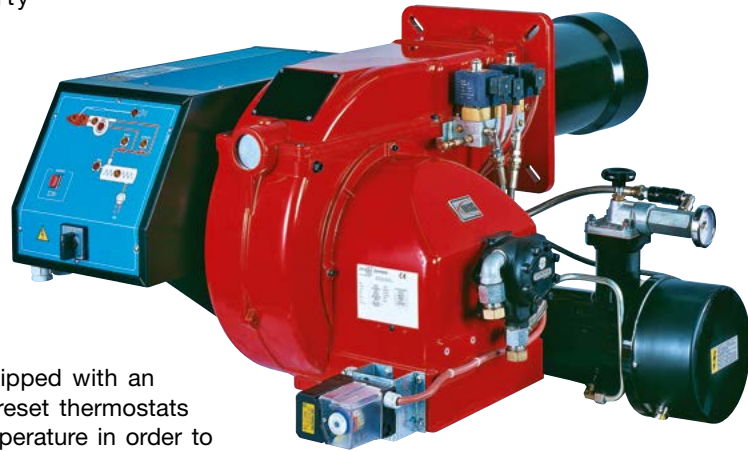
## MECHANICAL ATOMIZATION

Thanks to CIB UNIGAS's forty years experience in the design and production of oil burners, we produce a highly technical series of products renowned worldwide for their reliability.

These burners, in the standard version, are available to burn oil with viscosity up to 110 cSt at 50° C (15°E at 50°C). Upon request we can also supply a model for heavy oil up to 400 cSt at 50°C (50°E at 50°C).

The oil heater consists of a tank equipped with an electric element, while a system of preset thermostats controls the regulation of the fuel temperature in order to ensure the optimum performance of the fuel used.

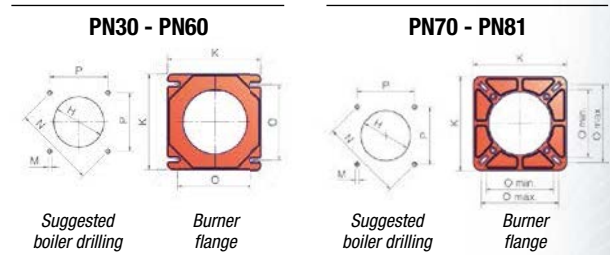
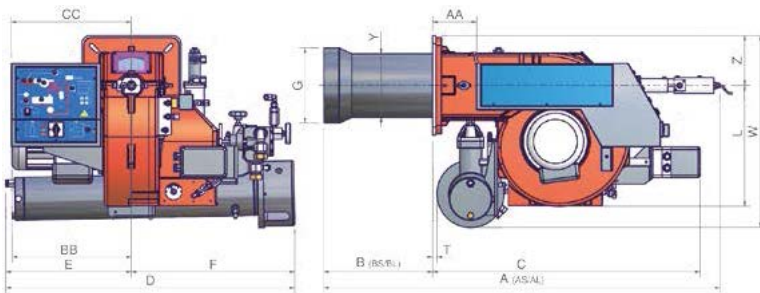
Upon request we can supply the components necessary to ensure that the oil supply line complies with UNI 9248.





TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Resistor kW
		min.	max.			
<b>PN30</b>	x-.TN.x.IT.A	163	349	230/400 V 3N ac	0,75	2,4
<b>PN30</b>	x-.AB.x.IT.A	105	383	230/400 V 3N ac	0,75	2,4
<b>PN60</b>	x-.AB.x.IT.A	145	698	230/400 V 3N ac	1,10	4,5
<b>PN60</b>	x-.xx.x.IT.A	151	791	230/400 V 3N ac	1,10	4,5
<b>PN70</b>	x-.xx.x.IT.A	291	1.047	230/400 V 3N ac	2,20	8,0
<b>PN81</b>	x-.xx.x.IT.A	264	1.900	230/400 V 3N ac	3,00	12,0



Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>PN30</b>	1180	930	720	90
<b>PN60</b>	1210	1020	790	130
<b>PN70/81</b>	1580	1010	860	170

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																							
		AS	AL	AA	BS	BL	BB	C	CC	D	E	F	G	H	K	L	M	N	O	P	T	W	Y	Z	
		min.		max.																					
<b>PN30</b>	x-.xx.x.IT.A	670	860	150	340		520		720	270	450	121	151	190	400	M10	219	155	155	155				131	
<b>PN60</b>	x-.AB.x.IT.A	864	1062	102	244	442	274	620	365	660	330	330	153	182	240	400	M10	269	190	190	190	92	520	162	120
<b>PN60</b>	x-.PR.x.IT.A	1051	1186	102	324	459	274	727	365	861	365	496	208	238*	240	344	M10	269	190	190	190	92	613	162	120
<b>PN70</b>	x-.AB.x.IT.A	1106	1256	138	407	557	373	699	376	871	360	511	220	250	300	475	M10	330	216	250	233	14	630	198	155
<b>PN70</b>	x-.PR.x.IT.A	1244	1394	138	407	557	373	837	376	871	360	511	220	250	300	475	M10	330	216	250	233	14	630	198	155
<b>PN81</b>	x-.AB.x.IT.A	1080	1230	138	340	490	373	699	376	903	392	511	234	264	300	376	M10	330	216	250	233	14	587	198	155
<b>PN81</b>	x-.PR.x.IT.A	1239	1389	138	340	490	373	837	376	903	392	511	234	264	300	376	M10	330	216	250	233	14	598	198	155

(\*) Approximate values

(\*) Install a counter-flange between the burner and the boiler or in alternative, drill the H hole smaller but higher than the Y point and assemble the blast tube inside the boiler

#### MECHANICAL ATOMIZATION

#### MECHANICAL OPERATION

Model	Operation	PN30		PN60		PN70		PN81	
		Code	Price €	Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)									
N-.TN.S.IT.A	TN	003060101		-		-		-	
N-.TN.L.IT.A	TN	003060201		-		-		-	
N-.AB.S.IT.A	AB	003060102		004060102		008060102		008060502	
N-.AB.L.IT.A	AB	003060202		004060202		008060202		008060602	
N-.PR.S.IT.A	PR	-		004060103		008060103		008060503	
N-.PR.L.IT.A	PR	-		004060203		008060203		008060603	
N-.MD.S.IT.A	MD(*)	-		004060104		008060104		008060504	
N-.MD.L.IT.A	MD(*)	-		004060204		008060204		008060604	
HEAVY OIL 110 cSt at 50°C (15°E at 50°C)									
E-.TN.S.IT.A	TN	003150101		-		-		-	
E-.TN.L.IT.A	TN	003150201		-		-		-	
E-.AB.S.IT.A	AB	003150102		004150102		008150102		008150502	
E-.AB.L.IT.A	AB	003015202		004150202		008150202		008150602	
E-.PR.S.IT.A	PR	-		004150103		008150103		008150503	
E-.PR.L.IT.A	PR	-		004150203		008150203		008150603	
E-.MD.S.IT.A	MD(*)	-		004150104		008150104		008150504	
E-.MD.L.IT.A	MD(*)	-		004150204		008150204		008150604	
HEAVY OIL 400 cSt at 50°C (50°E at 50°C)									
D-.TN.S.IT.A	TN	003180101		-		-		-	
D-.TN.L.IT.A	TN	003180201		-		-		-	
D-.AB.S.IT.A	AB	003180102		004180102		008180102		008180502	
D-.AB.L.IT.A	AB	003180202		004180202		008180202		008180602	
D-.PR.S.IT.A	PR	-		004180103		008180103		008180503	
D-.PR.L.IT.A	PR	-		004180203		008180203		008180603	
D-.MD.S.IT.A	MD(*)	-		004180104		008180104		008180504	
D-.MD.L.IT.A	MD(*)	-		004180204		008180204		008180604	

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250)



## ELECTRONIC OPERATION

Model	Operation	PN60		PN70		PN81	
		Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)							
<b>N-.MD.S.IT.A.ES</b>	MD(*)	00406010S		00806010S		00806050S	
<b>N-.MD.L.IT.A.ES</b>	MD(*)	00406020S		00806020S		00806060S	
HEAVY OIL 110 cSt at 50°C (15°E at 50°C)							
<b>E-.MD.S.IT.A.ES</b>	MD(*)	00415010S		00815010S		00815050S	
<b>E-.MD.L.IT.A.ES</b>	MD(*)	00415020S		00815020S		00815060S	
HEAVY OIL 400 cSt at 50°C (50°E at 50°C)							
<b>D-.MD.S.IT.A.ES</b>	MD(*)	00418010S		00818010S		00818050S	
<b>D-.MD.L.IT.A.ES</b>	MD(*)	00418020S		00818020S		00818060S	

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

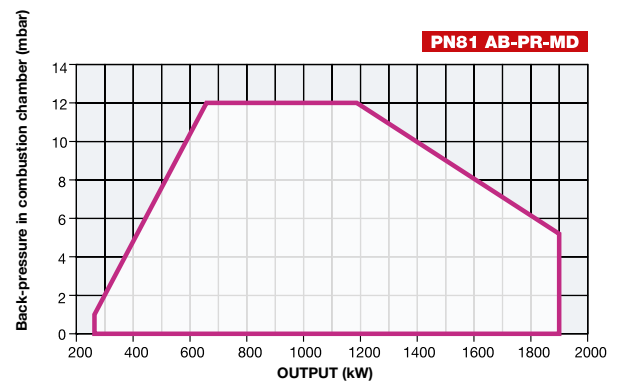
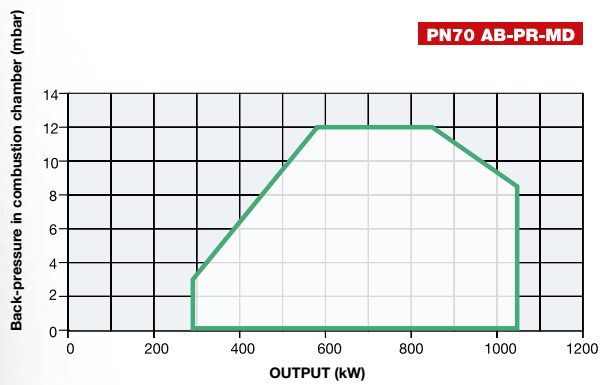
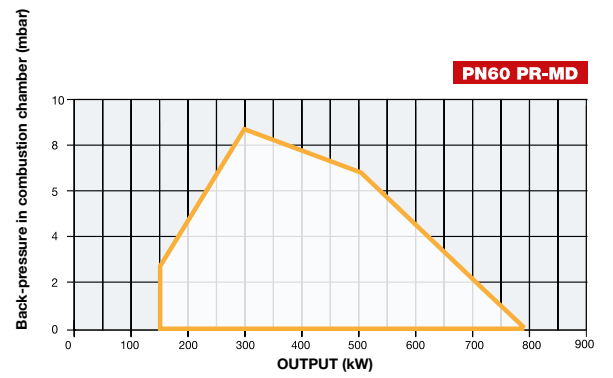
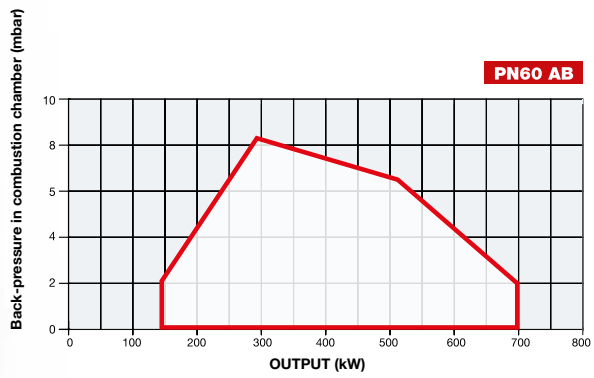
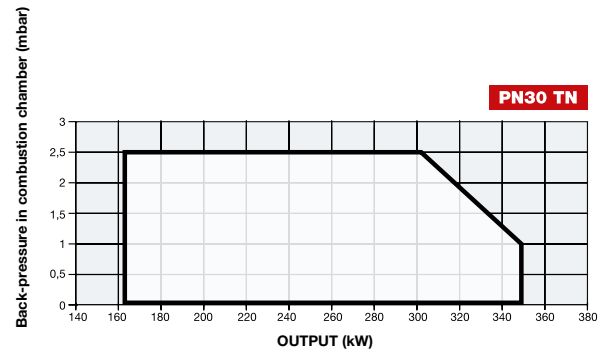
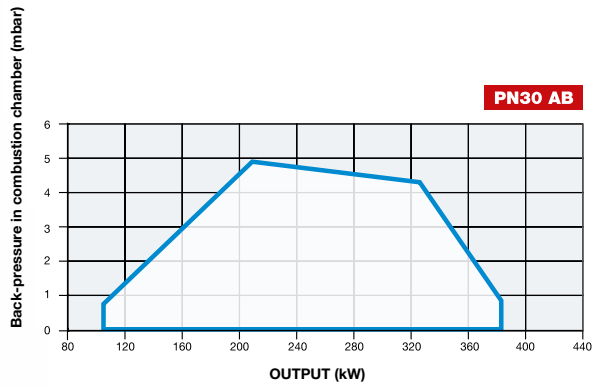
(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250)

# tecnopress series

PN30 PN60 PN70 PN81

HEAVY OIL

## MECHANICAL ATOMIZATION

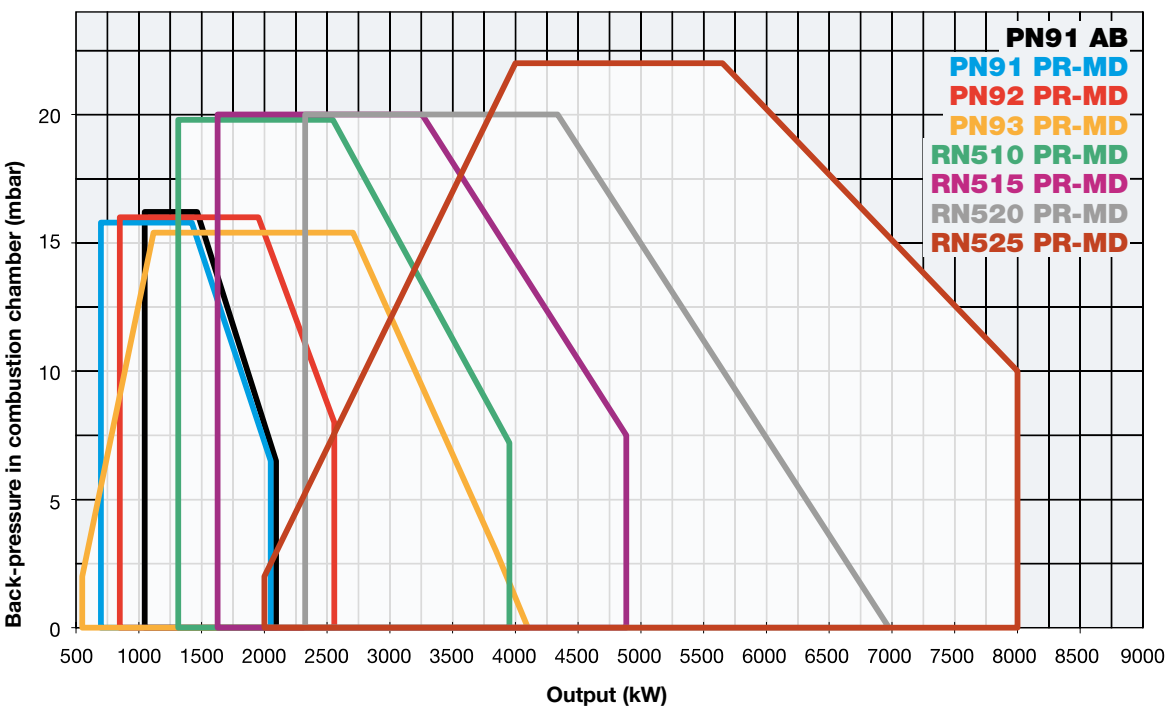


These aluminium monoblock industrial burners with integral fan are available for oils with viscosity up to 110 cSt at 50°C (15°E at 50°C).

Upon request we can also supply a model for heavy oils up to 400 cSt at 50° C (50°E at 50°C).

Given the particular viscosity of the fuel and the necessity to keep the oil fluid, the burner uses a preheating system provided with a much lower thermal load electrical element in order to avoid carbon deposits.

The maintenance is always easy given that the components – for example the solenoid valve group - are mounted on a specific bracket which can be easily removed.



# novanta-cinquecento series

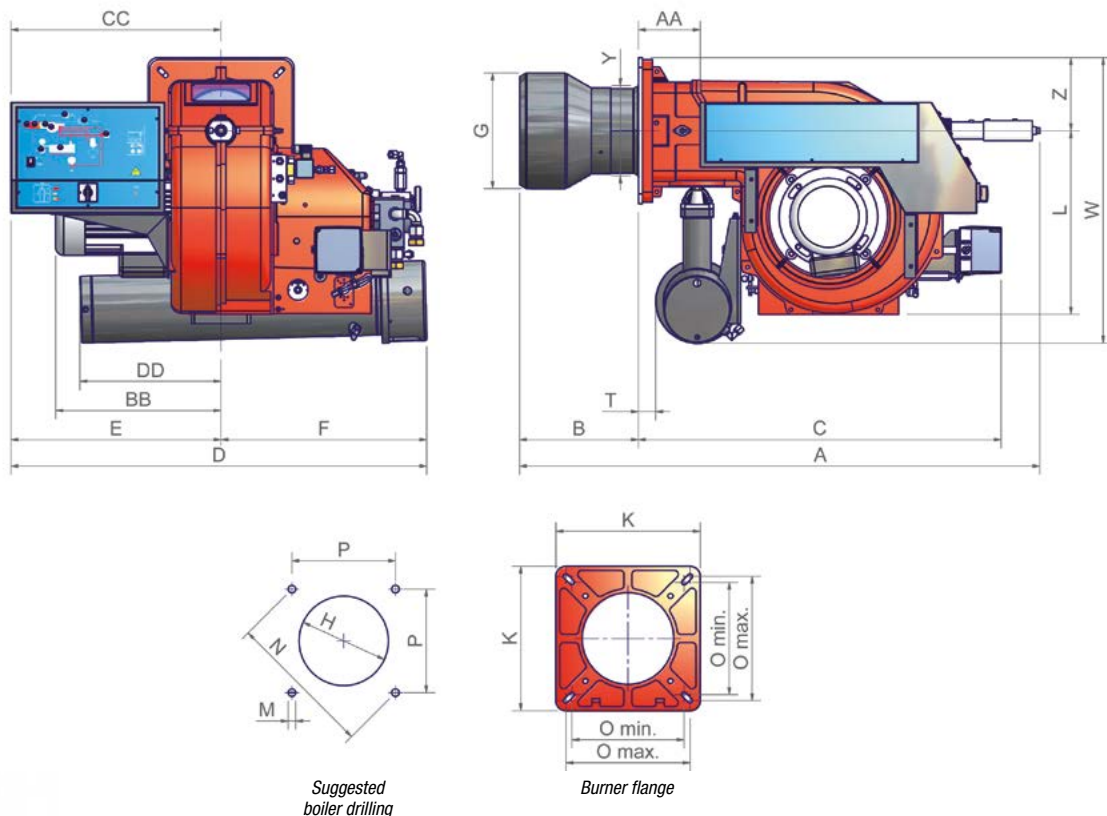
PN91 PN92 PN93 RN510 RN515 RN520 RN525

HEAVY OIL

## MECHANICAL ATOMIZATION

### TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Resistor kW
		min.	max.				
PN91	x-.AB.x.IT.A	1.047	2.093	230/400 V 3N ac	4,0	-	12
PN91	x-.xx.x.IT.A	698	2.093	230/400 V 3N ac	4,0	-	18
PN92	x-.xx.x.IT.A	849	2.558	230/400 V 3N ac	5,5	-	18
PN93	x-.xx.x.IT.A	550	4.100	230/400 V 3N ac	7,5	-	24



Suggested boiler drilling

Burner flange

Type	Packaging dimensions* (mm)			
	l	p	h	kg
PN91/92/93	1730	1280	1020	290

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																								
		AS	AL	AA	BS	BL	BB	C	CC	D	DD	E	F	G	H	K	L	M	N	O	P	T	W	Y	Z	
PN91	x-.xx.x.IT.A	1315	1505	157	298	488	419	918	532	1119	356	532	589	262	292	360	464	M12	424	280	310	300	45	722	228	185
PN92	x-.xx.x.IT.A	1318	1508	157	301	491	419	918	532	1119	356	532	589	292	322	360	464	M12	424	280	310	300	45	722	228	185
PN93	x-.xx.x.IT.A	1318	1508	157	301	491	460	918	532	1119	356	532	589	292	322	360	464	M12	424	280	310	300	45	722	228	185

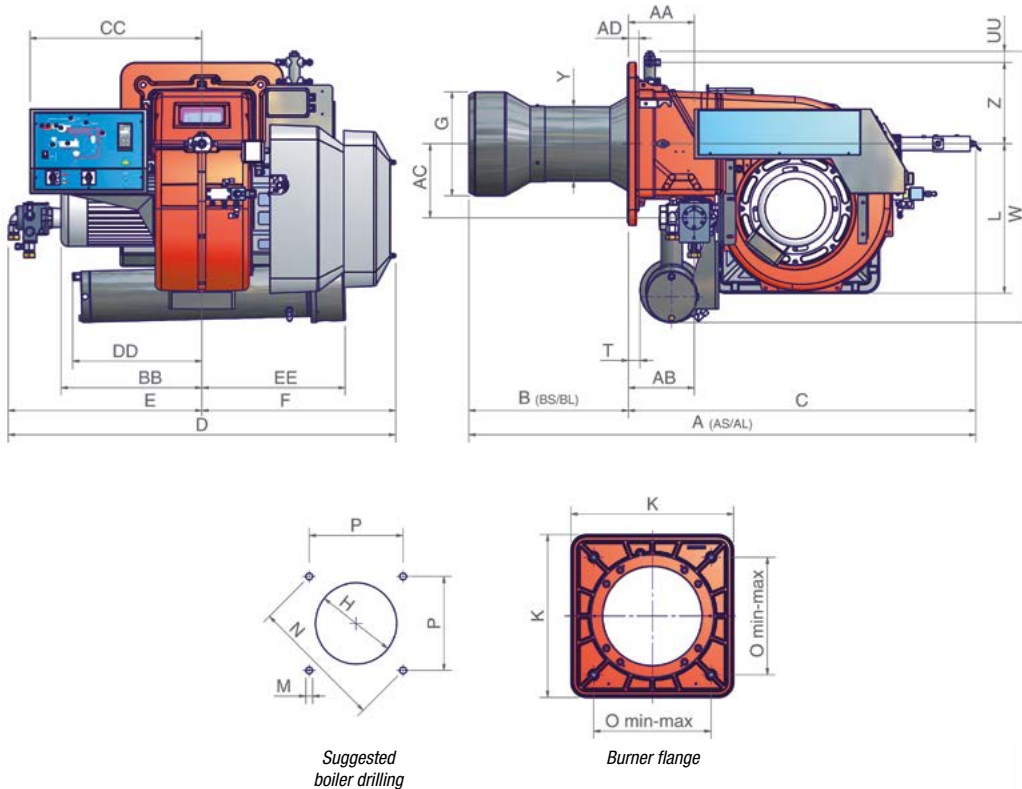
(\*) Approximate values



**MECHANICAL ATOMIZATION**

**TECHNICAL DETAILS**

Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Resistor kW
		min.	max.				
<b>RN510</b>	x-.xx.x.IT.A	1.314	3.953	230/400 V 3N ac	7,5	1,1	24
<b>RN515</b>	x-.xx.x.IT.A	1.628	4.884	230/400 V 3N ac	11,0	1,5	12 + 18
<b>RN520</b>	x-.xx.x.IT.A	2.326	6.977	230/400 V 3N ac	15,0	2,2	18 + 24
<b>RN525</b>	x-.xx.x.IT.A	2.000	8.000	400 V 3N ac	18,5	2,2	24 + 24



Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>RN510/515/520</b>	1720	1500	1150	410
<b>RN525</b>	1800	1500	1300	430

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																												
		A (AS)	A (AL)	AA	AB	AC	AD	B (BS)	B (BL)	BB	C	CC	D	DD	E	EE	F	G	H	K	L	M	N	O	P	T	UU	W	Y	Z
<b>RN510</b>	x-.xx.x.IT.A	1502	1682	221	217	246	35	350	530	468	1152	571	1286	349	643	556	643	345	385	540	496	M14	552	390	390	37	36	897	328	270
<b>RN515</b>	x-.xx.x.IT.A	1502	1682	145	217	246	35	350	530	508	1152	598	1286	-	643	-	643	384	424	540	496	M14	552	390	390	37	36	802	328	270
<b>RN520</b>	x-.xx.x.IT.A	1502	1682	145	207	250	35	350	530	508	1152	598	1286	-	643	-	643	422	472	540	496	M14	552	390	390	37	36	802	328	270
<b>RN525</b>	x-.xx.x.IT.A	1502	1682	145	197	275	35	350	530	650	1152	598	1286	-	643	-	643	434	484	540	496	M14	552	390	390	37	78	844	328	270

(\*) Approximate values

# novanta-cinquecento series

PN91 PN92 PN93 RN510 RN515 RN520 RN525

HEAVY OIL

## MECHANICAL ATOMIZATION

### MECHANICAL OPERATION

Model	Operation	PN91		PN92		PN93	
		Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)							
N-AB.S.IT.A	AB	012060302		-		-	
N-AB.L.IT.A	AB	012060402		-		-	
N-PR.S.IT.A	PR	012060303		012060503		012061403	
N-PR.L.IT.A	PR	012060403		012060603		012061503	
N-MD.S.IT.A	MD(*)	012060304		012060504		012061404	
N-MD.L.IT.A	MD(*)	012060404		012060604		012061504	
HEAVY OIL 110 cSt at 50°C (15°E at 50°C)							
E-AB.S.IT.A	AB	012150302		-		-	
E-AB.L.IT.A	AB	012150402		-		-	
E-PR.S.IT.A	PR	012150303		012150503		012151403	
E-PR.L.IT.A	PR	012150403		012150603		012151503	
E-MD.S.IT.A	MD(*)	012150304		012150504		012151404	
E-MD.L.IT.A	MD(*)	012150404		012150604		012151504	
HEAVY OIL 400 cSt at 50°C (50°E at 50°C)							
D-AB.S.IT.A	AB	012180302		-		-	
D-AB.L.IT.A	AB	012180402		-		-	
D-PR.S.IT.A	PR	012180303		012180503		012181403	
D-PR.L.IT.A	PR	012180403		012180603		012181503	
D-MD.S.IT.A	MD(*)	012180304		012180504		012181404	
D-MD.L.IT.A	MD(*)	012180404		012180604		012181504	

Model	Operation	RN510		RN515		RN520		RN525	
		Code	Price €	Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)									
N-PR.S.IT.A	PR	029060103		029060303		029060503		029060703	
N-PR.L.IT.A	PR	029060203		029060403		029060603		029060803	
N-MD.S.IT.A	MD(*)	029060104		029060304		029060504		029060704	
N-MD.L.IT.A	MD(*)	029060204		029060404		029060604		029060804	
HEAVY OIL 110 cSt at 50°C (15°E at 50°C)									
E-PR.S.IT.A	PR	029150103		029150303		029150503		029150703	
E-PR.L.IT.A	PR	029150203		029150403		029150603		029150803	
E-MD.S.IT.A	MD(*)	029150104		029150304		029150504		029150704	
E-MD.L.IT.A	MD(*)	029150204		029150404		029150604		029150804	
HEAVY OIL 400 cSt at 50°C (50°E at 50°C)									
D-PR.S.IT.A	PR	029180103		029180303		029180503		029180703	
D-PR.L.IT.A	PR	029180203		029180403		029180603		029180803	
D-MD.S.IT.A	MD(*)	029180104		029180304		029180504		029180704	
D-MD.L.IT.A	MD(*)	029180204		029180404		029180604		029180804	

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250)



**ELECTRONIC OPERATION**

Model	Operation	PN91		PN92		PN93	
		Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)							
<b>N-.MD.S.IT.A.ES</b>	MD(*)	01206030S		01206050S		01206040S	
<b>N-.MD.L.IT.A.ES</b>	MD(*)	01206140S		01206060S		01206150S	
HEAVY OIL 110 cSt at 50°C (15°E at 50°C)							
<b>E-.MD.S.IT.A.ES</b>	MD(*)	01215030S		01215050S		01215140S	
<b>E-.MD.L.IT.A.ES</b>	MD(*)	01215040S		01215060S		01215150S	
HEAVY OIL 400 cSt at 50°C (50°E at 50°C)							
<b>D-.MD.S.IT.A.ES</b>	MD(*)	01218030S		01218050S		01218140S	
<b>D-.MD.L.IT.A.ES</b>	MD(*)	01218040S		01218060S		01218150S	

Model	Operation	RN510		RN515		RN520		RN525	
		Code	Price €	Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)									
<b>N-.MD.S.IT.A.ES</b>	MD(*)	02906010S		02906030S		02906050S		02906070S	
<b>N-.MD.L.IT.A.ES</b>	MD(*)	02906020S		02906040S		02906050S		02906080S	
HEAVY OIL 110 cSt at 50°C (15°E at 50°C)									
<b>E-.MD.S.IT.A.ES</b>	MD(*)	02915010S		02915030S		02915050S		02915070S	
<b>E-.MD.L.IT.A.ES</b>	MD(*)	02915020S		02915040S		02915060S		02915080S	
HEAVY OIL 400 cSt at 50°C (50°E at 50°C)									
<b>D-.MD.S.IT.A.ES</b>	MD(*)	02918010S		02918030S		02918050S		02918070S	
<b>D-.MD.L.IT.A.ES</b>	MD(*)	02918020S		02918040S		02918060S		02918080S	

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

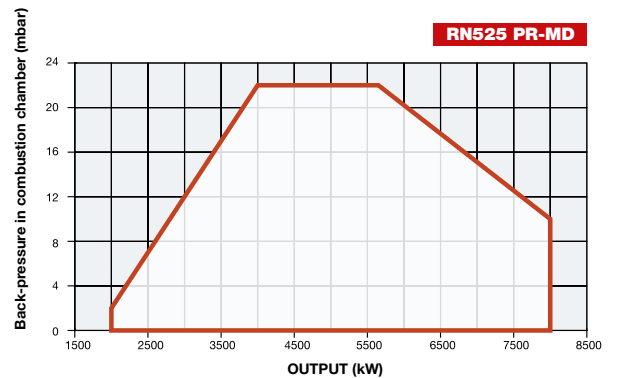
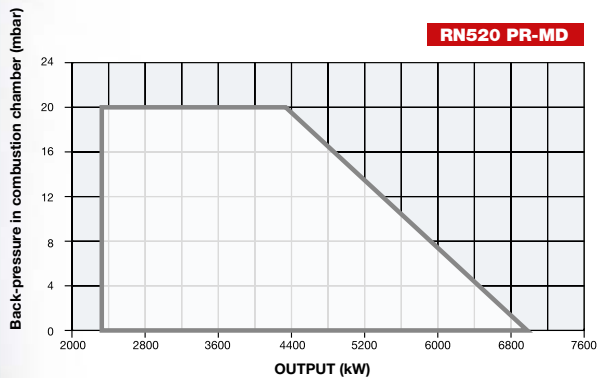
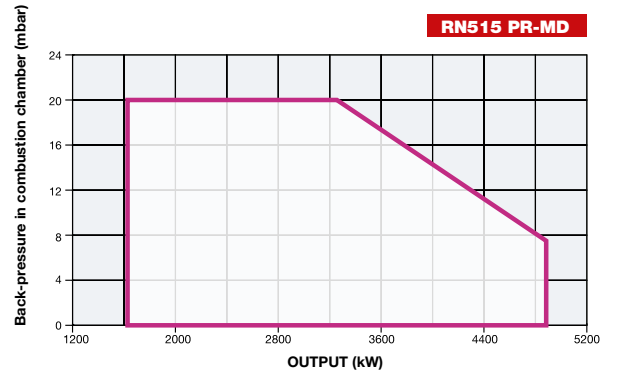
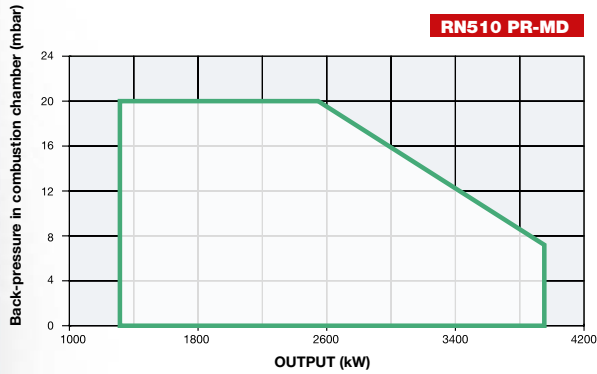
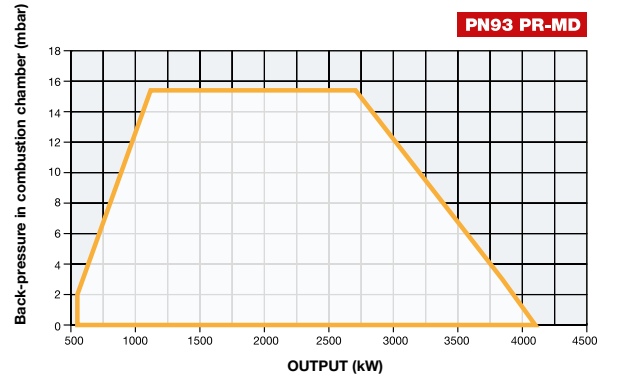
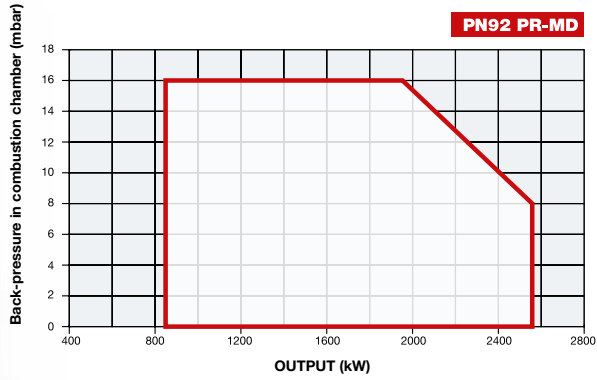
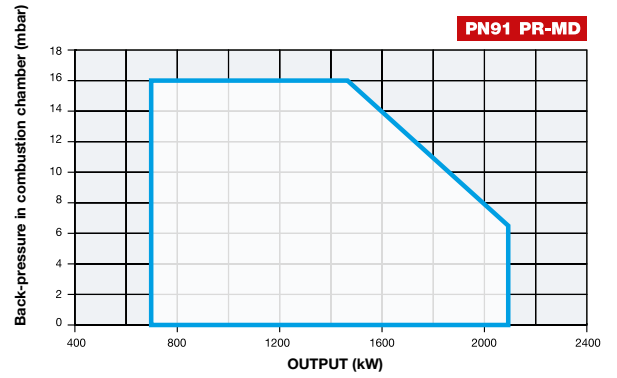
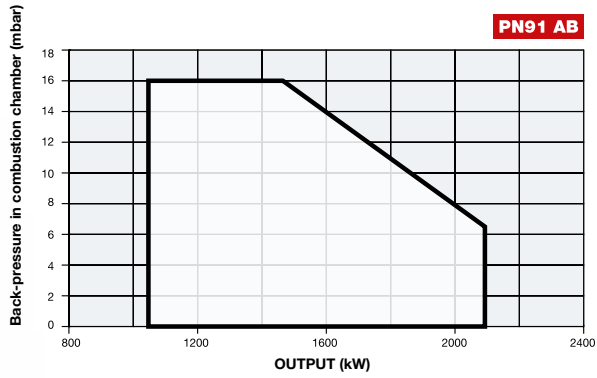
(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250)

# novanta-cinquecento series

PN91 PN92 PN93 RN510 RN515 RN520 RN525

HEAVY OIL

## MECHANICAL ATOMIZATION





These aluminium monoblock industrial burners with integral fan, are available for oils with viscosity up to 110 cSt at 50°C (15°E at 50°C).

Upon request we can also supply a model for heavy oils up to 400 cSt at 50° C (50°E at 50°C).

These burners use a mechanical atomization system and, given the particular viscosity of the fuel, they are equipped with two preheating tanks provided with electronic elements to keep the oil fluid and to avoid carbon deposits.

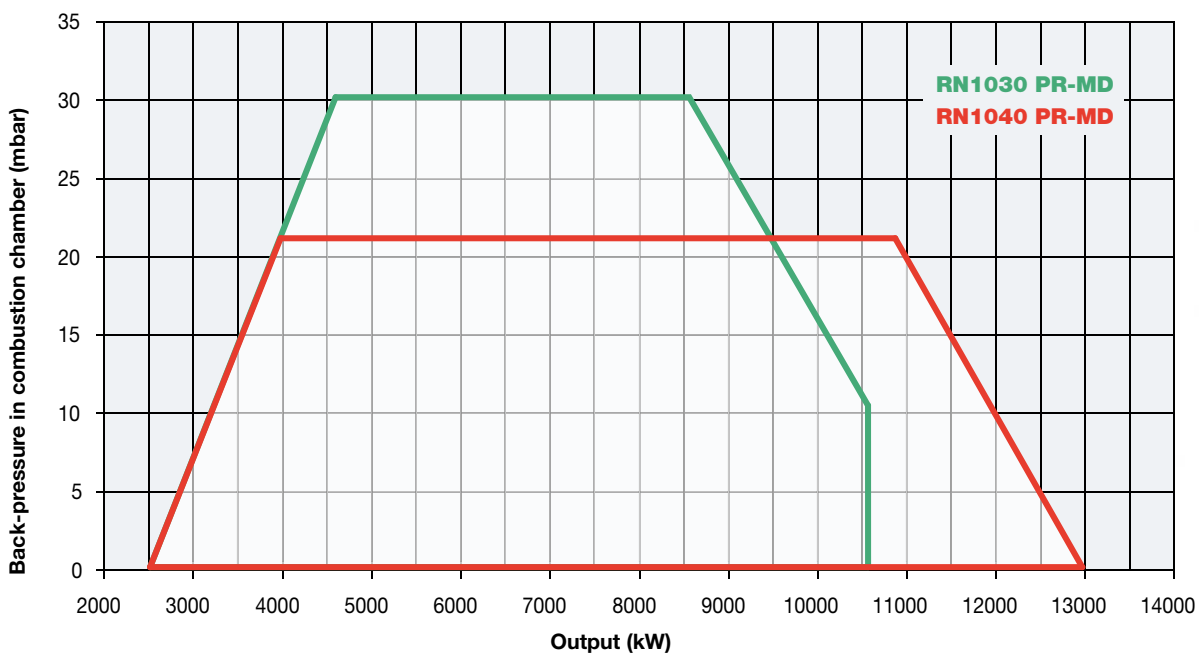
These burners are ignited through a pilot which can work either with natural gas or LPG.

The burners' main features are the relationship between the combustion head and the blast tube, and the specific fan guide that allows maximum exploitation of the fan performance.

Like all other UNIGAS burners these ones are highly reliable and fully compliant thanks to the constant tests carried out by our laboratory.



*Electronic set up (optional)*

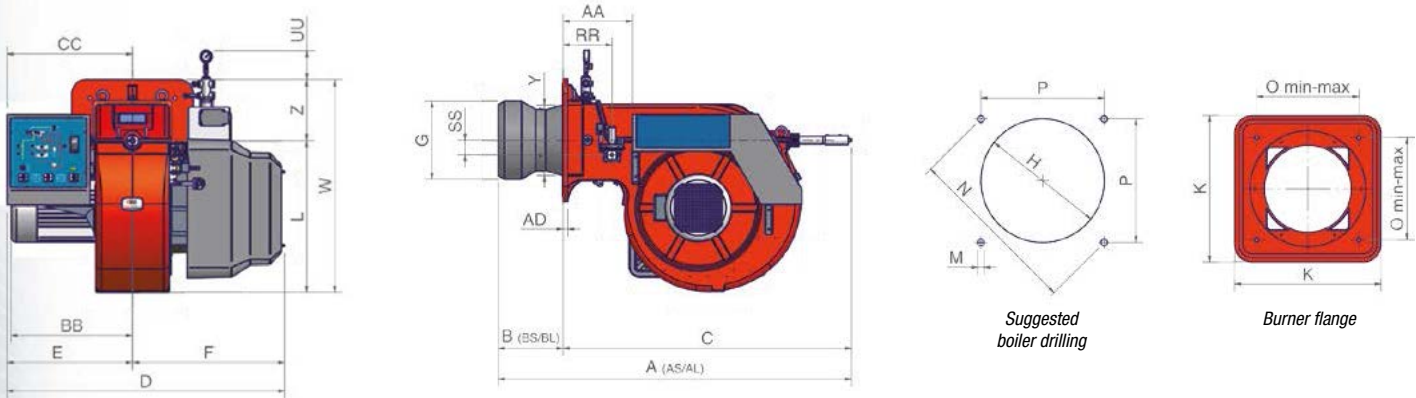


**MECHANICAL ATOMIZATION**

**TECHNICAL DETAILS**

Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Resistor kW
		min.	max.				
<b>RN1030</b>	x-.xx.x.IT.A	2.550	10.600	400 V 3N ac	22	5,5	24+24
<b>RN1040</b>	x-.xx.x.IT.A	2.550	13.000	400 V 3N ac	30	5,5	24+24

**N.B. Monoblock burners Duemila series with the capacity up to 19 MW consult ours sales officies.**



Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>RN1030/1040</b>	2270	1720	1320	800

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																									
		A (AS)	A (AL)	AA	AD	B (BS)	B (BL)	BB	C	CC	D	E	F	G	H	K	L	M	N	O	P	RR	SS	UU	W	Y	Z
<b>RN1030</b>	x-.xx.x.IT.A	1888	2082	377	25	420	614	657	1468	680	1502	680	822	526	576	660	816	M16	651	460	460	265	80	142	1146	381	330
<b>RN1040</b>	x-.xx.x.IT.A	1959	2153	377	25	384	578	657	1575	680	1502	680	822	671	731*	660	816	M16	651	460	460	265	80	142	1146	412	330

(\*) Approximate values

(\*) Install a counter-flange between the burner and the boiler or in alternative, drill the H hole smaller but higher than the Y point and assemble the blast tube inside the boiler.



## MECHANICAL ATOMIZATION

## MECHANICAL OPERATION

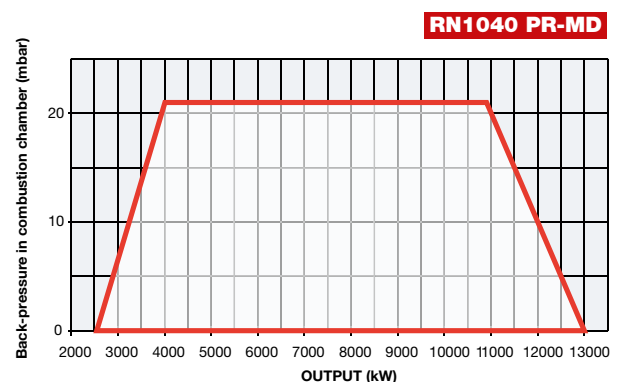
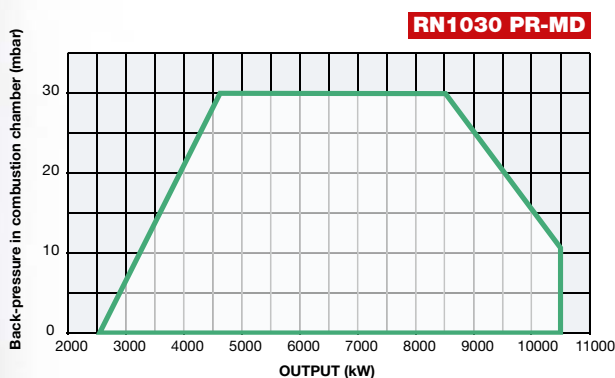
Model	Operation	RN1030		RN1040	
		Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)					
<b>N-.PR.S.IT.A</b>	PR	023061603		023061803	
<b>N-.PR.L.IT.A</b>	PR	023061703		023061903	
<b>N-.MD.S.IT.A</b>	MD(*)	023061604		023061804	
<b>N-.MD.L.IT.A</b>	MD(*)	023061704		023061904	
HEAVY OIL 110 cSt at 50°C (15°E at 50°C)					
<b>E-.PR.S.IT.A</b>	PR	023151603		023151803	
<b>E-.PR.L.IT.A</b>	PR	023151703		023151903	
<b>E-.MD.S.IT.A</b>	MD(*)	023151604		023151804	
<b>E-.MD.L.IT.A</b>	MD(*)	023151704		023151904	
HEAVY OIL 400 cSt at 50°C (50°E at 50°C)					
<b>D-.PR.S.IT.A</b>	PR	023181603		023181803	
<b>D-.PR.L.IT.A</b>	PR	023181703		023181903	
<b>D-.MD.S.IT.A</b>	MD(*)	023181604		023181804	
<b>D-.MD.L.IT.A</b>	MD(*)	023181704		023181904	

**MECHANICAL ATOMIZATION**

**ELECTRONIC OPERATION**

Model	Operation	RN1030		RN1040	
		Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)					
N-.PR.S.IT.A.EA	PR	02306160A		02306180A	
N-.PR.L.IT.A.EA	PR	02306170A		02306190A	
N-.MD.S.IT.A.EA	MD(*)	02306160E		02306180E	
N-.MD.L.IT.A.EA	MD(*)	02306170E		02306190E	
HEAVY OIL 110 cSt at 50°C (15°E at 50°C)					
E-.PR.S.IT.A.EA	PR	02315160A		02315180A	
E-.PR.L.IT.A.EA	PR	02315170A		02315190A	
E-.MD.S.IT.A.EA	MD(*)	02315160E		02315180E	
E-.MD.L.IT.A.EA	MD(*)	02315170E		02315190E	
HEAVY OIL 400 cSt at 50°C (50°E at 50°C)					
D-.PR.S.IT.A.EA	PR	02318160A		02318180A	
D-.PR.L.IT.A.EA	PR	02318170A		02318190A	
D-.MD.S.IT.A.EA	MD(*)	02318160E		02318180E	
D-.MD.L.IT.A.EA	MD(*)	02318170E		02318190E	

Model	Operation	RN1030		RN1040	
		Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)					
N-.MD.S.IT.A.ES	MD(*)	02306160S		02306180S	
N-.MD.L.IT.A.ES	MD(*)	02306170S		02306190S	
HEAVY OIL 110 cSt at 50°C (15°E at 50°C)					
E-.MD.S.IT.A.ES	MD(*)	02315160S		02315180S	
E-.MD.L.IT.A.ES	MD(*)	02315170S		02315190S	
HEAVY OIL 400 cSt at 50°C (50°E at 50°C)					
D-.MD.S.IT.A.ES	MD(*)	02318160S		02318180S	
D-.MD.L.IT.A.ES	MD(*)	02318170S		02318190S	



# novanta-cinquecento series

PBY70 PBY90 PBY91 PBY92 PBY93

RBV510 RBV515 RBV520 RBV525

HEAVY OIL

PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION

This particular heavy oil burners series has been developed in order to use compressed air or, alternatively, steam as a fluid to atomize the fuel with the aim to accomplish a better combustion result compared to the one gained using the traditional atomizing systems.

These burners are provided with a low pressure nozzle which allows consumption levels to be kept low and which also limits the general wear of the whole atomization system.

All burners are progressive and are completed with an electrical control cabinet and with a pump oil to be installed by the final user.

Furthermore, the nozzle performs an automatic cleaning process at the end of each cycle.

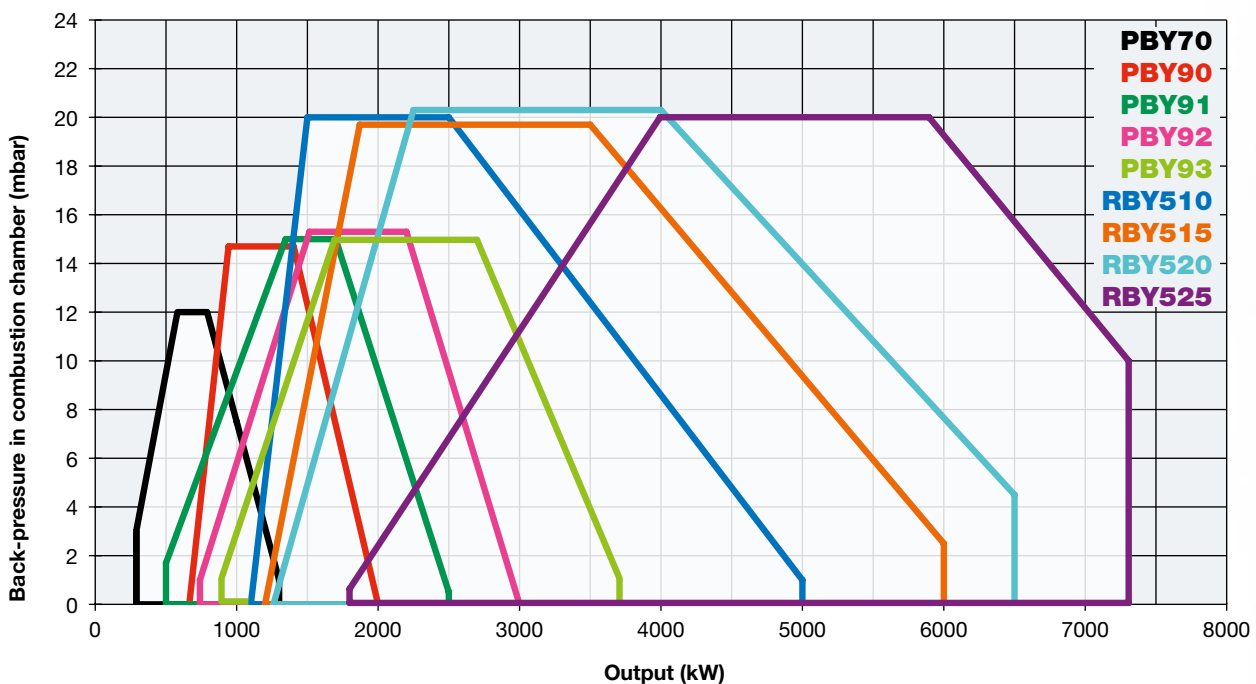
The plant must be provided with compressed air or steam at 8 bar.

Burners are ignited through a pilot which can work either with natural gas or LPG and are suitable to be used with fuels with a viscosity up to 4000 cSt at 50°C (530°E at 50°).

The standard version of burners is set up to atomize only with compressed air, when steam is requested for the atomization, the burner will be modified through a specific kit.

However, compressed air must be always present at the burner in the following cases:

- cold start ups when no steam is available
- valve opening for automatic nozzle cleaning.



# novanta-cinquecento series

PBY70 PBY90 PBY91 PBY92 PBY93

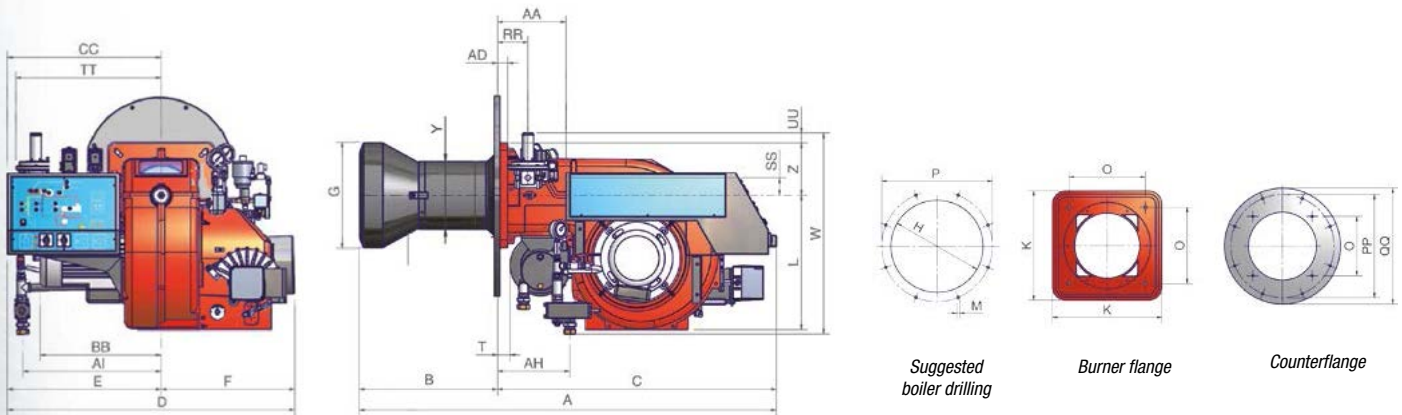
RBY510 RBY515 RBY520 RBY525

HEAVY OIL

## PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION

### TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Resistor kW
		min.	max.				
<b>PBY70</b>	H-.xx.S.IT.A.xx	290	1.300	230/400 V 3N ac	2,2	0,75	4,5
<b>PBY90</b>	H-.xx.S.IT.A.xx	670	2.000	230/400 V 3N ac	3,0	0,75	8,0
<b>PBY91</b>	H-.xx.S.IT.A.xx	500	2.500	230/400 V 3N ac	4,0	0,75	8,0
<b>PBY92</b>	H-.xx.S.IT.A.xx	700	3.000	230/400 V 3N ac	5,5	0,75	12,0
<b>PBY93</b>	H-.xx.S.IT.A.xx	900	3.700	230/400 V 3N ac	7,5	0,75	18,0



Low pressure pump set (pump, motor and filter) is included, but supplied loose (not assembled on the burner).

Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>PBY70</b>	1280	850	800	150
<b>PBY90/91/92</b>	1730	1280	1020	330

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																														
		A	AA	AD	AH	AI	B**	BB	C	CC	D	E	F	G	H	K	L	M	N	O	P	RR	SS	T	TT	UU	W	Y	Z	PP	QQ	
<b>PBY70</b>	H-.xx.x.IT.A.xx	1159	138	28	146	171	419	373	740	493	772	381	391	266	296	300	376	M10	330	216	250	500	100	132	41	-	150	730	198	155	500	550
<b>PBY90</b>	H-.xx.x.IT.A.xx	1287	237	35	250	479	318	419	964	532	992	532	460	306	346	360	464	M12	424	280	310	500	105	60	43	504	34	693	228	180	500	550
<b>PBY91</b>	H-.xx.x.IT.A.xx	1290	237	35	250	479	321	419	964	532	992	532	460	324	364	360	464	M12	424	280	310	500	105	60	43	504	34	693	228	180	500	550
<b>PBY92</b>	H-.xx.x.IT.A.xx	1296	237	35	250	479	327	419	964	532	992	532	460	365	405	360	464	M12	424	280	310	500	105	60	43	504	34	693	228	180	500	550
<b>PBY93</b>	H-.xx.x.xx.A.xx	1296	237	35	250	479	327	419	964	532	992	532	460	365	405	360	464	M12	424	280	310	500	105	60	43	504	34	693	228	180	500	550

(\*) Approximate values

(\*\*) The dimension B is reduced by 20 mm with counterflange and gasket



# novanta-cinquecento series

PBY70 PBY90 PBY91 PBY92 PBY93

RBV510 RBV515 RBV520 RBV525

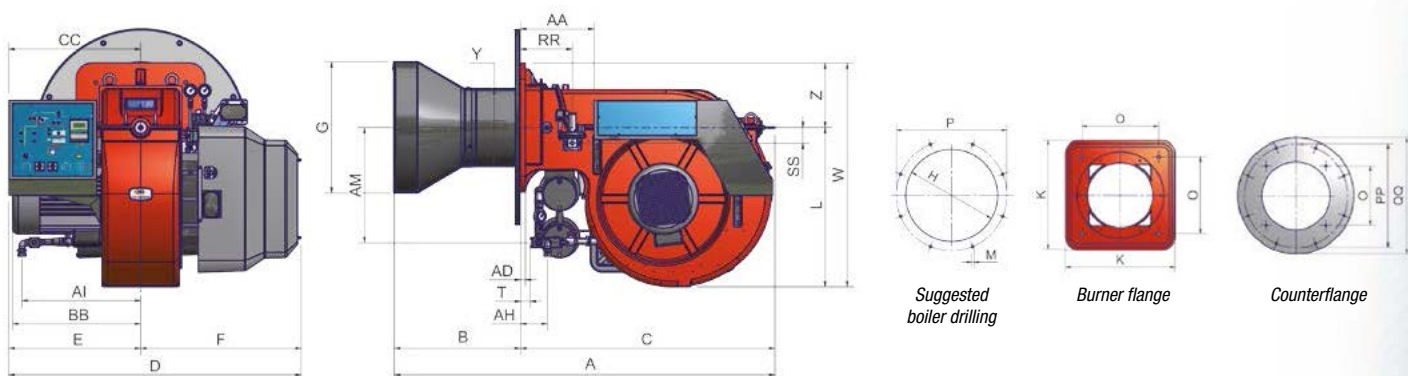
HEAVY OIL



**PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION**

## TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Resistor kW
		min.	max.				
<b>RBV510</b>	H-.xx.S.IT.A.xx	1.100	5.000	230/400 V 3N ac	7,5	0,75	18,0
<b>RBV515</b>	H-.xx.S.IT.A.xx	1.200	6.000	230/400 V 3N ac	11,0	0,75	18,0
<b>RBV520</b>	H-.xx.S.IT.A.xx	1.200	6.500	230/400 V 3N ac	15,0	0,75	24,0
<b>RBV525</b>	H-.xx.S.IT.A.xx	1.800	7.300	400 V 3N ac	18,5	0,75	24,0



Low pressure pump set (pump, motor and filter) is included, but supplied loose (not assembled on the burner).

Type	Packaging dimensions (mm)			
	l	p	h	kg
<b>RBV510/515/520</b>	1730	1430	1130	410
<b>RBV525</b>	1730	1430	1130	430

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																												
		A	AA	AD	AH	AI	B**	BB	C	CC	D	E	F	G	H	K	L	M	N	O	P	RR	SS	T	TT	W	Y	Z	PP	QQ
<b>RBV510</b>	H-.xx.x.IT.A.xx	1432	219	35	265	448	374	468	1058	571	1213	571	642	387	427	540	498	M14	552	390	800	109	115	44	547	827	329	270	800	850
<b>RBV515</b>	H-.xx.x.IT.A.xx	1436	219	35	265	448	378	508	1058	571	1213	571	642	474	524	540	498	M14	552	390	800	109	115	44	547	827	329	270	800	850
<b>RBV520</b>	H-.xx.x.IT.A.xx	1436	219	35	265	448	378	508	1058	571	1213	571	642	474	524	540	498	M14	552	390	800	109	115	44	547	827	329	270	800	850
<b>RBV525</b>	H-.xx.x.IT.A.xx	1436	219	35	265	448	378	642	1058	571	1284	642	642	474	524	540	498	M14	552	390	800	109	115	44	547	827	329	270	800	850

(\*) Approximate values

(\*\*) The dimension B is reduced by 25 mm with counterflange and gasket

# novanta-cinquecento series

PBY70 PBY90 PBY91 PBY92 PBY93

RBY510 RBY515 RBY520 RBY525

HEAVY OIL

## PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION

### ELECTRONIC OPERATION

PBY70				PBY90	
Model	Operation	Code	Price €	Code	Price €
HEAVY OIL 4000 cSt at 50°C (530°E at 50°C)					
H-.PR.S.IT.A.EA	PR	00818080A		01218090A	
H-.MD.S.IT.A.EA	MD(*)	00818080E		01218090E	
H-.MD.S.IT.A.ES	MD(*)	00818080S		01218090S	

PBY91				PBY92		PBY93	
Model	Operation	Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 4000 cSt at 50°C (530°E at 50°C)							
H-.PR.S.IT.A.EA	PR	01218100A		01218110A		-	
H-.MD.S.IT.A.EA	MD(*)	01218100E		01218110E		-	
H-.MD.S.IT.A.ES	MD(*)	01218100S		01218110S		-	

RBY510				RBY515		RBY520		RBY525	
Model	Operation	Code	Price €	Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 4000 cSt at 50°C (530°E at 50°C)									
H-.PR.S.IT.A.EA	PR	02918090A		02918110A		-		02918150A	
H-.MD.S.IT.A.EA	MD(*)	02918090E		02918110E		-		02918150E	
H-.MD.S.IT.A.ES	MD(*)	02918090S		02918110S		-		02918150S	

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250)

Steam atomization on request

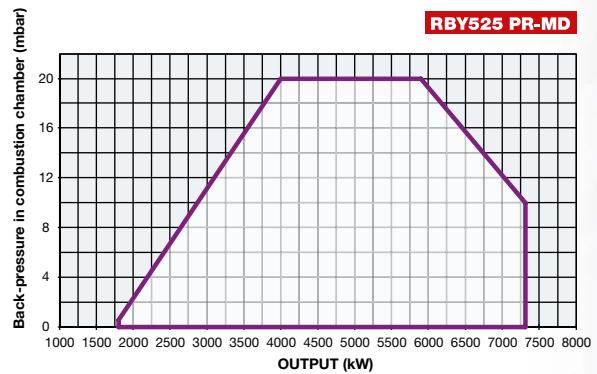
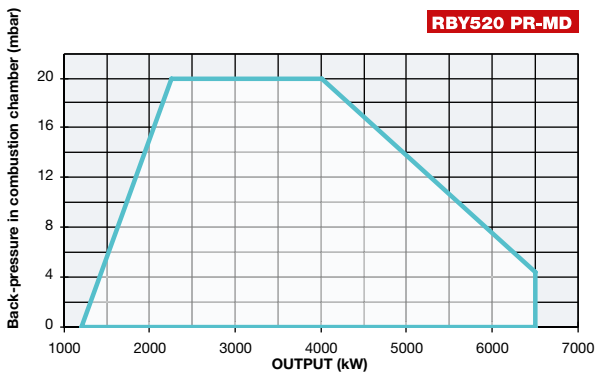
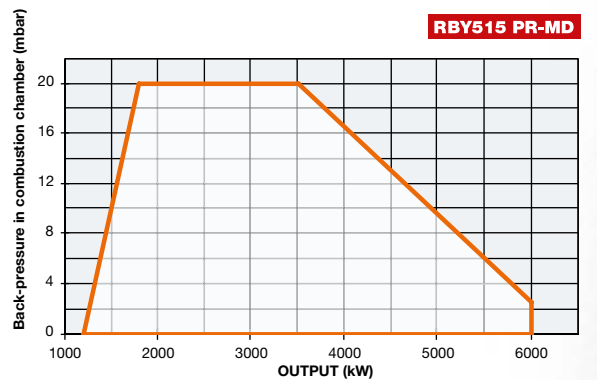
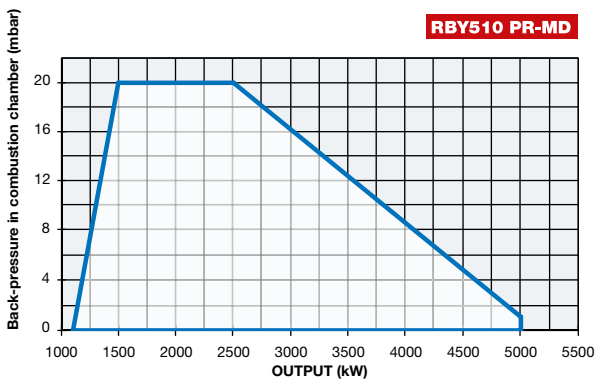
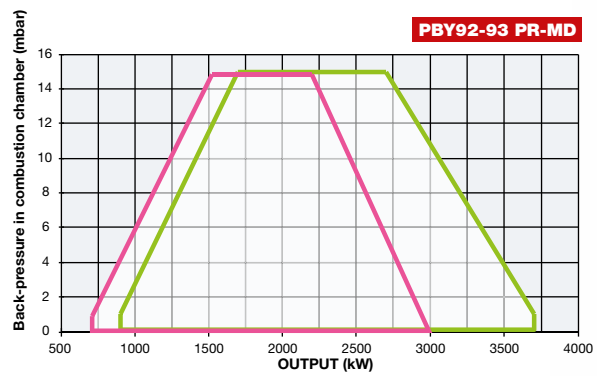
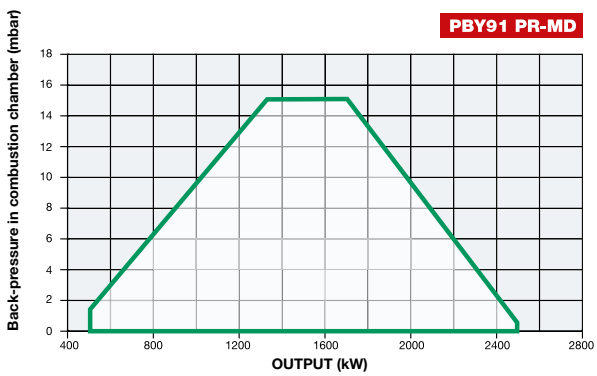
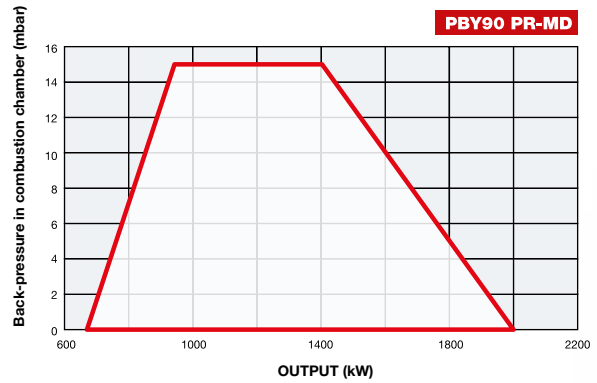
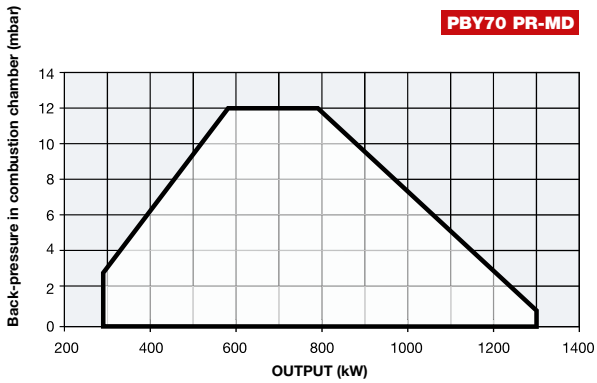
# novanta-cinquecento series

PBY70 PBY90 PBY91 PBY92 PBY93

RBV510 RBV515 RBV520 RBV525

HEAVY OIL

PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION



# mille series

RBY1025 RBY1030 RBY1040

HEAVY OIL

## PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION

Just like the corresponding series NOVANTA – CINQUECENTO, these oil burners - up to 4000 cSt at 50° C (530°E at 50°C)

- including emulsified oils, were developed to use compressed air or, when required, steam as a means of atomization in order to achieve better combustion results compared to the one gained using the traditional atomizing systems.

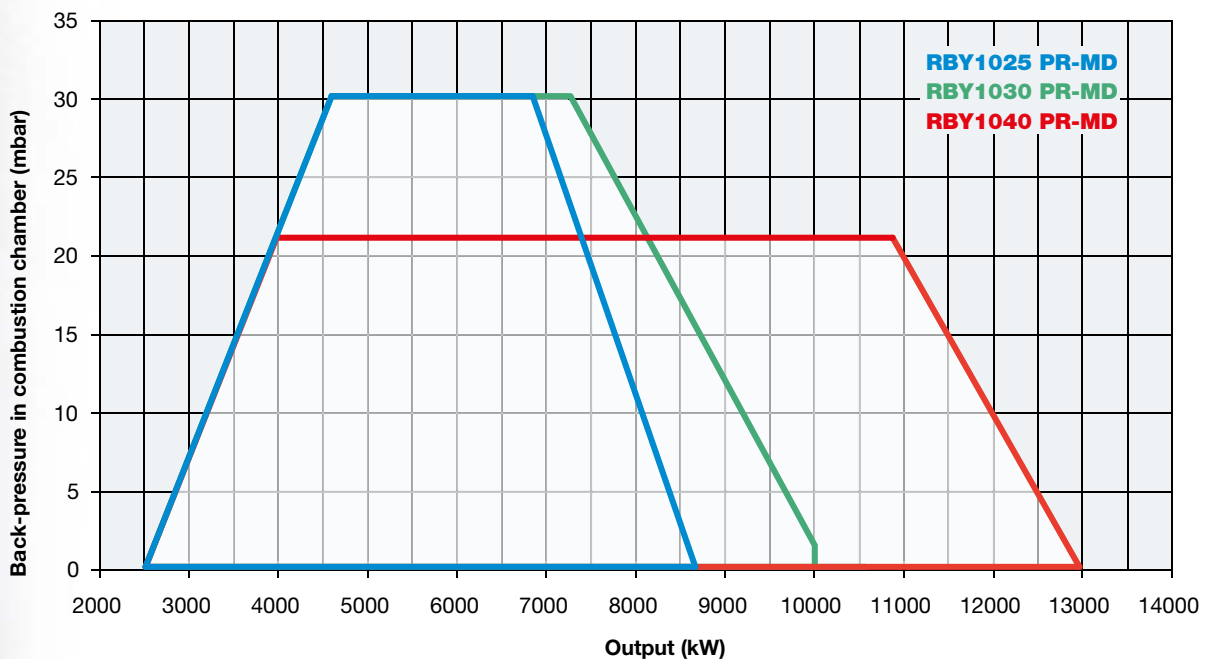
These burners are provided with a low pressure nozzle which allows consumption levels to be kept low and which also limits the general wear of the whole atomization system.

All burners are progressive and are completed with an electrical control cabinet and with a pump oil to be installed by the final user. Furthermore, the nozzle performs an automatic cleaning process at the end of each cycle.

The standard version of burners is set up to atomize compressed air only, when steam is requested for the atomization, the burner will be modified through a specific kit.

Air, or steam, must be present at the burner at pressure from 6 to 10 bar.

Burner are ignited through a pilot which can operate either with natural gas or LPG.



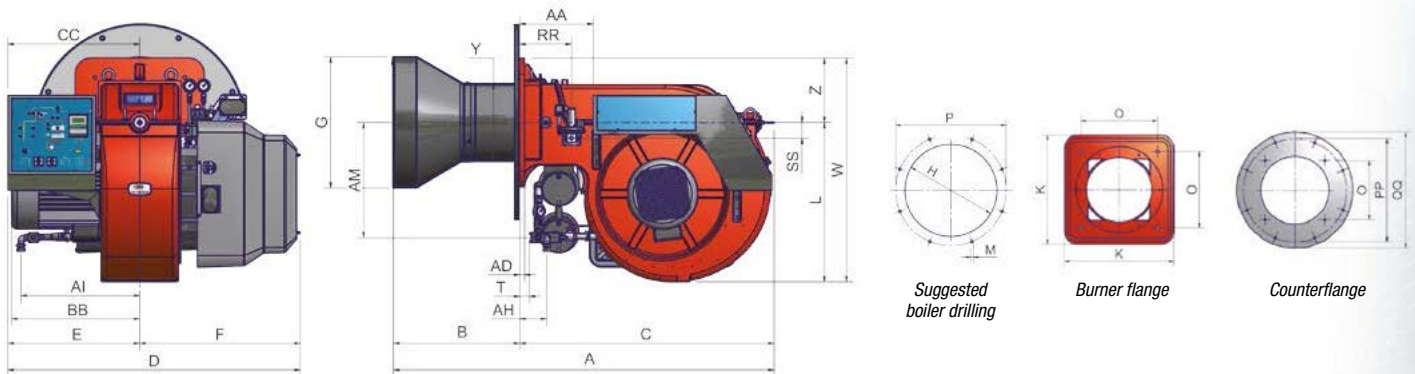


**PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION**

**TECHNICAL DETAILS**

Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Resistor kW
		min.	max.				
<b>RBY1025</b>	H-.xx.S.IT.A.xx	2.550	8.700	400 V 3N ac	18,5	0,75	24
<b>RBY1030</b>	H-.xx.S.IT.A.xx	2.550	10.000	400 V 3N ac	22,0	1,10	18+18
<b>RBY1040</b>	H-.xx.S.IT.A.xx	2.550	13.000	400 V 3N ac	30,0	1,10	24+24

**N.B. Monoblock burners Duemila series with the capacity up to 19 MW consult ours sales officies.**



Low pressure pump set (pump, motor and filter) is included, but supplied loose (not assembled on the burner).

Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>RBY1025/1030/1040</b>	2280	1730	1360	850

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																																
		A	AS	AL	AA	AD	AH	AI	AM	B	BS**	BL**	BB	C	CC	D	E	F	G	H	K	L	M	N	O	P	RR	SS	T	W	Y	Z	PP	QQ
<b>RBY1025</b>	H-.xx.x.IT.A.xx	1703	1669	1865	377	25	304	465	335	410	376	572	641	1293	680	1502	680	822	474	524	660	816	M16	651	460	800	265	80	95	1146	381	330	800	900
<b>RBY1030</b>	H-.xx.x.IT.A.xx	1646	1646	-	377	25	138	608	589	353	353	-	657	1293	680	1502	680	822	633	693	660	816	M16	651	460	800	265	80	50	1146	400	330	800	900
<b>RBY1040</b>	H-.xx.x.IT.A.xx	1654	1654	1873	377	25	138	608	589	361	361	580	657	1293	680	1502	680	822	671	731	660	816	M16	-	460	800	265	80	50	1146	412	330	800	900

(\*) Approximate values

The units pumps are separated

(\*\*) The dimensions BS and BL are reduced by 25 mm with counterflange and gasket

**PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION**

**ELECTRONIC OPERATION**

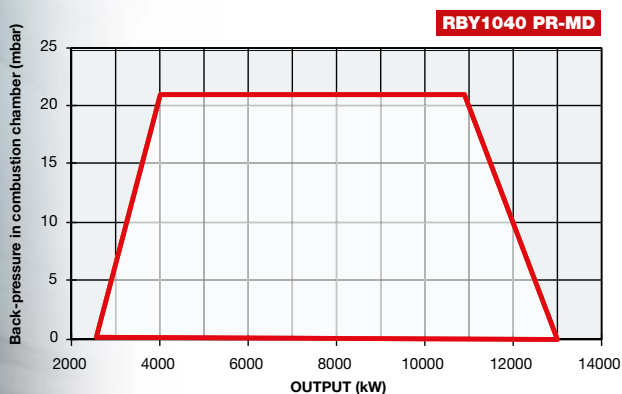
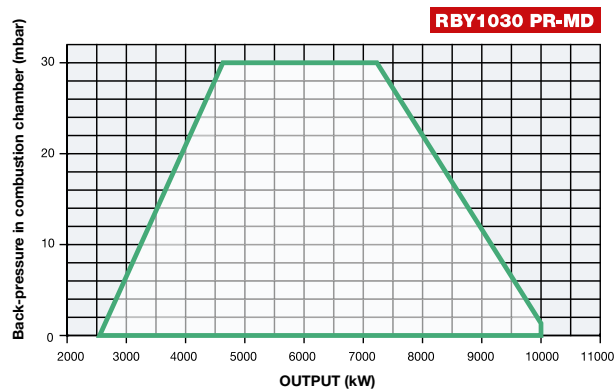
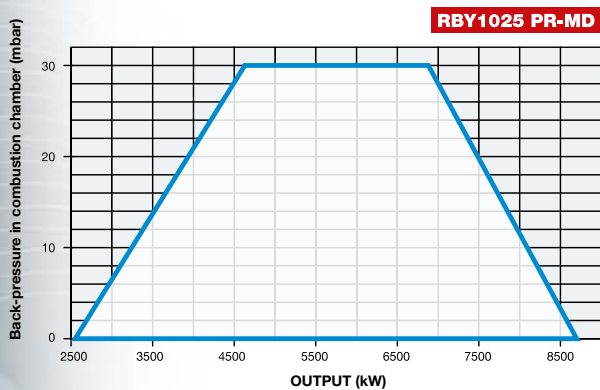
Model	Operation	RBY1025		RBY1030		RBY1040	
		Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 4000 cSt at 50°C (530°E at 50°C)							
H-.PR.S.IT.A.EA	PR	02318220A		02318240A		02318260A	
H-.PR.L.IT.A.EA	PR	02318230A		02318250A		02318270A	
H-.PR.S.IT.A.EA	MD(*)	02318220E		02318240E		02318260E	
H-.PR.L.IT.A.EA	MD(*)	02318230E		02318250E		02318270E	

Model	Operation	RBY1025		RBY1030		RBY1040	
		Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 4000 cSt at 50°C (530°E at 50°C)							
H-.MD.S.IT.A.ES	MD(*)	02318220S	43.554,00	02318240S		02318260S	
H-.MD.L.IT.A.ES	MD(*)	02318230S	43.746,00	02318250S		02318270S	

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250)

Steam atomization on request.



UNIGAS

UNIGAS





# dual fuel burners gas/light oil

## miniflam series

**HS5** - TN  
**HS10** - TN  
**HS18** - TN

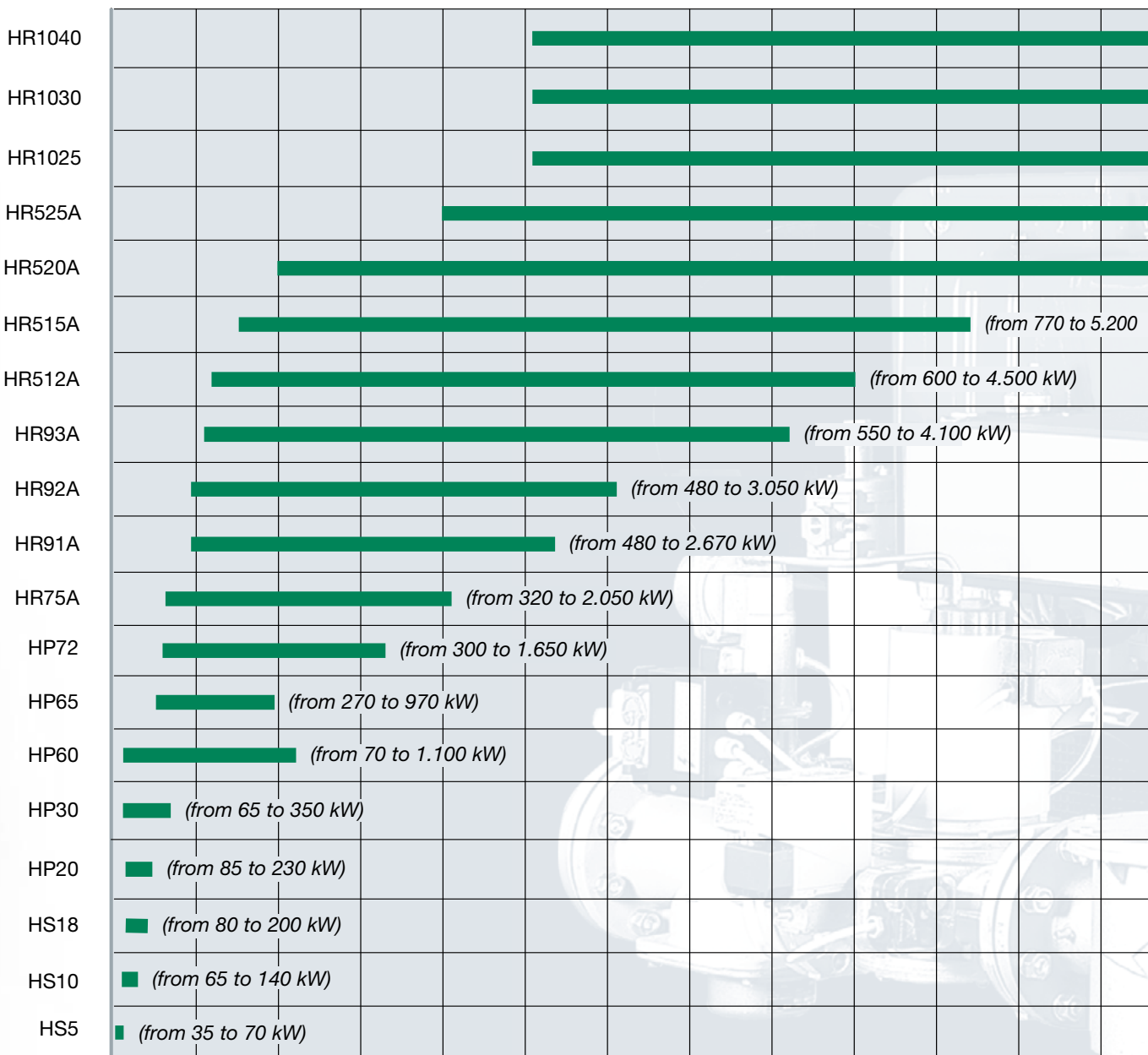
## tecnopress series

**HP20** - AB/PR/MD **HP65** - AB/PR/MD  
**HP30** - AB/PR/MD **HP72** - AB/PR/MD  
**HP60** - AB/PR/MD **HP75A** - AB/PR/MD

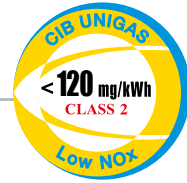
## novanta - cinquecento series

**HR91A** - PR/MD **HR512A** - PR/MD  
**HR92A** - PR/MD **HR515A** - PR/MD  
**HR93A** - PR/MD **HR520A** - PR/MD  
**HR525A** - PR/MD

### Type







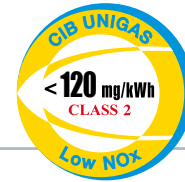
**mille series**

- HR1025** - PR/MD
- HR1030** - PR/MD
- HR1040** - PR/MD

										<i>(from 2.550 to 13.000 kW)</i>	
										<i>(from 2.550 to 9.500 kW)</i>	
										<i>(from 2.550 to 8.700 kW)</i>	
										<i>(from 2.000 to 8.000 kW)</i>	
										<i>(from 1.000 to 6.400 kW)</i>	
										<i>kW)</i>	

# miniflam series

HS5 HS10 HS18



GAS/LIGHT OIL

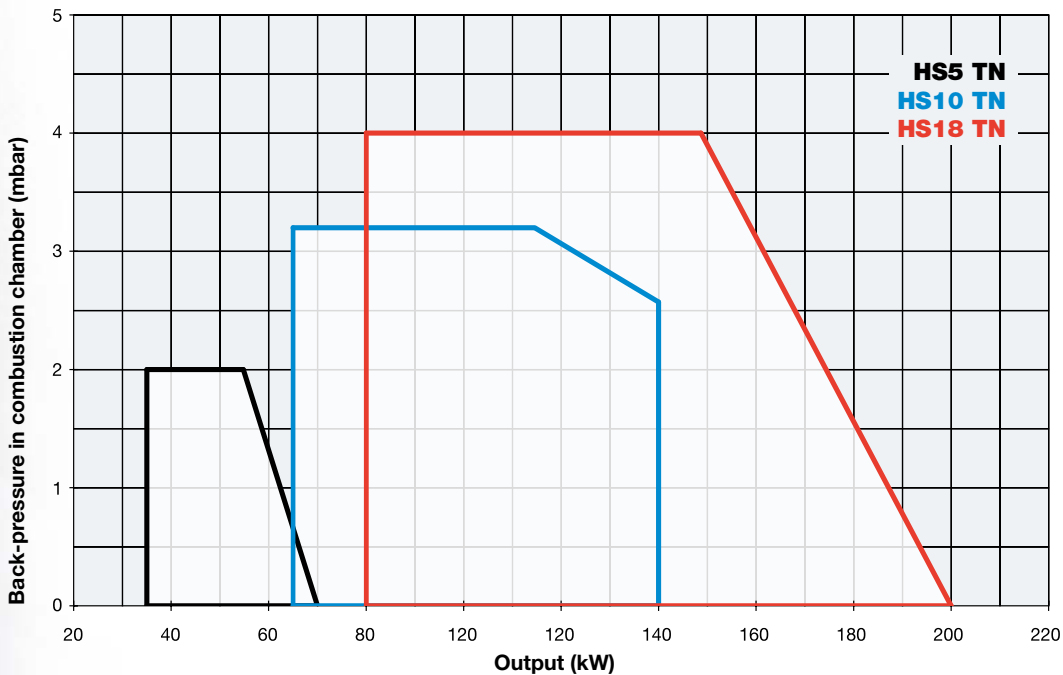
This small output series can work both with gas and light oil, according to the fuel availability on the plant .

All the mechanisms have been carefully studied to ensure the maximum efficiency and are perfectly compatible to work with gas and liquid fuels. In fact fuel change over is simply achieved by a single electrical switch which prompts the burner to carry out a controlled shutdown.

The high performance fuel pump is driven by a separate motor running only when oil firing is selected.

Moreover, thanks to its small dimensions, this series is particularly suitable to a quick maintenance.

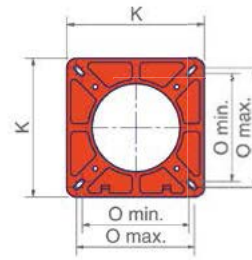
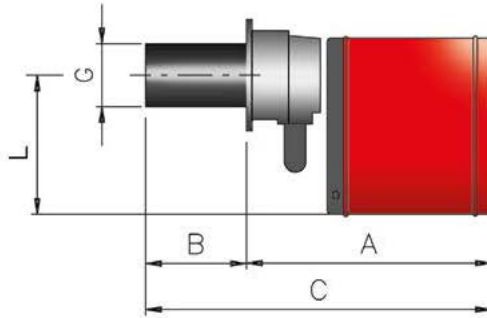
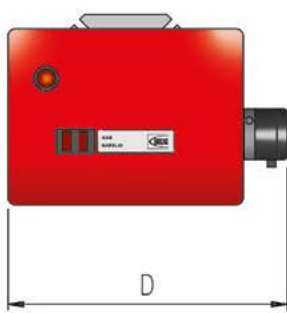
Burner's features: an housing made in aluminium die-cast, the cover can be easily removed, a grill on the air inlet prevents any foreign object being drawn into the fan. The combustion head can be adjusted by means of a graduated screw.



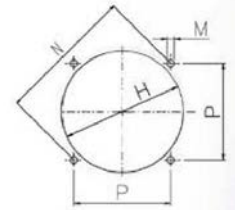


### TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Gas connections
		min.	max.				
<b>HS5</b>	MG.TN.x.xx.A.0.15	35	70	230 V 1N ac	0,10	0,1	1/2"
<b>HS10</b>	MG.TN.x.xx.A.0.20	65	140	230 V 1N ac	0,15	0,1	3/4"
<b>HS18</b>	MG.TN.x.xx.A.0.25	80	200	230 V 1N ac	0,15	0,1	1"



Burner flange



Suggested boiler drilling

Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>HS5</b>	580	580	360	23
<b>HS10</b>	510	350	730	30
<b>HS15</b>	510	350	730	31

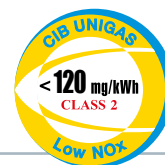
(\*) Approximate values

Type	Model	Overall dimensions* (mm)								Suggested boiler drilling (mm)				Burner flange (mm)			
		A	B	BL	C	CL	D	G	L	H	P min. max.		M	N	K	O min. max.	
<b>HS5</b>	MG.TN.x.xx.A.0.15	320	0÷61	0÷160	380	480	400	80	190	90	92	134	M8	130÷189	162	86	138
<b>HS10</b>	MG.TN.x.xx.A.0.20	351	159	254	510	605	430	108	210	115	105	134	M8	148÷189	162	103	103
<b>HS18</b>	MG.TN.x.xx.A.0.25	348	177	267	525	615	430	126	210	135	105	134	M8	148÷189	162	103	103

(\*) Approximate values

# miniflam series

HS5 HS10 HS18



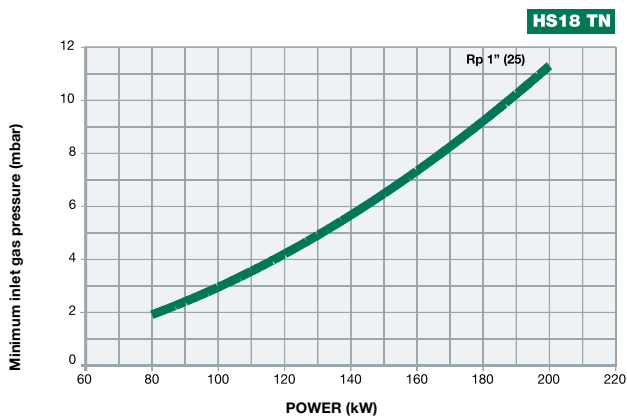
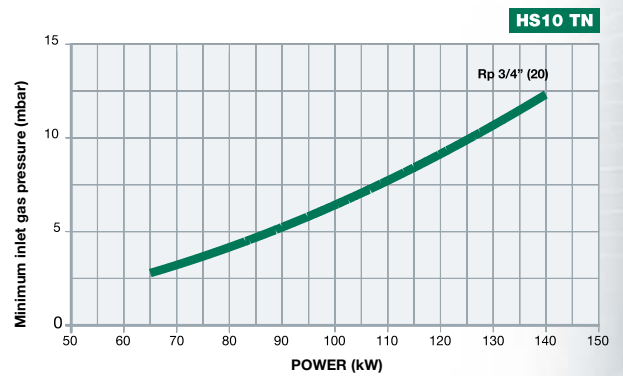
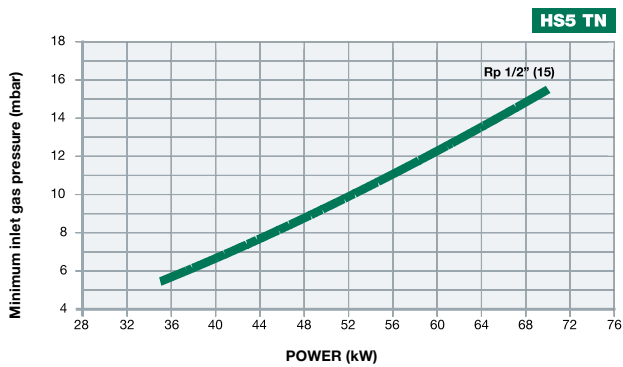
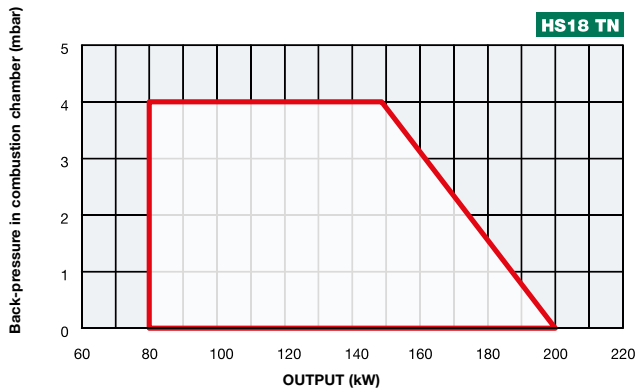
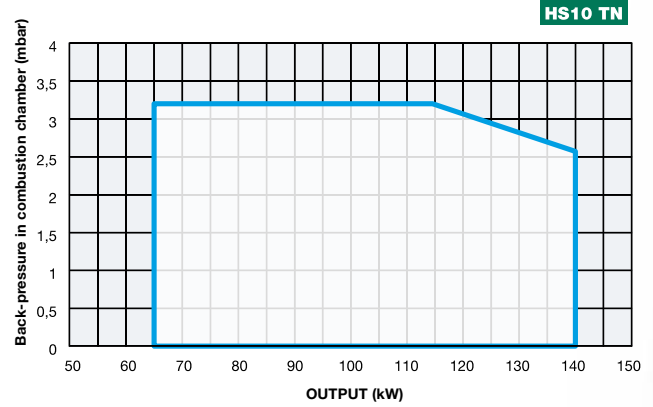
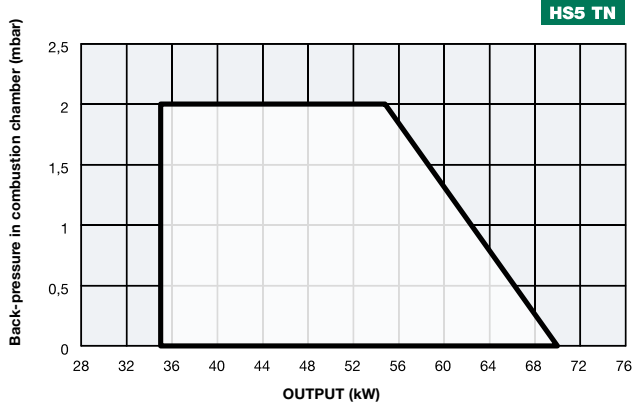
GAS/LIGHT OIL

Model	Gas train	Operation	HS5		HS10	
			Code	Price €	Code	Price €
MG.TN.S.IT.A.0.15	1/2"	TN	001070141		-	
MG.TN.L.IT.A.0.15	1/2"	TN	001070241		-	
MG.TN.S.IT.A.0.20	3/4"	TN	-		002070141	
MG.TN.L.IT.A.0.20	3/4"	TN	-		002070241	

Model	Gas train	Operation	HS18	
			Code	Price €
MG.TN.S.IT.A.0.25	1"	TN	002070341	
MG.TN.L.IT.A.0.25	1"	TN	002070441	

In compliance with DIRECTIVE 2009/142/CE

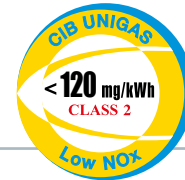
In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE



Attention: the graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.

# tecnopress series

HP20 HP30 HP60 HP65 HP72 HR75A



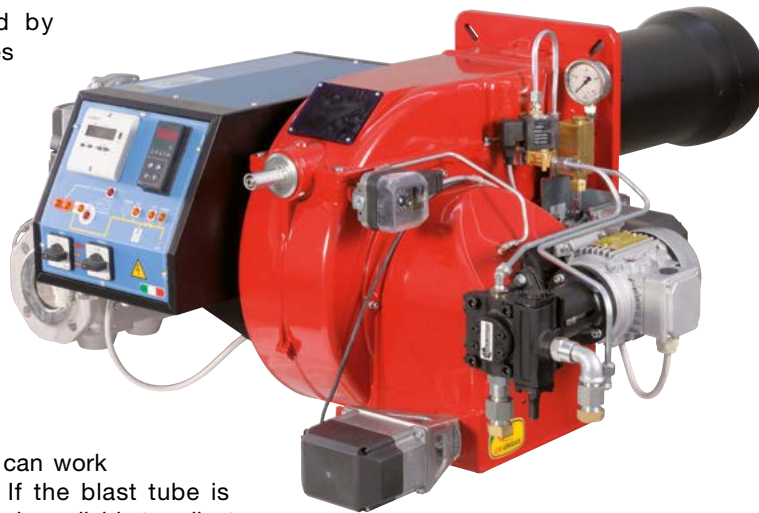
GAS/LIGHT OIL

These burners are characterized by the «spiral» line typical of the series TECNOPRESS. They are suitable both for medium and small outputs (up to 2050 kW). Moreover they are suitable to burn either natural gas or light oil, thanks to the adjustable combustion head which allows a good performance with both fuels.

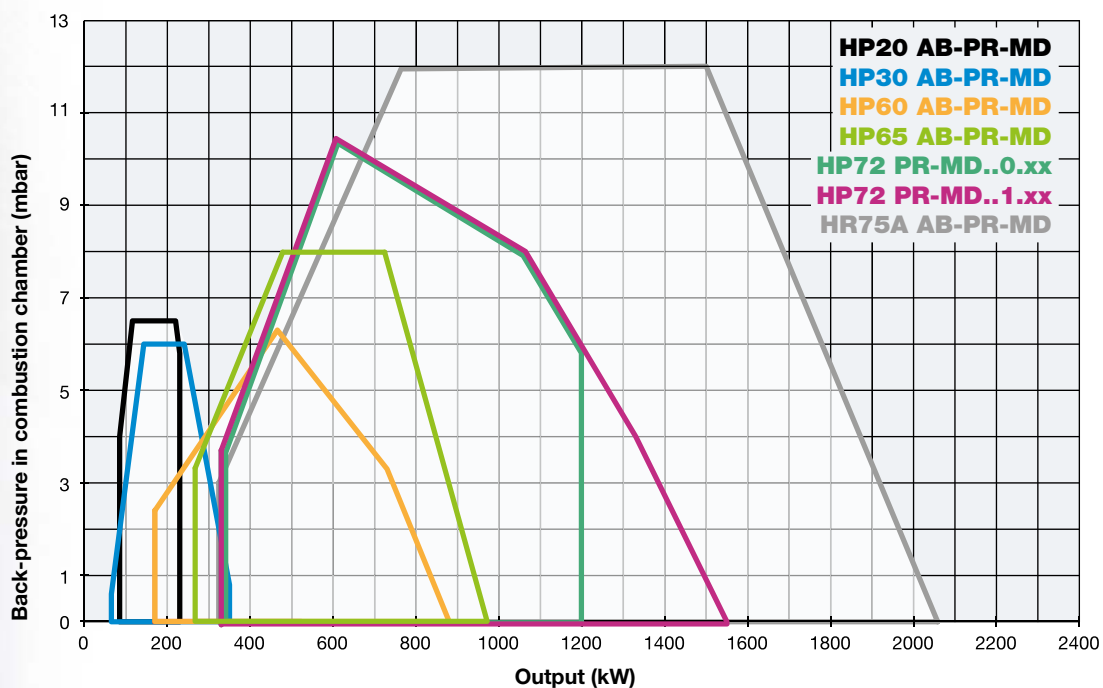
The control panel facia is printed with a mimic diagram fitted with neon lamps to indicate the different stages of the burner operation and any abnormalities.

Like all other models, these burners can work with standard and long blast tube. If the blast tube is shorter than the standard one, a spacer is available to adjust the insertion length into the combustion chamber.

All regulations and setting devices are simple and practical for both fuels thanks to the high quality leverages.



Electronic set up (optional)

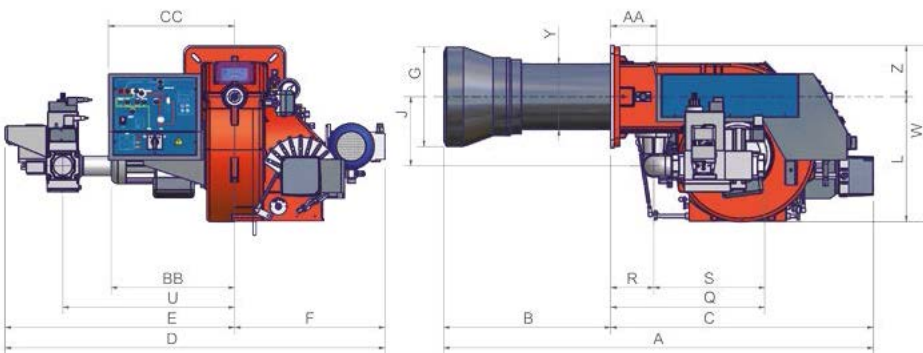




## TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Gas connections
		min.	max.				
HP20	MG.xx.x.IT.A.0.25	85	230	230 V 1N ac	0,37	0,10	1"
HP30	MG.xx.S.IT.A.0.xx	65	350	230 V 1N ac	0,37	0,10	1 1/4" - 1 1/2"
HP60	MG.xx.S.IT.A.0.xx	170	880	230/400 V 3N ac	1,10	0,55	1 1/4" - 1 1/2" - 2" - DN65
HP65	MG.xx.S.IT.A.x.xx	270	970	230/400 V 3N ac	1,50	0,55	1 1/2" - 2" - DN65
HP72	MG.xx.S.IT.A.0.xx	330	1200	230/400 V 3N ac	2,20	0,55	2" - DN65 - 80
HP72	MG.xx.S.IT.A.1.xx	330	1550	230/400 V 3N ac	2,20	0,55	2" - DN65 - 80

For the configuration of the gas train, see pages 110-111.

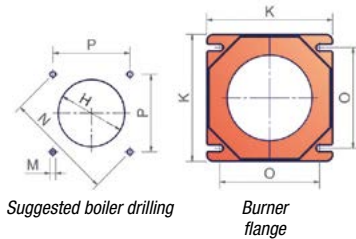


Type	Packaging dimensions* (mm)			
	l	p	h	kg
HP20/HP30	980	820	580	70
HP60	1280	850	760	90
HP65	1280	850	760	130
HP72	1280	850	760	145

(\* Approximate values)

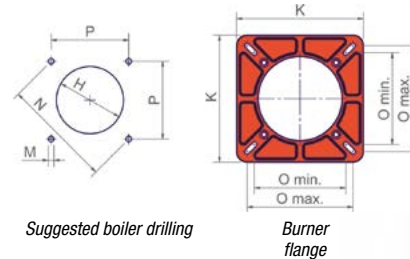
HP20 - HP30 - HP60

HP72



Suggested boiler drilling

Burner flange



Suggested boiler drilling

Burner flange

Type	Model	Overall dimensions* (mm)																												
		AS	AL	AA	BS	BL	BB	C	CC	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	U	V	W	Y	Z	
		min. max.																												
HP20	MG.xx.x.IT.A.0.25	728	813	-	173	258	-	555	-	830	510	320	126	151	178	190	290	M10	219	155	155	155	-	-	-	360	-	-	115	-
HP30	MG.xx.S.IT.A.0.xx	855	-	-	300	-	-	555	-	830	510	320	150	162	178	190	290	M10	219	155	155	155	-	-	-	360	-	-	133	-
HP60	MG.xx.S.IT.A.0.32	1119	-	99	383	-	314	736	362	930	500	430	240	280*	210	240	344	M10	269	190	190	190	445	112	327	444	-	464	162	120
HP60	MG.xx.S.IT.A.0.40	1119	-	99	383	-	314	736	362	930	500	430	240	280*	210	240	344	M10	269	190	190	190	445	112	327	444	-	464	162	120
HP60	MG.xx.S.IT.A.0.50	1119	-	99	383	-	314	736	362	930	500	430	240	280*	210	240	344	M10	269	190	190	190	445	112	335	444	-	464	162	120
HP60	MG.xx.S.IT.A.0.65	1119	-	99	383	-	314	736	362	1115	685	430	240	280*	250	240	420	M10	269	190	190	190	845	112	403	540	313	540	162	120
HP65	MG.xx.S.IT.A.1.40	1156	-	139	362	-	347	794	380	1148	694	454	240	280	208	300	376	M10	330	216	250	233	457	130	327	519	-	531	162	155
HP65	MG.xx.S.IT.A.1.50	1156	-	139	362	-	347	794	380	1148	694	454	240	280	208	300	376	M10	330	216	250	233	465	130	335	519	-	531	162	155
HP65	MG.xx.S.IT.A.1.65	1156	-	139	362	-	347	794	380	1226	772	454	240	280	275	300	393	M10	330	216	250	233	533	130	403	565	313	548	162	155
HP72	MG.xx.S.IT.A.0.50	1299	-	139	505	-	373	794	382	1022	568	454	300	340*	208	300	376	M10	330	216	250	233	465	130	335	519	-	531	198	155
HP72	MG.xx.S.IT.A.0.65	1299	-	139	505	-	373	794	382	1120	666	454	300	340*	275	300	393	M10	330	216	250	233	533	130	403	565	313	548	198	155
HP72	MG.xx.S.IT.A.0.80	1299	-	139	505	-	373	794	382	1120	666	454	300	340*	275	300	407	M10	330	216	250	233	574	130	444	565	344	562	198	155
HP72	MG.xx.S.IT.A.1.50	1299	-	139	505	-	373	794	382	1148	694	454	300	340*	208	300	376	M10	330	216	250	233	465	130	335	519	-	531	198	155
HP72	MG.xx.S.IT.A.1.65	1299	-	139	505	-	373	794	382	1226	772	454	300	340*	275	300	393	M10	330	216	250	233	533	130	403	565	313	548	198	155
HP72	MG.xx.S.IT.A.1.80	1299	-	139	505	-	373	794	382	1228	774	454	300	340*	275	300	407	M10	330	216	250	233	574	130	444	565	344	562	198	155

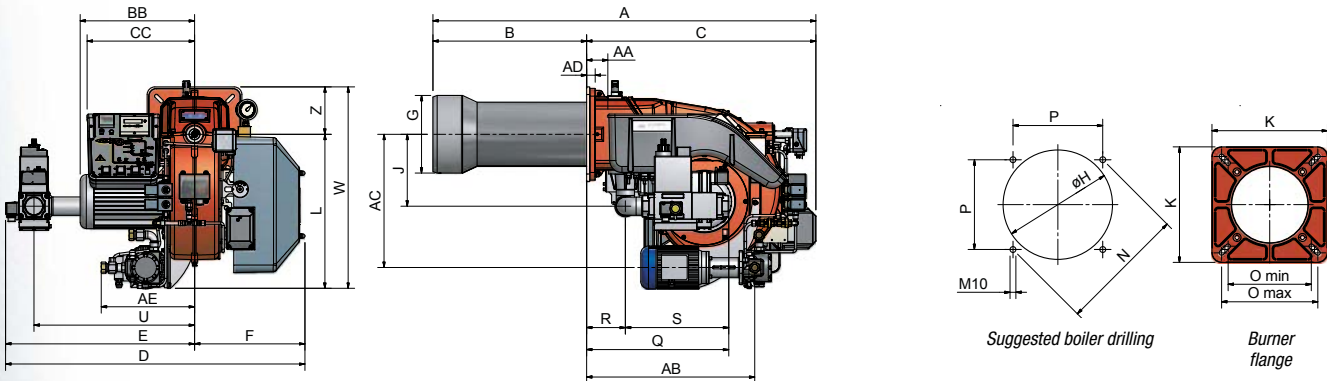
(\* Approximate values)

(\*) Install a counter-flange between the burner and the boiler or in alternative, drill the H hole smaller but higher than the Y point and assemble the blast tube inside the boiler.

### TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Gas connections
		min.	max.				
<b>HR75A</b>	MG.xx.S.IT.A.1.xx	320	2050	230/400 V 3N ac	3,00	0,55	2" - DN65 - 80

For the configuration of the gas train, see pages 110-111.



Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>HR75A</b>	1280	850	760	145

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																												
		A	AA	AB	AC	AD	AE	B	BB	C	CC	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	U	W	Z	
																				min. max.										
<b>HR75A</b>	MG.xx.S.IT.A.1.50	1253	69	550	436	28	305	503	374	750	352	979	618	361	254	284	235	300	504	M10	330	216	250	233	465	127	338	525	659	155
<b>HR75A</b>	MG.xx.S.IT.A.1.65	1253	69	550	436	28	305	503	374	750	352	979	618	361	254	284	235	300	504	M10	330	216	250	233	465	127	338	525	659	155
<b>HR75A</b>	MG.xx.S.IT.A.1.80	1253	69	550	436	28	305	503	374	750	352	979	618	361	254	284	235	300	504	M10	330	216	250	233	465	127	338	525	659	155

(\*) Approximate values





## MECHANICAL OPERATION

Model	Gas train	Operation	HP20		HP30	
			Code	Price €	Code	Price €
MG.AB.S.IT.A.0.25	1"	AB	003070142	-	-	-
MG.AB.L.IT.A.0.25	1"	AB	003070242	-	-	-
MG.PR.S.IT.A.0.25	1"	PR	003070143	-	-	-
MG.PR.L.IT.A.0.25	1"	PR	003070243	-	-	-
MG.MD.S.IT.A.0.25	1"	MD(*)	003070144	-	-	-
MG.MD.L.IT.A.0.25	1"	MD(*)	003070244	-	-	-
MG.AB.S.IT.A.0.32	1 1/4"	AB	-	-	003070342	-
MG.AB.S.IT.A.0.40	1 1/2"	AB	-	-	003070542	-
MG.PR.S.IT.A.0.32	1 1/4"	PR	-	-	003070343	-
MG.PR.S.IT.A.0.40	1 1/2"	PR	-	-	003070543	-
MG.MD.S.IT.A.0.32	1 1/4"	MD(*)	-	-	003070344	-
MG.MD.S.IT.A.0.40	1 1/2"	MD(*)	-	-	003070544	-

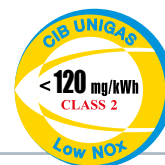
Model	Gas train	Operation	HP60		HP65	
			Code	Price €	Code	Price €
MG.AB.S.IT.A.0.32	1 1/4"	AB	004070542	-	-	-
MG.AB.S.IT.A.0.40	1 1/4"	AB	004070241	-	008071242	-
MG.AB.S.IT.A.0.50	2"	AB	004070242	-	008071042	-
MG.AB.S.IT.A.0.65	DN65	AB	004070342	-	008071142	-
MG.PR.S.IT.A.0.32	1 1/4"	PR	004070543	-	-	-
MG.PR.S.IT.A.0.40	1 1/2"	PR	004070143	-	008071243	-
MG.PR.S.IT.A.0.50	2"	PR	004070243	-	008071043	-
MG.PR.S.IT.A.0.65	DN65	PR	004070343	-	008071143	-
MG.MD.S.IT.A.0.32	1 1/4"	MD(*)	004070544	-	-	-
MG.MD.S.IT.A.0.40	1 1/2"	MD(*)	004070144	-	008071244	-
MG.MD.S.IT.A.0.50	2"	MD(*)	004070244	-	008071044	-
MG.MD.S.IT.A.0.65	DN65	MD(*)	004070344	-	008071144	-

■ Burner equipped with external air inlet

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, pages 250)

In compliance with DIRECTIVE 2009/142/CE

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE



### MECHANICAL OPERATION

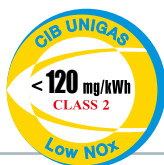
Model	Gas train	Operation	HP72		HR75A	
			Code	Price €	Code	Price €
MG.AB.S.IT.A.0.40	1"½	AB	008070442		-	
MG.AB.S.IT.A.0.50	2"	AB	008070142		-	
MG.AB.S.IT.A.0.65	DN65	AB	008070242		-	
MG.AB.S.IT.A.0.80	DN80	AB	008070342		-	
MG.AB.S.IT.A.1.40	1"½	AB	008070452		-	
MG.AB.S.IT.A.1.50	2"	AB	008070152		030070452	
MG.AB.S.IT.A.1.65	DN65	AB	008070252		030070452	
MG.AB.S.IT.A.1.80	DN80	AB	008070352		030070652	
MG.PR.S.IT.A.0.40	1"½	PR	008070443		-	
MG.PR.S.IT.A.0.50	2"	PR	008070143		-	
MG.PR.S.IT.A.0.65	DN65	PR	008070243		-	
MG.PR.S.IT.A.0.80	DN80	PR	008070343		-	
MG.PR.S.IT.A.1.40■	1"½	PR	008070453		-	
MG.PR.S.IT.A.1.50■	2"	PR	008070153		030070453	
MG.PR.S.IT.A.1.65■	DN65	PR	008070253		030070553	
MG.PR.S.IT.A.1.80■	DN80	PR	008070353		030070653	
MG.MD.S.IT.A.0.40	1"½	MD(*)	008070444		-	
MG.MD.S.IT.A.0.50	2"	MD(*)	008070144		-	
MG.MD.S.IT.A.0.65	DN65	MD(*)	008070244		-	
MG.MD.S.IT.A.0.80	DN80	MD(*)	008070344		-	
MG.MD.S.IT.A.1.40■	1"½	MD(*)	008070454		-	
MG.MD.S.IT.A.1.50■	2"	MD(*)	008070154		030070454	
MG.MD.S.IT.A.1.65■	DN65	MD(*)	008070254		030070554	
MG.MD.S.IT.A.1.80■	DN80	MD(*)	008070354		030070654	

■ Burner equipped with external air inlet

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, pages 250)

In compliance with DIRECTIVE 2009/142/CE

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE



## ELECTRONIC OPERATION

Model	Gas train	Operation	HP20		HP30	
			Code	Price €	Code	Price €
MG.PR.S.IT.A.1.25.EC	1"	PR	00307015C		-	
MG.PR.L.IT.A.1.25.EC	1"	PR	00307025C		-	
MG.PR.S.IT.A.1.32.EC	1"¼	PR	-		00307035C	
MG.MD.S.IT.A.1.25.EC	1"	MD(*)	00307015G		-	
MG.MD.L.IT.A.1.25.EC	1"	MD(*)	00307025G		-	
MG.MD.S.IT.A.1.32.EC	1"¼	MD(*)	-		00307035G	

Model	Gas train	Operation	HP60		HP65	
			Code	Price €	Code	Price €
MG.PR.S.IT.A.1.40.EC	1"½	PR	00407015C		00807125C	
MG.PR.S.IT.A.1.50.EC	2"	PR	00407025C		00807105C	
MG.PR.S.IT.A.1.65.EC	DN65	PR	00407035C		00807115C	
MG.MD.S.IT.A.1.40.EC	1"½	MD(*)	00407015G		00807125G	
MG.MD.S.IT.A.1.50.EC	2"	MD(*)	00407025G		00807105G	
MG.MD.S.IT.A.1.65.EC	DN65	MD(*)	00407035G		00807115G	

Model	Gas train	Operation	HP72		HR75A	
			Code	Price €	Code	Price €
MG.PR.S.IT.A.1.40.EC	1"½	PR	00807045C		-	
MG.PR.S.IT.A.1.50.EC	2"	PR	00807015C		03007045C	
MG.PR.S.IT.A.1.65.EC	DN65	PR	00807025C		03007055C	
MG.PR.S.IT.A.1.80.EC	DN80	PR	00807035C		03007065C	
MG.MD.S.IT.A.1.40.EC	1"½	MD(*)	00807045G		-	
MG.MD.S.IT.A.1.50.EC	2"	MD(*)	00807015G		03007045G	
MG.MD.S.IT.A.1.65.EC	DN65	MD(*)	00807025G		03007055G	
MG.MD.S.IT.A.1.80.EC	DN80	MD(*)	00807035G		03007065G	

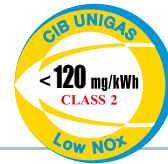
(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, pages 250)

In compliance with DIRECTIVE 2009/142/CE

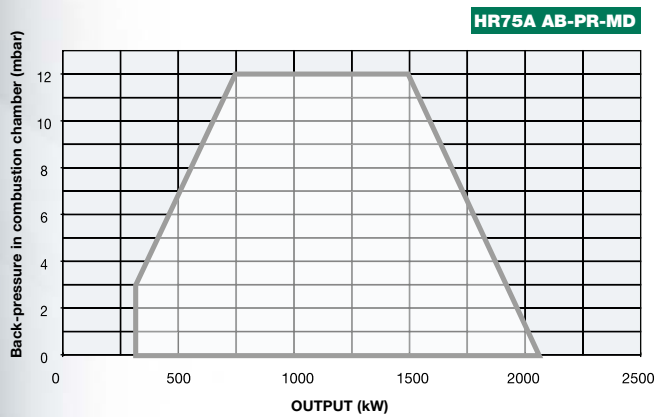
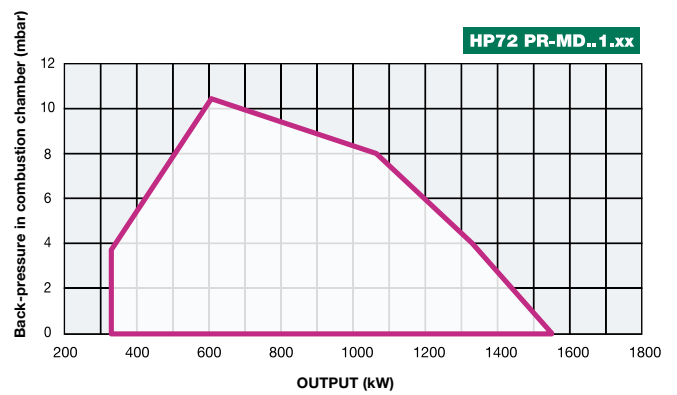
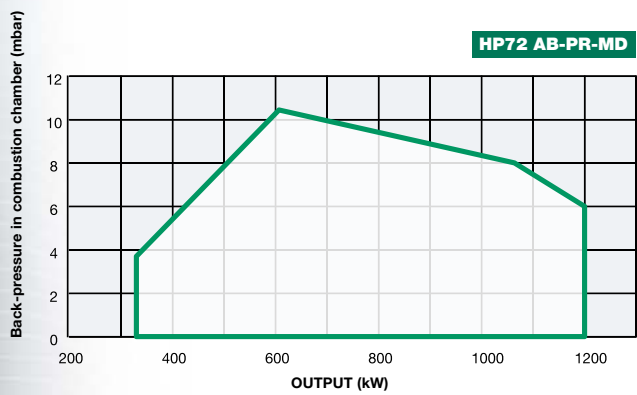
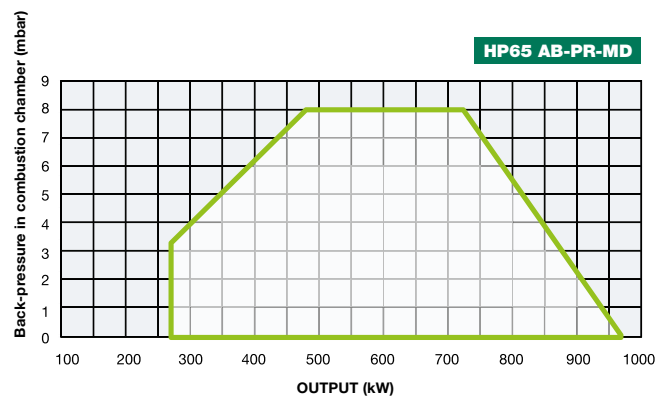
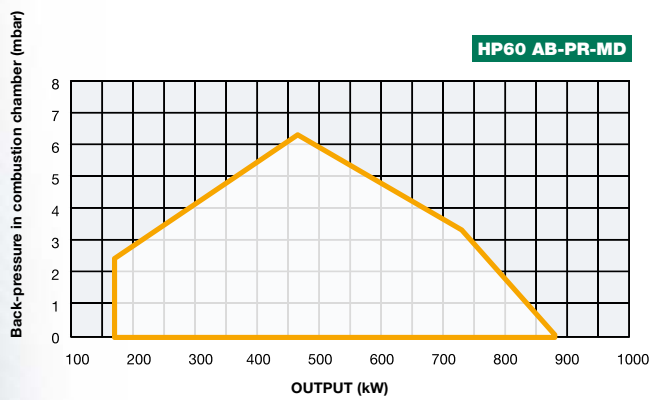
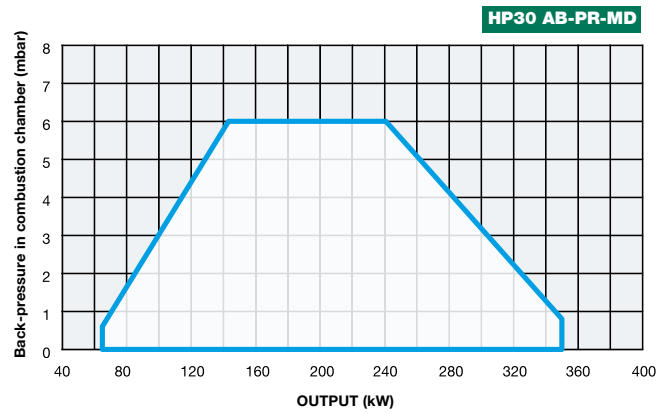
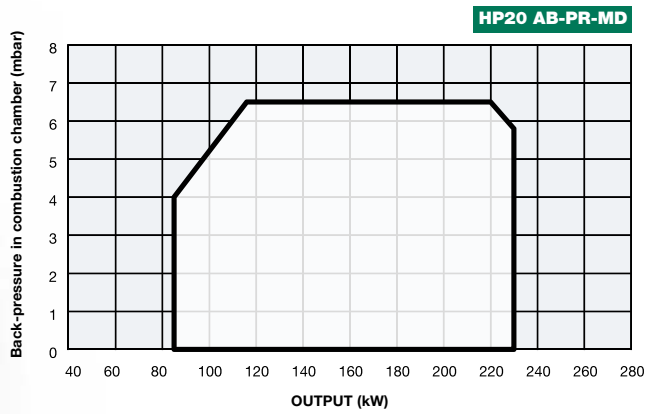
In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

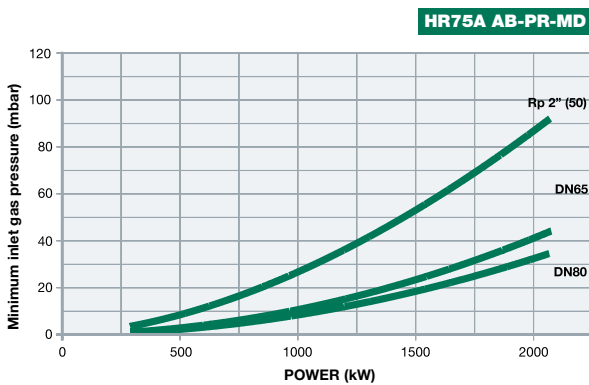
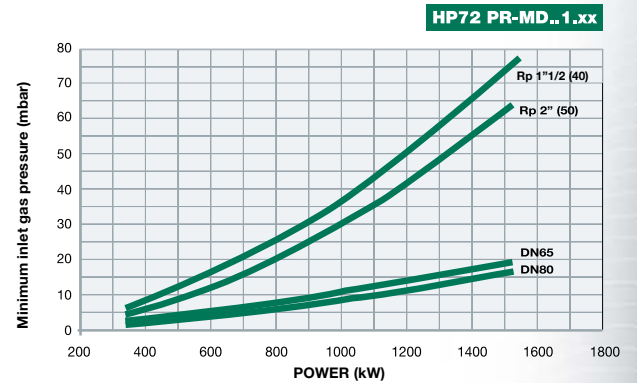
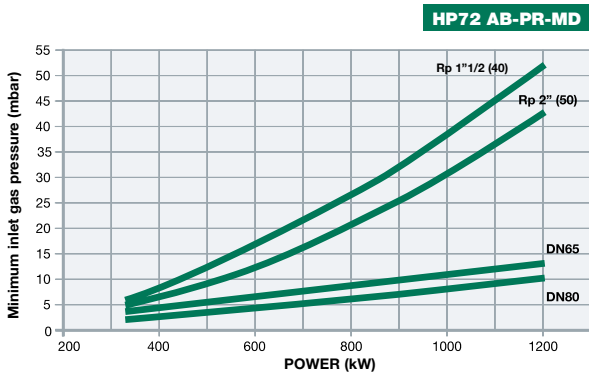
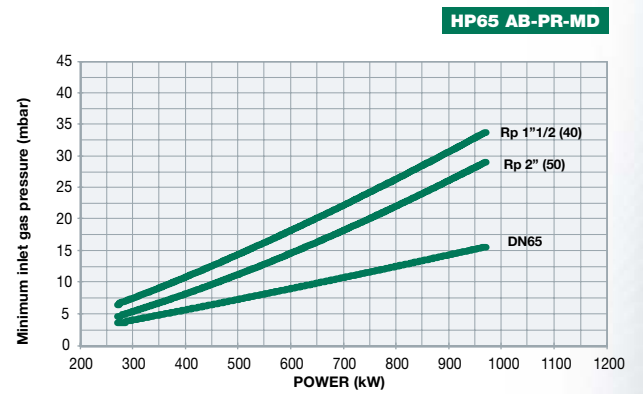
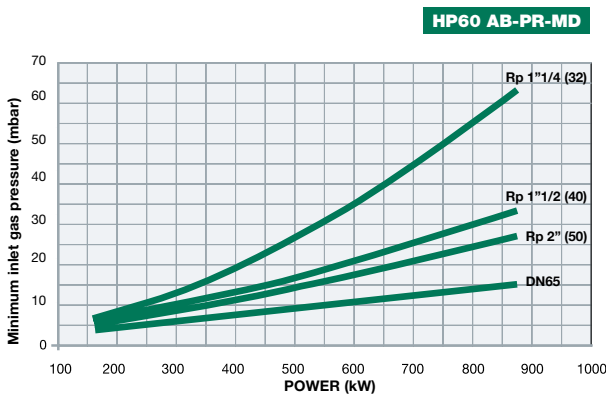
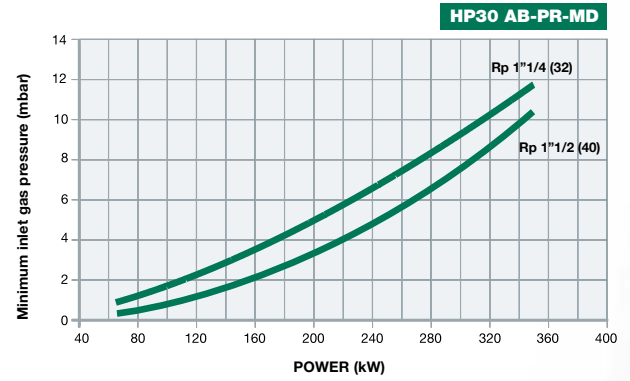
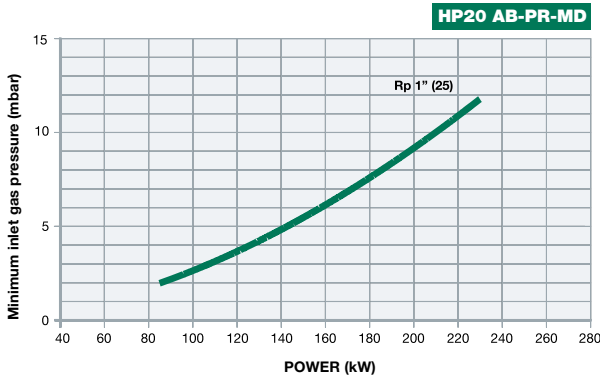
# tecnopress series

HP20 HP30 HP60 HP65 HP72 HR75A



GAS/LIGHT OIL





**Attention:** the graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.

# novanta-cinquecento series

HR91A HR92A HR93A

HR512A HR515A HR520A HR525A



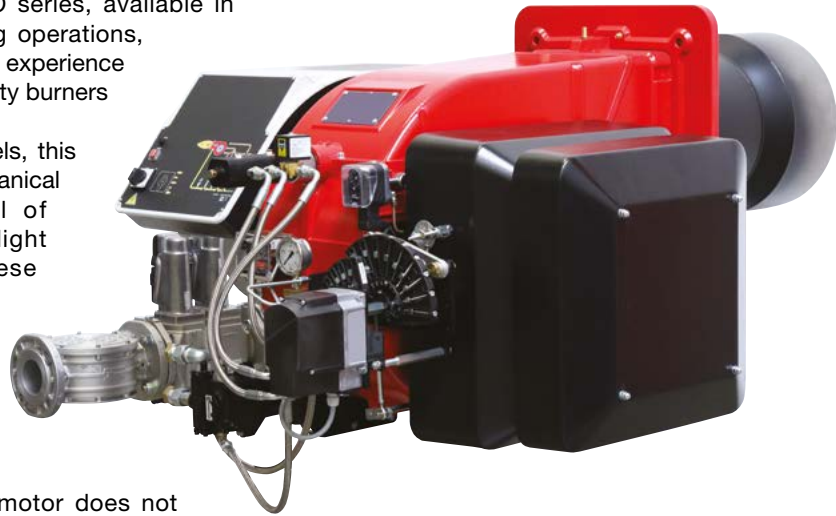
GAS/LIGHT OIL

The NOVANTA - CINQUECENTO series, available in both progressive and modulating operations, represents the culmination of our experience in the field of medium-large capacity burners (up to 8000 kW).

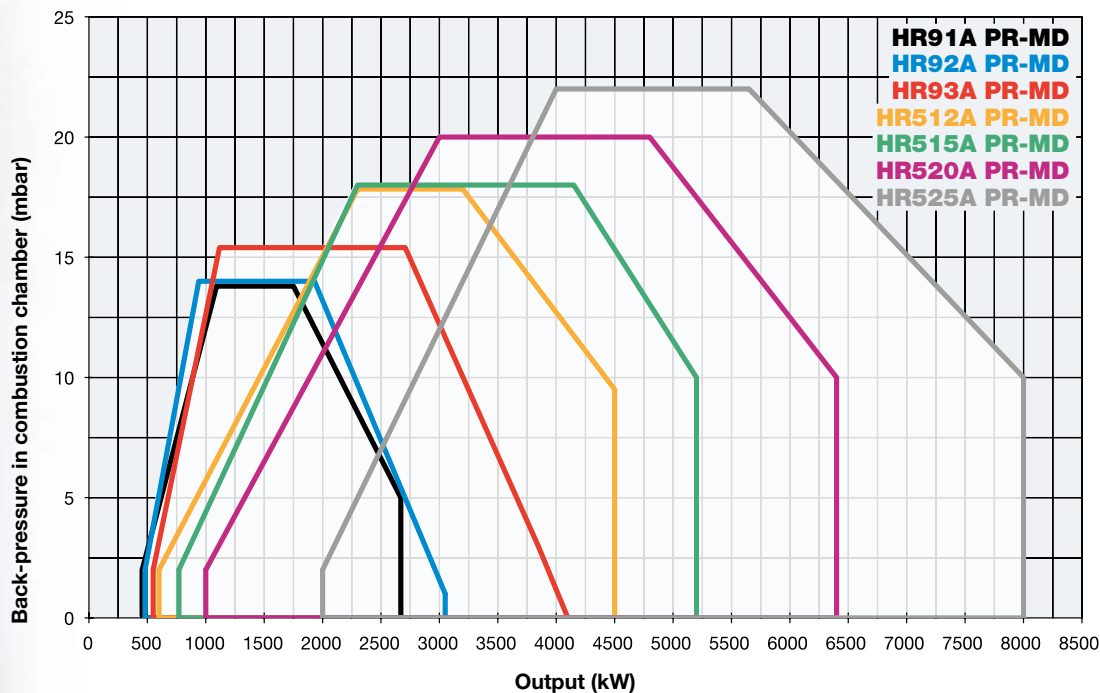
Like all the other dual fuels models, this series perfectly combine the mechanical devices and systems typical of gas burners with the ones of light oil burners. In this manner these series can burn the two flues separately.

This is possible because these burners are equipped with an independent electric motor for the activation of the oil pump. As a consequence during gas firing, the oil pump motor does not operate and remains off.

These burners are equipped with a high performance combustion head, designed to achieve an high irradiating flame when they run on natural gas. Instead, when they run on light oil, they are equipped with a by-pass nozzle which, using a pressure regulator, can reach a modulating ratio of 1:3. The control panel facia is printed with a mimic diagram fitted with neon lamps to indicate the different stages of burners operation and any abnormalities. Therefore, the burners are provided with an UV photocell to control the flame during the operation.



Electronic set up (optional)

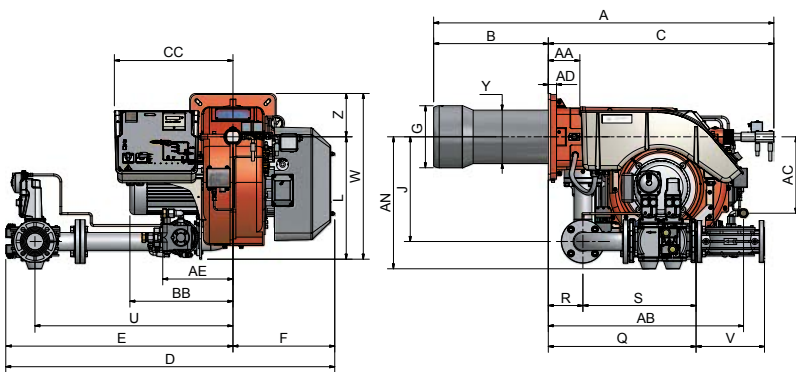




## TECHNICAL DETAILS

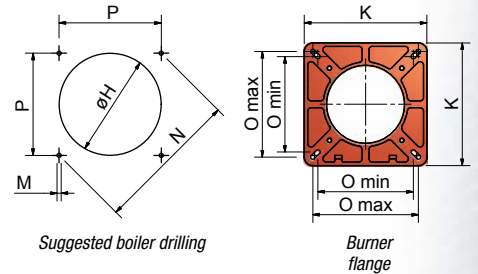
Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Gas connections
		min.	max.				
<b>HR91A</b>	MG.xx.S.IT.A.1.xx	480	2.670	230/400 V 3N ac	4,0	1,1	2" - DN65 - 80 - 100
<b>HR92A</b>	MG.xx.S.IT.A.1.xx	480	3.050	230/400 V 3N ac	5,5	1,1	2" - DN65 - 80 - 100
<b>HR93A</b>	MG.xx.S.IT.A.1.xx	550	4.100	230/400 V 3N ac	7,5	1,1	2" - DN65 - 80 - 100

For the configuration of the gas train, see pages 110-111.

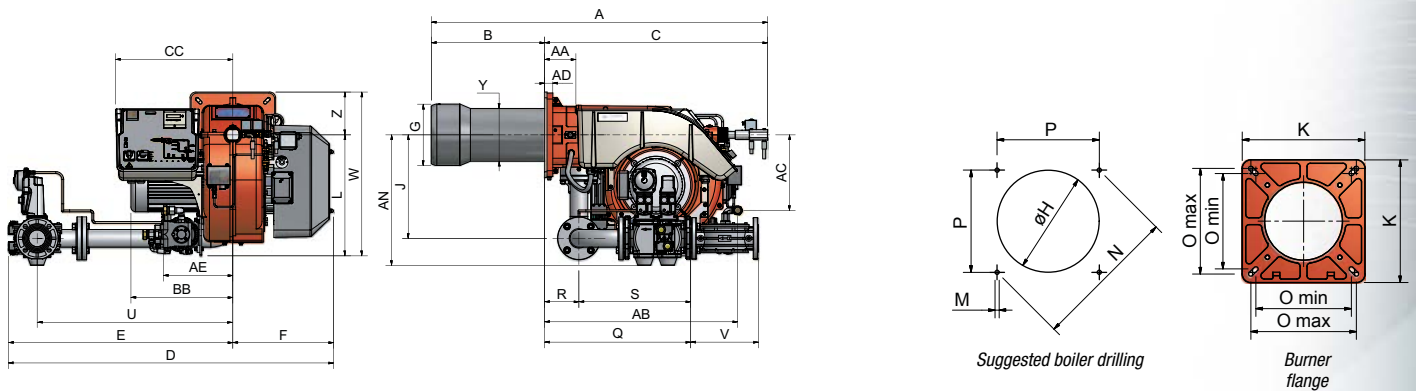


Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>HR91A/HR92A/HR93A</b>	1730	1280	1020	315

(\*) Approximate values



Type	Model	Overall dimensions* (mm)																																																			
		A	AA	AB	AC	AD	AE	AN	B	BB	C	CC	D	E	F	G	H	J	K	L	M	N	O		P	Q	R	S	U	V	W	Y	Z																				
																										min.	max.																										
<b>HR91A</b>	MG.xx.S.IT.A.1.50	1495	135	835	327	35	300	550	490	441	1005	507	1160	725	435	265	295	447	360	523	M12	424	280	310	300	532	148	384	624	190	708	228	185																				
<b>HR91A</b>	MG.xx.S.IT.A.1.65	1495	135	835	327	35	300	564	490	441	1005	507	1406	971	435	265	295	447	360	523	M12	424	280	310	300	632	148	484	846	292	708	228	185																				
<b>HR91A</b>	MG.xx.S.IT.A.1.80	1495	135	835	327	35	300	579	490	441	1005	507	1437	1002	435	265	295	447	360	523	M12	424	280	310	300	683	148	535	875	313	708	228	185																				
<b>HR91A</b>	MG.xx.S.IT.A.1.100	1495	135	835	327	35	300	592	490	441	1005	507	1520	1085	435	265	295	447	360	523	M12	424	280	310	300	790	148	642	942	353	708	228	185																				



Type	Model	Overall dimensions* (mm)																																																			
		A	AA	AB	AC	AD	AE	AN	B	BB	C	CC	D	E	F	G	H	J	K	L	M	N	O		P	Q	R	S	U	V	W	Y	Z																				
																										min.	max.																										
<b>HR92A</b>	MG.xx.S.IT.A.1.50	1495	135	835	327	35	300	550	490	441	1005	507	1160	725	435	269	299	447	360	523	M12	424	280	310	300	532	148	384	624	190	708	228	185																				
<b>HR92A</b>	MG.xx.S.IT.A.1.65	1495	135	835	327	35	300	564	490	441	1005	507	1406	971	435	269	299	447	360	523	M12	424	280	310	300	632	148	484	846	292	708	228	185																				
<b>HR92A</b>	MG.xx.S.IT.A.1.80	1495	135	835	327	35	300	579	490	441	1005	507	1437	1002	435	269	299	447	360	523	M12	424	280	310	300	683	148	535	875	313	708	228	185																				
<b>HR92A</b>	MG.xx.S.IT.A.1.100	1495	135	835	327	35	300	592	490	441	1005	507	1520	1085	435	269	299	447	360	523	M12	424	280	310	300	790	148	642	942	353	708	228	185																				
<b>HR93A</b>	MG.xx.S.IT.A.1.50	1495	135	835	327	35	300	550	495	493	1005	507	1160	725	435	304	344	447	360	523	M12	424	280	310	300	532	148	384	624	190	708	228	185																				
<b>HR93A</b>	MG.xx.S.IT.A.1.65	1495	135	835	327	35	300	564	495	493	1005	507	1406	971	435	304	344	447	360	523	M12	424	280	310	300	632	148	484	846	292	708	228	185																				
<b>HR93A</b>	MG.xx.S.IT.A.1.80	1495	135	835	327	35	300	579	495	493	1005	507	1437	1002	435	304	344	447	360	523	M12	424	280	310	300	683	148	535	875	313	708	228	185																				
<b>HR93A</b>	MG.xx.S.IT.A.1.100	1495	135	835	327	35	300	592	495	493	1005	507	1520	1085	435	304	344	447	360	523	M12	424	280	310	300	790	148	642	942	353	708	228	185																				

(\*) Approximate values

# novanta-cinquecento series

HR91A HR92A HR93A

HR512A HR515A HR520A HR525A

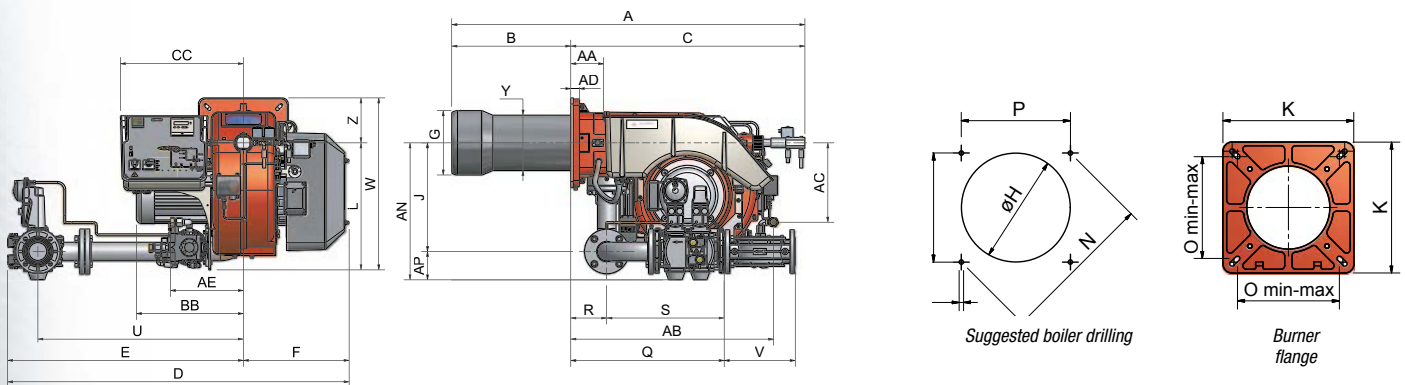


GAS/LIGHT OIL

## TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Gas connections
		min.	max.				
HR512A	MG.xx.S.IT.A.1.xxx	600	4.500	230/400 V 3N ac	9,2	1,1	2" - DN65 - 80 - 100
HR515A	MG.xx.S.IT.A.1.xxx	770	5.200	230/400 V 3N ac	11,0	1,5	2" - DN65 - 80 - 100
HR520A	MG.xx.S.IT.A.1.xxx	1.000	6.400	230/400 V 3N ac	15,0	1,5	2" - DN65 - 80 - 100
HR525A	MG.xx.S.IT.A.1.xxx	2.000	8.000	400 V 3N ac	18,5	3,0	DN65 - 80 - 100

For the configuration of the gas train, see pages 110-111.



Type	Packaging dimensions* (mm)			
	l	p	h	kg
HR512A	1730	1430	1130	340
HR515A	1730	1430	1130	360
HR520A	1730	1430	1130	375
HR525A	1800	1500	1300	400

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																														
		A	AA	AB	AC	AD	AE	AN	B	BB	C	CC	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	U	V	W	Y	Z
HR512A	MG.xx.S.IT.A.1.50	1669	220	924	364	35	348	595	530	517	1139	532	1590	946	644	340	380	494	540	494	M14	552	390	390	763	149	614	845	190	830	328	270
HR512A	MG.xx.S.IT.A.1.65	1669	220	924	364	35	348	611	530	517	1139	532	1613	969	644	340	380	494	540	494	M14	552	390	390	636	149	487	845	292	830	328	270
HR512A	MG.xx.S.IT.A.1.80	1669	220	924	364	35	348	626	530	517	1139	532	1645	1002	644	340	380	494	540	494	M14	552	390	390	687	149	538	875	313	830	328	270
HR512A	MG.xx.S.IT.A.1.100	1669	220	924	364	35	348	639	530	517	1139	532	1726	1082	644	340	380	494	540	494	M14	552	390	390	791	149	642	942	353	830	328	270
HR515A	MG.xx.S.IT.A.1.50	1669	220	928	371	35	348	595	530	517	1139	532	1590	946	644	380	420	494	540	494	M14	552	390	390	763	149	614	845	190	830	328	270
HR515A	MG.xx.S.IT.A.1.65	1669	220	928	371	35	348	611	530	517	1139	532	1613	969	644	380	420	494	540	494	M14	552	390	390	636	149	487	845	292	830	328	270
HR515A	MG.xx.S.IT.A.1.80	1669	220	928	371	35	348	626	530	517	1139	532	1645	1002	644	380	420	494	540	494	M14	552	390	390	687	149	538	875	313	830	328	270
HR515A	MG.xx.S.IT.A.1.100	1669	220	928	371	35	348	639	530	517	1141	532	1726	1082	644	380	420	494	540	494	M14	552	390	390	791	149	642	942	353	830	328	270
HR520A	MG.xx.S.IT.A.1.50	1671	220	928	371	35	348	595	530	517	1141	532	1590	946	644	400	450	494	540	494	M14	552	390	390	763	149	614	845	190	830	328	270
HR520A	MG.xx.S.IT.A.1.65	1671	220	928	371	35	348	611	530	517	1141	532	1613	969	644	400	450	494	540	494	M14	552	390	390	636	149	487	845	292	830	328	270
HR520A	MG.xx.S.IT.A.1.80	1671	220	928	371	35	348	626	530	517	1141	532	1645	1002	644	400	450	494	540	494	M14	552	390	390	687	149	538	875	313	830	328	270
HR520A	MG.xx.S.IT.A.1.100	1671	220	928	371	35	348	639	530	517	1141	532	1726	1082	644	400	450	494	540	494	M14	552	390	390	791	149	642	942	353	830	328	270
HR525A	MG.xx.S.IT.A.1.65	1671	220	928	580	35	348	611	530	650	1141	650	1613	969	644	434	484	494	540	494	M14	552	390	390	636	149	487	845	292	874	328	270
HR525A	MG.xx.S.IT.A.1.80	1671	220	884	580	35	348	626	530	650	1141	650	1645	1002	644	434	484	494	540	494	M14	552	390	390	687	149	538	875	313	874	328	270
HR525A	MG.xx.S.IT.A.1.100	1671	220	884	580	35	348	639	530	650	1141	650	1726	1082	644	434	484	494	540	494	M14	552	390	390	792	149	642	942	353	874	328	270

(\*) Approximate values





## MECHANICAL OPERATION

Model	Gas train	Operation	HR91A		HR92A		HR93A	
			Code	Price €	Code	Price €	Code	Price €
MG.PR.S.IT.A.1.50	2"	PR	012073753		012074153		012074553	
MG.PR.S.IT.A.1.65	DN65	PR	012073853		012074253		012074653	
MG.PR.S.IT.A.1.80	DN80	PR	012073953		012074353		012074753	
MG.PR.S.IT.A.1.100	DN100	PR	012074053		012074453		012074853	
MG.MD.S.IT.A.1.50	2"	MD(*)	012073754		012074154		012074554	
MG.MD.S.IT.A.1.65	DN65	MD(*)	012073854		012074254		012074654	
MG.MD.S.IT.A.1.80	DN80	MD(*)	012073954		012074354		012074754	
MG.MD.S.IT.A.1.100	DN100	MD(*)	012074054		012074454		012074854	

Model	Gas train	Operation	HR512A		HR515A	
			Code	Price €	Code	Price €
MG.PR.S.IT.A.1.50	2"	PR	029070153		029070553	
MG.PR.S.IT.A.1.65	DN65	PR	029070253		029070653	
MG.PR.S.IT.A.1.80	DN80	PR	029070353		029070753	
MG.PR.S.IT.A.1.100	DN100	PR	029070453		029070853	
MG.MD.S.IT.A.1.50	2"	MD(*)	029070154		029070554	
MG.MD.S.IT.A.1.65	DN65	MD(*)	029070254		029070654	
MG.MD.S.IT.A.1.80	DN80	MD(*)	029070354		029070754	
MG.MD.S.IT.A.1.100	DN100	MD(*)	029070454		029070854	

Model	Gas train	Operation	HR520A		HR525A	
			Code	Price €	Code	Price €
MG.PR.S.IT.A.1.50	2"	PR	029070953		-	
MG.PR.S.IT.A.1.65	DN65	PR	029071053		029071453	
MG.PR.S.IT.A.1.80	DN80	PR	029071153		029071553	
MG.PR.S.IT.A.1.100	DN100	PR	029071253		029071653	
MG.MD.S.IT.A.1.50	2"	MD(*)	029070954		-	
MG.MD.S.IT.A.1.65	DN65	MD(*)	029071054		029071454	
MG.MD.S.IT.A.1.80	DN80	MD(*)	029071154		029071554	
MG.MD.S.IT.A.1.100	DN100	MD(*)	029071254		029071654	

■ Burner equipped with external air inlet

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, pages 250)

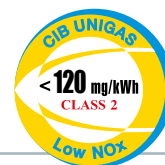
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In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

# novanta-cinquecento series

HR91A HR92A HR93A

HR512A HR515A HR520A HR525A



GAS/LIGHT OIL

## ELECTRONIC OPERATION

Model	Gas train	Operation	HR91A		HR92A		HR93A	
			Code	Price €	Code	Price €	Code	Price €
MG.PR.S.IT.A.1.50.EC	2"	PR	01207265C		01207295C		01207335C	
MG.PR.S.IT.A.1.65.EC	DN65	PR	01207275C		01207305C		01207345C	
MG.PR.S.IT.A.1.80.EC	DN80	PR	01207285C		01207315C		01207355C	
MG.PR.S.IT.A.1.100.EC	DN100	PR	01207295C		01207325C		01207365C	
MG.MD.S.IT.A.1.50.EC	2"	MD(*)	01207265G		01207295G		01207335G	
MG.MD.S.IT.A.1.65.EC	DN65	MD(*)	01207275G		01207305G		01207345G	
MG.MD.S.IT.A.1.80.EC	DN80	MD(*)	01207285G		01207315G		01207355G	
MG.MD.S.IT.A.1.100.EC	DN100	MD(*)	01207295G		01207325G		01207365G	
MG.MD.S.xx.A.1.50.ES	2"	MD(*)	01207265S		01207295S		01207335S	
MG.MD.S.xx.A.1.65.ES	DN65	MD(*)	01207275S		01207305S		01207345S	
MG.MD.S.xx.A.1.80.ES	DN80	MD(*)	01207285S		01207315S		01207355S	
MG.MD.S.xx.A.1.100.ES	DN100	MD(*)	01207295S		01207325S		01207365S	

Model	Gas train	Operation	HR512A		HR515A	
			Code	Price €	Code	Price €
MG.PR.S.IT.A.1.50.EC	2"	PR	02907015C		02907055C	
MG.PR.S.IT.A.1.65.EC	DN65	PR	02907025C		02907065C	
MG.PR.S.IT.A.1.80.EC	DN80	PR	02907035C		02907075C	
MG.PR.S.IT.A.1.100.EC	DN100	PR	02907045C		02907085C	
MG.MD.S.IT.A.1.50.EC	2"	MD(*)	02907015G		02907055G	
MG.MD.S.IT.A.1.65.EC	DN65	MD(*)	02907025G		02907065G	
MG.MD.S.IT.A.1.80.EC	DN80	MD(*)	02907035G		02907075G	
MG.MD.S.IT.A.1.100.EC	DN100	MD(*)	02907045G		02907085G	
MG.MD.S.xx.A.1.50.ES	2"	MD(*)	02907015S		02907055S	
MG.MD.S.xx.A.1.65.ES	DN65	MD(*)	02907025S		02907065S	
MG.MD.S.xx.A.1.80.ES	DN80	MD(*)	02907035S		02907075S	
MG.MD.S.xx.A.1.100.ES	DN100	MD(*)	02907045S		02907085S	

Model	Gas train	Operation	HR520A		HR525A	
			Code	Price €	Code	Price €
MG.PR.S.IT.A.1.50.EC	2"	PR	02907095C		-	
MG.PR.S.IT.A.1.65.EC	DN65	PR	02907105C		02907145C	
MG.PR.S.IT.A.1.80.EC	DN80	PR	02907115C		02907155C	
MG.PR.S.IT.A.1.100.EC	DN100	PR	02907125C		02907165C	
MG.MD.S.IT.A.1.50.EC	2"	MD(*)	02907095G		-	
MG.MD.S.IT.A.1.65.EC	DN65	MD(*)	02907105G		02907145G	
MG.MD.S.IT.A.1.80.EC	DN80	MD(*)	02907115G		02907155G	
MG.MD.S.IT.A.1.100.EC	DN100	MD(*)	02907125G		02907165G	
MG.MD.S.IT.A.1.50.ES	2"	MD(*)	02907095S		-	
MG.MD.S.IT.A.1.65.ES	DN65	MD(*)	02907105S		02907145S	
MG.MD.S.IT.A.1.80.ES	DN80	MD(*)	02907115S		02907155S	
MG.MD.S.IT.A.1.100.ES	DN100	MD(*)	02907125S		02907165S	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, pages 250)

In compliance with DIRECTIVE 2009/142/CE

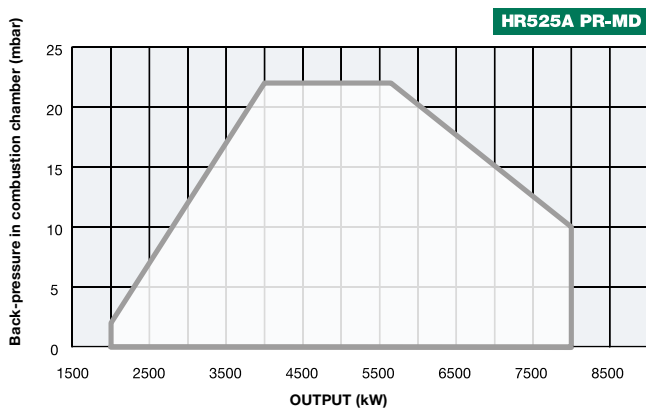
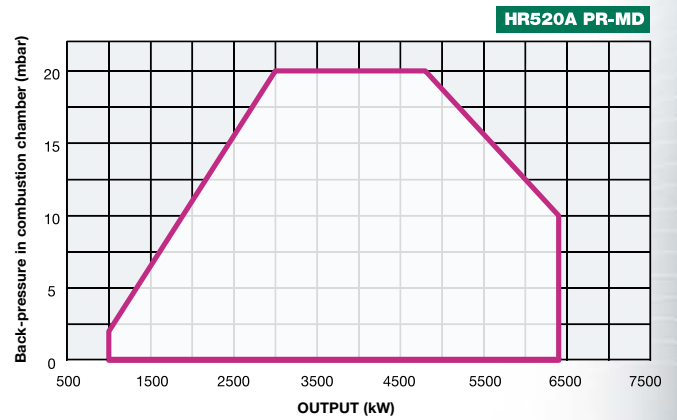
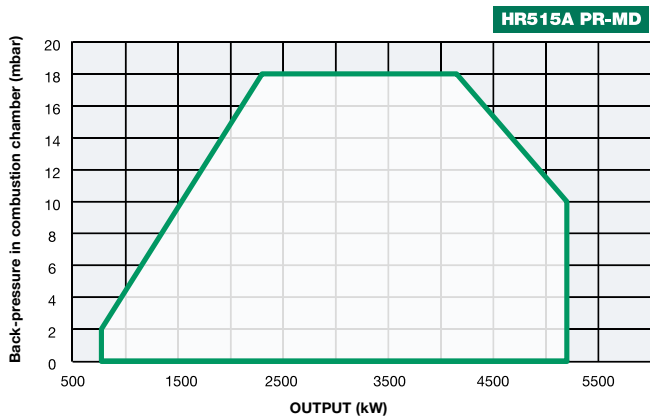
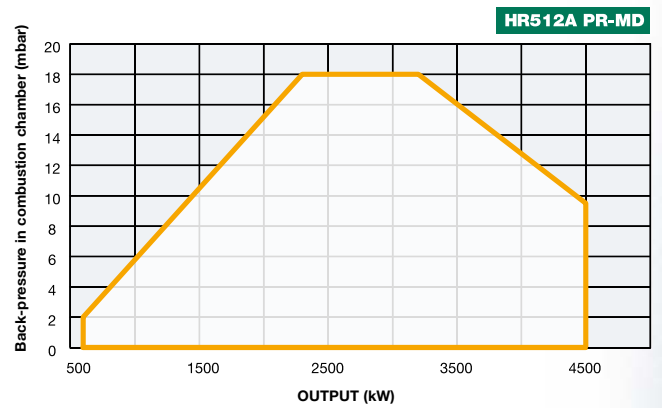
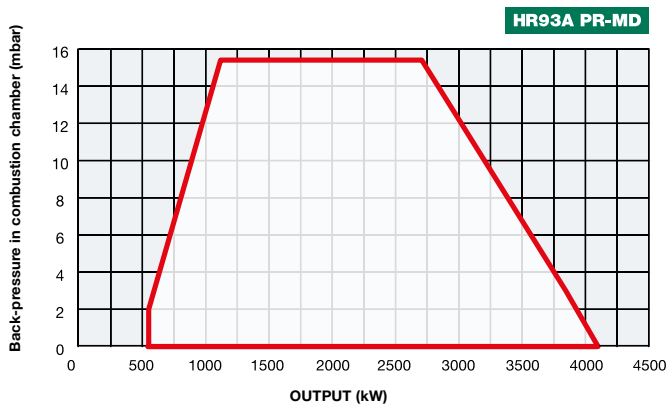
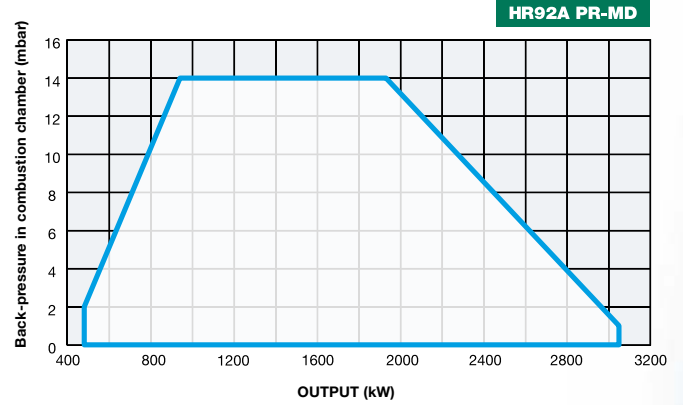
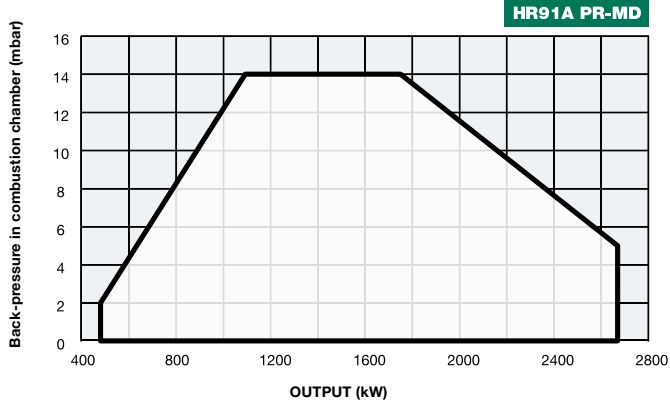
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# novanta-cinquecento series

HR91A HR92A HR93A

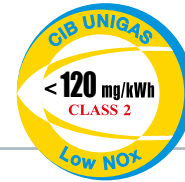
HR512A HR515A HR520A HR525A



# novanta-cinquecento series

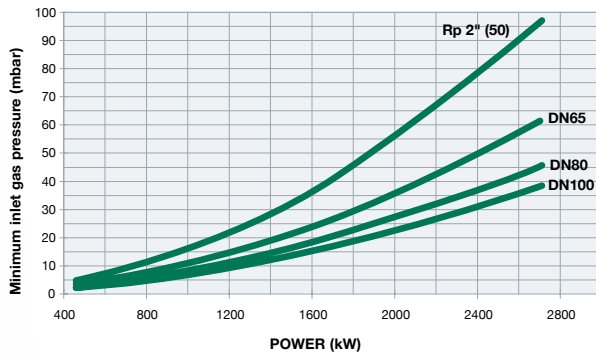
HR91A HR92A HR93A

HR512A HR515A HR520A HR525A

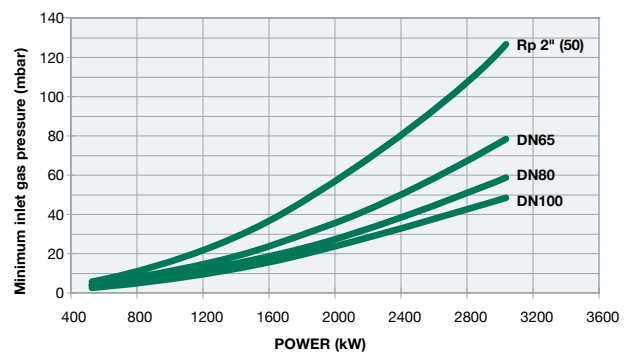


GAS/LIGHT OIL

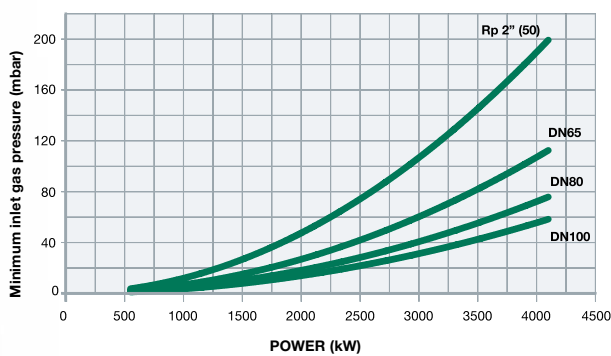
**HR91A PR-MD**



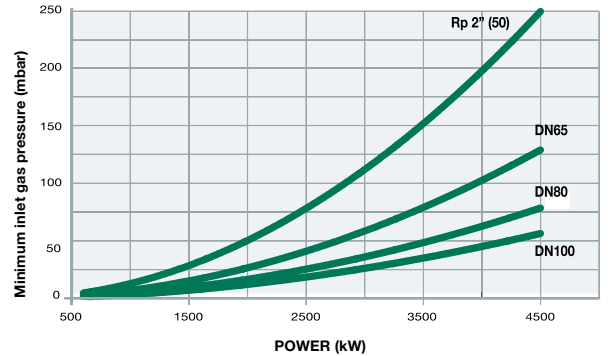
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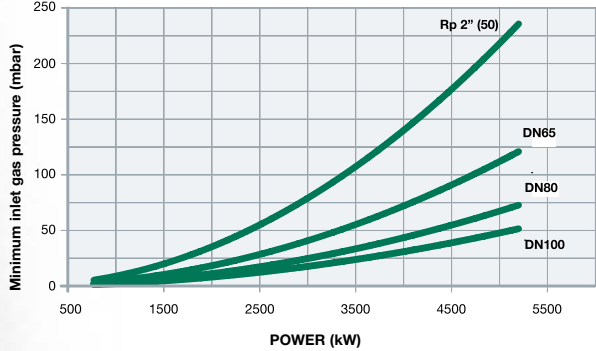
**HR93A PR-MD**



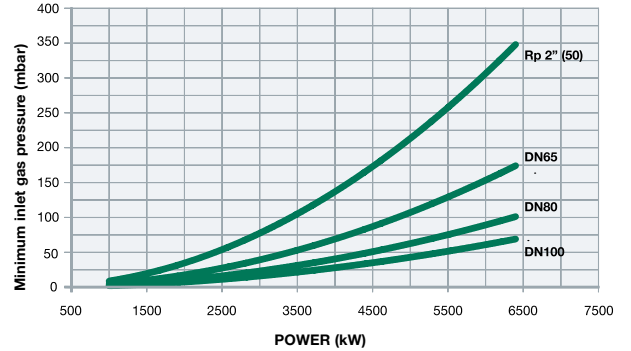
**HR512A PR-MD**



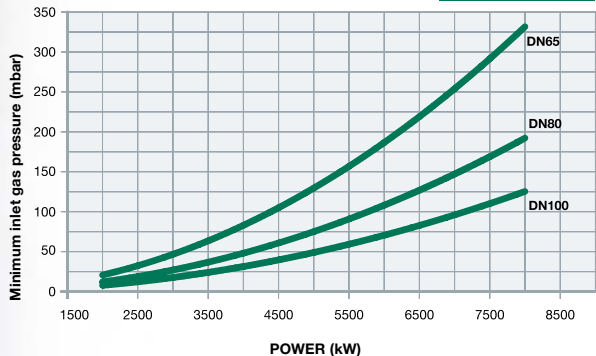
**HR515A PR-MD**



**HR520A PR-MD**



**HR525A PR-MD**



**Attention:** The graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.



The HR1000 series represents, in terms of performance curve and dimensions, the most powerful version of our dual flue (gas - light oil) burners (up to 13.000 kW).

These burners are made of a solid aluminium housing and are suitable both for industrial applications, big heating plants and public users (hospitals, universities, etc.).

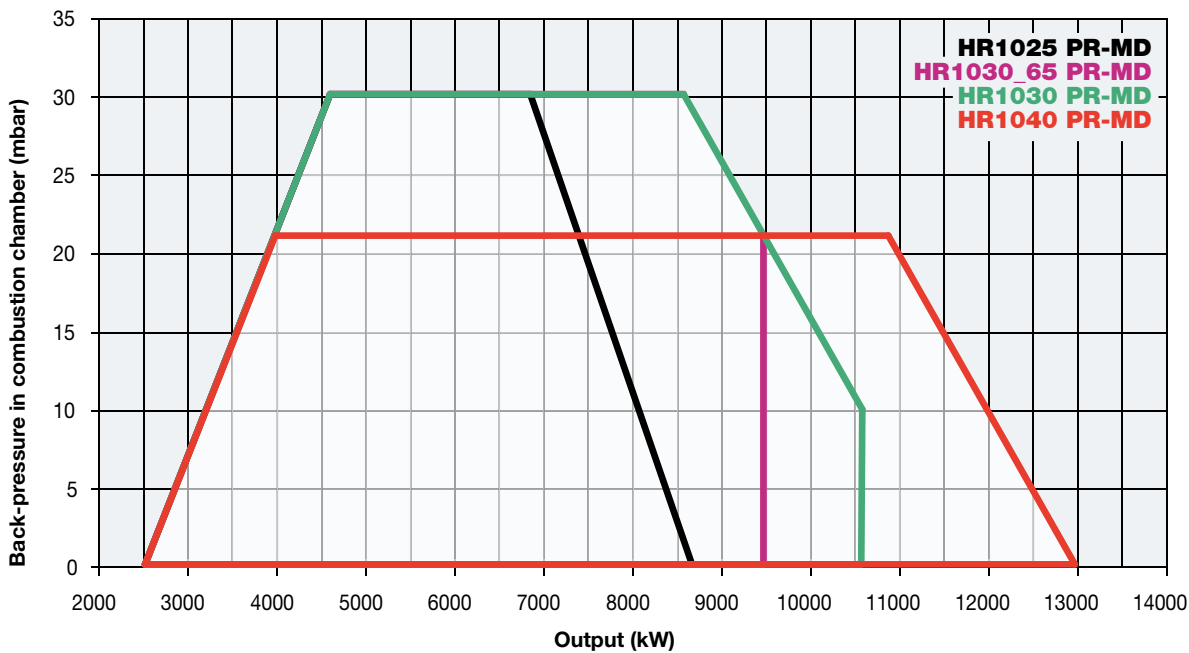
The possibility of using both flues separately, the manageability and the easy maintenance, notwithstanding its big dimensions, make this series of burners really special.

These burners may be produced both in the version of progressive and modulating operation.

Upon request they can be customized through an electronic control system which controls the O<sub>2</sub> flow at any stages, optimizing the efficiency, and through a control panel in form of either remote console type, cabinet type or wall mounted type.



*Electronic set up (optional)*

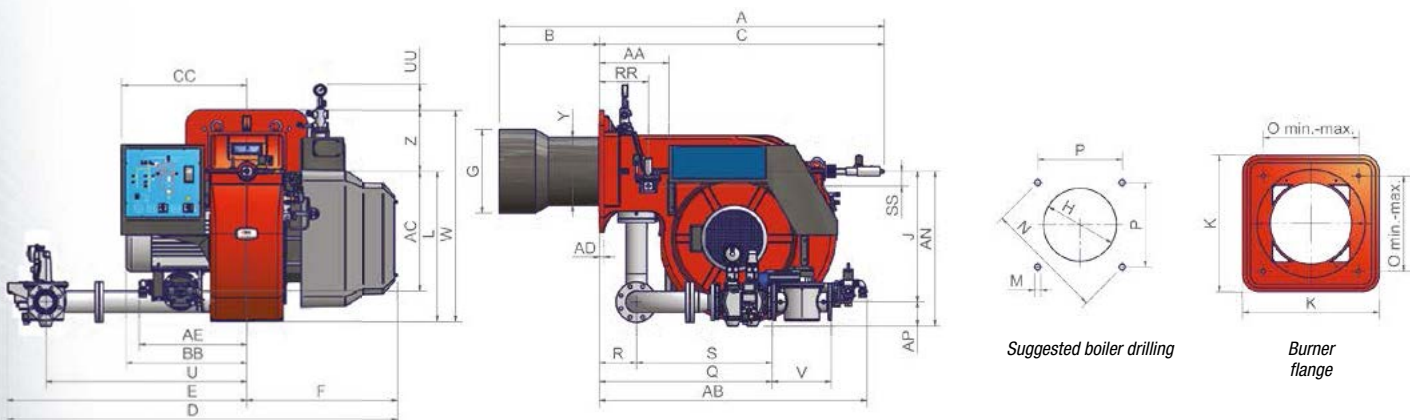


TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Gas connections
		min.	max.				
HR1025	MG.xx.S.IT.A.1.xx	2.550	8.700	400 V 3N ac	18,5	4	DN 65 - 80 - 100
HR1030	MG.xx.S.IT.A.1.65	2.550	9.500	400 V 3N ac	22,0	4	DN65
HR1030	MG.xx.S.IT.A.1.xx	2.550	10.600	400 V 3N ac	22,0	4	DN 80 - 100
HR1040	MG.xx.S.IT.A.1.xx	2.550	13.000	400 V 3N ac	30,0	5,5	DN80 - 100 - 125

For the configuration of the gas train, see pages 110-111.

**N.B. Monoblock burners Duemila series with the capacity up to 19 MW consult ours sales officies.**



Type	Packaging dimensions* (mm)			
	l	p	h	kg
HR1025/HR1030/HR1040	2270	1720	1320	700

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																																		
		A	AA	AB	AC	AD	AE	AN	AP	B	BB	C	CC	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	RR	S	SS	U	UU	V	W	Y	Z
HR1025	MG.xx.S.IT.A.1.65	2088	377	1452	651	25	585	827	118	544	641	1544	680	2121	1299	822	400	450	709	660	816	M16	651	460	460	914	200	265	714	80	1092	142	292	1146	379	330
HR1025	MG.xx.S.IT.A.1.80	2088	377	1452	651	25	585	841	132	544	641	1544	680	2123	1301	822	400	450	709	660	816	M16	651	460	460	936	200	265	736	80	1092	142	322	1146	379	330
HR1025	MG.xx.S.IT.A.1.100	2088	377	1452	651	25	585	854	145	544	641	1544	680	2139	1317	822	400	450	709	660	816	M16	651	460	460	842	200	265	642	80	1092	142	382	1146	379	330
HR1030	MG.xx.S.IT.A.1.65	2088	377	1452	651	25	585	827	118	544	657	1544	680	2121	1299	822	454	504	709	660	816	M16	651	460	460	914	200	265	714	80	1092	142	292	1146	372	330
HR1030	MG.xx.S.IT.A.1.80	2088	377	1452	651	25	585	841	132	544	657	1544	680	2123	1301	822	454	504	709	660	816	M16	651	460	460	936	200	265	736	80	1092	142	322	1146	372	330
HR1030	MG.xx.S.IT.A.1.100	2088	377	1452	651	25	585	854	145	544	657	1544	680	2139	1317	822	454	504	709	660	816	M16	651	460	460	842	200	265	642	80	1092	142	382	1146	372	330
HR1040	MG.xx.S.IT.A.1.80	2106	377	1452	651	25	585	841	132	544	657	1562	680	2123	1301	822	514	564	709	660	816	M16	651	460	460	936	200	265	736	80	1092	142	322	1146	408	330
HR1040	MG.xx.S.IT.A.1.100	2106	377	1452	651	25	585	854	145	544	657	1562	680	2139	1317	822	514	564	709	660	816	M16	651	460	460	842	200	265	642	80	1092	142	382	1146	408	330
HR1040	MG.xx.S.IT.A.1.125	2106	377	1452	651	25	585	884	175	544	657	1562	680	2254	1432	822	514	564	709	660	816	M16	651	460	460	954	200	265	754	80	1192	142	480	1146	408	330

(\*) Approximate values


**MECHANICAL OPERATION**

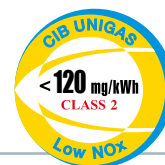
Model	Gas train	Operation	HR1025		HR1030	
			Code	Price €	Code	Price €
<b>MG.PR.S.IT.A.1.65</b>	DN65	PR	023071653		023071953	
<b>MG.PR.S.IT.A.1.80</b>	DN80	PR	023071753		023072053	
<b>MG.PR.S.IT.A.1.100</b>	DN100	PR	023071853		023072153	
<b>MG.MD.S.IT.A.1.65</b>	DN65	MD(*)	023071654		023071954	
<b>MG.MD.S.IT.A.1.80</b>	DN80	MD(*)	023071754		023072054	
<b>MG.MD.S.IT.A.1.100</b>	DN100	MD(*)	023071854		023072154	

Model	Gas train	Operation	HR1040	
			Code	Price €
<b>MG.PR.S.IT.A.1.80</b>	DN80	PR	023072253	
<b>MG.PR.S.IT.A.1.100</b>	DN100	PR	023072353	
<b>MG.PR.S.IT.A.1.125</b>	DN125	PR	023072453	
<b>MG.MD.S.IT.A.1.80</b>	DN80	MD(*)	023072254	
<b>MG.MD.S.IT.A.1.100</b>	DN100	MD(*)	023072354	
<b>MG.MD.S.IT.A.1.125</b>	DN125	MD(*)	023072454	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, pages 250)

In compliance with DIRECTIVE 2009/142/CE

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE



**ELECTRONIC OPERATION**

Model	Gas train	Operation	HR1025		HR1030	
			Code	Price €	Code	Price €
<b>MG.PR.S.IT.A.1.65.EC</b>	DN65	PR	02307165C		02307195C	
<b>MG.PR.S.IT.A.1.80.EC</b>	DN80	PR	02307175C		02307205C	
<b>MG.PR.S.IT.A.1.100.EC</b>	DN100	PR	02307185C		02307215C	
<b>MG.MD.S.IT.A.1.65.EC</b>	DN65	MD(*)	02307165G		02307195G	
<b>MG.MD.S.IT.A.1.80.EC</b>	DN80	MD(*)	02307175G		02307205G	
<b>MG.MD.S.IT.A.1.100.EC</b>	DN100	MD(*)	02307185G		02307215G	

Model	Gas train	Operation	HR1040	
			Code	Price €
<b>MG.PR.S.IT.A.1.80.EC</b>	DN80	PR	02307225C	
<b>MG.PR.S.IT.A.1.100.EC</b>	DN100	PR	02307235C	
<b>MG.PR.S.IT.A.1.125.EC</b>	DN125	PR	02307245C	
<b>MG.MD.S.IT.A.1.80.EC</b>	DN80	MD(*)	02307225G	
<b>MG.MD.S.IT.A.1.100.EC</b>	DN100	MD(*)	02307235G	
<b>MG.MD.S.IT.A.1.125.EC</b>	DN125	MD(*)	02307245G	

Model	Gas train	Operation	HR1025		HR1030	
			Code	Price €	Code	Price €
<b>MG.MD.S.IT.A.1.65.ES</b>	DN65	MD(*)	02307025S		02307065S	
<b>MG.MD.S.IT.A.1.80.ES</b>	DN80	MD(*)	02307035S		02307075S	
<b>MG.MD.S.IT.A.1.100.ES</b>	DN100	MD(*)	02307045S		02307085S	

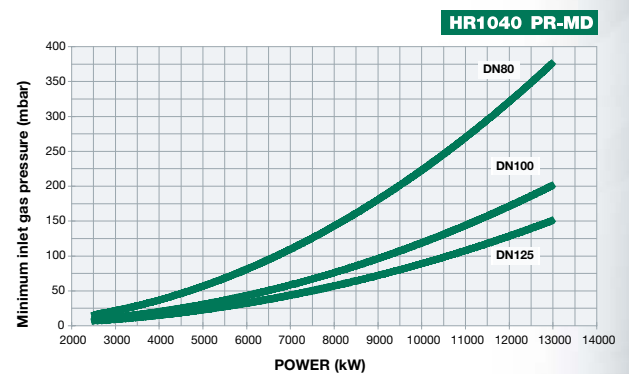
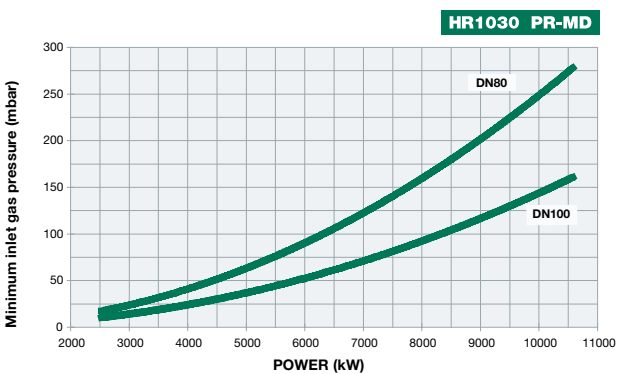
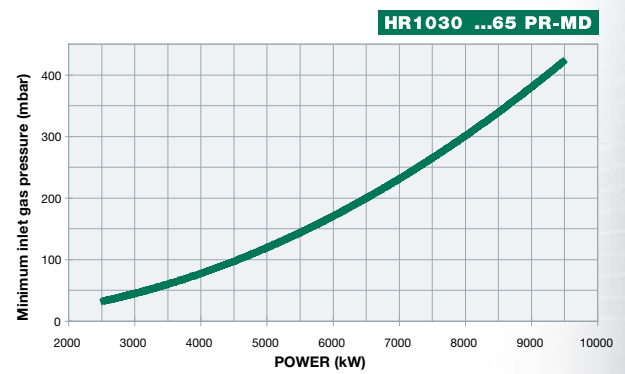
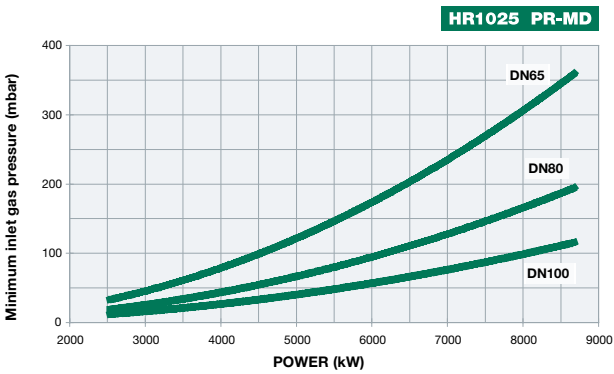
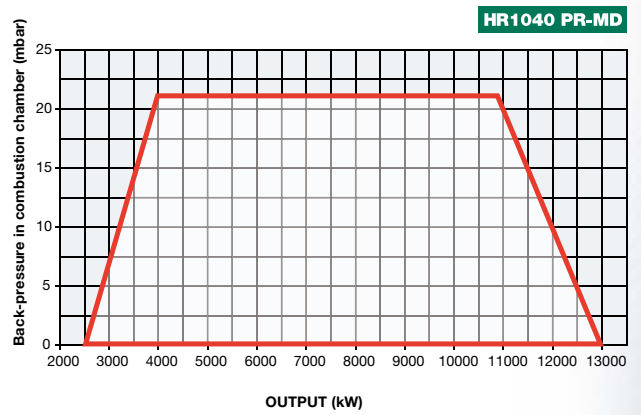
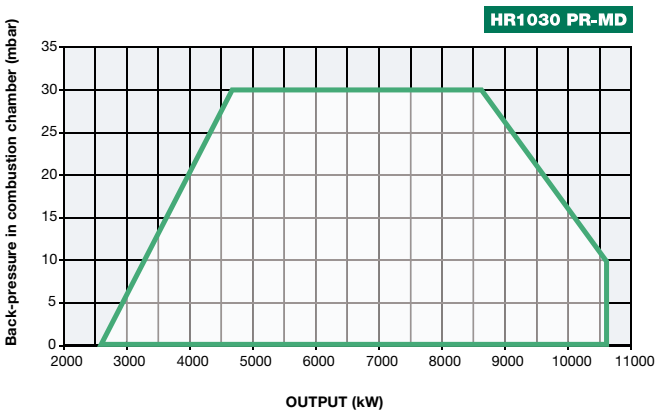
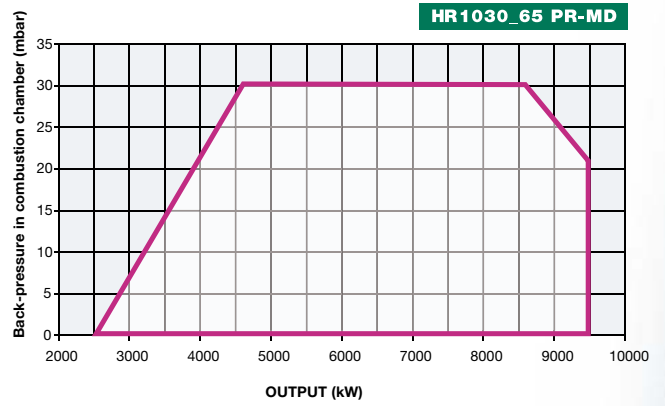
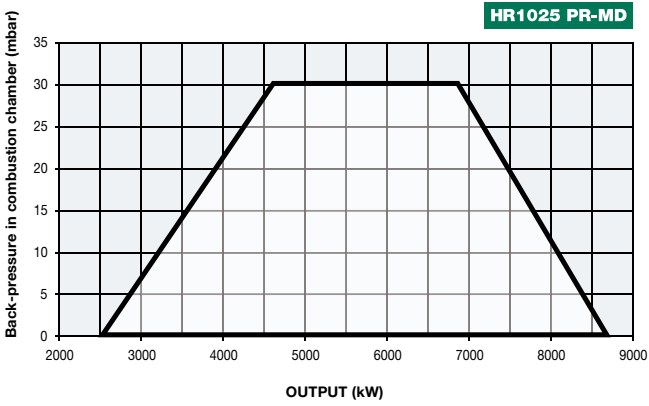
Model	Gas train	Operation	HR1040	
			Code	Price €
<b>MG.MD.S.IT.A.1.80.ES</b>	DN80	MD(*)	02307095S	
<b>MG.MD.S.IT.A.1.100.ES</b>	DN100	MD(*)	02307105S	
<b>MG.MD.S.IT.A.1.125.ES</b>	DN125	MD(*)	02307115S	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, pages 250)

In compliance with DIRECTIVE 2009/142/CE

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE





Attention: the graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.



# low NOx gas/light oil burners

## tecnopress series

HRX75R - PR/MD

## novanta - cinquecento series

HRX92 - PR/MD

HRX 512 - PR/MD

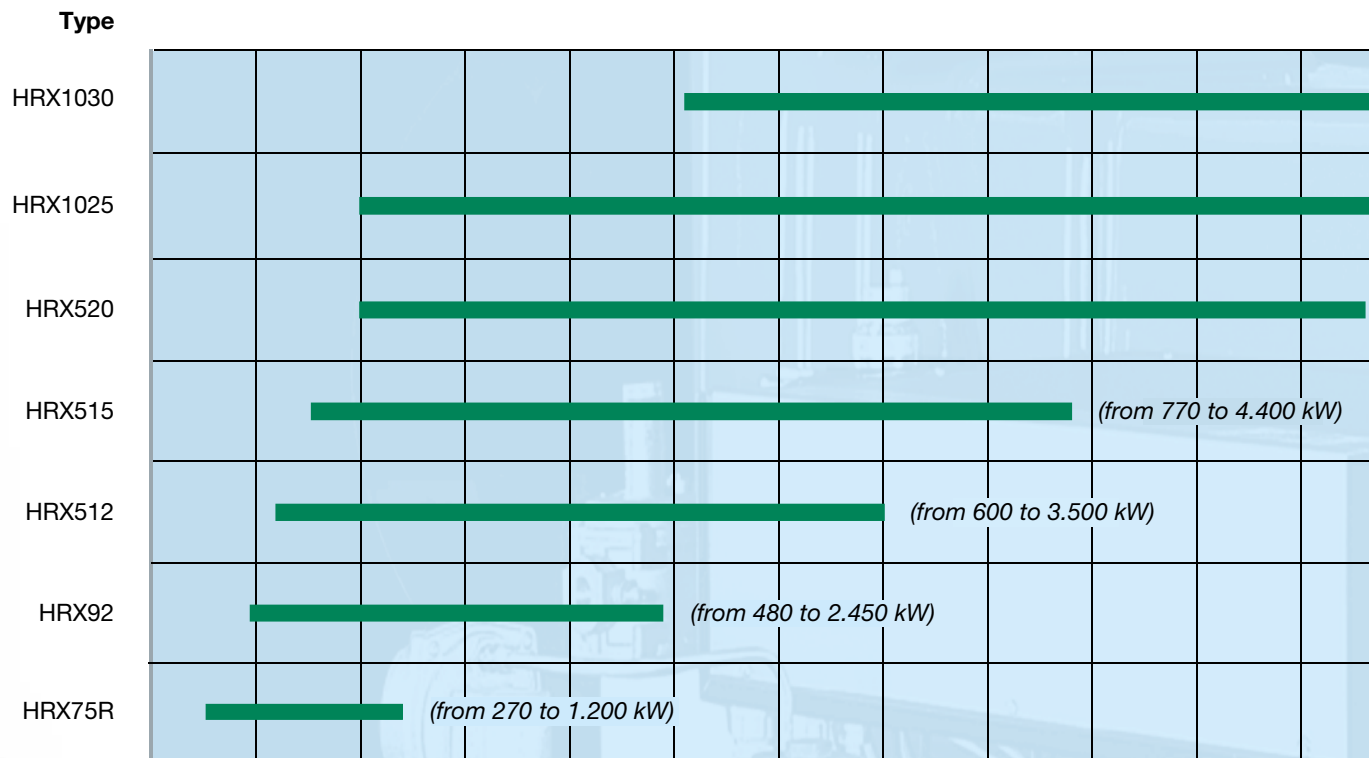
HRX 515 - PR/MD

HRX 520 - PR/MD

## mille series

HRX 1025 - PR/MD

HRX 1030 - PR/MD





# tecnopress series

## HRX75R



GAS/LIGHT OIL

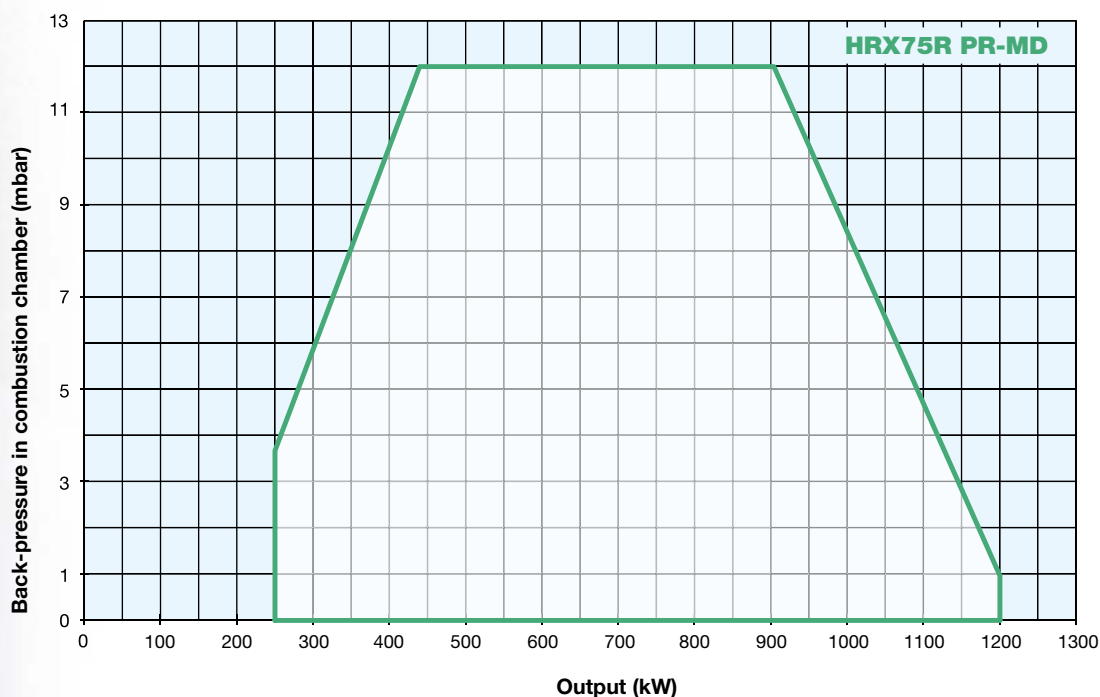
This burner is characterized by the «spiral» line typical of the series TECNOPRESS. It is suitable both for medium and small output up to 2050 kW. Moreover it is suitable to burn either natural gas or light oil, thanks to the adjustable combustion head which allows a good performance with both fuels.

The control panel facia is printed with a mimic diagram fitted with neon lamps to indicate the different stages of the burner operation and any abnormalities. Like all other models, it can work with standard and long blast tube.

If the blast tube is shorter than the standard one, a spacer is available to adjust the insertion length into the combustion chamber.

All regulations and setting devices are simple and practical for both fuels thanks to the high quality leverages.

This new series of burners integrates our well known performance and reliability characteristics with the new air inlet system equipped with a silencer and a new combustion head which guarantees low pollutant emissions (gas side  $< 80 \text{ mg/kWh}$  Class 3 EN676).

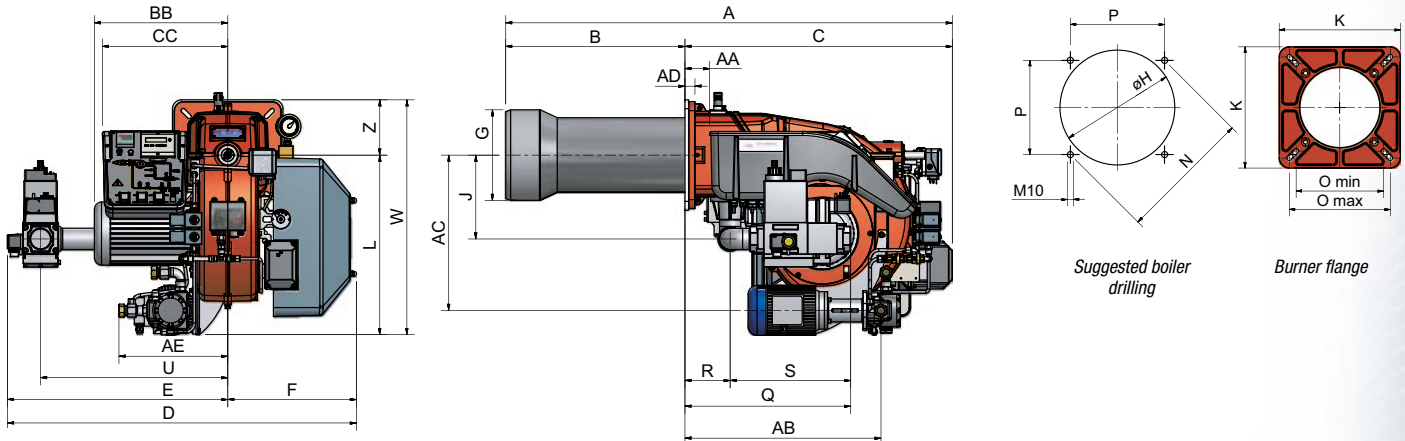




TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Gas connections
		min.	max.				
<b>HRX75R</b>	MG.xx.S.IT.A.1.xx	270	1.200	230/400 V 3N ac	2,2	0,55	1 1/2" - 2" - DN 65

For the configuration of the gas train, see pages 110-111.

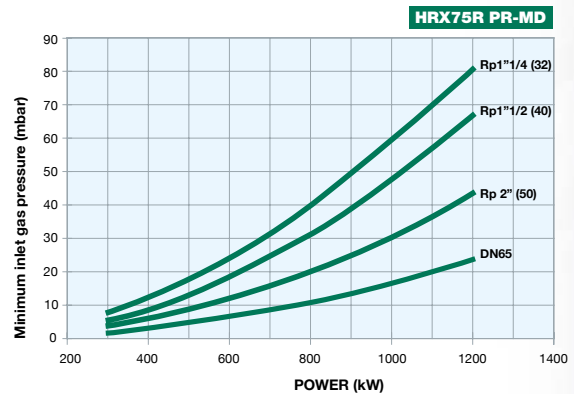
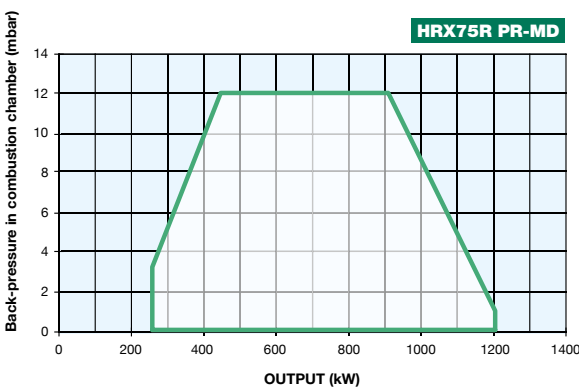


Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>HRX75R</b>	1280	850	760	145

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																												
		A	AA	AD	AC	AE	AB	BB	B	C	CC	D	E	F	G	H	J	K	L	N	O	P	Q	R	S	U	V	W	Z	
<b>HRX75R</b>	MG.xx.S.IT.A.1.40	1253	69	28	436	305	550	374	503	750	352	979	618	361	254	284	235	300	504	330	216	250	233	454	127	327	525	-	659	155
<b>HRX75R</b>	MG.xx.S.IT.A.1.50	1253	69	28	436	305	550	374	503	750	352	979	618	361	254	284	235	300	504	330	216	250	233	465	127	338	525	-	659	155
<b>HRX75R</b>	MG.xx.S.IT.A.1.65	1253	69	28	436	305	550	374	503	750	352	1138	777	361	254	284	296	300	504	330	216	250	233	530	127	403	570	313	659	155

(\*) Approximate values



## MECHANICAL OPERATION

<b>HRX75R</b>				
Model	Gas train	Operation	Code	Price €
<b>MG.PR.S.IT.A.1.40</b>	1"½	PR	030070753	
<b>MG.PR.S.IT.A.1.50</b>	2"	PR	030070853	
<b>MG.PR.S.IT.A.1.65</b>	DN65	PR	030070953	
<b>MG.MD.S.IT.A.1.40</b>	1"½	MD(*)	030070754	
<b>MG.MD.S.IT.A.1.50</b>	2"	MD(*)	030070854	
<b>MG.MD.S.IT.A.1.65</b>	DN65	MD(*)	030070954	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, pages 250)

In compliance with DIRECTIVE 2009/142/CE

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

## ELECTRONIC OPERATION

<b>HRX75R</b>				
Model	Gas train	Operation	Code	Price €
<b>MG.PR.S.IT.A.1.40.EC</b>	1"½ - 2" - DN 65	PR	03007075C	
<b>MG.PR.S.IT.A.1.50.EC</b>	1"½ - 2" - DN 65	PR	03007085C	
<b>MG.PR.S.IT.A.1.65.EC</b>	1"½ - 2" - DN 65	PR	03007095C	
<b>MG.MD.S.IT.A.1.40.EC</b>	1"½ - 2" - DN 65	MD(*)	03007075G	
<b>MG.MD.S.IT.A.1.50.EC</b>	1"½ - 2" - DN 65	MD(*)	03007085G	
<b>MG.MD.S.IT.A.1.65.EC</b>	1"½ - 2" - DN 65	MD(*)	03007095G	

<b>HRX75R</b>				
Model	Gas train	Operation	Code	Price €
<b>MG.MD.S.IT.A.1.40.ES</b>	1"½ - 2" - DN 65	MD(*)	03007075S	
<b>MG.MD.S.IT.A.1.50.ES</b>	1"½ - 2" - DN 65	MD(*)	03007085S	
<b>MG.MD.S.IT.A.1.65.ES</b>	1"½ - 2" - DN 65	MD(*)	03007095S	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, pages 250)

In compliance with DIRECTIVE 2009/142/CE

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

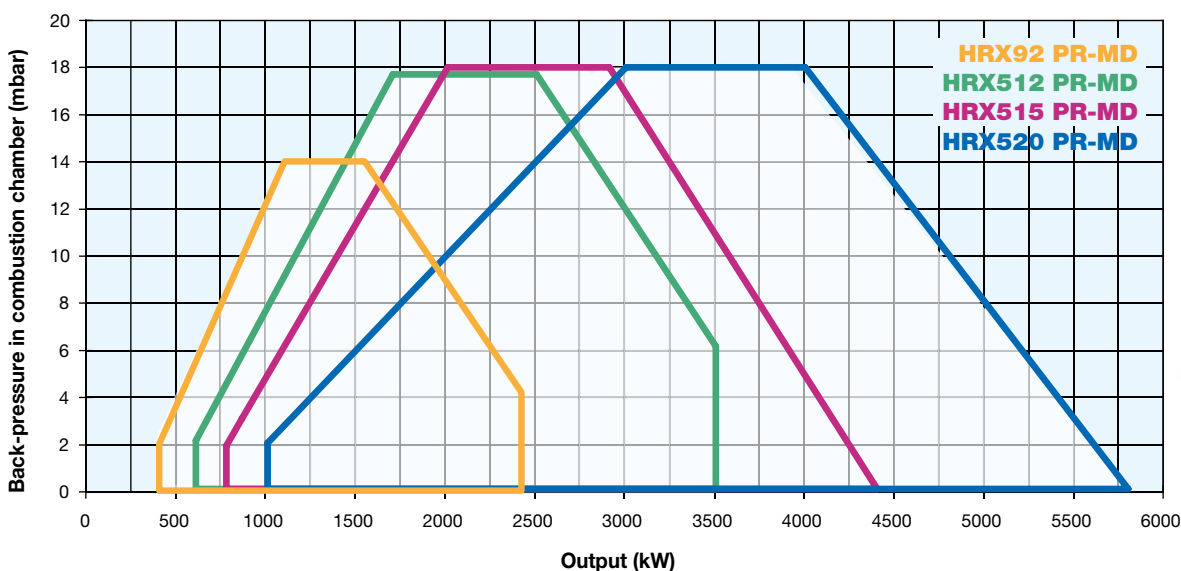


The NOVANTA - CINQUECENTO series, available in both progressive and modulating operations, represent the culmination of our experience in the field of medium-large capacity burners (up to 8000 kW). Like all other dual fuels models, these series perfectly combine all the mechanisms to work with the two flues separately. This is possible because these burners are equipped with an independent electric motor for the activation of the oil pump. As a consequence, during gas firing, the oil pump motor does not operate and remains off.

These burners are equipped with a high performance combustion head, designed to achieve an high irradiating flame when they run on natural gas. Instead, when they run on light oil, they are equipped with a by-pass nozzle which, using a pressure regulator, can reach a modulating ratio of 1:3.

The control panel facia is printed whit a mimic diagram fitted with neon lamps to indicate the different stages of burners operation and any abnormalities. Therefore, the burners are provided with an UV photocell to control the flame during the operation.

These series of burners integrate our well known performance and reliability characteristics with the new air inlet system equipped with a silencer and a new combustion head which guarantees low pollutant emissions (gas side < 80mg/kWh Class 3 EN676).



# novanta-cinquecento series

## HRX92 HRX512 HRX515 HRX520

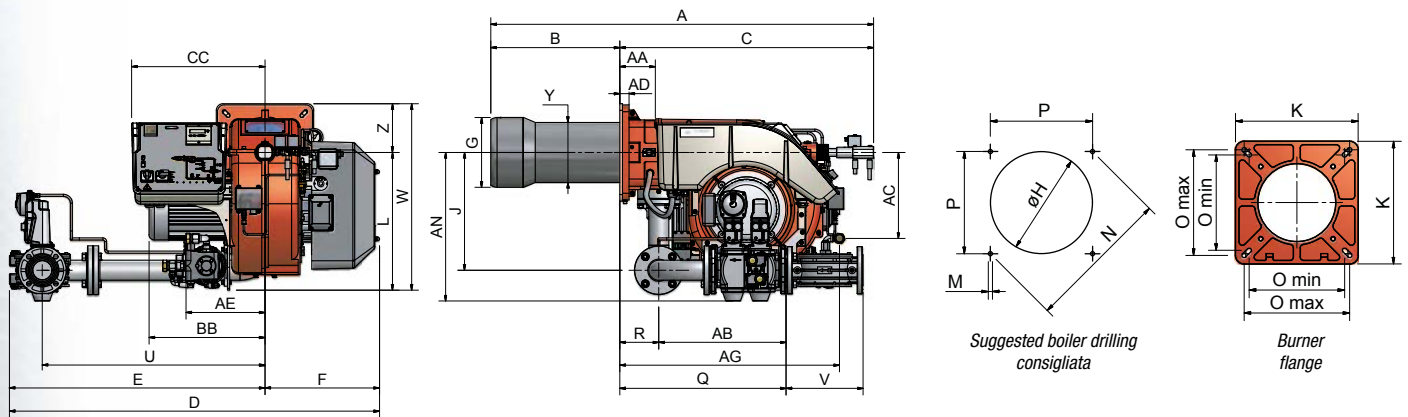


GAS/LIGHT OIL

### TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Gas connections
		min.	max.				
<b>HRX92</b>	MG.xx.S.IT.1.xxx	480	2.450	230/400 V 3N ac	5,5	1,1	2" - DN65 - 80 - 100
<b>HRX512</b>	MG.xx.S.IT.A.1.xxx	600	3.500	230/400 V 3N ac	9,2	1,1	2" - DN65 - 80 - 100
<b>HRX515</b>	MG.xx.S.IT.A.1.xxx	770	4.400	230/400 V 3N ac	11	1,5	2" - DN65 - 80 - 100
<b>HRX520</b>	MG.xx.S.IT.A.1.xxx	1.000	5.800	230/400 V 3N ac	15	1,5	2" - DN65 - 80 - 100

For the configuration of the gas train, see pages 110-111.



Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>HRX92</b>	1730	1280	1020	315
<b>HRX510</b>	1570	1350	1120	350
<b>HRX515</b>	1720	1500	1150	370
<b>HRX520</b>	1720	1500	1150	420

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																															
		A	AA	AB	AC	AD	AE	AN	B	BB	C	CC	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	U	V	W	Y	Z	
		min. max.																															
<b>HRX92</b>	MG.xx.S.IT.A.1.50	1495	135	835	327	35	300	550	380	441	1005	507	1160	725	435	286	299	447	360	523	M12	424	280	310	300	532	148	384	624	190	708	228	185
<b>HRX92</b>	MG.xx.S.IT.A.1.65	1495	135	835	327	35	300	564	380	441	1005	507	1406	971	435	286	299	447	360	523	M12	424	280	310	300	632	148	484	846	292	708	228	185
<b>HRX92</b>	MG.xx.S.IT.A.1.80	1495	135	835	327	35	300	579	380	441	1005	507	1437	1002	435	286	299	447	360	523	M12	424	280	310	300	683	148	535	875	313	708	228	185
<b>HRX92</b>	MG.xx.S.IT.A.1.100	1495	135	835	327	35	300	592	380	441	1005	507	1520	1085	435	286	299	447	360	523	M12	425	280	310	300	790	148	642	942	353	708	228	185

Type	Model	Overall dimensions* (mm)																													
		A	AA	AB	AC	AD	AE	B	BB	C	CC	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	U	V	W	Y	Z
<b>HRX512</b>	MG.xx.S.IT.A.1.50	1539	220	924	364	35	300	400	517	1139	532	1590	946	644	305	345	494	540	494	M14	552	390	390	763	149	614	845	190	830	328	270
<b>HRX512</b>	MG.xx.S.IT.A.1.65	1539	220	924	364	35	300	400	517	1139	532	1613	969	644	305	345	494	540	494	M14	552	390	390	636	149	487	845	292	830	328	270
<b>HRX512</b>	MG.xx.S.IT.A.1.80	1539	220	924	364	35	300	400	517	1645	1002	1645	1002	644	305	345	494	540	494	M14	552	390	390	687	149	538	875	313	830	328	270
<b>HRX512</b>	MG.xx.S.IT.A.1.100	1539	220	924	364	35	300	400	517	1134	532	1726	1082	644	305	345	494	540	494	M14	552	390	390	791	149	642	942	353	830	328	270
<b>HRX515</b>	MG.xx.S.IT.A.1.50	1669	220	924	371	35	300	530	517	1134	532	1590	946	644	305	345	494	540	494	M14	552	390	390	763	149	614	845	190	830	328	270
<b>HRX515</b>	MG.xx.S.IT.A.1.65	1669	220	928	371	35	300	530	517	1139	532	1613	969	644	305	345	494	540	494	M14	552	390	390	636	149	487	845	292	830	328	270
<b>HRX515</b>	MG.xx.S.IT.A.1.80	1669	220	928	371	35	300	530	517	1139	532	1645	1002	644	305	345	494	540	494	M14	552	390	390	687	149	538	875	313	830	328	270
<b>HRX515</b>	MG.xx.S.IT.A.1.100	1669	220	928	371	35	300	530	517	1139	532	1726	1082	644	305	345	494	540	494	M14	552	390	390	791	149	642	942	353	830	328	270
<b>HRX520</b>	MG.xx.S.IT.A.1.50	1669	220	928	371	35	300	530	517	1139	532	1590	946	644	340	372	494	540	494	M14	552	390	390	763	149	614	845	190	830	328	270
<b>HRX520</b>	MG.xx.S.IT.A.1.65	1669	220	928	371	35	300	530	517	1139	532	1613	969	644	340	372	494	540	494	M14	552	390	390	636	149	487	845	292	830	328	270
<b>HRX520</b>	MG.xx.S.IT.A.1.80	1669	220	928	371	35	300	530	517	1139	532	1645	1002	644	340	372	494	540	494	M14	552	390	390	687	149	536	875	313	830	328	270
<b>HRX520</b>	MG.xx.S.IT.A.1.100	1669	220	928	371	35	300	530	517	1139	532	1726	1082	644	340	372	494	540	494	M14	552	390	390	791	149	642	942	353	830	328	270

(\*) Approximate values





## MECHANICAL OPERATION

<b>HRX92</b>				
Model	Gas train	Operation	Code	Price €
<b>MG.PR.S.IT.A.1.50</b>	2"	PR	012075053	
<b>MG.PR.S.IT.A.1.65</b>	DN65	PR	012075153	
<b>MG.PR.S.IT.A.1.80</b>	DN80	PR	012075253	
<b>MG.PR.S.IT.A.1.100</b>	DN100	PR	012075353	
<b>MG.MD.S.IT.A.1.50</b>	2"	MD(*)	012075054	
<b>MG.MD.S.IT.A.1.65</b>	DN65	MD(*)	012075154	
<b>MG.MD.S.IT.A.1.80</b>	DN80	MD(*)	012075254	
<b>MG.MD.S.IT.A.1.100</b>	DN100	MD(*)	012075354	

		<b>HRX512</b>		<b>HRX515</b>		<b>HRX520</b>		
Model	Gas train	Operation	Code	Price €	Code	Price €	Code	Price €
<b>MG.PR.S.IT.A.1.50</b>	2"	PR	029072453		029072853		029073253	
<b>MG.PR.S.IT.A.1.65</b>	DN65	PR	029072553		029072953		029073353	
<b>MG.PR.S.IT.A.1.80</b>	DN80	PR	029072653		029073053		029073453	
<b>MG.PR.S.IT.A.1.100</b>	DN100	PR	029072753		029073153		029073553	
<b>MG.MD.S.IT.A.1.50</b>	2"	MD(*)	029072454		029072854		029073254	
<b>MG.MD.S.IT.A.1.65</b>	DN65	MD(*)	029072554		029072954		029073354	
<b>MG.MD.S.IT.A.1.80</b>	DN80	MD(*)	029072654		029073054		029073454	
<b>MG.MD.S.IT.A.1.100</b>	DN100	MD(*)	029072754		029073154		029073554	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, pages 250)

In compliance with DIRECTIVE 2009/142/CE

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

# novanta-cinquecento series

HRX92 HRX512 HRX515 HRX520



GAS/LIGHT OIL

## ELECTRONIC OPERATION

HRX92				
Model	Gas train	Operation	Code	Price €
MG.PR.S.IT.A.1.50.EC	2"	PR	01207505C	
MG.PR.S.IT.A.1.65.EC	DN65	PR	01207515C	
MG.PR.S.IT.A.1.80.EC	DN80	PR	01207525C	
MG.PR.S.IT.A.1.100.EC	DN100	PR	01207535C	
MG.MD.S.IT.A.1.50.EC	2"	MD(*)	01207505G	
MG.MD.S.IT.A.1.65.EC	DN65	MD(*)	01207515G	
MG.MD.S.IT.A.1.80.EC	DN80	MD(*)	01207525G	
MG.MD.S.IT.A.1.100.EC	DN100	MD(*)	01207535G	

HRX92				
Model	Gas train	Operation	Code	Price €
MG.MD.S.IT.A.1.50.ES	2"	MD(*)	01207505S	
MG.MD.S.IT.A.1.65.ES	DN65	MD(*)	01207515S	
MG.MD.S.IT.A.1.80.ES	DN80	MD(*)	01207525S	
MG.MD.S.IT.A.1.100.ES	DN100	MD(*)	01207535S	

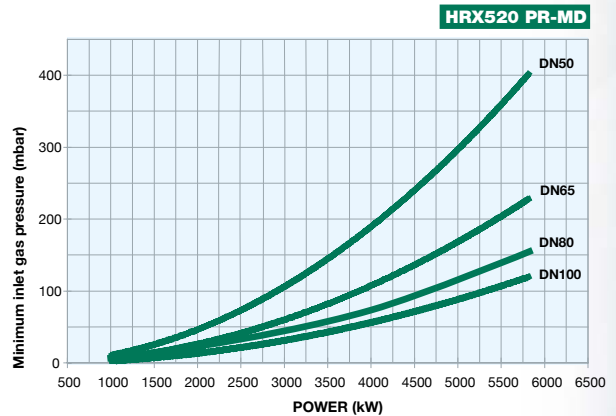
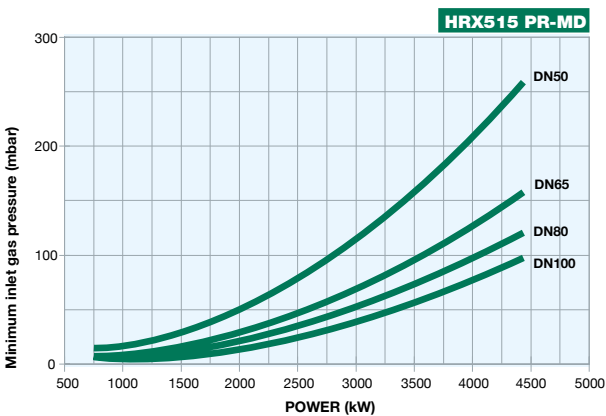
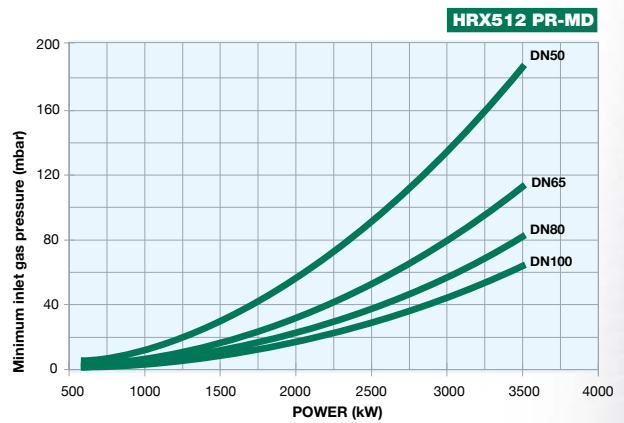
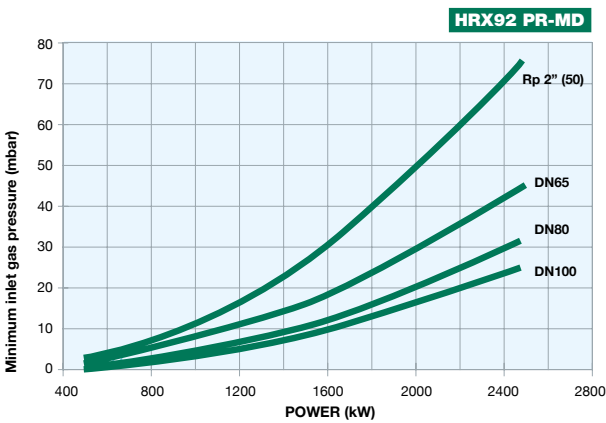
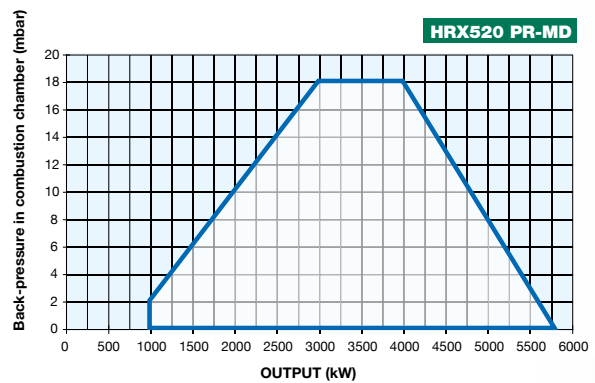
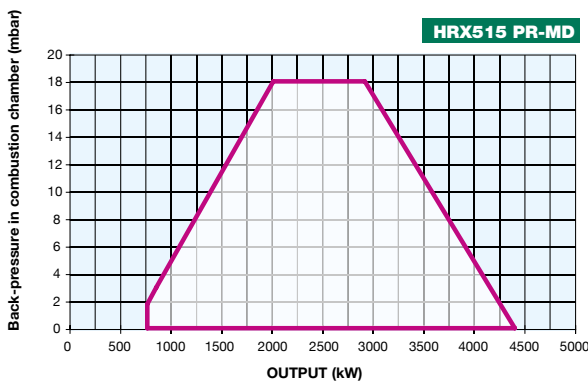
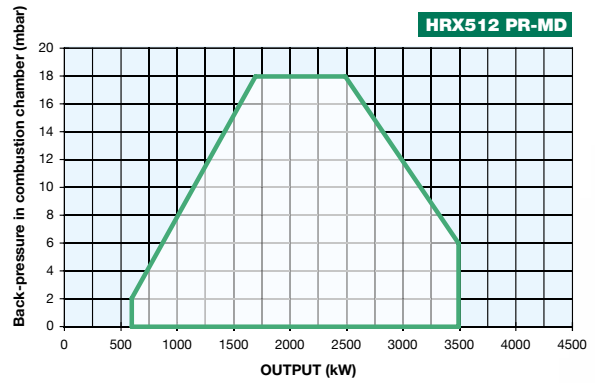
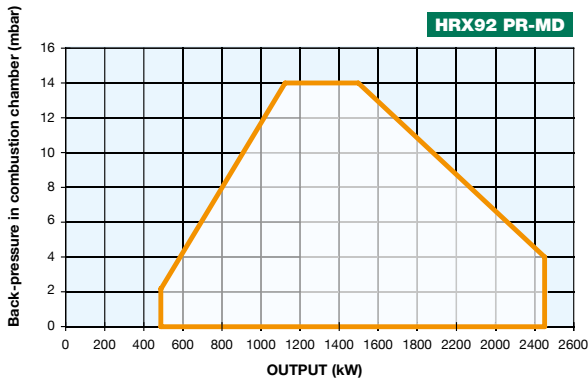
Model	Gas train	Operation	HRX512		HRX515		HRX520	
			Code	Price €	Code	Price €	Code	Price €
MG.PR.S.IT.A.1.50.EC	2"	PR	02907245C		02907285C		02907325C	
MG.PR.S.IT.A.1.65.EC	DN65	PR	02907255C		02907295C		02907335C	
MG.PR.S.IT.A.1.80.EC	DN80	PR	02907265C		02907305C		02907345C	
MG.PR.S.IT.A.1.100.EC	DN100	PR	02907275C		02907315C		02907355C	
MG.MD.S.IT.A.1.50.EC	2"	MD(*)	02907245G		02907285G		02907325G	
MG.MD.S.IT.A.1.65.EC	DN65	MD(*)	02907255G		02907295G		02907335G	
MG.MD.S.IT.A.1.80.EC	DN80	MD(*)	02907265G		02907305G		02907345G	
MG.MD.S.IT.A.1.100.EC	DN100	MD(*)	02907275G		02907315G		02907355G	

Model	Gas train	Operation	HRX512		HRX515		HRX520	
			Code	Price €	Code	Price €	Code	Price €
MG.MD.S.IT.A.1.50.ES	2"	MD(*)	02907245S		02907285S		02907325S	
MG.MD.S.IT.A.1.65.ES	DN65	MD(*)	02907255S		02907295S		02907335S	
MG.MD.S.IT.A.1.80.ES	DN80	MD(*)	02907265S		02907305S		02907345S	
MG.MD.S.IT.A.1.100.ES	DN100	MD(*)	02907275S		02907315S		02907355S	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, pages 250)

In compliance with DIRECTIVE 2009/142/CE

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE



**Attention:** he graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.

The HRX1000 series represents, in terms of performance curve and dimensions, the most powerful version of our dual flue (gas - light oil) Low NO<sub>x</sub> burners (up to 10.600 kW).

These burners are made of a solid aluminium housing and are suitable both for industrial applications, big heating plants and public users (hospitals, universities, etc.).

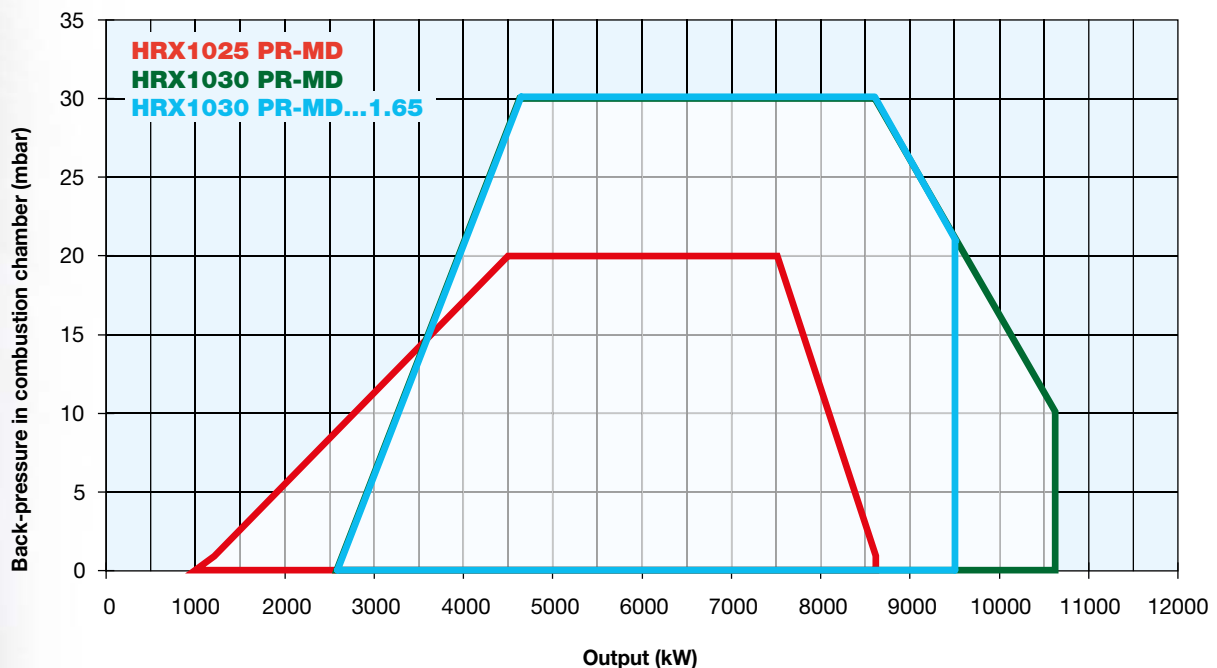
The possibility of using both flues separately, the manageability and the easy maintenance, notwithstanding its big dimensions, make this series really special.

These burners may be produced both in the version of progressive and modulating operation.

Upon request this series can be customized through an electronic control system which controls the O<sub>2</sub> flow at any stages, optimizing the efficiency, and through a control panel in form of either remote console type, cabinet type or wall mounted type. This new series of burners integrates our well known performance and reliability characteristics with the new air inlet system equipped with a silencer and a new combustion head which guarantees low pollutant emissions (gas side <math>< 80 \text{ mg/kWh}</math> class 3 EN676).



Electronic set up (optional)



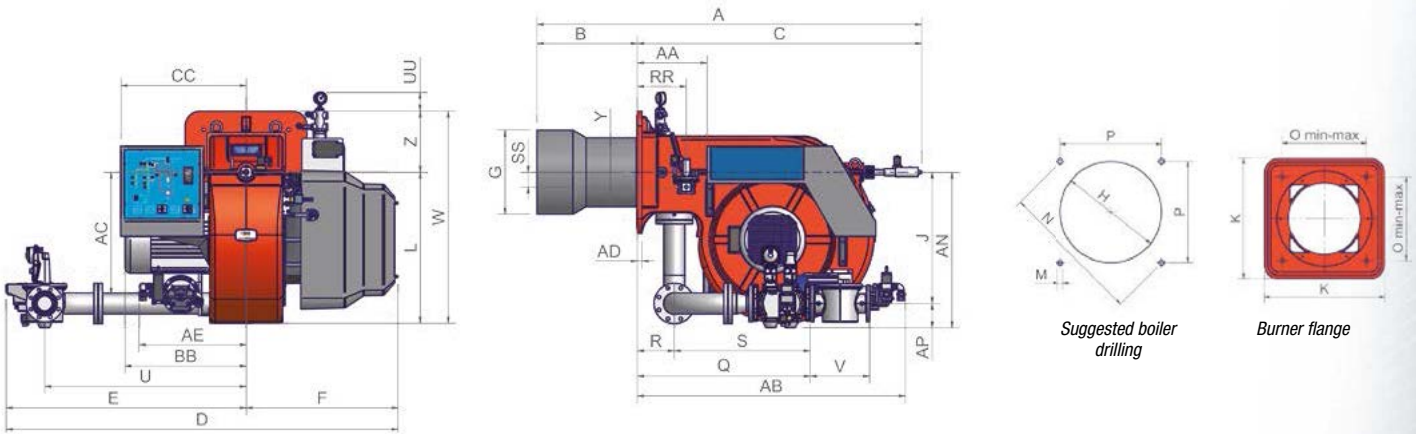


TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Gas connections
		min.	max.				
HRX1025	MG.xx.S.IT.A.1.xxx	1.000	8.600	400 V 3N ac	18.5	4	DN65 - 80 - 100
HRX1030	MG.xx.S.IT.A.1.65	2.550	9.500	400 V 3N ac	22	4	DN65
HRX1030	MG.xx.S.IT.A.1.xxx	2.550	10.600	400 V 3N ac	22	4	DN80 - 100

For the configuration of the gas train, see pages 110-111.

**N.B. Monoblock burners Duemila series with the capacity up to 19 MW consult ours sales offices.**



Type	Packaging dimensions* (mm)			
	l	p	h	kg
HRX1025	2270	1720	1320	650
HRX1030	2500	1720	1320	750

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																																		
		A	AA	AB	AC	AD	AE	AN	AP	B	BB	C	CC	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	RR	S	SS	U	UU	V	W	Y	Z
HRX1025	MG.xx.S.IT.A.1.65	2087	377	1450	683	25	580	828	118	544	641	1543	680	2039	1217	822	425	475	710	660	815	M16	651	460	460	914	200	265	714	80	1092	155	292	1145	425	330
HRX1025	MG.xx.S.IT.A.1.80	2087	377	1450	683	25	580	842	132	544	641	1543	680	2041	1219	822	425	475	710	660	815	M16	651	460	460	939	200	265	739	80	1092	155	322	1145	425	330
HRX1025	MG.xx.S.IT.A.1.100	2087	377	1450	683	25	580	855	145	544	641	1543	680	2057	1235	822	425	475	710	660	815	M16	651	460	460	842	200	265	642	80	1092	155	382	1145	425	330
HRX1030	MG.xx.S.IT.A.1.65	2527	817	1450	683	25	580	828	118	544	657	1983	680	2039	1217	822	550	600	710	ND	815	M16	ND	460	ND	964	250	265	714	80	1092	155	292	1190	550	375
HRX1030	MG.xx.S.IT.A.1.80	2527	817	1450	683	25	580	842	132	544	657	1983	680	2041	1219	822	550	600	710	ND	815	M16	ND	460	ND	989	250	265	739	80	1092	155	322	1190	550	375
HRX1030	MG.xx.S.IT.A.1.100	2527	817	1450	683	25	580	855	145	544	657	1983	680	2057	1235	822	550	600	710	ND	815	M16	ND	460	ND	892	250	265	642	80	1092	155	382	1190	550	375

(\*) Approximate values

### MECHANICAL OPERATION

Model	Gas train	Operation	HRX1025		HRX1030	
			Code	Price €	Code	Price €
<b>MG.PR.S.IT.A.1.65</b>	DN65	PR	023072553		023072853	
<b>MG.PR.S.IT.A.1.80</b>	DN80	PR	023072653		023072953	
<b>MG.PR.S.IT.A.1.100</b>	DN100	PR	023072753		023073053	
<b>MG.MD.S.IT.A.1.65</b>	DN65	MD(*)	023072554		023072854	
<b>MG.MD.S.IT.A.1.80</b>	DN80	MD(*)	023072654		023072954	
<b>MG.MD.S.IT.A.1.100</b>	DN100	MD(*)	023072754		023073054	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, pages 250)

In compliance with DIRECTIVE 2009/142/CE

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

### ELECTRONIC OPERATION

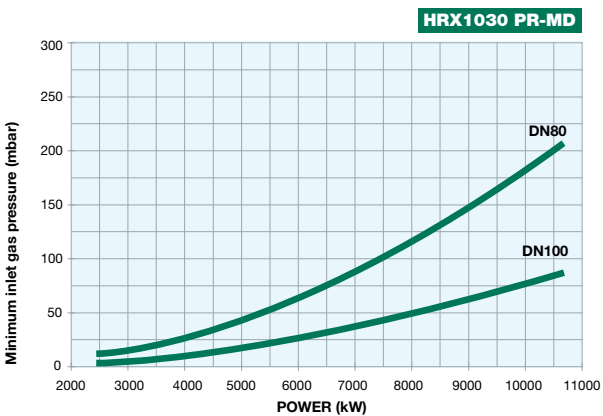
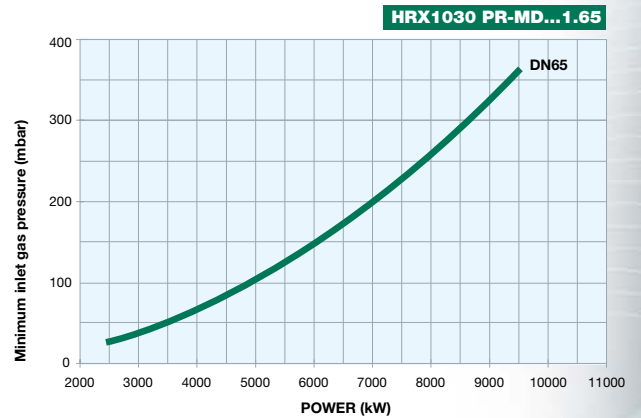
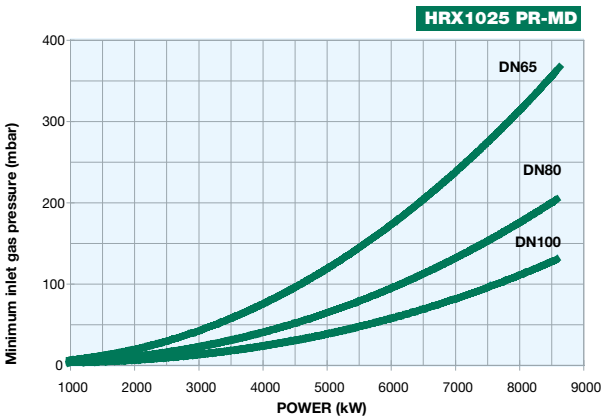
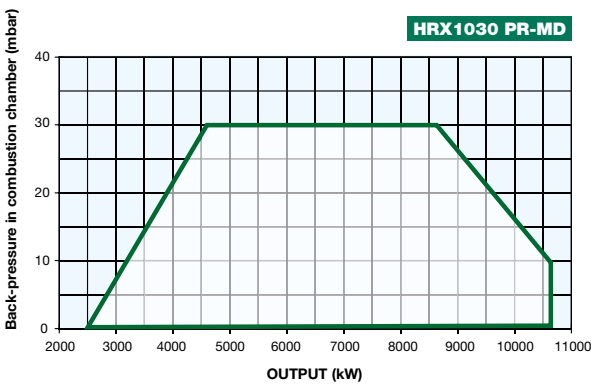
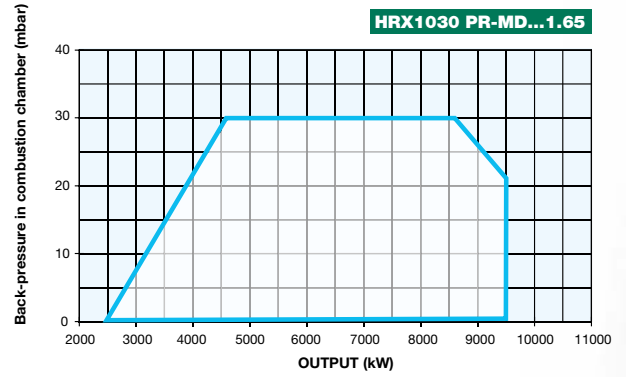
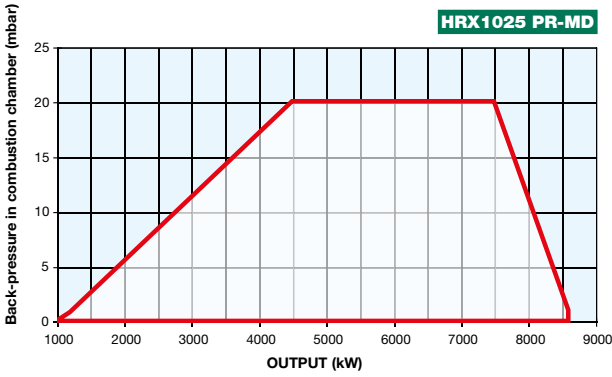
Model	Gas train	Operation	HRX1025		HRX1030	
			Code	Price €	Code	Price €
<b>MG.PR.S.IT.A.1.65.EC</b>	DN65	PR	02307255C		02307285C	<b>35.795,00</b>
<b>MG.PR.S.IT.A.1.80.EC</b>	DN80	PR	02307265C		02307295C	<b>36.780,00</b>
<b>MG.PR.S.IT.A.1.100.EC</b>	DN100	PR	02307275C		02307305C	<b>41.180,00</b>
<b>MG.MD.S.IT.A.1.65.EC</b>	DN65	MD(*)	02307255G		02307285G	<b>37.394,00</b>
<b>MG.MD.S.IT.A.1.80.EC</b>	DN80	MD(*)	02307265G		02307295G	<b>38.380,00</b>
<b>MG.MD.S.IT.A.1.100.EC</b>	DN100	MD(*)	02307275G		02307305G	<b>42.779,00</b>

Model	Gas train	Operation	HRX1025		HRX1030	
			Code	Price €	Code	Price €
<b>MG.MD.S.IT.A.1.65.ES</b>	DN65	MD(*)	02307255S		02307285S	
<b>MG.MD.S.IT.A.1.80.ES</b>	DN80	MD(*)	02307265S		02307295S	
<b>MG.MD.S.IT.A.1.100.ES</b>	DN100	MD(*)	02307275S		02307305S	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, pages 250)

In compliance with DIRECTIVE 2009/142/CE

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE



Attention: he graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.



# dual fuel burners gas/heavy oil

mechanical atomization  
**tecnopress series**

- KP60** - PR/MD
- KP72** - PR/MD
- KP73** - PR/MD

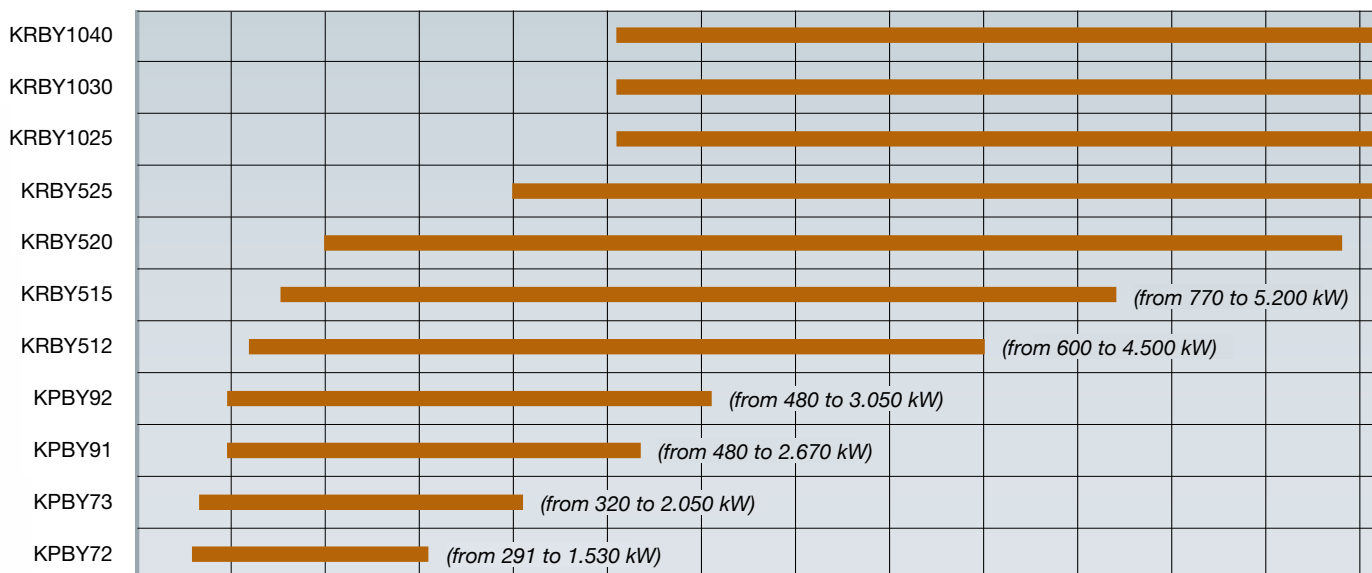
mechanical atomization  
**novanta - cinquecento series**

- KP91** - PR/MD
- KP92** - PR/MD
- KP93** - PR/MD
- KR512** - PR/MD
- KR515** - PR/MD
- KR520** - PR/MD
- KR525** - PR/MD

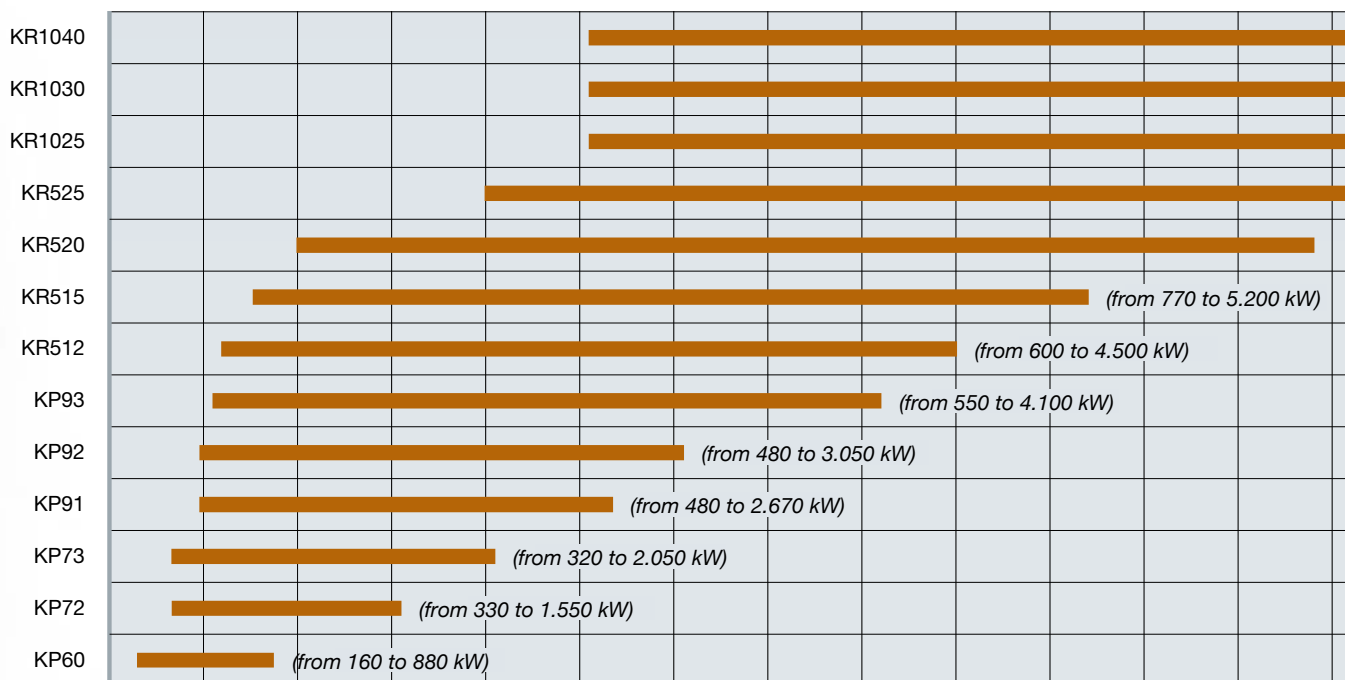
mechanical atomization  
**mille series**

- KR1025** - PR/MD
- KR1030** - PR/MD
- KR1040** - PR/MD

## Type pneumatic atomization



## Type mechanical atomization







# tecnopress series

KP60 KP72 KP73

GAS/HEAVY OIL

## MECHANICAL ATOMIZATION

In order to meet the market requests of burners able to burn either natural gas or heavy oil, we have created the KP series, suitable for industrial applications of medium - high capacity.

The capacity of these burners, from 170 to 2050 kW, allows many solutions in the adjustment phase.

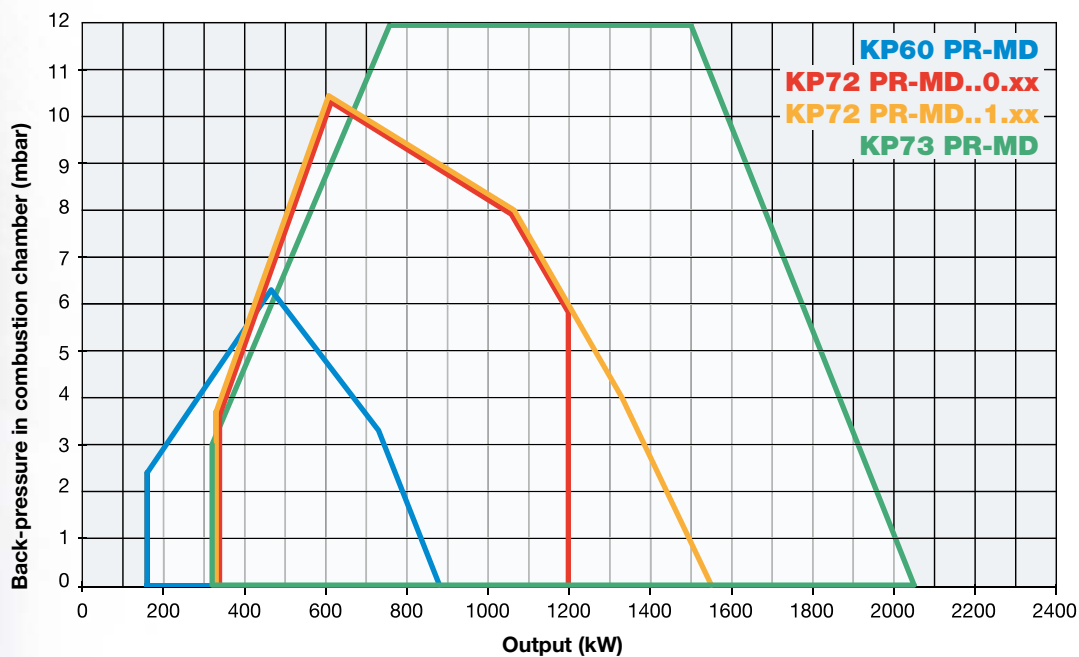
All these burners, with progressive or modulating operation, are appropriate to burn oil with a standard viscosity of 50 cSt at 50°C (7 E° at 50°C).

Upon request it is available the version for heavy oils up to 400 cSt at 50°C (50 E° at 50°C).

In order to keep the oil fluid, the burners are provided with a pre-heating tank equipped with low thermal load electrical resistance.



Electronic set up (optional)

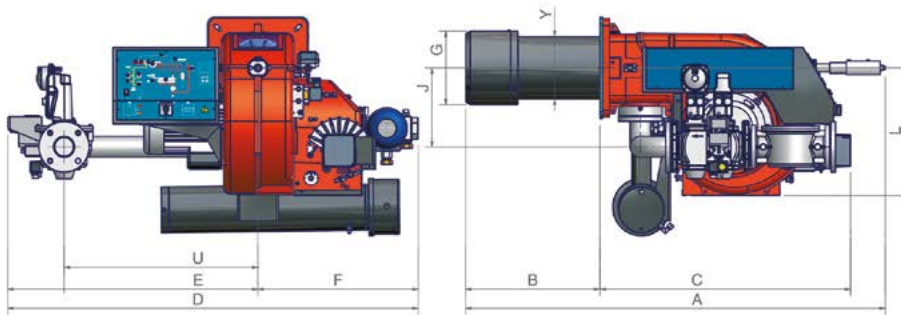




**TECHNICAL DETAILS**

Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Resistor kW	Gas connections
		min.	max.					
<b>KP60</b>	MN.xx.S.IT.A.0.xx	160	880	230/400 V 3N ac	1,1	0,55	4,5	1"1/2 - 2" - DN65
<b>KP72</b>	MN.xx.S.IT.A.0.xx	330	1.200	230/400 V 3N ac	2,2	0,55	8,0	2" - DN65 - 80
<b>KP72</b>	MN.xx.S.IT.A.1.xx	330	1.550	230/400 V 3N ac	2,2	0,55	8,0	2" - DN65 - 80
<b>KP73</b>	MN.xx.S.IT.A.1.xx	320	2.050	230/400 V 3N ac	3,0	1,10	12,0	2" - DN65 - 80

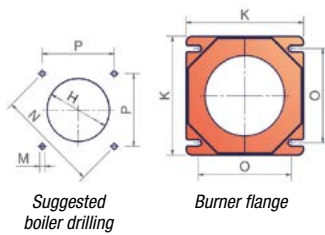
For the configuration of the gas train, see pages 110-111.



Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>KP60</b>	1730	1280	1020	176
<b>KP72/KP73</b>	1730	1280	1020	280

(\*) Approximate values

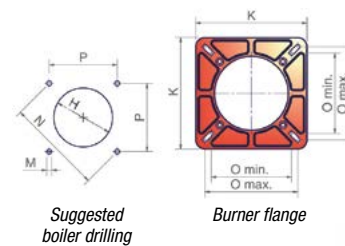
**KP60**



Suggested boiler drilling

Burner flange

**KP72 - KP73**



Suggested boiler drilling

Burner flange

Type	Model	Overall dimensions* (mm)											Boiler drilling (mm)				Burner flange (mm)				
		A	B	C	D	E	F	G	J	Y	L	U	H	M	N	P	K	O			
<b>KP60*</b>	MN.xx.S.IT.A.0.xx	1116	376	740	1205	685	520	250	250	190	520	540	280*	M10	269	190	240	190	190		
<b>KP72*</b>	MN.xx.S.IT.A.0.xx	1325	505	820	1365	825	540	300	265	212	580	560	340*	M10	330	233	300	216	250		
<b>KP73*</b>	MN.xx.S.IT.A.0.xx	1320	500	820	1365	825	540	234	265	212	580	560	264	M10	330	233	300	216	250		

(\*) Approximate values

(\*) Install a counter-flange between the burner and the boiler or in alternative, drill the H hole smaller but higher than the Y point and assemble the blast tube inside the boiler.

### MECHANICAL ATOMIZATION

#### MECHANICAL OPERATION

Model	Gas train	Operation	KP60		KP72	
			Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)						
<b>MN.PR.S.IT.A.0.32</b>	1"¼	PR	004080543		-	
<b>MN.PR.S.IT.A.0.40</b>	1"½	PR	004080143		008080443	
<b>MN.PR.S.IT.A.0.50</b>	2"	PR	004080243		008080143	
<b>MN.PR.S.IT.A.0.65</b>	DN65	PR	004080343		008080243	
<b>MN.PR.S.IT.A.0.80</b>	DN80	PR	-		008080343	
<b>MN.PR.S.IT.A.1.40■</b>	1"½	PR	-		008080453	
<b>MN.PR.S.IT.A.1.50■</b>	2"	PR	-		008080153	
<b>MN.PR.S.IT.A.1.65■</b>	DN65	PR	-		008080253	
<b>MN.PR.S.IT.A.1.80■</b>	DN80	PR	-		008080353	
<b>MN.MD.S.IT.A.0.32</b>	1"¼	MD(*)	004080544		-	
<b>MN.MD.S.IT.A.0.40</b>	1"½	MD(*)	004080144		008080444	
<b>MN.MD.S.IT.A.0.50</b>	2"	MD(*)	004080244		008080144	
<b>MN.MD.S.IT.A.0.65</b>	DN65	MD(*)	004080344		008080244	
<b>MN.MD.S.IT.A.0.80</b>	DN80	MD(*)	-		008080344	
<b>MN.MD.S.IT.A.1.40■</b>	1"½	MD(*)	-		008080454	
<b>MN.MD.S.IT.A.1.50■</b>	2"	MD(*)	-		008080154	
<b>MN.MD.S.IT.A.1.65■</b>	DN65	MD(*)	-		008080254	
<b>MN.MD.S.IT.A.1.80■</b>	DN80	MD(*)	-		008080354	

Model	Gas train	Operation	KP73	
			Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)				
<b>MN.PR.S.IT.A.1.50■</b>	2"	PR	008080553	
<b>MN.PR.S.IT.A.1.65■</b>	DN65	PR	00808065	
<b>MN.PR.S.IT.A.1.80■</b>	DN80	PR	008080753	
<b>MN.MD.S.IT.A.1.50■</b>	2"	MD(*)	008080554	
<b>MN.MD.S.IT.A.1.65■</b>	DN65	MD(*)	008080654	
<b>MN.MD.S.IT.A.1.80■</b>	DN80	MD(*)	008080754	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250)

■ = Burner equipped with gas leakage control

In compliance with DIRECTIVE 2009/142/CE

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

## MECHANICAL OPERATION

Model	Gas train	Operation	KP60		KP72	
			Code	Price €	Code	Price €
HEAVY OIL 400 cSt at 50° (50°E at 50°C)						
MD.PR.S.IT.A.0.32	1"¼	PR	004190543		-	
MD.PR.S.IT.A.0.40	1"½	PR	004190143		008190443	
MD.PR.S.IT.A.0.50	2"	PR	004190243		008190143	
MD.PR.S.IT.A.0.65	DN65	PR	004190343		008190243	
MD.PR.S.IT.A.0.80	DN80	PR	-		008190343	
MD.PR.S.IT.A.1.40■	1"½	PR	-		008190453	
MD.PR.S.IT.A.1.50■	2"	PR	-		008190153	
MD.PR.S.IT.A.1.65■	DN65	PR	-		008190253	
MD.PR.S.IT.A.1.80■	DN80	PR	-		008190353	
MD.MD.S.IT.A.0.32	1"¼	MD(*)	004190544		-	
MD.MD.S.IT.A.0.40	1"½	MD(*)	004190144		008190444	
MD.MD.S.IT.A.0.50	2"	MD(*)	004190244		008190144	
MD.MD.S.IT.A.0.65	DN65	MD(*)	004190344		008190244	
MD.MD.S.IT.A.0.80	DN80	MD(*)	-		008190344	
MD.MD.S.IT.A.1.40■	1"½	MD(*)	-		008190454	
MD.MD.S.IT.A.1.50■	2"	MD(*)	-		008190154	
MD.MD.S.IT.A.1.65■	DN65	MD(*)	-		008190254	
MD.MD.S.IT.A.1.80■	DN80	MD(*)	-		008190354	

Model	Gas train	Operation	KP73	
			Code	Price €
HEAVY OIL 400 cSt at 50° (50°E at 50°C)				
MD.PR.S.IT.A.1.50■	2"	PR	008190553	
MD.PR.S.IT.A.1.65■	DN65	PR	008190653	
MD.PR.S.IT.A.1.80■	DN80	PR	008190753	
MD.MD.S.IT.A.1.50■	2"	MD(*)	008190554	
MD.MD.S.IT.A.1.65■	DN65	MD(*)	008190654	
MD.MD.S.IT.A.1.80■	DN80	MD(*)	008190754	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250)

■ =Burner equipped with gas leakage control

In compliance with DIRECTIVE 2009/142/CE

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

### MECHANICAL ATOMIZATION

#### ELECTRONIC OPERATION

Model	Gas train	Operation	KP60		KP72	
			Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)						
<b>MN.PR.S.IT.A.1.32.EC</b>	1"¼	PR	00408054C		-	
<b>MN.PR.S.IT.A.1.40.EC</b>	1"½	PR	00408014C		00808045C	
<b>MN.PR.S.IT.A.1.50.EC</b>	2"	PR	00408024C		00808015C	
<b>MN.PR.S.IT.A.1.65.EC</b>	DN65	PR	00408034C		00808025C	
<b>MN.PR.S.IT.A.1.80.EC</b>	DN80	PR	-		00808035C	
<b>MN.MD.S.IT.A.1.32.EC</b>	1"¼	MD(*)	00408054G		-	
<b>MN.MD.S.IT.A.1.40.EC</b>	1"½	MD(*)	00408014G		00808045G	
<b>MN.MD.S.IT.A.1.50.EC</b>	2"	MD(*)	00408024G		00808015G	
<b>MN.MD.S.IT.A.1.65.EC</b>	DN65	MD(*)	00408034G		00808025G	
<b>MN.MD.S.IT.A.1.80.EC</b>	DN80	MD(*)	-		00808035G	

Model	Gas train	Operation	KP73	
			Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)				
<b>MN.PR.S.IT.A.1.50.EC</b>	2"	PR	00808055C	
<b>MN.PR.S.IT.A.1.65.EC</b>	DN65	PR	00808065C	
<b>MN.PR.S.IT.A.1.80.EC</b>	DN80	PR	00808075C	
<b>MN.MD.S.IT.A.1.50.EC</b>	2"	MD(*)	00808055G	
<b>MN.MD.S.IT.A.1.65.EC</b>	DN65	MD(*)	00808065G	
<b>MN.MD.S.IT.A.1.80.EC</b>	DN80	MD(*)	00808075G	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250)

In compliance with DIRECTIVE 2009/142/CE

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE



## ELECTRONIC OPERATION

Model	Gas train	Operation	KP60		KP72	
			Code	Price €	Code	Price €
HEAVY OIL 400 cSt at 50° (50°E at 50°C)						
MD.PR.S.IT.A.1.32.EC	1"¼	PR	00419054C		-	
MD.PR.S.IT.A.1.40.EC	1"½	PR	00419014C		00819045C	
MD.PR.S.IT.A.1.50.EC	2"	PR	00419024C		00819015C	
MD.PR.S.IT.A.1.65.EC	DN65	PR	00419034C		00819025C	
MD.PR.S.IT.A.1.80.EC	DN80	PR	-		00819035C	
MD.MD.S.IT.A.1.32.EC	1"¼	MD(*)	00419054G		-	
MD.MD.S.IT.A.1.40.EC	1"½	MD(*)	00419014G		00808045G	
MD.MD.S.IT.A.1.50.EC	2"	MD(*)	00419024G		00808015G	
MD.MD.S.IT.A.1.65.EC	DN65	MD(*)	00419034G		00808025G	
MD.MD.S.IT.A.1.80.EC	DN80	MD(*)	-		00819035G	

Model	Gas train	Operation	KP73	
			Code	Price €
HEAVY OIL 400 cSt at 50° (50°E at 50°C)				
MD.PR.S.IT.A.1.50.EC	2"	PR	00819055C	
MD.PR.S.IT.A.1.65.EC	DN65	PR	00819065C	
MD.PR.S.IT.A.1.80.EC	DN80	PR	00819075C	
MD.MD.S.IT.A.1.50.EC	2"	MD(*)	00819055C	
MD.MD.S.IT.A.1.65.EC	DN65	MD(*)	00819065C	
MD.MD.S.IT.A.1.80.EC	DN80	MD(*)	00819075C	

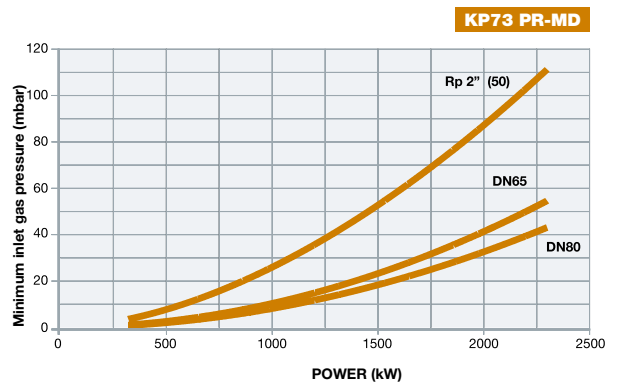
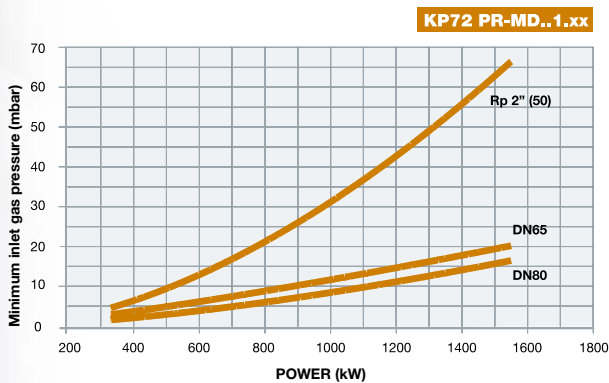
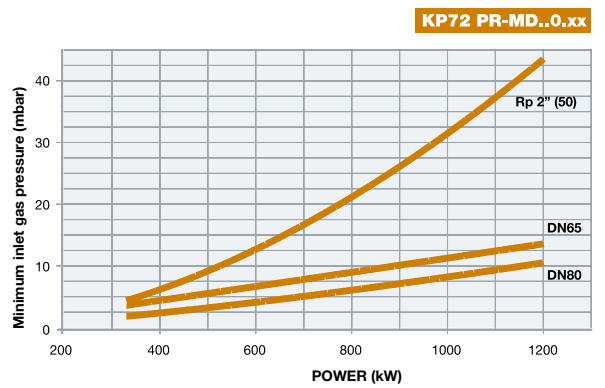
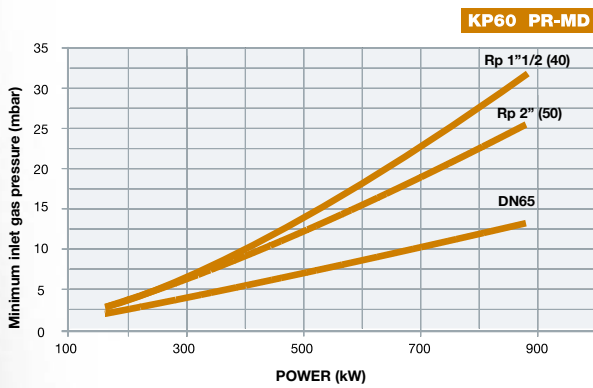
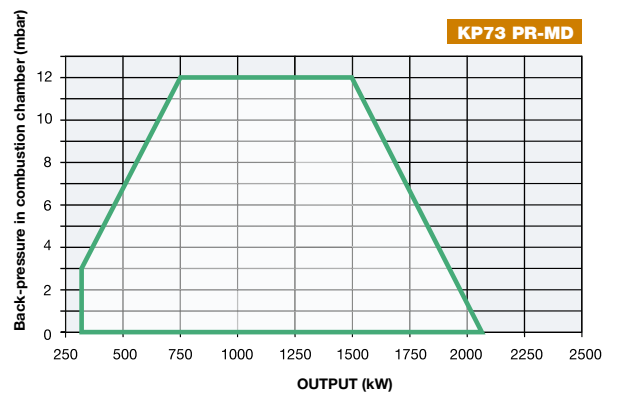
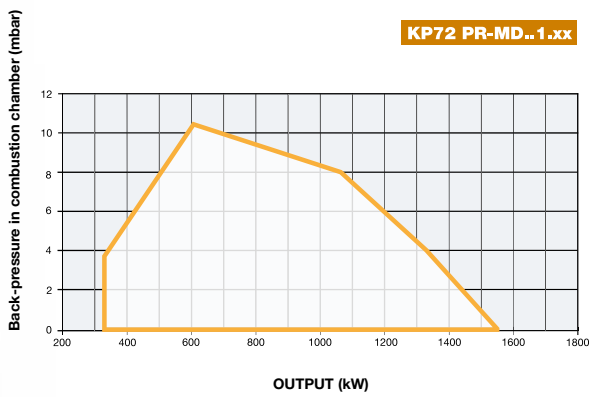
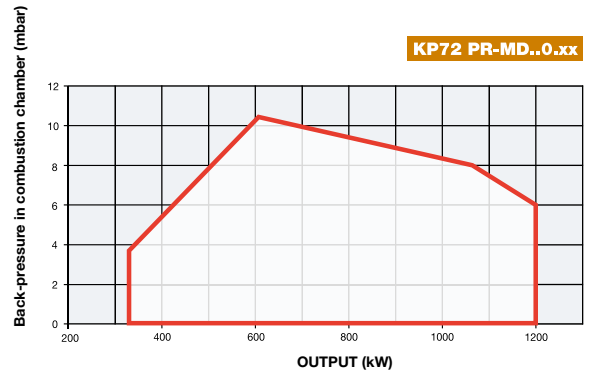
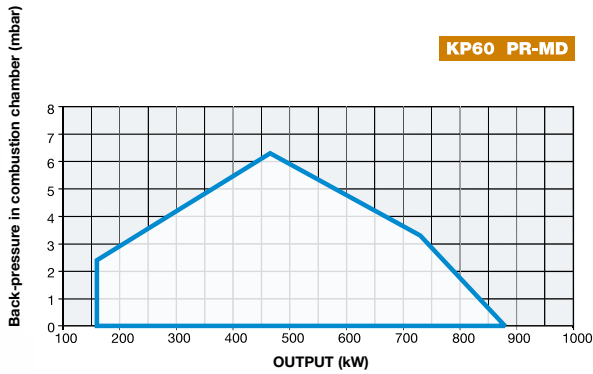
Model	Gas train	Operation	KP60		KP72		KP73	
			Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)								
MN.MD.S.IT.A.1.32.ES	1"½	MD(*)	00408055S		-		-	
MN.MD.S.IT.A.1.40.ES	1"½	MD(*)	00408015S		00808045S		-	
MN.MD.S.IT.A.1.50.ES	2"	MD(*)	00408025S		00808015S		00808055S	
MN.MD.S.IT.A.1.65.ES	DN65	MD(*)	00408035S		00808025S		00808065S	
MN.MD.S.IT.A.1.80.ES	DN80	MD(*)	-		00808035S		00808075S	
HEAVY OIL 400 cSt at 50° (50°E at 50°C)								
MD.MD.S.IT.A.1.32.ES	1"½	MD(*)	00419055S		-		-	
MD.MD.S.IT.A.1.40.ES	1"½	MD(*)	00419015S		00819045S		-	
MD.MD.S.IT.A.1.50.ES	2"	MD(*)	00419025S		00819015S		00819055S	
MD.MD.S.IT.A.1.65.ES	DN65	MD(*)	00419035S		00819025S		00819065S	
MD.MD.S.IT.A.1.80.ES	DN80	MD(*)	-		00819035S		00819075S	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250)

In compliance with DIRECTIVE 2009/142/CE

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

### MECHANICAL ATOMIZATION



Attention: the graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.



# novanta-cinquecento series

KP91 KP92 KP93

KR512 KR515 KR520 KR525

GAS/HEAVY OIL

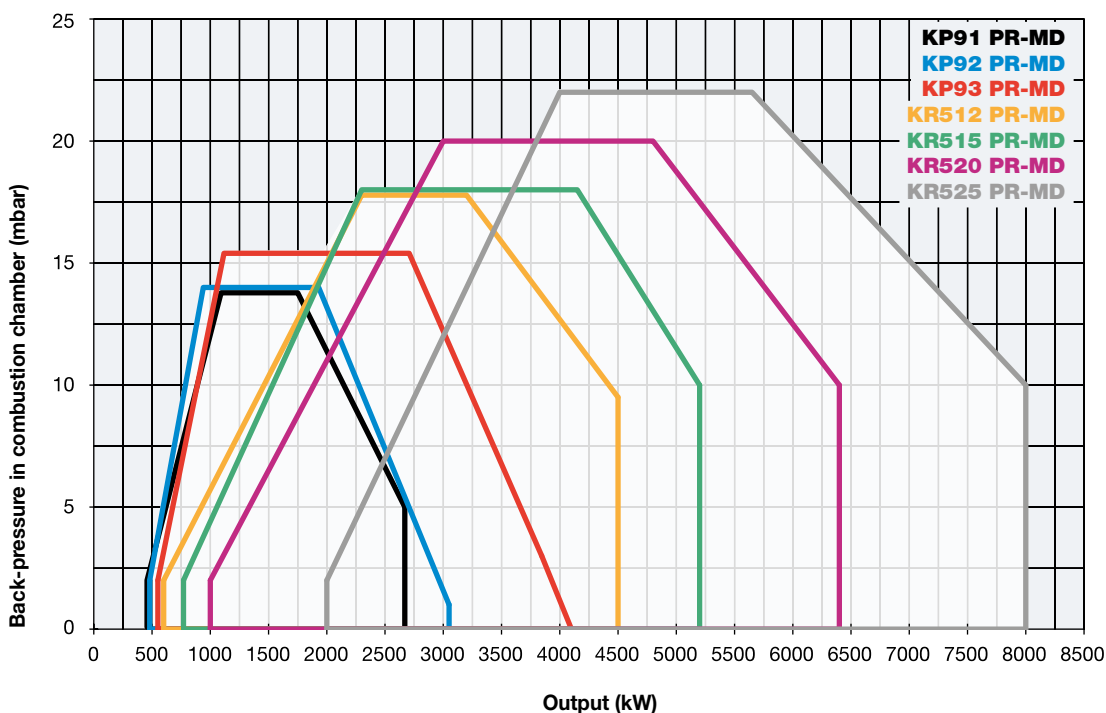
MECHANICAL ATOMIZATION

The dual flue series KP, suitable for industrial applications up to 8000 kW, perfectly combine the mechanical devices and systems typical of gas burners with the ones of heavy oil burners. In this manner these burners can burn the two flues separately. This is possible because these burners are equipped with an independent electric motor for the activation of the oil pump. As a consequence during gas firing, the oil pump motor does not operate and remains off.

The burners are, therefore, provided with an UV photocell to control the flame during the operation. These burners are provided with a pre-heating tank equipped with low thermal load electrical resistance to ensure oil fluidity.

All burners, with progressive or modulating operation, have been built to burn fuels whose standard viscosity is 50 cSt at 50°C (7 E° at 50°C).

Upon request it is available the version for heavy oils up to 400 cSt at 50°C (50 E° at 50°C) completed with the heating cable for the oil lance.



# novanta-cinquecento series

KP91 KP92 KP93

KR512 KR515 KR520 KR525

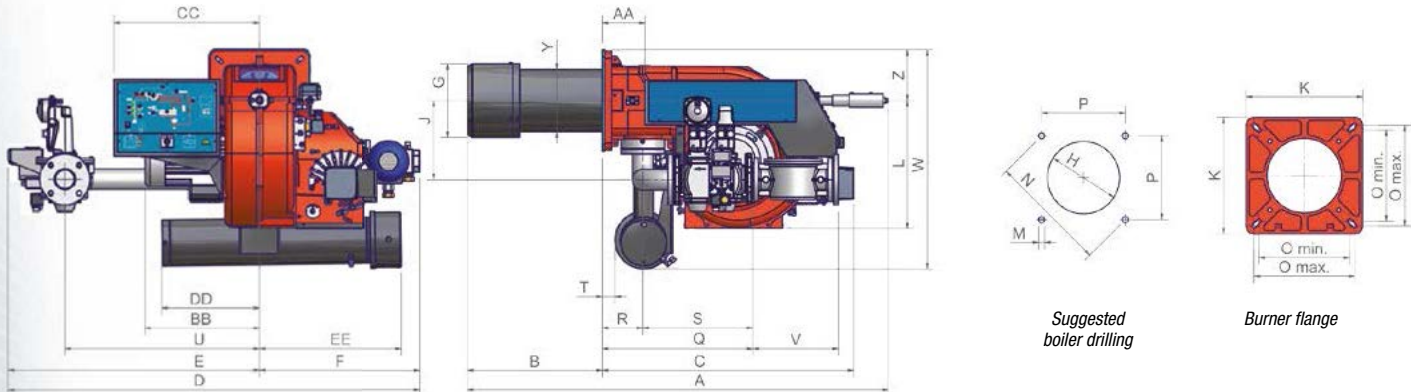
GAS/HEAVY OIL

## MECHANICAL ATOMIZATION

### TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Resistor kW	Gas connections
		min.	max.					
<b>KP91</b>	MN.xx.S.IT.A.1.xx	480	2.670	230/400 V 3N ac	4,0	1,1	18	2" - DN 65 - 80 - 100
<b>KP92</b>	MN.xx.S.IT.A.1.xx	480	3.050	230/400 V 3N ac	5,5	1,1	18	2" - DN 65 - 80 - 100
<b>KP93</b>	MN.xx.S.IT.A.1.xx	550	4.100	230/400 V 3N ac	7,5	1,1	24	2" - DN 65 - 80 - 100

For the configuration of the gas train, see pages 110-111.



Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>KP91/KP92/KP93</b>	1730	1280	1020	370

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																																			
		A	AA	AC	AD	AE	AN	AP	B	BB	C	CC	D	DD	E	EE	F	G	H	I	J	K	L	M	N	O min	O max	P	Q	R	S	T	U	V	W	Y	Z
<b>KP91</b>	MN.xx.S.xx.A.1.50	1550	152	343	35	473	429	100	520	441	1030	533	1345	464	726	441	619	304	344	228	329	360	466	M12	424	280	310	300	522	148	374	44	624	216	783	240	185
<b>KP91</b>	MN.xx.S.xx.A.1.65	1550	152	343	35	473	405	117	520	441	1030	533	1494	464	875	441	619	304	344	228	288	360	466	M12	424	280	310	300	632	148	484	44	750	292	783	240	185
<b>KP91</b>	MN.xx.S.xx.A.1.80	1550	152	343	35	473	439	132	520	441	1030	533	1496	464	877	441	619	304	344	228	307	360	466	M12	424	280	310	300	683	148	535	44	750	313	783	240	185
<b>KP91</b>	MN.xx.S.xx.A.1.100	1550	152	343	35	473	592	145	520	441	1030	533	1586	464	967	441	619	304	344	228	447	360	466	M12	424	280	310	300	790	148	642	44	824	353	783	240	185
<b>KP92</b>	MN.xx.S.xx.A.1.50	1550	152	343	35	473	429	100	520	441	1030	533	1345	464	726	441	619	304	344	228	329	360	466	M12	424	280	310	300	522	148	374	44	624	216	783	240	185
<b>KP92</b>	MN.xx.S.xx.A.1.65	1550	152	343	35	473	405	117	520	441	1030	533	1494	464	875	441	619	304	344	228	288	360	466	M12	424	280	310	300	632	148	484	44	750	292	783	240	185
<b>KP92</b>	MN.xx.S.xx.A.1.80	1550	152	343	35	473	439	132	520	441	1030	533	1496	464	877	441	619	304	344	228	307	360	466	M12	424	280	310	300	683	148	535	44	750	313	783	240	185
<b>KP92</b>	MN.xx.S.xx.A.1.100	1550	152	343	35	473	592	145	520	441	1030	533	1586	464	967	441	619	304	344	228	447	360	466	M12	424	280	310	300	790	148	642	44	824	353	783	240	185
<b>KP93</b>	MN.xx.S.xx.A.1.50	1525	152	343	35	473	429	100	495	460	1030	533	1345	464	726	441	619	304	344	228	329	360	466	M12	424	280	310	300	522	148	374	44	624	216	783	248	185
<b>KP93</b>	MN.xx.S.xx.A.1.65	1525	152	343	35	473	405	117	495	460	1030	533	1494	464	875	441	619	304	344	228	288	360	466	M12	424	280	310	300	632	148	484	44	750	292	783	248	185
<b>KP93</b>	MN.xx.S.xx.A.1.80	1525	152	343	35	473	439	132	495	460	1030	533	1496	464	877	441	619	304	344	228	307	360	466	M12	424	280	310	300	683	148	535	44	750	313	783	248	185
<b>KP93</b>	MN.xx.S.xx.A.1.100	1525	152	343	35	473	592	145	495	460	1030	533	1586	464	967	441	619	304	344	228	447	360	466	M12	424	280	310	300	790	148	642	44	824	353	783	248	185

(\*) Approximate values

NOTE: dimensions with Siemens VGD valves

# novanta-cinquecento series

KP91 KP92 KP93

KR512 KR515 KR520 KR525

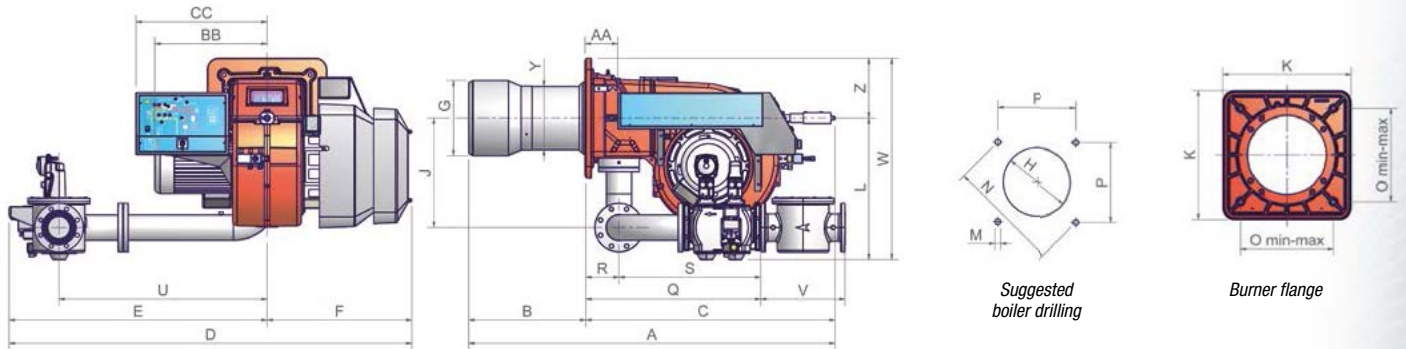
GAS/HEAVY OIL

MECHANICAL ATOMIZATION

## TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Resistor kW	Gas connections
		min.	max.					
KR512	MN.xx.S.IT.A.1.xxx	600	4.500	230/400 V 3N ac	9,2	1,5	24	2" - DN 65 - 80 - 100
KR515	MN.xx.S.IT.A.1.xxx	770	5.200	230/400 V 3N ac	11,0	1,5	12 + 18	2" - DN 65 - 80 - 100
KR520	MN.xx.S.IT.A.1.xxx	1.000	6.400	230/400 V 3N ac	15,0	2,2	18 + 24	2" - DN 65 - 80 - 100
KR525	MN.xx.S.IT.A.1.xxx	2.000	8.000	400 V 3N ac	18,5	2,2	24 + 24	DN 65 - 80 - 100

For the configuration of the gas train, see pages 110-111.



Low pressure pump set (pump, motor and filter) is included, but supplied loose (not assembled on the burner).

Type	Packaging dimensions* (mm)			
	l	p	h	kg
KR512/KR515/KR520	1760	1470	1300	470
KR525	1800	1500	1300	480

(\*) Approximate values

Type	Model	Overall dimensions* (mm)																													
		A	AA	AD	AM	AN	AP	B	BB	C	CC	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	U	V	W	Y	Z
KR512	MN.xx.S.xx.A.1.50	1766	144	35	220	594	100	555	508	1211	598	1713	1071	642	380	420	494	540	492	M14	552	390	390	755	150	605	845	216	759	328	270
KR512	MN.xx.S.xx.A.1.65	1766	144	35	220	612	118	555	508	1211	598	1693	1051	642	380	420	494	540	492	M14	552	390	390	634	150	485	845	292	759	328	270
KR512	MN.xx.S.xx.A.1.80	1766	144	35	220	626	132	555	508	1211	598	1726	1084	642	380	420	494	540	492	M14	552	390	390	685	150	535	875	322	759	328	270
KR512	MN.xx.S.xx.A.1.100	1766	144	35	220	639	145	555	508	1211	598	1809	1167	642	380	420	494	540	492	M14	552	390	390	792	150	642	942	382	759	328	270
KR515	MN.xx.S.xx.A.1.50	1741	144	35	220	594	100	530	508	1211	598	1713	1071	642	380	420	494	540	492	M14	552	390	390	755	150	605	845	216	759	328	270
KR515	MN.xx.S.xx.A.1.65	1741	144	35	220	612	118	530	508	1211	598	1693	1051	642	380	420	494	540	492	M14	552	390	390	634	150	485	845	292	759	328	270
KR515	MN.xx.S.xx.A.1.80	1741	144	35	220	626	132	530	508	1211	598	1726	1084	642	380	420	494	540	492	M14	552	390	390	685	150	535	875	322	759	328	270
KR515	MN.xx.S.xx.A.1.100	1741	144	35	220	639	145	530	508	1211	598	1809	1167	642	380	420	494	540	492	M14	552	390	390	792	150	642	942	382	759	328	270
KR520	MN.xx.S.xx.A.1.50	1761	144	35	220	594	100	550	508	1211	598	1713	1071	642	434	484	494	540	492	M14	552	390	390	755	150	605	845	216	759	328	270
KR520	MN.xx.S.xx.A.1.65	1761	144	35	220	612	118	550	508	1211	598	1693	1051	642	434	484	494	540	492	M14	552	390	390	634	150	485	845	292	759	328	270
KR520	MN.xx.S.xx.A.1.80	1761	144	35	220	626	132	550	508	1211	598	1726	1084	642	434	484	494	540	492	M14	552	390	390	685	150	535	875	322	759	328	270
KR520	MN.xx.S.xx.A.1.100	1761	144	35	220	639	145	550	508	1211	598	1809	1167	642	434	484	494	540	492	M14	552	390	390	792	150	642	942	382	759	328	270
KR525	MN.xx.S.xx.A.1.50	1741	144	35	220	594	100	530	650	1211	598	1713	1071	642	454	504	494	540	492	M14	552	390	390	755	150	605	845	216	759	343	270
KR525	MN.xx.S.xx.A.1.65	1741	144	35	220	612	118	530	650	1211	598	1693	1051	642	454	504	494	540	492	M14	552	390	390	634	150	485	845	292	759	343	270
KR525	MN.xx.S.xx.A.1.80	1741	144	35	220	626	132	530	650	1211	598	1726	1084	642	454	504	494	540	492	M14	552	390	390	685	150	535	875	322	759	343	270
KR525	MN.xx.S.xx.A.1.100	1741	144	35	220	639	145	530	650	1211	598	1809	1167	642	454	504	494	540	492	M14	552	390	390	792	150	642	942	382	759	343	270

(\*) Approximate values

NOTE: dimensions with Siemens VGD valves

(•) Install a counter-flange between the burner and the boiler or in alternative, drill the H hole smaller but higher than the Y point and assemble the blast tube inside the boiler.

# novanta-cinquecento series

KP91 KP92 KP93

KR512 KR515 KR520 KR525

GAS/HEAVY OIL

## MECHANICAL ATOMIZATION

### MECHANICAL OPERATION

Model	Gas train	Operation	KP91		KP92		KP93	
			Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)								
MN.PR.S.IT.A.1.50	2"	PR	012081753		012082153		012081353	
MN.PR.S.IT.A.1.65	DN65	PR	012081853		012082253		012081453	
MN.PR.S.IT.A.1.80	DN80	PR	012081953		012082353		012081553	
MN.PR.S.IT.A.1.100	DN100	PR	012082053		012082453		012081653	
MN.MD.S.IT.A.1.50	2"	MD(*)	012081754		012082154		012081354	
MN.MD.S.IT.A.1.65	DN65	MD(*)	012081854		012082254		012081454	
MN.MD.S.IT.A.1.80	DN80	MD(*)	012081954		012082354		012081554	
MN.MD.S.IT.A.1.100	DN100	MD(*)	012082054		012082454		012081654	

HEAVY OIL 400 cSt at 50° (50°E at 50°C)								
MD.PR.S.IT.A.1.50	2"	PR	012191753		012192153		012191353	
MD.PR.S.IT.A.1.65	DN65	PR	012191853		012192253		012191453	
MD.PR.S.IT.A.1.80	DN80	PR	012191953		012192353		012191553	
MD.PR.S.IT.A.1.100	DN100	PR	012192053		012192453		012191653	
MD.MD.S.IT.A.1.50	2"	PR	012191754		012192154		012191354	
MD.MD.S.IT.A.1.65	DN65	PR	012191854		012192254		012191454	
MD.MD.S.IT.A.1.80	DN80	PR	012191954		012192354		012191554	
MD.MD.S.IT.A.1.100	DN100	PR	012192054		012192454		012191654	

Model	Gas train	Operation	KR512		KR515	
			Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)						
MN.PR.S.IT.A.1.50	2"	PR	029080153		029080553	
MN.PR.S.IT.A.1.65	DN65	PR	029080253		029080653	
MN.PR.S.IT.A.1.80	DN80	PR	029080353		029080753	
MN.PR.S.IT.A.1.100	DN100	PR	029080453		029080853	
MN.MD.S.IT.A.1.50	2"	MD(*)	029080154		029080554	
MN.MD.S.IT.A.1.65	DN65	MD(*)	029080254		029080654	
MN.MD.S.IT.A.1.80	DN80	MD(*)	029080354		029080754	
MN.MD.S.IT.A.1.100	DN100	MD(*)	029080454		029080854	

Model	Gas train	Operation	KR520		KR525	
			Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)						
MN.PR.S.IT.A.1.50	2"	PR	029080953		-	
MN.PR.S.IT.A.1.65	DN65	PR	029081053		029081453	
MN.PR.S.IT.A.1.80	DN80	PR	029081153		029081553	
MN.PR.S.IT.A.1.100	DN100	PR	029081253		029081653	
MN.MD.S.IT.A.1.50	2"	MD(*)	029080954		-	
MN.MD.S.IT.A.1.65	DN65	MD(*)	029081054		029081454	
MN.MD.S.IT.A.1.80	DN80	MD(*)	029081154		029081554	
MN.MD.S.IT.A.1.100	DN100	MD(*)	029081254		029081654	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250)

In compliance with DIRECTIVE 2009/142/CE

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

# novanta-cinquecento series

KP91 KP92 KP93

KR512 KR515 KR520 KR525

GAS/HEAVY OIL



MECHANICAL ATOMIZATION

## MECHANICAL OPERATION

Model	Gas train	Operation	KR512		KR515	
			Code	Price €	Code	Price €
HEAVY OIL 400 cSt at 50° (50°E at 50°C)						
MD.PR.S.IT.A.1.50	2"	PR	029190153		029190553	
MD.PR.S.IT.A.1.65	DN65	PR	029190253		029190653	
MD.PR.S.IT.A.1.80	DN80	PR	029190353		029190753	
MD.PR.S.IT.A.1.100	DN100	PR	029190453		029190853	
MD.MD.S.IT.A.1.50	2"	MD(*)	029190154		029190554	
MD.MD.S.IT.A.1.65	DN65	MD(*)	029190254		029190654	
MD.MD.S.IT.A.1.80	DN80	MD(*)	029190354		029190754	
MD.MD.S.IT.A.1.100	DN100	MD(*)	029190454		029190854	

Model	Gas train	Operation	KR520		KR525	
			Code	Price €	Code	Price €
HEAVY OIL 400 cSt at 50° (50°E at 50°C)						
MD.PR.S.IT.A.1.50	2"	PR	029190953		-	
MD.PR.S.IT.A.1.65	DN65	PR	029191053		029191453	
MD.PR.S.IT.A.1.80	DN80	PR	029191153		029191553	
MD.PR.S.IT.A.1.100	DN100	PR	029191253		029191653	
MD.MD.S.IT.A.1.50	2"	MD(*)	029190954		-	
MD.MD.S.IT.A.1.65	DN65	MD(*)	029191054		029191454	
MD.MD.S.IT.A.1.80	DN80	MD(*)	029191154		029191554	
MD.MD.S.IT.A.1.100	DN100	MD(*)	029191254		029191654	

## ELECTRONIC OPERATION

Model	Gas train	Operation	KP91		KP92		KP93	
			Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)								
MN.PR.S.IT.A.1.50.EC	2"	PR	01208175C		01208215C		01208135C	
MN.PR.S.IT.A.1.65.EC	DN65	PR	01208185C		01208225C		01208145C	
MN.PR.S.IT.A.1.80.EC	DN80	PR	01208195C		01208235C		01208155C	
MN.PR.S.IT.A.1.100.EC	DN100	PR	01208205C		01208245C		01208165C	
MN.MD.S.IT.A.1.50.EC	2"	MD(*)	01208175G		01208215G		01208135G	
MN.MD.S.IT.A.1.65.EC	DN65	MD(*)	01208185G		01208225G		01208145G	
MN.MD.S.IT.A.1.80.EC	DN80	MD(*)	01208195G		01208235G		01208155G	
MN.MD.S.IT.A.1.100.EC	DN100	MD(*)	01208205G		01208245G		01208165G	
HEAVY OIL 400 cSt at 50° (50°E at 50°C)								
MD.PR.S.IT.A.1.50.EC	2"	PR	01219175C		01219215C		01219135C	
MD.PR.S.IT.A.1.65.EC	DN65	PR	01219185C		01219225C		01219145C	
MD.PR.S.IT.A.1.80.EC	DN80	PR	01219195C		01219235C		01219155C	
MD.PR.S.IT.A.1.100.EC	DN100	PR	01219205C		01219245C		01219165C	
MD.MD.S.IT.A.1.50.EC	2"	PR	01219175G		01219215G		01219135G	
MD.MD.S.IT.A.1.65.EC	DN65	PR	01219185G		01219225G		01219145G	
MD.MD.S.IT.A.1.80.EC	DN80	PR	01219195G		01219235G		01219155G	
MD.MD.S.IT.A.1.100.EC	DN100	PR	01219205G		01219245G		01219165G	

# novanta-cinquecento series

KP91 KP92 KP93

KR512 KR515 KR520 KR525

GAS/HEAVY OIL

## MECHANICAL ATOMIZATION

### ELECTRONIC OPERATION

Model	Gas train	Operation	KR512		KR515	
			Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)						
<b>MN.PR.S.IT.A.1.50.EC</b>	2"	PR	02908015C		02908055C	
<b>MN.PR.S.IT.A.1.65.EC</b>	DN65	PR	02908025C		02908065C	
<b>MN.PR.S.IT.A.1.80.EC</b>	DN80	PR	02908035C		02908075C	
<b>MN.PR.S.IT.A.1.100.EC</b>	DN100	PR	02908045C		02908085C	
<b>MN.MD.S.IT.A.1.50.EC</b>	2"	MD(*)	02908015G		02908055G	
<b>MN.MD.S.IT.A.1.65.EC</b>	DN65	MD(*)	02908025G		02908065G	
<b>MN.MD.S.IT.A.1.80.EC</b>	DN80	MD(*)	02908035G		02908075G	
<b>MN.MD.S.IT.A.1.100.EC</b>	DN100	MD(*)	02908045G		02908085G	

Model	Gas train	Operation	KR520		KR525	
			Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)						
<b>MN.PR.S.IT.A.1.50.EC</b>	2"	PR	02908095C		-	
<b>MN.PR.S.IT.A.1.65.EC</b>	DN65	PR	02908105C		02908145C	
<b>MN.PR.S.IT.A.1.80.EC</b>	DN80	PR	02908115C		02908155C	
<b>MN.PR.S.IT.A.1.100.EC</b>	DN100	PR	02908125C		02908165C	
<b>MN.MD.S.IT.A.1.50.EC</b>	2"	MD(*)	02908095G		-	
<b>MN.MD.S.IT.A.1.65.EC</b>	DN65	MD(*)	02908105G		02908145G	
<b>MN.MD.S.IT.A.1.80.EC</b>	DN80	MD(*)	02908115G		02908155G	
<b>MN.MD.S.IT.A.1.100.EC</b>	DN100	MD(*)	02908125G		02908165G	

Model	Gas train	Operation	KP91		KP92		KP93	
			Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)								
<b>MN.MD.S.xx.A.1.50.ES</b>	2"	MD(*)	01208175S		01208215S		01208135S	
<b>MN.MD.S.xx.A.1.65.ES</b>	DN65	MD(*)	01208185S		01208225S		01208145S	
<b>MN.MD.S.xx.A.1.80.ES</b>	DN80	MD(*)	01208195S		01208235S		01208155S	
<b>MN.MD.S.xx.A.1.100.ES</b>	DN100	MD(*)	01208205S		01208245S		01208165S	

HEAVY OIL 400 cSt at 50° (50°E at 50°C)								
<b>MD.MD.S.xx.A.1.50.ES</b>	2"	MD(*)	01219175S		01219215S		01219135S	
<b>MD.MD.S.xx.A.1.65.ES</b>	DN65	MD(*)	01219185S		01219225S		01219145S	
<b>MD.MD.S.xx.A.1.80.ES</b>	DN80	MD(*)	01219195S		01219235S		01219155S	
<b>MD.MD.S.xx.A.1.100.ES</b>	DN100	MD(*)	01219205S		01219245S		01219165S2	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250)

In compliance with DIRECTIVE 2009/142/CE

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

# novanta-cinquecento series

KP91 KP92 KP93

KR512 KR515 KR520 KR525

GAS/HEAVY OIL



**MECHANICAL ATOMIZATION**

## ELECTRONIC OPERATION

Model	Gas train	Operation	KR512		KR515	
			Code	Price €	Code	Price €
HEAVY OIL 400 cSt at 50° (50°E at 50°C)						
<b>MD.PR.S.IT.A.1.50.EC</b>	2"	PR	02919015C		02919055C	
<b>MD.PR.S.IT.A.1.65.EC</b>	DN65	PR	02919025C		02919065C	
<b>MD.PR.S.IT.A.1.80.EC</b>	DN80	PR	02919035C		02919075C	
<b>MD.PR.S.IT.A.1.100.EC</b>	DN100	PR	02919045C		02919085C	
<b>MD.MD.S.IT.A.1.50.EC</b>	2"	MD(*)	02919015G		02919055G	
<b>MD.MD.S.IT.A.1.65.EC</b>	DN65	MD(*)	02919025G		02919065G	
<b>MD.MD.S.IT.A.1.80.EC</b>	DN80	MD(*)	02919035G		02919075G	
<b>MD.MD.S.IT.A.1.100.EC</b>	DN100	MD(*)	02919045G		02919085G	

Model	Gas train	Operation	KR520		KR525	
			Code	Price €	Code	Price €
HEAVY OIL 400 cSt at 50° (50°E at 50°C)						
<b>MD.PR.S.IT.A.1.50.EC</b>	2"	PR	02919095C		-	
<b>MD.PR.S.IT.A.1.65.EC</b>	DN65	PR	02919105C		02919145C	
<b>MD.PR.S.IT.A.1.80.EC</b>	DN80	PR	02919115C		02919155C	
<b>MD.PR.S.IT.A.1.100.EC</b>	DN100	PR	02919125C		02919165C	
<b>MD.MD.S.IT.A.1.50.EC</b>	2"	MD(*)	02919095G		-	
<b>MD.MD.S.IT.A.1.65.EC</b>	DN65	MD(*)	02919105G		02919145G	
<b>MD.MD.S.IT.A.1.80.EC</b>	DN80	MD(*)	02919115G		02919155G	
<b>MD.MD.S.IT.A.1.100.EC</b>	DN100	MD(*)	02919125G		02919165G	

Model	Gas train	Operation	KR512		KR515	
			Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)						
<b>MN.MD.S.xx.A.1.50.ES</b>	2"	MD(*)	02908015S28		02908055S28	
<b>MN.MD.S.xx.A.1.65.ES</b>	DN65	MD(*)	02908025S28		02908065S28	
<b>MN.MD.S.xx.A.1.80.ES</b>	DN80	MD(*)	02908035S28		02908075S28	
<b>MN.MD.S.xx.A.1.100.ES</b>	DN100	MD(*)	02908045S28		02908085S28	

Model	Gas train	Operation	KR520		KR525	
			Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)						
<b>MN.MD.S.xx.A.1.50.ES</b>	2"	MD(*)	02908095S		-	
<b>MN.MD.S.xx.A.1.65.ES</b>	DN65	MD(*)	02908105S		02908145S	
<b>MN.MD.S.xx.A.1.80.ES</b>	DN80	MD(*)	02908115S		02908155S	
<b>MN.MD.S.xx.A.1.100.ES</b>	DN100	MD(*)	02908125S		02908165S	

# novanta-cinquecento series

KP91 KP92 KP93

KR512 KR515 KR520 KR525

GAS/HEAVY OIL

## MECHANICAL ATOMIZATION

### ELECTRONIC OPERATION

Model	Gas train	Operation	KR512		KR515	
			Code	Price €	Code	Price €
HEAVY OIL 400 cSt at 50° (50°E at 50°C)						
<b>MD.MD.S.xx.A.1.50.ES</b>	2"	MD(*)	02919015S		02919055S	
<b>MD.MD.S.xx.A.1.65.ES</b>	DN65	MD(*)	02919025S		02919065S	
<b>MD.MD.S.xx.A.1.80.ES</b>	DN80	MD(*)	02919035S		02919075S	
<b>MD.MD.S.xx.A.1.100.ES</b>	DN100	MD(*)	02919045S		02919085S	

Model	Gas train	Operation	KR520		KR525	
			Code	Price €	Code	Price €
HEAVY OIL 400 cSt at 50° (50°E at 50°C)						
<b>MD.MD.S.xx.A.1.50.ES</b>	2"	MD(*)	02919095S		-	
<b>MD.MD.S.xx.A.1.65.ES</b>	DN65	MD(*)	02919105S		02919145S	
<b>MD.MD.S.xx.A.1.80.ES</b>	DN80	MD(*)	02919115S		02919155S	
<b>MD.MD.S.xx.A.1.100.ES</b>	DN100	MD(*)	02919125S		02919165S	

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250)

In compliance with DIRECTIVE 2009/142/CE

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE



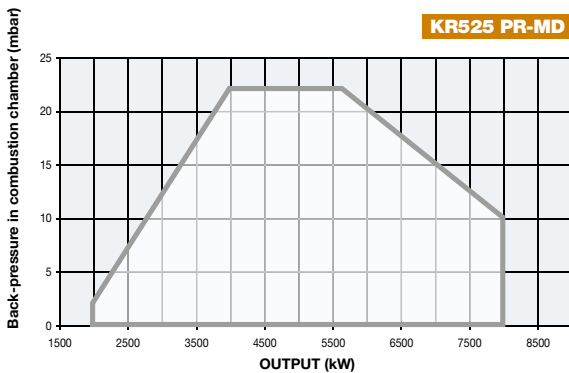
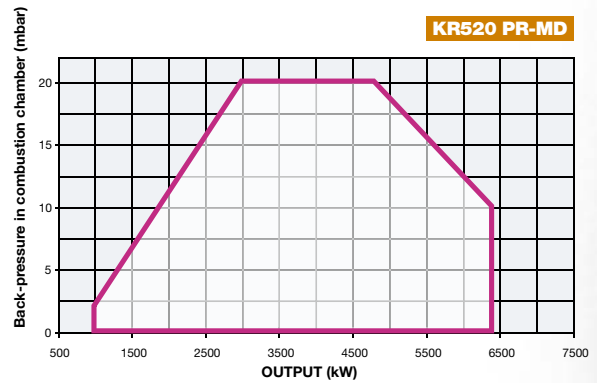
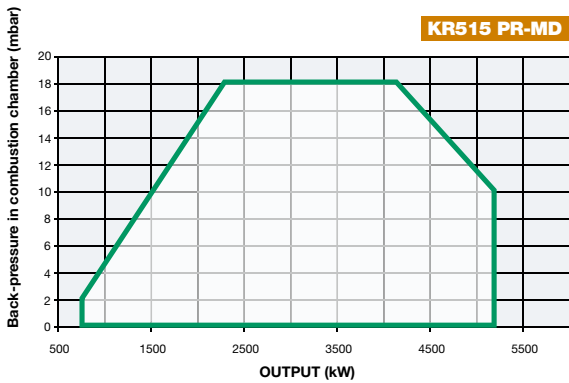
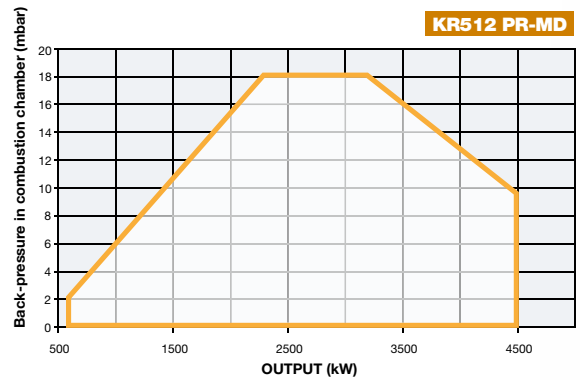
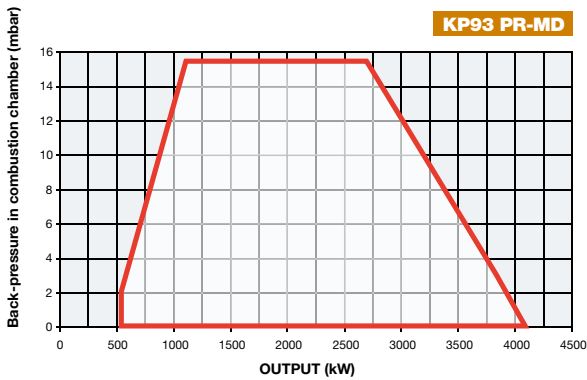
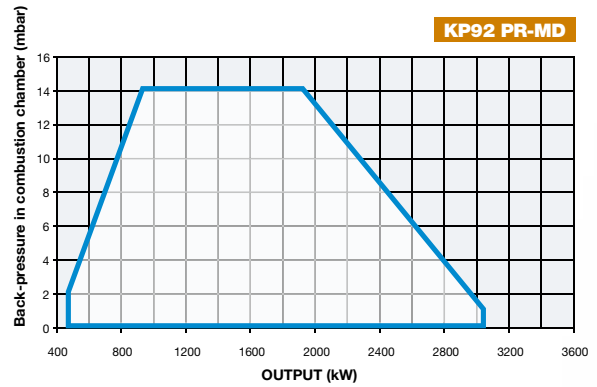
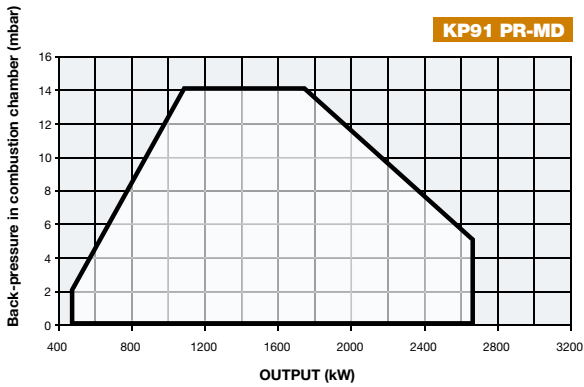
# novanta-cinquecento series

KP91 KP92 KP93

KR512 KR515 KR520 KR525

GAS/HEAVY OIL

MECHANICAL ATOMIZATION



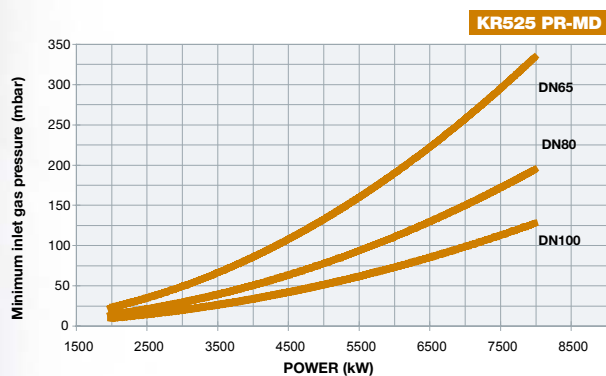
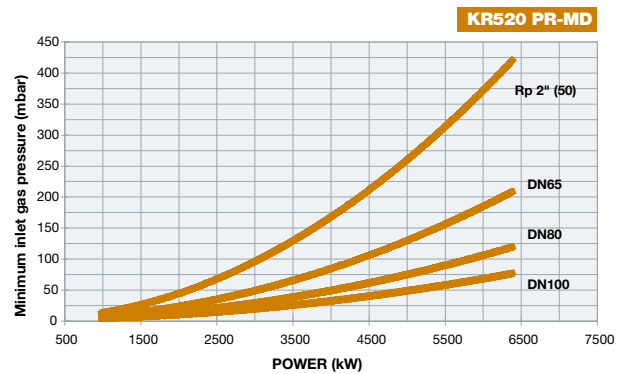
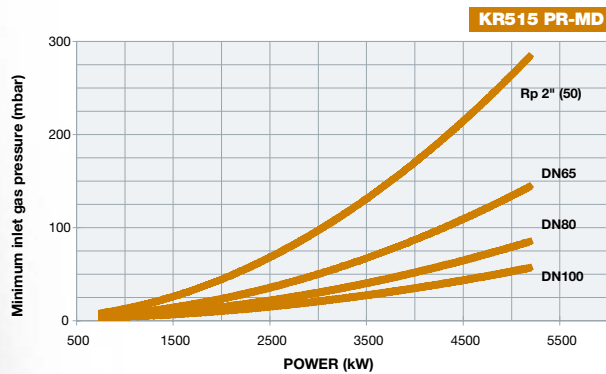
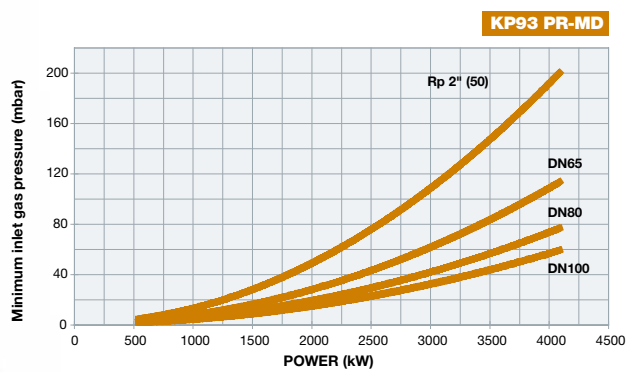
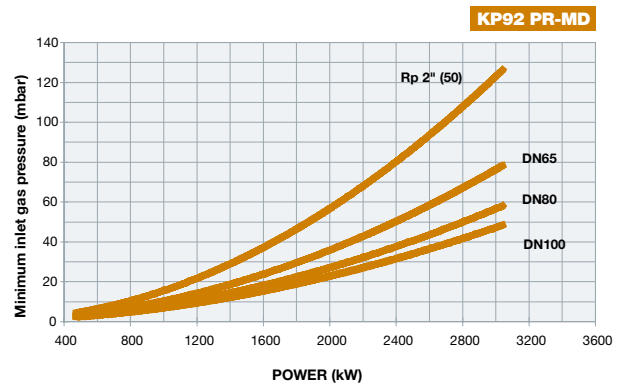
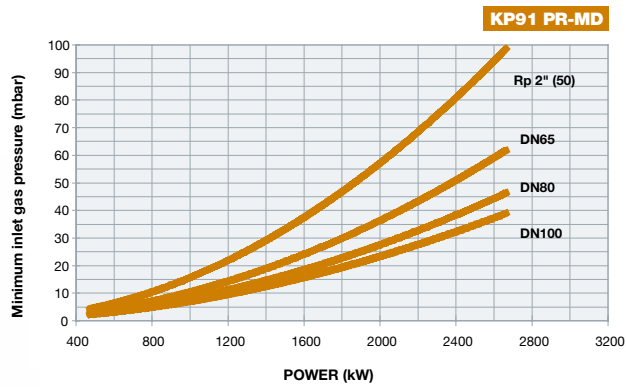
# novanta-cinquecento series

KP91 KP92 KP93

KR512 KR515 KR520 KR525

GAS/HEAVY OIL

## MECHANICAL ATOMIZATION



Attention: the graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.



These models of burners represent the most powerful version of the KP series. Thanks to their independent electric motor for the activation of the oil pump, they can burn gas and heavy oil separately. In fact, during gas firing, the oil pump motor does not operate and remains off.

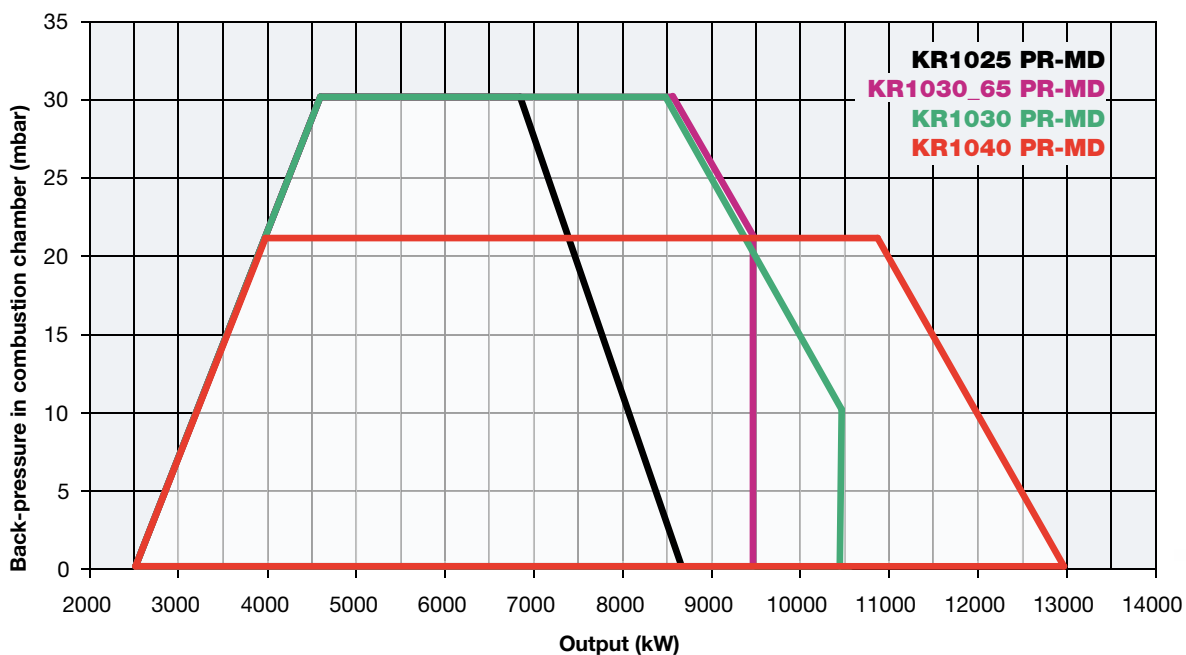
These burners are, therefore, provided with an UV photocell to control the flame during the operation.

They are, therefore, provided with a pre-heating tank equipped with low thermal load electrical resistance to ensure oil fluidity. All burners with progressive or modulating operation, have been built to burn fuels whose standard viscosity is 50 cSt at 50°C (7 E° at 50°C).

Upon request it is available the version for heavy oils up to 400 cSt at 50°C (50 E° at 50°C).



*Electronic set up (optional)*



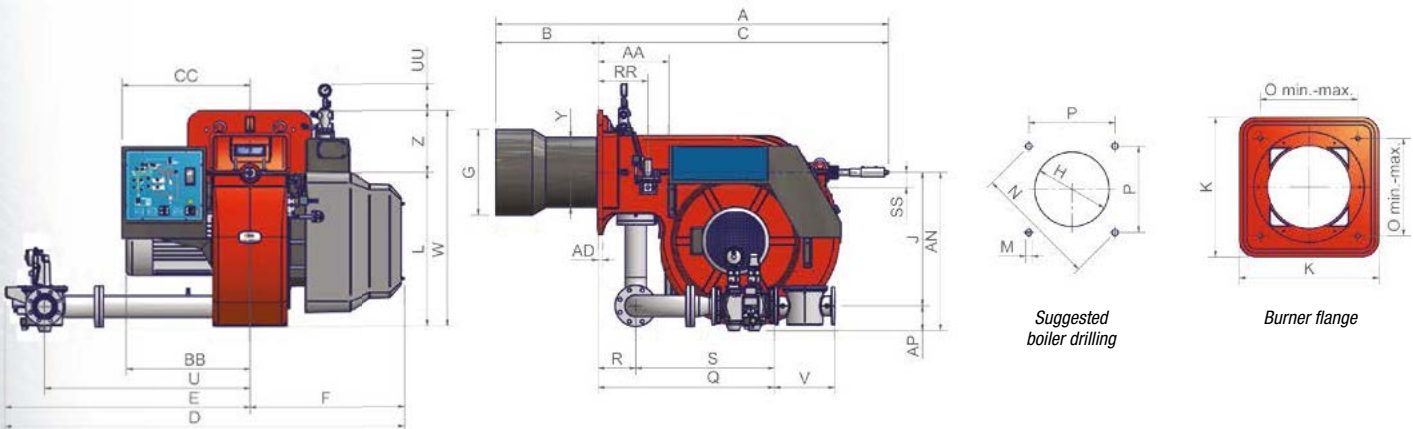
**MECHANICAL ATOMIZATION**

**TECHNICAL DETAILS**

Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Resistor kW	Gas connections
		min.	max.					
<b>KR1025</b>	MN.xx.S.IT.A.1.xx	2.550	8.700	400 V 3N ac	18,5	4,0	24 + 24	DN 65 - 80 - 100
<b>KR1030</b>	MN.xx.S.IT.A.1.65	2.550	9.500	400 V 3N ac	22,0	5,5	24 + 24	DN 65
<b>KR1030</b>	MN.xx.S.IT.A.1.xx	2.550	10.600	400 V 3N ac	22,0	5,5	24 + 24	DN 80 - 100
<b>KR1040</b>	MN.xx.x.IT.A.1.xx	2.550	13.000	400 V 3N ac	30,0	5,5	24 + 24	DN 80 - 100 - 125

For the configuration of the gas train, see pages 110-111.

**N.B. Monoblock burners Duemila series with the capacity up to 19 MW consult ours sales offices.**



Low pressure pump set (pump, motor and filter) is included, but supplied loose (not assembled on the burner).

Type	Packaging dimensions* (mm)			
	l	p	h	kg
<b>KR1025/KR1030</b>	2270	1720	1320	760
<b>KR1030/KR1040</b>	2270	1720	1320	780
<b>Gruppo di spinta**</b>	1170	770	1610	-

(\*) Approximate values  
 (\*\*) Supplied underframe

Type	Model	Overall dimensions* (mm)																															
		A	AA	AD	AN	AP	B	BB	C	CC	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	RR	S	SS	U	UU	V	W	Y	Z
<b>KR1025</b>	MN.xx.S.IT.A.1.65	2088	377	25	827	118	544	641	1544	680	2121	1299	822	400	450	709	660	816	M16	651	460	460	914	200	265	714	80	1092	142	292	1146	379	330
<b>KR1025</b>	MN.xx.S.IT.A.1.80	2088	377	25	841	132	544	641	1544	680	2123	1301	822	400	450	709	660	816	M16	651	460	460	936	200	265	736	80	1092	142	322	1146	379	330
<b>KR1025</b>	MN.xx.S.IT.A.1.100	2088	377	25	854	145	544	641	1544	680	2139	1317	822	400	450	709	660	816	M16	651	460	460	842	200	265	642	80	1092	142	382	1146	379	330
<b>KR1030</b>	MN.xx.S.IT.A.1.65	2088	377	25	827	118	544	657	1544	680	2121	1299	822	454	504	709	660	816	M16	651	460	460	914	200	265	714	80	1092	142	292	1146	372	330
<b>KR1030</b>	MN.xx.S.IT.A.1.80	2088	377	25	841	132	544	657	1544	680	2123	1301	822	454	504	709	660	816	M16	651	460	460	936	200	265	736	80	1092	142	322	1146	372	330
<b>KR1030</b>	MN.xx.S.IT.A.1.100	2088	377	25	854	145	544	657	1544	680	2139	1317	822	454	504	709	660	816	M16	651	460	460	842	200	265	642	80	1092	142	382	1146	372	330
<b>KR1040</b>	MN.xx.S.IT.A.1.80	2106	377	25	841	132	544	657	1562	680	2123	1301	822	514	564	709	660	816	M16	651	460	460	936	200	265	736	80	1092	142	322	1146	408	330
<b>KR1040</b>	MN.xx.S.IT.A.1.100	2106	377	25	854	145	544	657	1562	680	2139	1317	822	514	564	709	660	816	M16	651	460	460	842	200	265	642	80	1092	142	382	1146	408	330
<b>KR1040</b>	MN.xx.S.IT.A.1.125	2106	377	25	884	175	544	657	1562	680	2254	1432	822	514	564	709	660	816	M16	651	460	460	954	200	265	754	80	1192	142	480	1146	408	330

(\*) Approximate values



## MECHANICAL ATOMIZATION

## MECHANICAL OPERATION

Model	Gas train	Operation	KR1025		KR1030		KR1040	
			Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)								
MN.PR.S.IT.A.1.65	DN65	PR	023081653		023081953		-	
MN.PR.S.IT.A.1.80	DN80	PR	023081753		023082053		023082253	
MN.PR.S.IT.A.1.100	DN100	PR	023081853		023082153		023082353	
MN.PR.S.IT.A.1.125	DN125	PR	-		-		023082453	
MN.MD.S.IT.A.1.65	DN65	MD(*)	023081654		023081954		-	
MN.MD.S.IT.A.1.80	DN80	MD(*)	023081754		023082054		023082254	
MN.MD.S.IT.A.1.100	DN100	MD(*)	023081854		023082154		023082354	
MN.MD.S.IT.A.1.125	DN125	MD(*)	-		-		023082454	
HEAVY OIL 400 cSt at 50° (50°E at 50°C)								
MD.PR.S.IT.A.1.65	DN65	PR	023191653		023191953		-	
MD.PR.S.IT.A.1.80	DN80	PR	023191753		023192053		023192253	
MD.PR.S.IT.A.1.100	DN100	PR	023191853		023192153		023192353	
MD.PR.S.IT.A.1.125	DN125	PR	-		-		023192453	
MD.MD.S.IT.A.1.65	DN65	MD(*)	023191654		023191954		-	
MD.MD.S.IT.A.1.80	DN80	MD(*)	023191754		023192054		023192254	
MD.MD.S.IT.A.1.100	DN100	MD(*)	023191854		023192154		023192354	
MD.MD.S.IT.A.1.125	DN125	MD(*)	-		-		023192454	

## ELECTRONIC OPERATION

Model	Gas train	Operation	KR1025		KR1030		KR1040	
			Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)								
MN.PR.S.IT.A.1.65.EC	DN65	PR	02308165		02308195		-	
MN.PR.S.IT.A.1.80.EC	DN80	PR	02308175		02308205		02308225	
MN.PR.S.IT.A.1.100.EC	DN100	PR	02308185		02308215		02308235	
MN.PR.S.IT.A.1.125.EC	DN125	PR	-		-		02308245	
MN.MD.S.IT.A.1.65.EC	DN65	MD(*)	02308165		02308195		-	
MN.MD.S.IT.A.1.80.EC	DN80	MD(*)	02308175		02308205		02308225	
MN.MD.S.IT.A.1.100.EC	DN100	MD(*)	02308185		02308215		02308235	
MN.MD.S.IT.A.1.125.EC	DN125	MD(*)	-		-		02308245	
HEAVY OIL 400 cSt at 50° (50°E ta 50°C)								
MD.PR.S.IT.A.1.65.EC	DN65	PR	02319165		02319195		-	
MD.PR.S.IT.A.1.80.EC	DN80	PR	02319175		02319205		02319225	
MD.PR.S.IT.A.1.100.EC	DN100	PR	02319185		02319215		02319235	
MD.PR.S.IT.A.1.125.EC	DN125	PR	-		-		02319245	
MD.MD.S.IT.A.1.65.EC	DN65	MD(*)	02319165		02319195		-	
MD.MD.S.IT.A.1.80.EC	DN80	MD(*)	02319175		02319205		02319225	
MD.MD.S.IT.A.1.100.EC	DN100	MD(*)	02319185		02319215		02319235	
MD.MD.S.IT.A.1.125.EC	DN125	MD(*)	-		-		02319245	

**MECHANICAL ATOMIZATION**

**ELECTRONIC OPERATION**

Model	Gas train	Operation	KR1025		KR1030		KR1040	
			Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)								
<b>MN.MD.S.IT.A.1.65.ES</b>	DN65	MD(*)	02308165S		02308195S		-	
<b>MN.MD.S.IT.A.1.80.ES</b>	DN80	MD(*)	02308175S		02308205S		02308225S	
<b>MN.MD.S.IT.A.1.100.ES</b>	DN100	MD(*)	02308185S		02308215S		02308235S	
<b>MN.MD.S.IT.A.1.125.ES</b>	DN125	MD(*)	-		-		02308245S	
HEAVY OIL 400 cSt at 50° (50°E at 50°C)								
<b>MD.MD.S.IT.A.1.65.ES</b>	DN65	MD(*)	02319165S		02319195S		-	
<b>MD.MD.S.IT.A.1.80.ES</b>	DN80	MD(*)	02319175S		02319205S		02319225S	
<b>MD.MD.S.IT.A.1.100.ES</b>	DN100	MD(*)	02319185S		02319215S		02319235S	
<b>MD.MD.S.IT.A.1.125.ES</b>	DN125	MD(*)	-		-		02319245S	

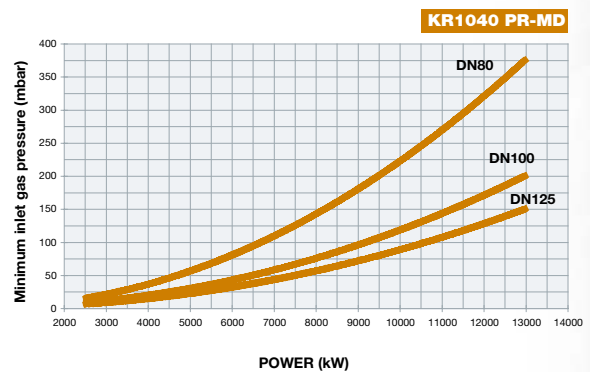
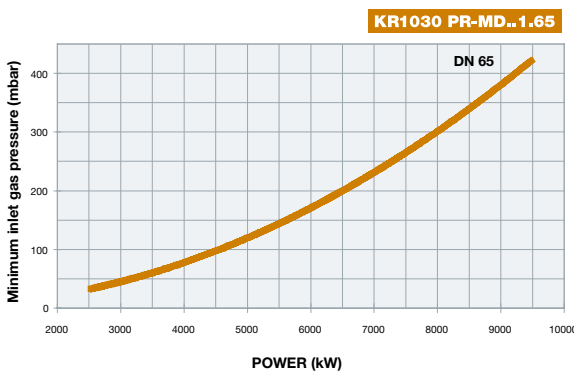
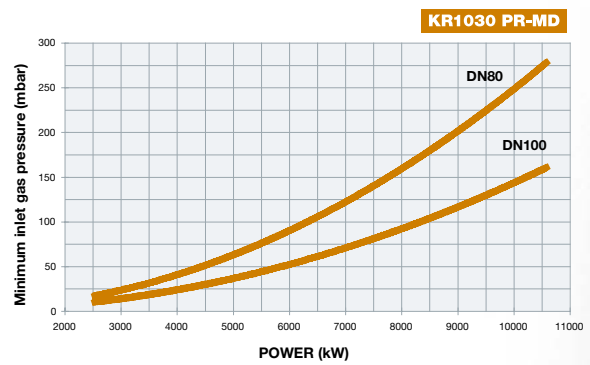
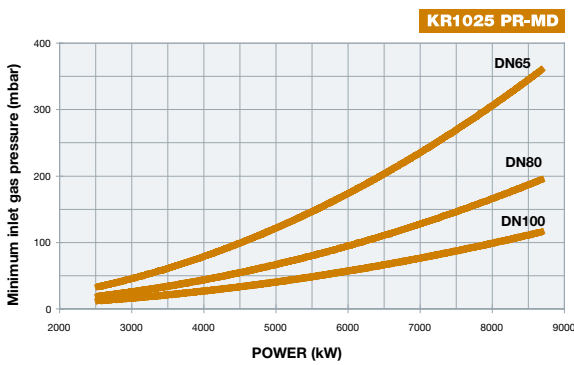
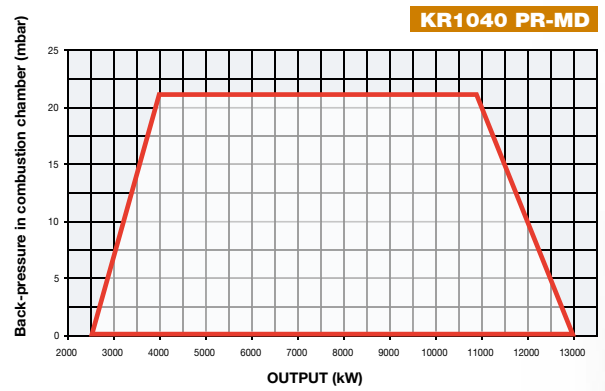
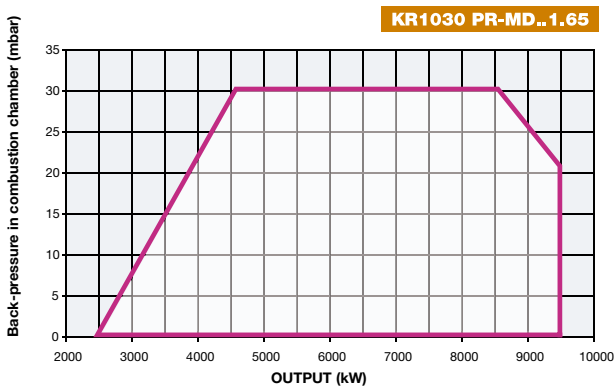
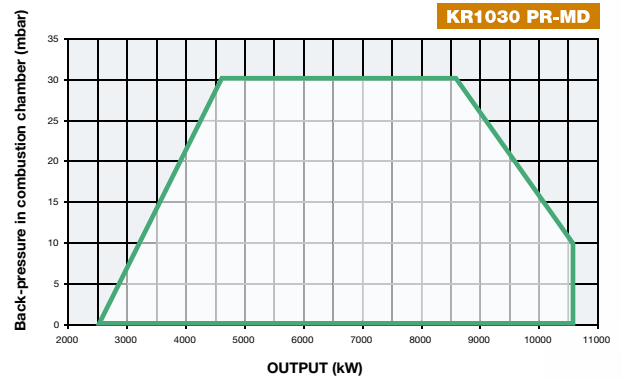
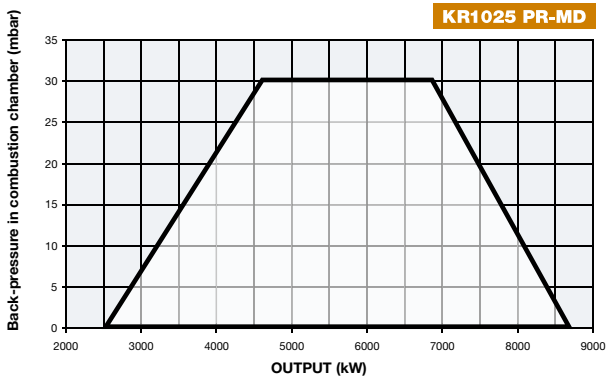
(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250)

In compliance with DIRECTIVE 2009/142/CE

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE



MECHANICAL ATOMIZATION



Attention: the graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.

# tecnopress-novanta-cinquecento series

KPBY72 KPBY73 KPBY91 KPBY92

KRBY512 KRBY515 KRBY520 KRBY525

GAS/HEAVY OIL

## PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION

This particular gas/heavy oil burners series has been developed in order to use compressed air or, alternatively, steam as a fluid to atomize the fuel, with the aim to accomplish a better combustion result compared to the one gained using the traditional atomizing systems.

These burners are provided with a low pressure nozzle which allows consumption levels to be kept low and which also limits the general wear of the whole atomization system. All burners are progressive and are completed with an electrical control cabinet and with a pump oil to be installed by the final user. Furthermore, the nozzle performs an automatic cleaning process at the end of each cycle.

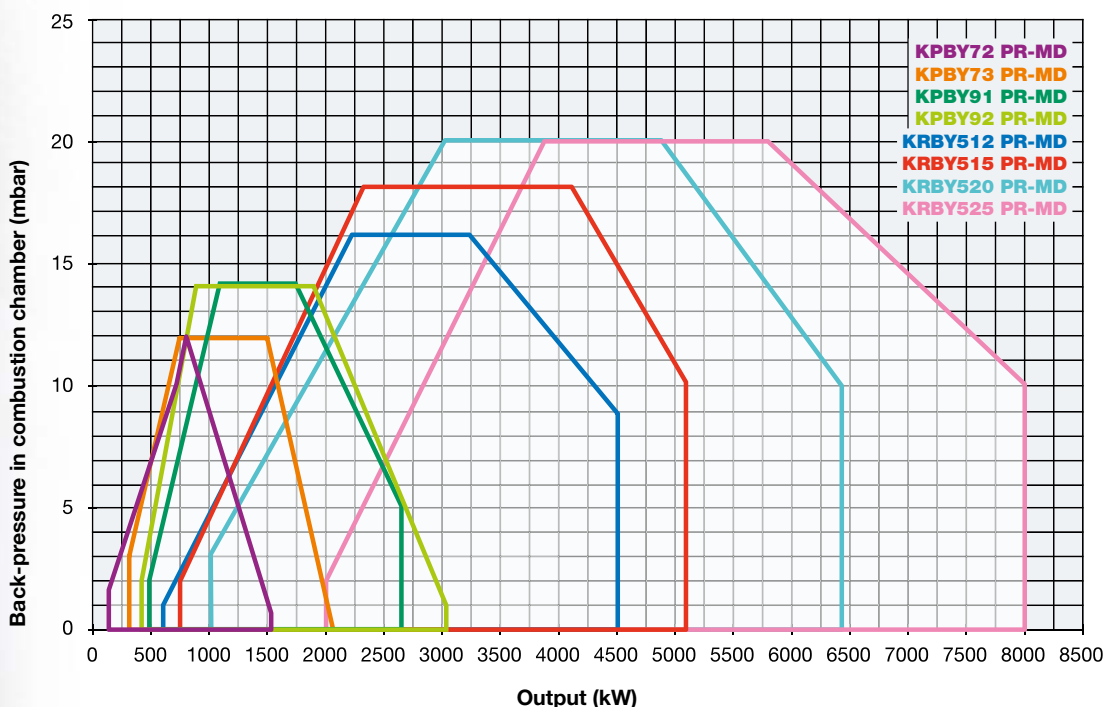
The plant must be provided with compressed air or steam at 8 bar.

Burners are ignited through a pilot which can work either with natural gas or LPG and are suitable to be used with fuels with a viscosity up to 4000 cSt at 50°C (530°E at 50°).

The standard version of burners is set up to atomize with compressed air only, when steam is requested for the atomization, the burner will be modified through a specific kit.

However, compressed air must be always present at the burner in the following cases:

- cold start ups when no steam is available
- valve opening for automatic nozzle cleaning.





# tecnopress-novanta-cinquecento series

KPBY72 KPBY73 KPBY91 KPBY92

KRBY512 KRBY515 KRBY520 KRBY525

GAS/HEAVY OIL

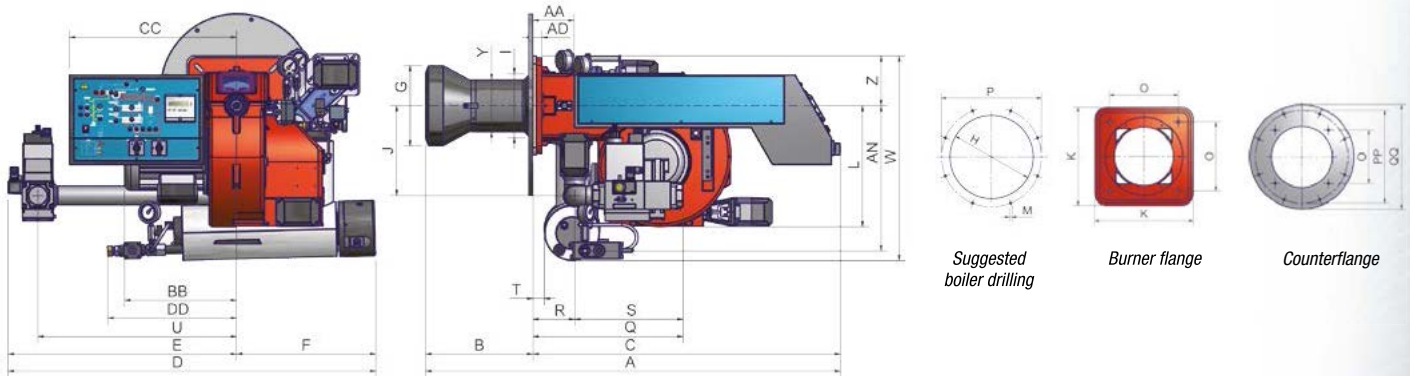


**PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION**

## TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Resistor kW	Gas connections
		min.	max.					
<b>KPBY72</b>	MH.xx.S.IT.A.1.xxx	291	1.530	230/400 V 3N ac	2,2	0,75	4,5	2" - DN65 - 80
<b>KPBY73</b>	MH.xx.S.IT.A.1.xxx	320	2.050	230/400 V 3N ac	3,0	0,75	8,0	2" - DN65 - 80
<b>KPBY91</b>	MH.xx.S.IT.A.1.xxx	480	2.670	230/400 V 3N ac	4,0	0,75	8,0	2" - DN65 - 80 - 100
<b>KPBY92</b>	MH.xx.S.IT.A.1.xxx	480	3.050	230/400 V 3N ac	5,5	0,75	12,0	2" - DN65 - 80 - 100

For the configuration of the gas train, see pages 110-111.



Low pressure pump set (pump, motor and filter) is included, but supplied loose (not assembled on the burner).

Type	Model	Overall dimensions* (mm)																														
		DN	A	AA	AN	B**	BB	C	CC	D	DD	E	F	G	H	J	K	L	M	O	P	R	S	U	V	W	Z	T	Y	PP	QQ	
		min.		max.		min.		max.		min.		max.		min.		max.		min.		min.		min.		min.		min.		min.		min.		
<b>KPBY72</b>	MH.xx.x.xx.1.50	50	1443	150	517	474	373	969	525	1411	470	895	390	320	360	221	300	374	M12	216	250	500	150	338	720	-	667	150	43	210	500	550
<b>KPBY72</b>	MH.xx.x.xx.1.65	65	1443	150	517	474	373	969	525	1400	470	884	390	320	360	456	300	374	M12	216	250	500	150	483	678	292	667	150	43	210	500	550
<b>KPBY72</b>	MH.xx.x.xx.1.80	80	1443	150	517	474	373	969	525	1435	470	919	390	320	360	456	300	374	M12	216	250	500	150	535	710	322	667	150	43	210	500	550
<b>KPBY73</b>	MH.xx.x.xx.1.50	50	1493	150	517	524	373	969	525	1411	470	895	387	320	360	221	300	374	M12	216	250	500	150	338	720	-	667	150	43	210	500	550
<b>KPBY73</b>	MH.xx.x.xx.1.65	65	1493	150	517	524	373	969	525	1400	470	884	387	320	360	456	300	374	M12	216	250	500	150	483	678	292	667	150	43	210	500	550
<b>KPBY73</b>	MH.xx.x.xx.1.80	80	1493	150	517	524	373	969	525	1435	470	919	387	320	360	456	300	374	M12	216	250	500	150	535	710	322	667	150	43	210	500	550
<b>KPBY91</b>	MH.xx.x.xx.1.50	50	1475	240	600	490	419	985	532	1372	510	852	520	365	405	456	360	550	M12	280	310	500	166	374	624	-	798	185	43	228	500	550
<b>KPBY91</b>	MH.xx.x.xx.1.65	65	1475	240	600	490	419	985	532	1569	510	1049	520	365	405	456	360	550	M12	280	310	500	166	483	843	292	798	185	43	228	500	550
<b>KPBY91</b>	MH.xx.x.xx.1.80	80	1475	240	600	490	419	985	532	1604	510	1084	520	365	405	456	360	550	M12	280	310	500	166	535	875	322	798	185	43	228	500	550
<b>KPBY91</b>	MH.xx.x.xx.1.100	100	1475	240	600	490	419	985	532	1687	510	1167	520	365	405	456	360	550	M12	280	310	500	166	642	942	382	798	185	43	228	500	550
<b>KPBY92</b>	MH.xx.x.xx.1.50	50	1475	240	600	490	419	985	532	1372	510	852	520	365	405	456	360	550	M12	280	310	500	166	374	624	-	798	185	43	228	500	550
<b>KPBY92</b>	MH.xx.x.xx.1.65	65	1475	240	600	490	419	985	532	1569	510	1049	520	365	405	456	360	550	M12	280	310	500	166	483	843	292	798	185	43	228	500	550
<b>KPBY92</b>	MH.xx.x.xx.1.80	80	1475	240	600	490	419	985	532	1604	510	1084	520	365	405	456	360	550	M12	280	310	500	166	535	875	322	798	185	43	228	500	550
<b>KPBY92</b>	MH.xx.x.xx.1.100	100	1475	240	600	490	419	985	532	1687	510	1167	520	365	405	456	360	550	M12	280	310	500	166	642	942	382	798	185	43	228	500	550

(\*) Approximate values

(\*\*) The dimension B is reduced by 20 mm with counterflange and gasket

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

# tecnopress-novanta-cinquecento series

KPBY72 KPBY73 KPBY91 KPBY92

KRBY512 KRBY515 KRBY520 KRBY525

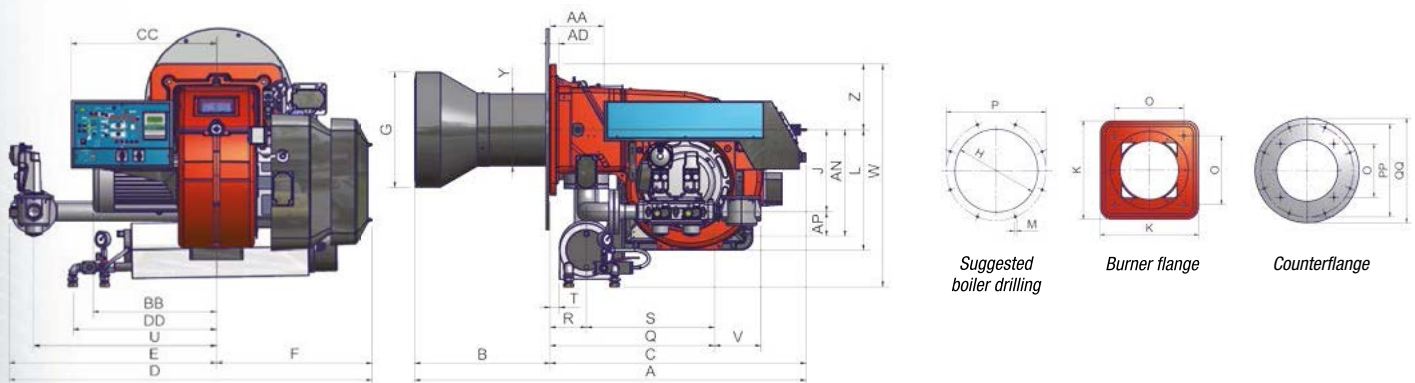
GAS/HEAVY OIL

## PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION

### TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Resistor kW	Gas connections
		min.	max.					
<b>KRBY512</b>	MH.xx.S.IT.A.1.xxx	600	4.500	230/400 V 3N ac	9,2	0,75	18	2" - DN65 - 80 - 100
<b>KRBY515</b>	MH.xx.S.IT.A.1.xxx	770	5.200	230/400 V 3N ac	11,0	0,75	18	2" - DN65 - 80 - 100
<b>KRBY520</b>	MH.xx.S.IT.A.1.xxx	1.000	6.400	230/400 V 3N ac	15,0	0,75	24	2" - DN65 - 80 - 100
<b>KRBY525</b>	MH.xx.S.IT.A.1.xxx	2.000	8.000	400 V 3N ac	18,5	0,75	24	DN65 - 80 - 100

For the configuration of the gas train, see pages 110-111.



Low pressure pump set (pump, motor and filter) is included, but supplied loose (not assembled on the burner).

Type	Model	Overall dimensions* (mm)																													
		DN	A	AA	AN	AP	B**	BB	C	CC	D	E	F	G	H	J	K	L	M	O	P	Q	R	S	U	V	W	Z	Y	PP	QQ
<b>KRBY512</b>	MH.xx.x.xx.A.1.50	50	1607	523	594	100	540	508	1067	636	1512	870	642	456	506	494	540	560	M14	390	800	755	150	605	750	216	916	270	328	800	850
<b>KRBY512</b>	MH.xx.x.xx.A.1.65	65	1607	523	612	118	540	508	1067	636	1517	875	642	456	506	494	540	560	M14	390	800	633	150	485	750	292	916	270	328	800	850
<b>KRBY512</b>	MH.xx.x.xx.A.1.80	80	1607	523	626	132	540	508	1067	636	1624	986	642	456	506	494	540	560	M14	390	800	685	150	535	858	322	916	270	328	800	850
<b>KRBY512</b>	MH.xx.x.xx.A.1.100	100	1607	523	639	145	540	508	1067	636	1727	1085	642	456	506	494	540	560	M14	390	800	792	150	642	942	382	916	270	328	800	850
<b>KRBY515</b>	MH.xx.x.xx.A.1.50	50	1623	523	594	100	556	508	1067	636	1512	870	642	475	525	494	540	560	M14	390	800	755	150	605	750	216	916	270	328	800	850
<b>KRBY515</b>	MH.xx.x.xx.A.1.65	65	1623	523	612	118	556	508	1067	636	1517	875	642	475	525	494	540	560	M14	390	800	633	150	485	750	292	916	270	328	800	850
<b>KRBY515</b>	MH.xx.x.xx.A.1.80	80	1623	523	626	132	556	508	1067	636	1624	986	642	475	525	494	540	560	M14	390	800	685	150	535	858	322	916	270	328	800	850
<b>KRBY515</b>	MH.xx.x.xx.A.1.100	100	1623	523	639	145	556	508	1067	636	1727	1085	642	475	525	494	540	560	M14	390	800	792	150	642	942	382	916	270	328	800	850
<b>KRBY520</b>	MH.xx.x.xx.A.1.50	50	1650	523	594	100	583	508	1067	636	1512	870	642	527	577	494	540	560	M14	390	800	755	150	605	750	216	916	270	328	800	850
<b>KRBY520</b>	MH.xx.x.xx.A.1.65	65	1650	523	612	118	583	508	1067	636	1517	875	642	527	577	494	540	560	M14	390	800	633	150	485	750	292	916	270	328	800	850
<b>KRBY520</b>	MH.xx.x.xx.A.1.80	80	1650	523	626	132	583	508	1067	636	1624	986	642	527	577	494	540	560	M14	390	800	685	150	535	858	322	916	270	328	800	850
<b>KRBY520</b>	MH.xx.x.xx.A.1.100	100	1650	523	639	145	583	508	1067	636	1727	1085	642	527	577	494	540	560	M14	390	800	792	150	642	942	382	916	270	328	800	850
<b>KRBY525</b>	MH.xx.x.xx.A.1.65	65	1619	523	612	118	552	508	1067	636	1517	875	642	572	632	494	540	560	M14	390	800	633	150	485	750	292	916	270	328	800	850
<b>KRBY525</b>	MH.xx.x.xx.A.1.80	80	1619	523	626	132	552	508	1067	636	1624	986	642	572	632	494	540	560	M14	390	800	685	150	535	858	322	916	270	328	800	850
<b>KRBY525</b>	MH.xx.x.xx.A.1.100	100	1619	523	639	145	552	508	1067	636	1727	1085	642	572	632	494	540	560	M14	390	800	792	150	642	942	382	916	270	328	800	850

(\*) Approximate values

(\*\*) The dimension B is reduced by 25 mm with counterflange and gasket

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

# tecnopress-novanta-cinquecento series

KPBY72 KPBY73 KPBY91 KPBY92

KRBY512 KRBY515 KRBY520 KRBY525

GAS/HEAVY OIL



## PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION

Model	Gas train	Operation	KPBY72		KPBY73	
			Code	Price €	Code	Price €

HEAVY OIL 4000 cSt at 50°C (530°E at 50°C)						
MH.PR.S.xx.A.1.50.EC	2"	PR	-	-	-	-
MH.PR.S.xx.A.1.65.EC	DN65	PR	-	-	-	-
MH.PR.S.xx.A.1.80.EC	DN80	PR	-	-	-	-
MH.MD.S.xx.A.1.50.EC	2"	MD(*)	-	-	-	-
MH.MD.S.xx.A.1.65.EC	DN65	MD(*)	-	-	-	-
MH.MD.S.xx.A.1.80.EC	DN80	MD(*)	-	-	-	-

Model	Gas train	Operation	KPBY91		KPBY92	
			Code	Price €	Code	Price €

HEAVY OIL 4000 cSt at 50°C (530°E at 50°C)						
MH.PR.S.xx.A.1.50.EC	2"	PR	-	-	-	-
MH.PR.S.xx.A.1.65.EC	DN65	PR	-	-	-	-
MH.PR.S.xx.A.1.80.EC	DN80	PR	-	-	-	-
MH.PR.S.xx.A.1.100.EC	DN100	PR	-	-	-	-
MH.MD.S.xx.A.1.50.EC	2"	MD(*)	-	-	-	-
MH.MD.S.xx.A.1.65.EC	DN65	MD(*)	-	-	-	-
MH.MD.S.xx.A.1.80.EC	DN80	MD(*)	-	-	-	-
MH.MD.S.xx.A.1.100.EC	DN100	MD(*)	-	-	-	-

Model	Gas train	Operation	KRBY512		KRBY515	
			Code	Price €	Code	Price €

HEAVY OIL 4000 cSt at 50°C (530°E at 50°C)						
MH.PR.S.xx.A.1.50.EC	2"	PR	-	-	-	-
MH.PR.S.xx.A.1.65.EC	DN65	PR	-	-	-	-
MH.PR.S.xx.A.1.80.EC	DN80	PR	-	-	-	-
MH.PR.S.xx.A.1.100.EC	DN100	PR	-	-	-	-
MH.MD.S.xx.A.1.50.EC	2"	MD(*)	-	-	-	-
MH.MD.S.xx.A.1.65.EC	DN65	MD(*)	-	-	-	-
MH.MD.S.xx.A.1.80.EC	DN80	MD(*)	-	-	-	-
MH.MD.S.xx.A.1.100.EC	DN100	MD(*)	-	-	-	-

Model	Gas train	Operation	KRBY520		KRBY525	
			Code	Price €	Code	Price €

HEAVY OIL 4000 cSt at 50°C (530°E at 50°C)						
MH.PR.S.xx.A.1.50.EC	2"	PR	-	-	-	-
MH.PR.S.xx.A.1.65.EC	DN65	PR	-	-	-	-
MH.PR.S.xx.A.1.80.EC	DN80	PR	-	-	-	-
MH.PR.S.xx.A.1.100.EC	DN100	PR	-	-	-	-
MH.MD.S.xx.A.1.50.EC	2"	MD(*)	-	-	-	-
MH.MD.S.xx.A.1.65.EC	DN65	MD(*)	-	-	-	-
MH.MD.S.xx.A.1.80.EC	DN80	MD(*)	-	-	-	-
MH.MD.S.xx.A.1.100.EC	DN100	MD(*)	-	-	-	-

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, pages 250)

In compliance with DIRECTIVE 2009/142/CE

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

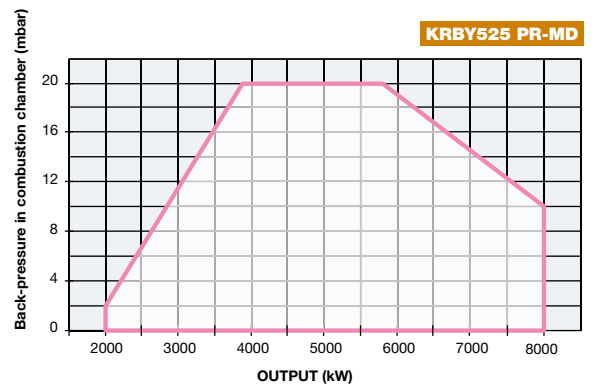
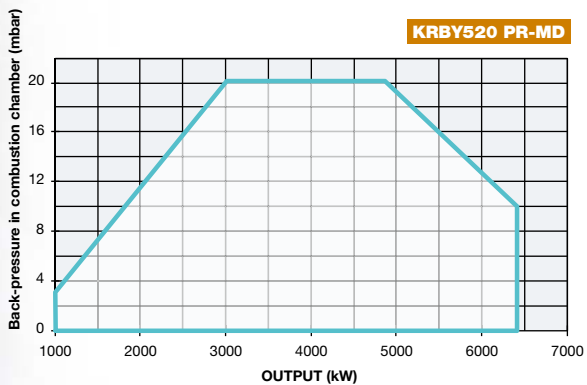
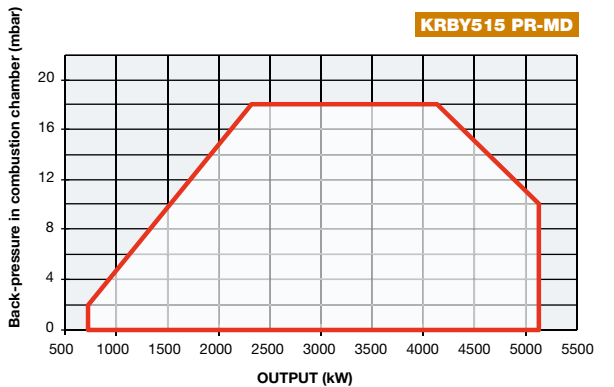
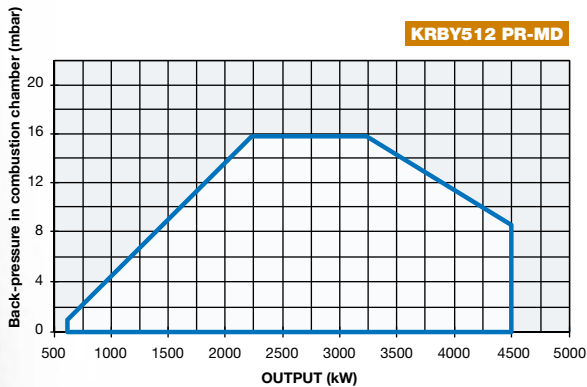
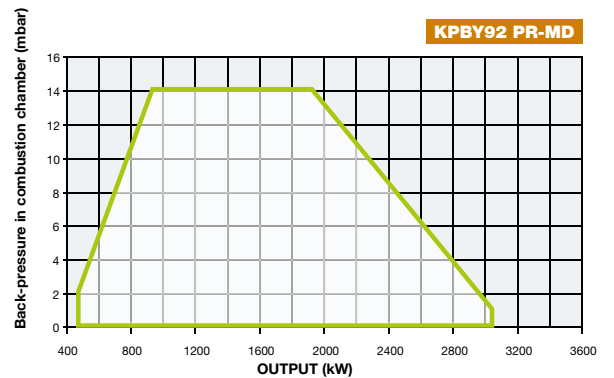
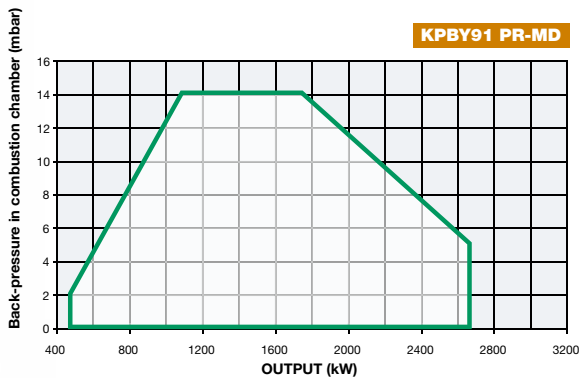
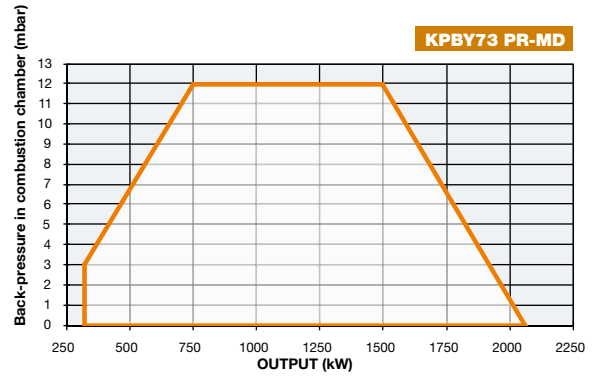
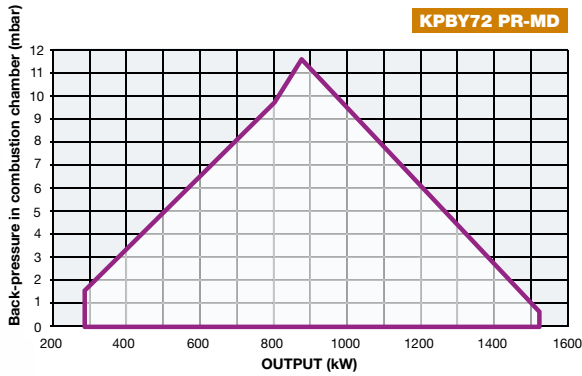
# tecnopress-novanta-cinquecento series

KPBY72 KPBY73 KPBY91 KPBY92

KRBY512 KRBY515 KRBY520 KRBY525

GAS/HEAVY OIL

## PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION



# tecnopress-novanta-cinquecento series

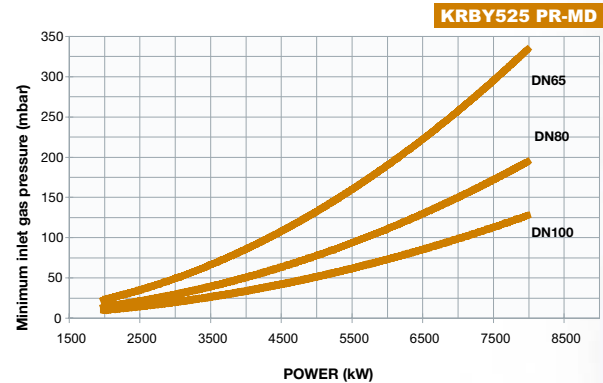
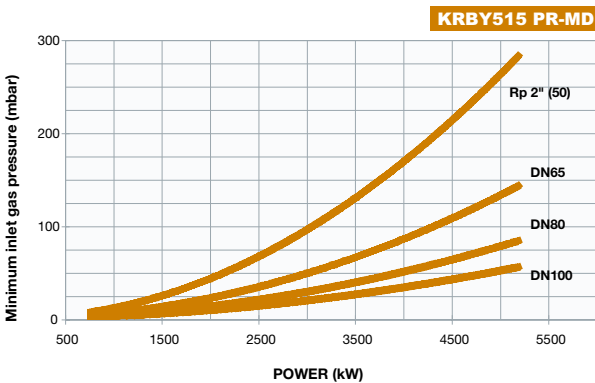
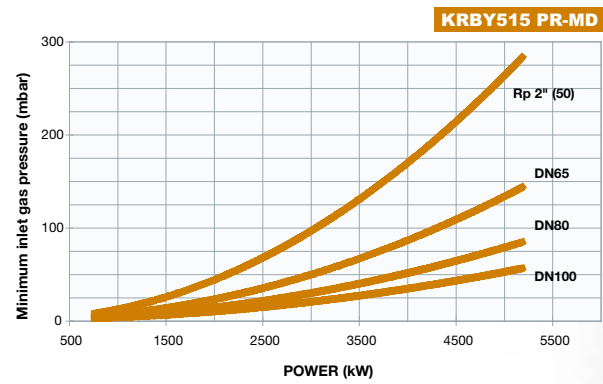
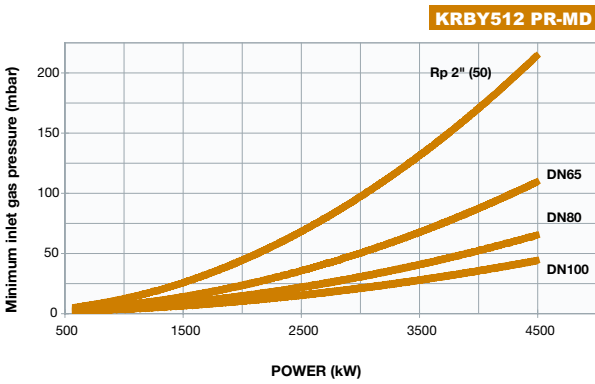
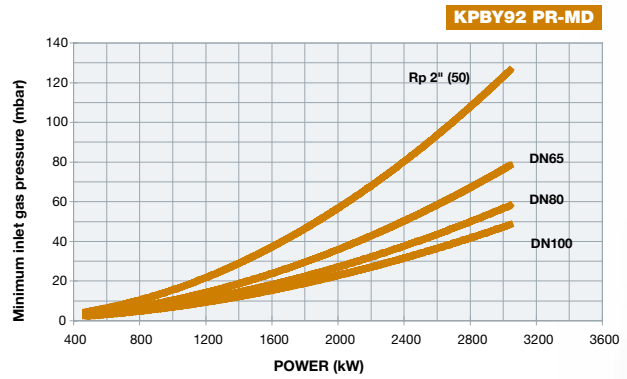
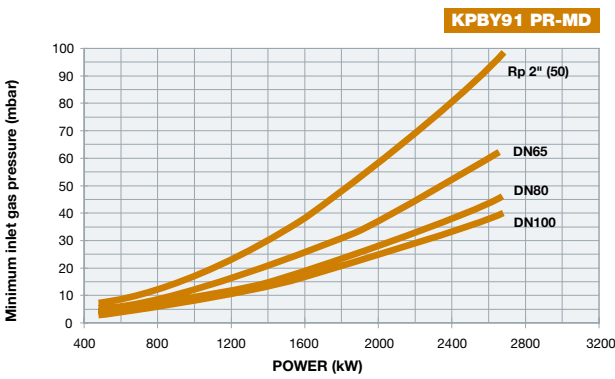
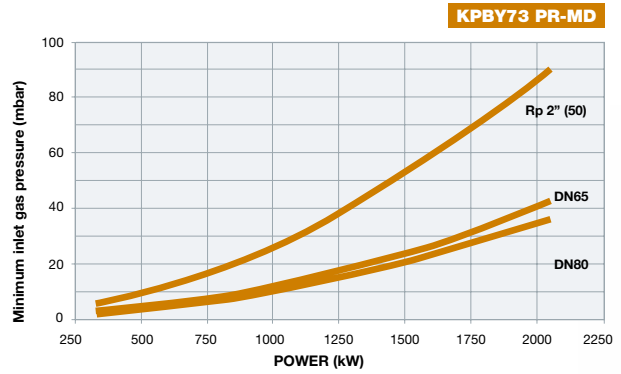
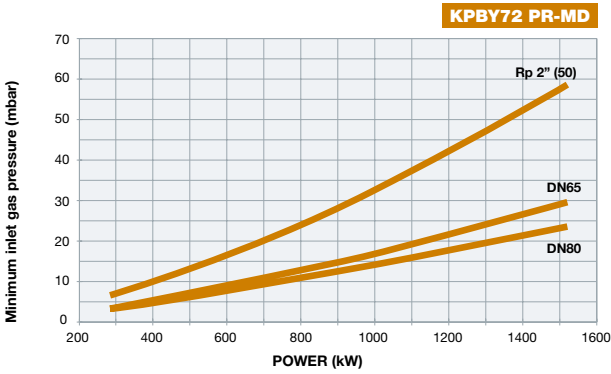
KPBY72 KPBY73 KPBY91 KPBY92

KRBY512 KRBY515 KRBY520 KRBY525

GAS/HEAVY OIL



## PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION



**Attention:** The graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.

## mille series

KRBY1025 KRBY1030 KRBY1040

GAS/HEAVY OIL

### PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION

Just like the corresponding series MILLE, these oil burners - up to 4000 cSt at 50°C (530°E at 50°C) - including emulsified oils, have been developed in order to use compressed air or, alternatively, steam as a fluid to atomize the fuel with the aim to accomplish a better combustion result compared to the one gained using the traditional atomizing systems.

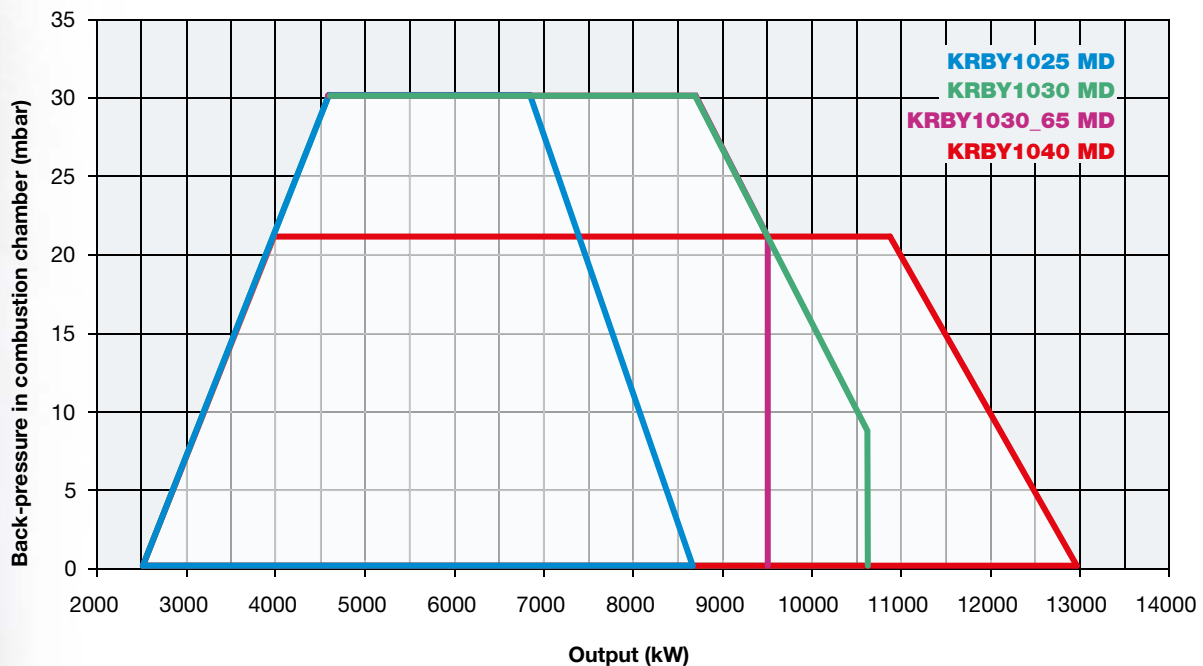
These burners are provided with a low pressure nozzle which allows consumption levels to be kept low and which also limits the general wear of the whole atomization system.

All burners are progressive and are completed with an electrical control cabinet and with a pump oil to be installed by the final user. Furthermore, the nozzle performs an automatic cleaning process at the end of each cycle.

The standard version of burners is set up to atomize with compressed air only, when steam is requested for the atomization, the burner will be modified through a specific kit.

Air or steam must be present at the burner at a pressure from 6 to 10 bar.

Burners are ignited through a pilot which can operate either with natural gas or LPG.



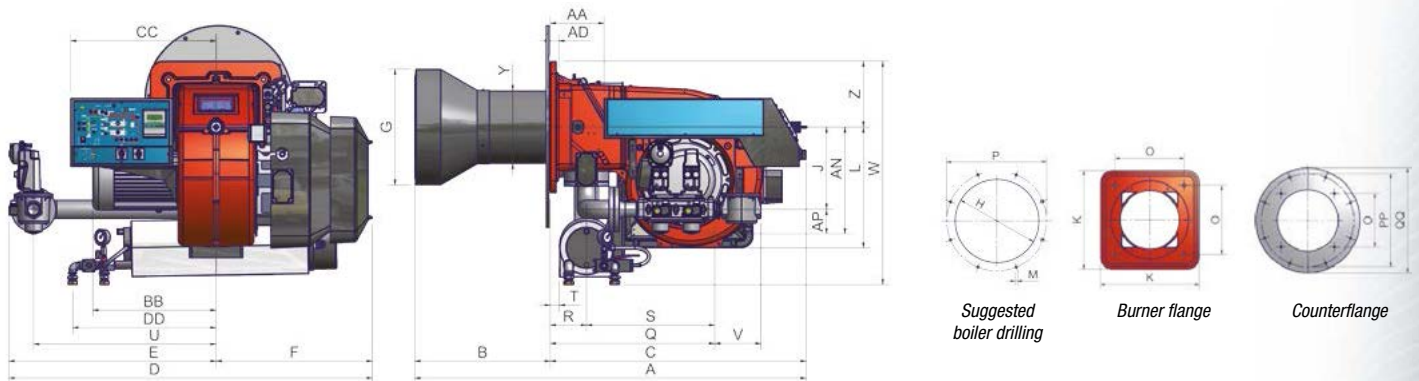


**PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION**

**TECHNICAL DETAILS**

Type	Model	Power kW		Electric power supply	Fan motor kW	Pump motor kW	Resistor kW	Gas connections
		min.	max.					
<b>KRBY1025</b>	MH.xx.S.xx.A.1.xxx	2.550	8.700	400 V 3N ac	18,5	0,75	24	DN65 - 80 - 100
<b>KRBY1030</b>	MH.xx.S.xx.A.1.xxx	2.550	9.500	400 V 3N ac	22,0	1,10	18+18	DN65
<b>KRBY1030</b>	MH.xx.S.xx.A.1.xxx	2.550	10.600	400 V 3N ac	22,0	1,10	18+18	DN80 - 100
<b>KRBY1040</b>	MH.xx.S.xx.A.1.xxx	2.550	13.000	400 V 3N ac	30,0	1,10	24+24	DN80 - 100 - 125

**N.B. Monoblock burners Duemila series with the capacity up to 19 MW consult ours sales officies.**



Low pressure pump set (pump, motor and filter) is included, but supplied loose (not assembled on the burner).

Type	Model	Overall dimensions* (mm)																													
		DN	A	AA	AN	AP	B**	BB	C	CC	D	E	F	G	J	H	K	L	M	O	P	Q	R	S	U	V	W	Z	Y	PP	QQ
<b>KRBY1025</b>	MH.xx.x.xx.1.65	65	2095	377	816	118	551	641	1544	680	2121	1299	822	572	494	632	660	816	M16	460	800	914	200	714	1092	292	916	270	379	800	900
<b>KRBY1025</b>	MH.xx.x.xx.1.80	80	2095	377	816	132	551	641	1544	680	2123	1301	822	572	494	632	660	816	M16	460	800	936	200	736	1092	322	916	270	379	800	900
<b>KRBY1025</b>	MH.xx.x.xx.1.100	100	2095	377	816	145	551	641	1544	680	2139	1317	822	572	494	632	660	816	M16	460	800	942	200	642	1092	382	916	270	379	800	900
<b>KRBY1030</b>	MH.xx.x.xx.1.65	65	2124	377	816	118	580	657	1544	680	2121	1299	822	600	494	660	660	816	M16	460	800	914	200	714	1092	292	916	270	384	800	900
<b>KRBY1030</b>	MH.xx.x.xx.1.80	80	2124	377	816	132	580	657	1544	680	2123	1301	822	600	494	660	660	816	M16	460	800	936	200	736	1092	322	916	270	384	800	900
<b>KRBY1030</b>	MH.xx.x.xx.1.100	100	2124	377	816	145	580	657	1544	680	2139	1317	822	600	494	660	660	816	M16	460	800	942	200	642	1092	382	916	270	384	800	900
<b>KRBY1040</b>	MH.xx.x.xx.1.80	80	2133	377	816	118	571	657	1562	680	2123	1301	822	671	494	731	660	816	M16	460	800	914	200	736	1092	292	916	270	384	800	900
<b>KRBY1040</b>	MH.xx.x.xx.1.100	100	2133	377	816	132	571	657	1562	680	2129	1317	822	671	494	731	660	816	M16	460	800	936	200	842	1092	322	916	270	384	800	900
<b>KRBY1040</b>	MH.xx.x.xx.1.125	125	2133	377	816	145	571	657	1562	680	2254	1432	822	671	494	731	660	816	M16	460	800	942	200	642	1192	382	916	270	384	800	900

(\*) Approximate values

(\*\*) The dimension B is reduced by 25 mm with counterflange and gasket

In compliance with DIRECTIVE E.M.C. 2004/108/CE and DIRECTIVE B.T. 2006/95/CE

# mille series

KRBY1025 KRBY1030 KRBY1040

GAS/HEAVY OIL

## PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION

### ELECTRONIC OPERATION

Model	Gas train	Operation	KRBY1025		KRBY1030		KRBY1040	
			Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 4000 cSt at 50°C (530°E at 50°C)								
MH.PR.S.xx.A.1.65.EC	DN65	PR	-	-	-	-	-	-
MH.PR.S.xx.A.1.80.EC	DN80	PR	-	-	-	-	-	-
MH.PR.S.xx.A.1.100.EC	DN100	PR	-	-	-	-	-	-
MH.PR.S.xx.A.1.125.EC	DN125	PR	-	-	-	-	-	-
MH.MD.S.xx.A.1.65.EC	DN65	MD(*)	-	-	-	-	-	-
MH.MD.S.xx.A.1.80.EC	DN80	MD(*)	-	-	-	-	-	-
MH.MD.S.xx.A.1.100.EC	DN100	MD(*)	-	-	-	-	-	-
MH.MD.S.xx.A.1.125.EC	DN125	MD(*)	-	-	-	-	-	-
MH.MD.S.xx.A.1.65.ES	DN65	MD(*)	-	-	-	-	-	-
MH.MD.S.xx.A.1.80.ES	DN80	MD(*)	-	-	-	-	-	-
MH.MD.S.xx.A.1.100.ES	DN100	MD(*)	-	-	-	-	-	-
MH.MD.S.xx.A.1.125.ES	DN125	MD(*)	-	-	-	-	-	-

(\*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 250)

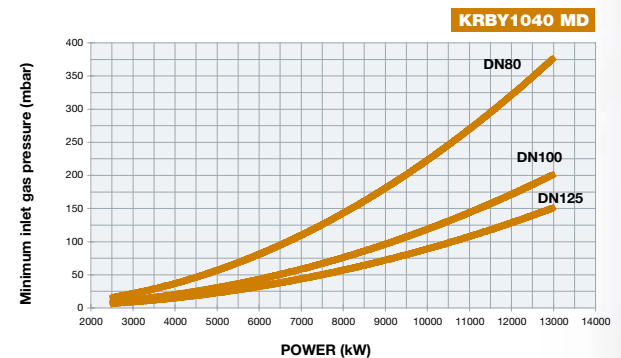
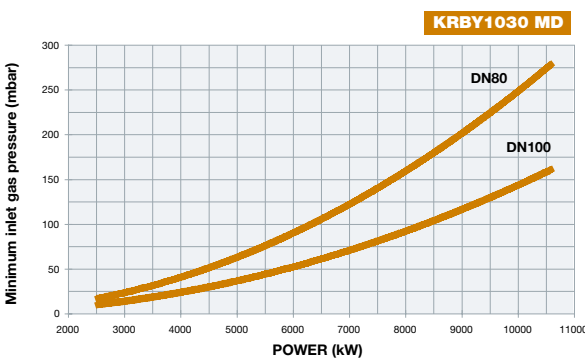
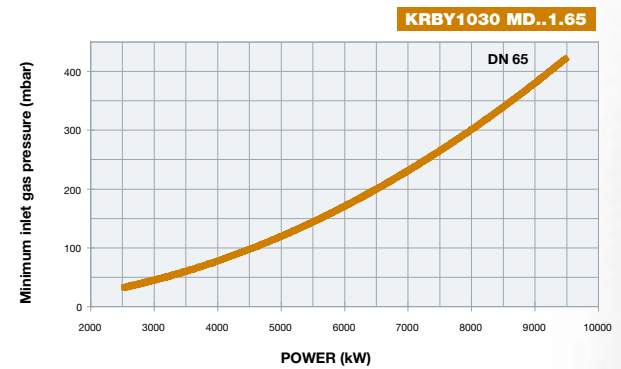
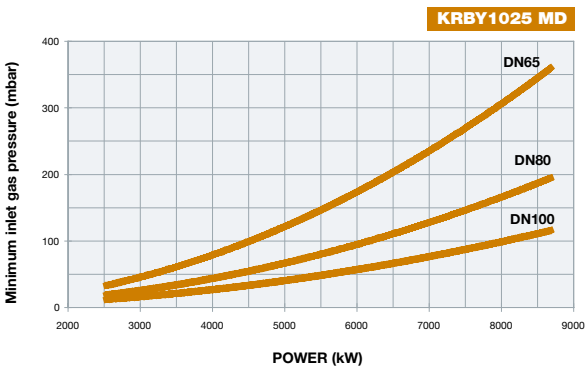
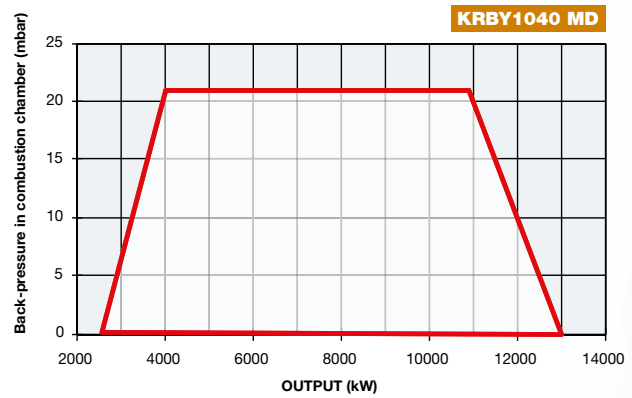
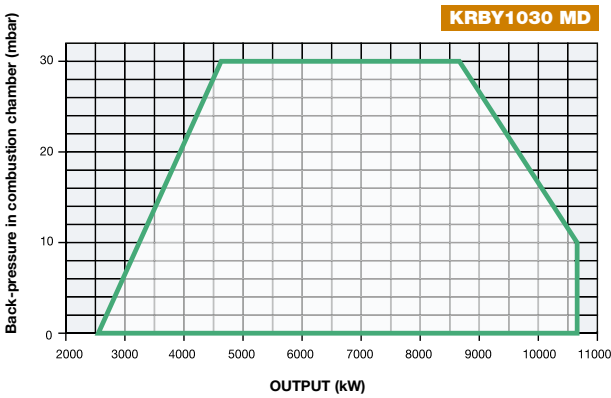
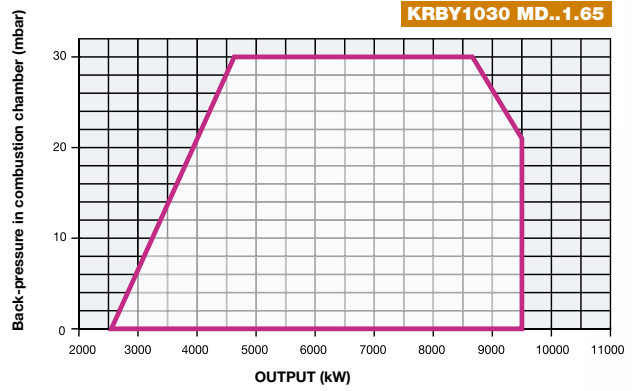
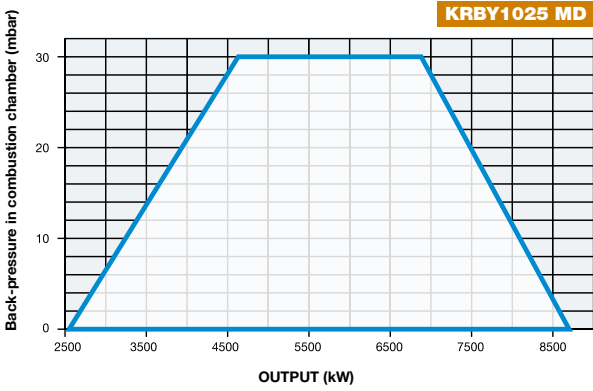
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**PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION**



# industrial burners

## novanta-cinquecento mille-duemila-URB series

INDUSTRIAL

BURNERS FOR INDUSTRIAL APPLICATIONS WITH SEPARATE FAN

These industrial burners have been designed for all those applications in which singleblock models are poorly suited or entirely inadequate, such as wherever the power values at the firing would otherwise require the use of built-in fans of excessive size, whenever combustion air pre-heating is provided, or again, whenever the primary noise source must be shifted to soundproofed areas.

The range runs from 264 kW to 80 MW power in different constructive versions as required by the type of final system or specific client needs.

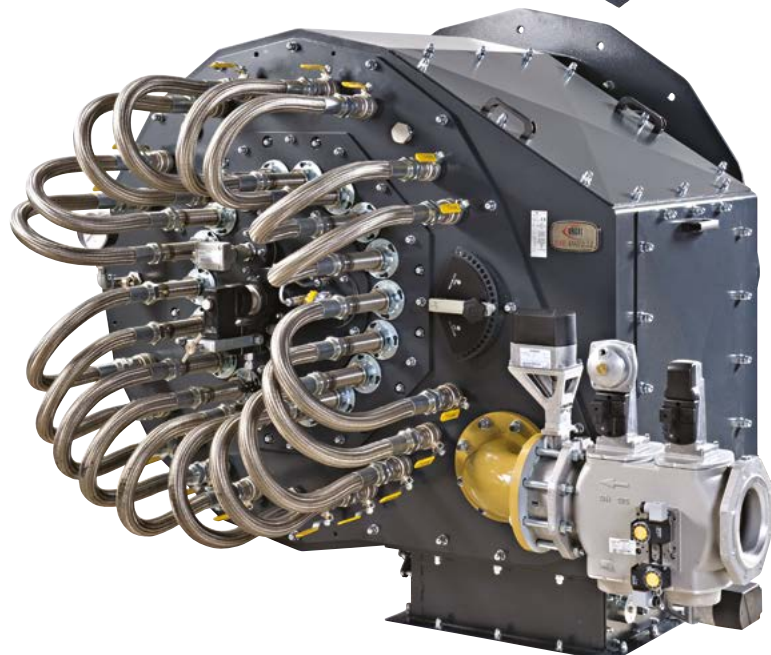
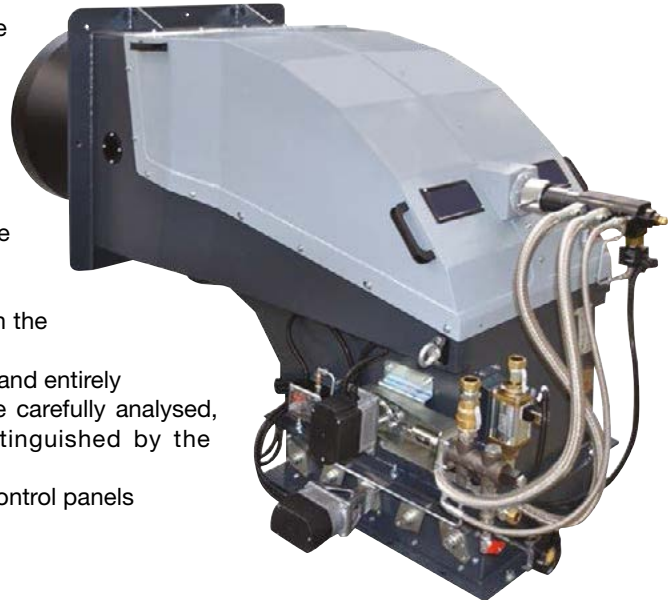
Aluminium casting is usually used for the lower power models (up to 19 MW), while steel construction is adopted for higher power models.

This industrial burner design project was developed to obtain the greatest versatility in order to achieve the objectives posed by the client, and therefore in respect of the widest range of technical specifications. For example, combustion heads with air inlet from above or below the firing, axial or tangential air flow, or registers for turbulence adjustment and other features can be provided. This means that the machines can be personalised as required by size and performance in different industrial sectors that offer differ widely one from another.

All the combustion heads are obviously available in the versions for liquid, gaseous or mixed fuels.

Personalisation in these cases is almost inevitable and entirely feasible with our range, and all such requests are carefully analysed, one by one. Each system can be further distinguished by the equipment provided:

- built-in or separately-mounted (wall or console) control panels
- electronic or mechanical adjustment
- oxygen flow control
- flue gas re-circulation
- combustion air heated up to 200°C
- combustion oil thrust unit
- combustion oil heating unit





## TECHNICAL DETAILS

TP gas series

Type	Min modulation output kW	Min application output kW	Max output kW
TP90A	320	1.610	2.300
TP91A	480	1.869	2.670
TP92A	480	2.135	3.050
TP93A	550	2.870	4.100
TP512A	600	3.150	4.500
TP515A	770	3.640	5.200
TP520A	1.000	4.480	6.400
TP525A	2.000	6.825	9.750
TP1030	2.500	9.310	13.300
TP1050	3.500	10.850	15.500
TP1080	3.500	13.300	19.000
TP2000	3.600	15.400	22.000
TP2500	4.500	18.400	27.000



TLX gas series LOW NOx

Type	Min modulation output kW	Min application output kW	Max output kW
TLX90	288	1.036	1.480
TLX91	674	1.406	2.008
TLX510	800	2.275	3.250
TLX515	770	3.080	4.400
TLX520	1.000	4.060	5.800
TLX1025	1.000	6.020	8.600
TLX1030	2.600	9.100	13.300
TLX1050	3.500	10.850	15.500
TLX2000	3.600	15.400	22.000
TLX2500	4.500	18.400	27.000



## TECHNICAL DETAILS

TG series light oil

Type	Min modulation output kW	Min application output kW	Max output kW
<b>TG90</b>	264	1.330	1.900
<b>TG91</b>	698	1.465	2.093
<b>TG92</b>	849	1.791	2.558
<b>TG510</b>	1.314	2.767	3.953
<b>TG515</b>	1.628	3.419	4.884
<b>TG520</b>	2.326	4.884	6.977
<b>TG525</b>	2.000	6.825	9.750
<b>TG1030</b>	2.500	9.310	13.300
<b>TG1050</b>	3.500	10.850	15.500
<b>TG1080</b>	3.500	13.300	19.000
<b>TG2000</b>	3.600	15.400	22.000
<b>TG2500</b>	4.500	18.400	27.000



TN series heavy oil viscosity up to 400 cSt at 50°C (50°E at 50°C)

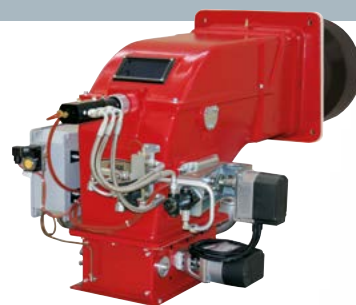
Type	Min modulation output kW	Min application output kW	Max output kW
<b>TN90</b>	264	1.330	1.900
<b>TN91</b>	698	1.465	2.093
<b>TN92</b>	849	1.791	2.558
<b>TN510</b>	1.314	2.767	3.953
<b>TN515</b>	1.628	3.419	4.884
<b>TN520</b>	2.326	4.884	6.977
<b>TN525</b>	2.000	6.825	9.750
<b>TN1030</b>	2.500	9.310	13.300
<b>TN1050</b>	3.500	10.850	15.500
<b>TN1080</b>	3.500	13.300	19.000
<b>TN2000</b>	3.600	15.400	22.000
<b>TN2500</b>	4.500	18.400	27.000





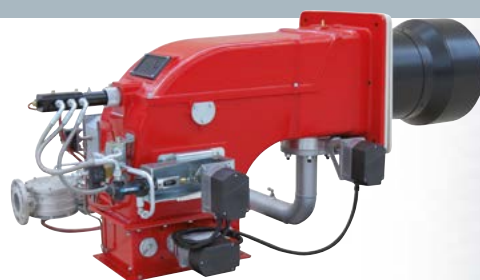
TPBY series heavy oil pneumatic atomization with viscosity up to 4000 cSt at 50°C  
(503°E at 50°C)

Type	Min modulation output kW	Min application output kW	Max output kW
<b>TPBY90</b>	670	1.400	2.000
<b>TPBY91</b>	500	1.750	2.500
<b>TPBY92</b>	700	2.100	3.000
<b>TPBY510</b>	1.100	3.500	5.000
<b>TPBY515</b>	1.200	4.200	6.000
<b>TPBY520</b>	1.400	4.900	7.000
<b>TPBY525</b>	2.000	6.825	9.750
<b>TPBY1030</b>	2.550	9.310	13.300
<b>TPBY1050</b>	3.100	10.850	15.500
<b>TPBY1080</b>	3.800	13.300	19.000
<b>TPBY2000</b>	3.600	15.400	22.000
<b>TPBY2500</b>	4.500	18.400	27.000



HTP series dual fuel gas/light oil

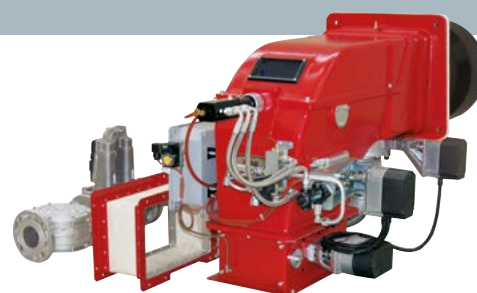
Type	Min modulation output kW	Min application output kW	Max output kW
<b>HTP90A</b>	320	1.610	2.300
<b>HTP91A</b>	480	1.869	2.670
<b>HTP92A</b>	480	2.135	3.050
<b>HTP93A</b>	550	2.870	4.100
<b>HTP512A</b>	600	3.150	4.500
<b>HTP515A</b>	770	3.640	5.200
<b>HTP520A</b>	1.000	4.480	6.400
<b>HTP525A</b>	2.000	6.825	9.750
<b>HTP1030</b>	2.500	9.310	13.300
<b>HTP1050</b>	3.500	10.850	15.500
<b>HTP1080</b>	3.500	13.300	19.000
<b>HTP2000</b>	3.600	15.400	22.000
<b>HTP2500</b>	4.500	18.400	27.000



## TECHNICAL DETAILS

KTP series dual fuel gas/heavy oil with viscosity up to 400 cSt at 50°C (50°E at 50°C)

Type	Min modulation output kW	Min application output kW	Max output kW
KTP90A	320	1.610	2.300
KTP91A	480	1.869	2.670
KTP92A	480	2.135	3.050
KTP93A	550	2.870	4.100
KTP512A	600	3.150	4.500
KTP515A	770	3.640	5.200
KTP520A	1.000	4.480	6.400
KTP525A	2.000	6.825	9.750
KTP1030	2.500	9.310	13.300
KTP1050	3.500	10.850	15.500
KTP1080	3.500	13.300	19.000
KTP2000	3.600	15.400	22.000
KTP2500	4.500	18.400	27.000



KTBY series dual fuel gas/heavy oil with viscosity up to 4000 cSt at 50°C (530°E at 50°C)

Type	Min modulation output kW	Min application output kW	Max output kW
KTBY90	320	1.610	2.300
KTBY91	480	1.869	2.670
KTBY92	480	2.135	3.050
KTBY93	550	2.870	4.100
KTBY512	600	3.150	4.500
KTBY515	770	3.640	5.200
KTBY520	1.000	4.480	6.400
KTBY525	2.000	6.825	9.750
KTBY1030	2.500	9.310	13.300
KTBY1050	3.500	10.850	15.500
KTBY1080	3.500	13.300	19.000
KTBY2000	3.600	15.400	22.000
KTBY2500	4.500	18.400	27.000

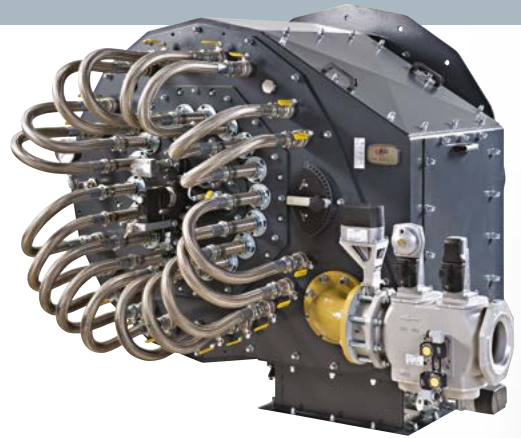


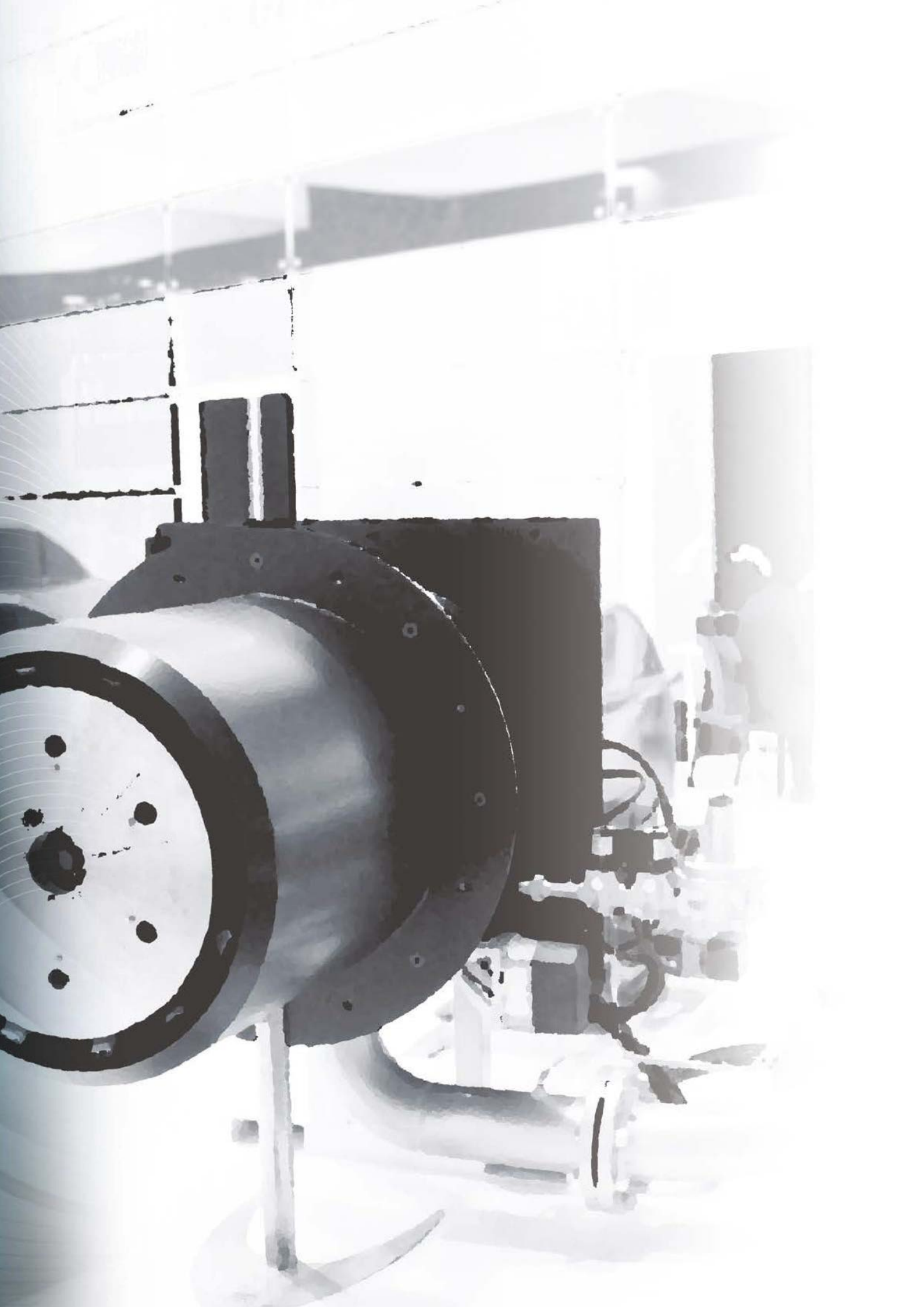


**REGISTER BURNERS FOR INDUSTRIAL APPLICATIONS 7 MW ÷ 80 MW**

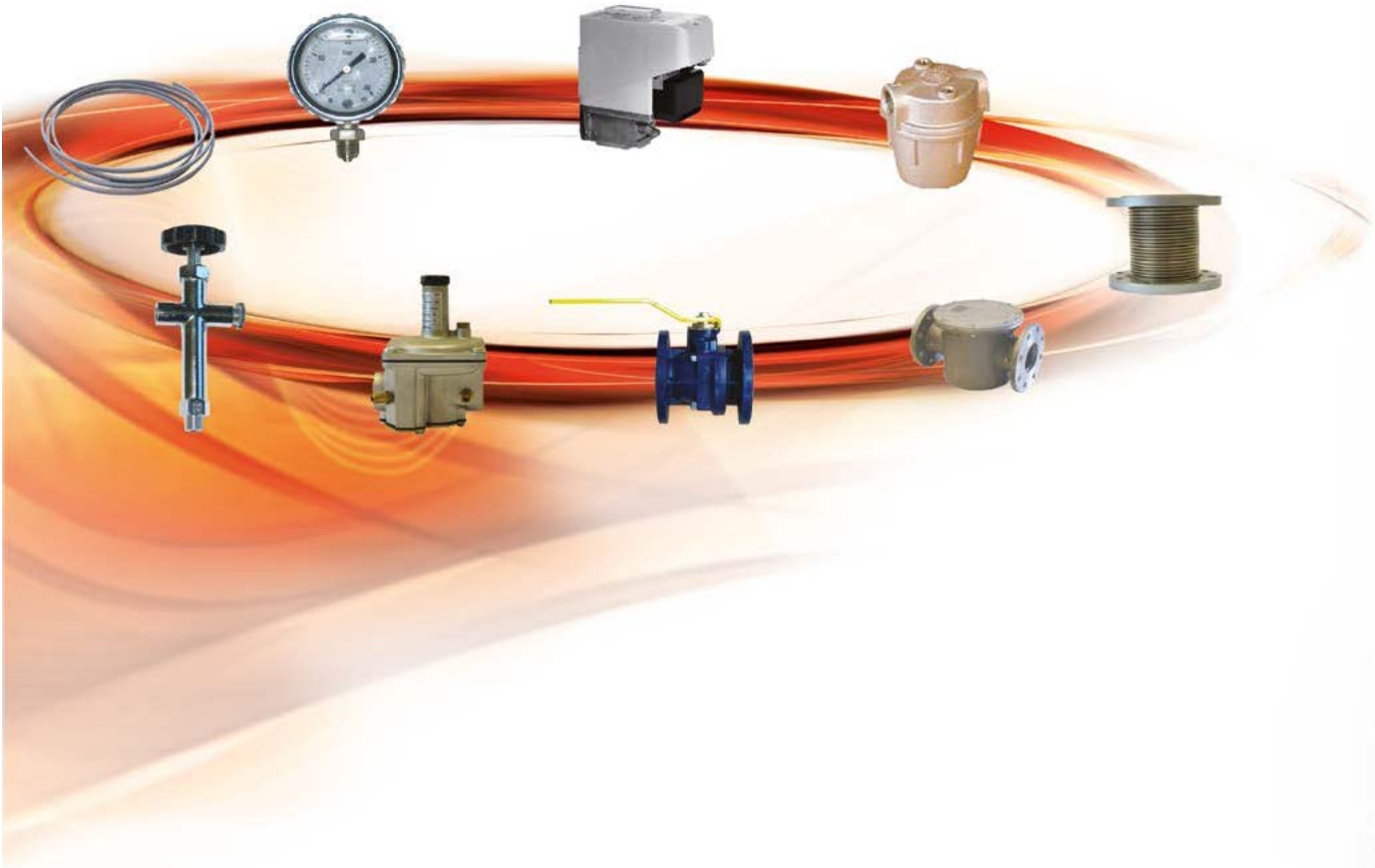
TECHNICAL DETAILS

URB series multifuel			
Type	Min modulation output kW	Min application output kW	Max output kW
<b>URB5</b>	1.167	4.900	7.000
<b>URB10</b>	1.700	7.000	10.200
<b>URB15</b>	2.567	10.200	15.400
<b>URB20</b>	2.983	15.400	17.900
<b>URB25</b>	3.783	17.900	22.700
<b>URB30</b>	5.050	22.700	30.300
<b>URB32</b>	5.533	30.300	33.200
<b>URB35</b>	5.967	33.200	35.800
<b>URB40</b>	6.917	35.800	41.500
<b>URB45</b>	7.750	41.500	46.500
<b>URB50</b>	8.500	46.500	51.000
<b>URB60</b>	10.067	51.000	60.400
<b>URB70</b>	11.167	60.400	67.000
<b>URB80</b>	13.300	67.000	80.000











## options burners



### PROBES FOR MODULATORS

Variabile da controllare	Temperature/Pressure scale	Code	Price €
Temperature*	-15 ÷ 50 °C	2.56.01.35	
Temperature	30 ÷ 130 °C	2.56.01.C3	
Temperature	0 ÷ 400 °C	2.56.01.45	
Temperature	0 ÷ 1200 °C	2.56.01.42	
Pressure	3 bar	2.56.01.C4	
Pressure	10 bar	2.56.01.C5	
Pressure	16 bar	2.56.01.C6	
Pressure	25 bar	2.56.01.C7	
Pressure	40 bar	2.56.01.C8	

\* Hot air probe

### Special components

#### PNEUMATICALLY OPERATED SLIDE FOR BURNERS UP TO 800 kW (without stokehole closing, neither automatic nor manual)

Description	Code	Price €
For burners P61 (control fluid: 8 bar compressed air)	3.11.00.14	
For burners P65 - P71 - R73A (control fluid: 8 bar compressed air)	3.11.00.15	

#### ACOUSTIC HOODS BOX Asembled on wheeled frame (made in sheet steel, oven painted and coated with soundproofing material)



Description	Price €
Idea series	
Tecnopress series	
Novanta series	
Cinquecento series	
Mille series	

#### AIR INLET ATTENUATORS directly mounted on the burner (made in sheet steel, oven painted and coated with soundproofing material)



Description	Code	Price €
Suitable for burners up to 800 kW (P61)	3.15.01.13	
Suitable for burners up to 1.650 kW (P65 - P71)	3.15.01.08	

#### KIT for automatic fuel switch

Model	Code	Price €
MIXMATIC	-	

#### COUNTER



Model	Code	Price €
Crouzet (87610150)	6220008	



## SPACERS



Height mm	Burner type	Code	Price €
100	S10 - 18	3.07.03.04	
175	S10 - 18	3.07.03.05	
50	NG/LO350 - 400	3.07.03.48	
80	NG/LO350 - 400	3.07.03.47	
100	NG/LO350 - 400	3.07.03.11	
100	NG/LO550	3.07.03.12	
200	NG/LO550	3.07.03.13	
50	P-PG-PN-HP-HR-60-61	3.07.03.14	
100	P-PG-PN-HP-HR-60-61	3.07.03.15	
150	P-PG-PN-HP-HR-60-61	3.07.03.17	
200	P-PG-PN-HP-HR-60-61	3.07.03.18	
70	P-R-PG-PN-HP-HR 65-71-72-75-70-81	3.07.03.20	
100	P-R-PG-PN-HP-HR 65-71-72-75-70-81	3.07.03.21	
150	P-R-PG-PN-HP-HR 65-71-72-75-70-81	3.07.03.23	
220	P-R-PG-PN-HP-HR 65-71-72-75-70-81	3.07.03.25	
250	P-R-PG-PN-HP-HR 65-71-72-75-70-81	3.07.03.26	
100	SERIE 90	3.07.03.28	
150	SERIE 90	3.07.03.29	
200	SERIE 90	3.07.03.30	
250	SERIE 90	3.07.03.31	
100	SERIE 500	3.07.03.34	
150	SERIE 500	3.07.03.36	
180	SERIE 500	3.07.03.37	
200	SERIE 500	3.07.03.38	
250	SERIE 500	3.07.03.39	
300	SERIE 500	3.07.03.41	
100	SERIE 1000	3.07.03.49	
150	SERIE 1000	3.07.03.44	
200	SERIE 1000	3.07.03.46	
250	SERIE 1000	3.07.03.45	
300	SERIE 1000	3.07.03.45	



## options burners

### INVERTER FOR ELECTRONIC CAM BURNERS

#### INVERTER FOR ELECTRONIC CAM BURNERS

Variants:	Packaging included
	Inverter supplied loose
	IP20 version to be fitted inside the electrical panel c/w remote keyboard
	Complete version c/w electrical panel upon request
	IP54 version to be placed by the burner

Inverter power kW	Burner Type	IP 20 version Price €	IP 54 version Price €
1,1	60/61		
1,5	65		
2,2	70/71		
3,0	73/75/81/90		
4,0	91		
5,5	92		
7,5	93/510		
9,2	512		
11	515		
15	520		
18,5	525		
18,5**	1025		
22**	1030		
30**	1040		

\* Included braking resistor loose form IP54 (IP65 version on request)

\*\* IP55



**MANUAL CUT OFF VALVES, THREADED (ball valve)**

Gas connections	Model	Code	Price €
1/2"	V15	2.81.00.01	
3/4"	V20	2.81.00.02	
1"	V25	2.81.00.03	
1 1/4"	V32	2.81.00.04	
1 1/2"	V40	2.81.00.05	
2"	V50	2.81.00.06	

**MANUAL CUT OFF VALVES, FLANGED (ball valve)**

Gas connections	Model	Code	Price €
DN65	V65	2.81.00.12	
DN80	V80	2.81.00.13	
DN100	V100	2.81.00.14	
DN125	V125	2.81.00.71	

**ANTI VIBRATING JOINT (threaded)**

Gas connections	Model	Code	Price €
1/2"	GA15	2.34.00.62	
3/4"	GA20	2.34.00.76	
1"	GA25	2.34.00.77	
1 1/4"	GA32	2.34.GA.02	
1 1/2"	GA40	2.34.00.78	
2"	GA50	2.34.00.79	

**ANTI VIBRATING JOINT (flanged)**

Gas connections	Model	Code	Price €
DN65	GA65	2.34.00.81	
DN80	GA80	2.34.00.82	
DN100	GA100	2.34.00.83	
DN125	GA125	2.34.00.70	

**GAS FILTERS (threaded)**

Gas connections	Model	Code	Price €
1/2"	F15	2.09.01.01	
3/4"	F20	2.09.01.02	

**GAS FILTERS (max inlet pressure 2 bar)**

Gas connections	Model	Code	Price €
1"	F25	2.09.01.15	
1 1/2"	F40	2.09.01.05	
2"	F50	2.09.01.05	

**GAS FILTERS (flanged: max inlet pressure 2 bar)**

Gas connections	Model	Code	Price €
DN65	F65	2.09.01.17	
DN80	F80	2.09.01.18	
DN100	F100	2.09.01.20	
DN125	F125	2.09.01.28	



## options gas burners



### PRESSURE GOVERNORS WITH GAS FILTERS (threaded: Pe max 1bar)

Gas connections	Model	Code	Price €
1/2"	S.P.15	2.80.00.85	
3/4"	S.P.20	2.80.00.94	
1"	S.P.25	2.80.00.72	
1"1/2	S.P.40	2.80.00.65	
2"	S.P.50	2.80.00.67	



### PRESSURE GOVERNORS WITH GAS FILTERS (flanged: Pe max 1bar)

Gas connections	Model	Code	Price €
DN65	S.P.65	2.80.00.69	
DN80	S.P.80	2.80.00.71	
DN100	S.P.100	2.80.00.74	



### LEAKAGE CONTROLS

Description	Code	Price €
DUNGS VPS 504 with plug	2.19.16.06	

### LEAKAGE CONTROLS MOUNTING KITS (for groups with separate valves only)

Description	Code	Price €
DUNGS VPS 504	2.19.12.01	



### MAXIMUM PRESSURE

Description	Code	Price €
GAS MAXIMUM PRESSURE SWITCH KIT	2.19.12.41	



### SUPPORT FOR PRESSURE GAUGE

Model	Code	Price €
Push button valve	2810010	



### MANOMETER

Model	Code	Price €
Glycerine gauge 0 ÷ 60 mbar	2520001	
Glycerine gauge 0 ÷ 400 mbar	2520028	
Glycerine gauge 0 ÷ 1 bar	2520030	



## GAS PRESSURE REDUCING STATIONS

Gas pressure reducing stations (available for inlet pressures up to 6 bar and max flow rate corresponding to an output of 20.000 kW).

Type	Power (kW)	Capacity (Nm <sup>3</sup> /h)	Burners*	Max pressure (bar)	Price €
GRG2	200	21	NG200	6	
GRG6	550	60	NG550	6	
GRG17	1600	170	P71	6	
GRG30	3000	320	R92A	6	
GRG130	13000	1370	R1040A	6	
GRG200	20000	2100	2 x R1025A	6	

Gas pressure reducing station according to the below scheme

The station includes all the components as shown in the picture (see scheme and legend)

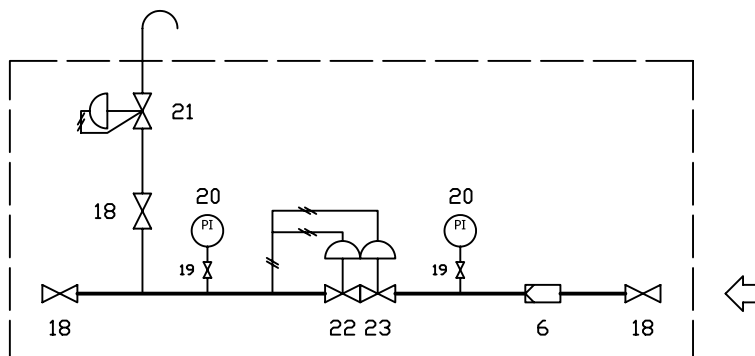
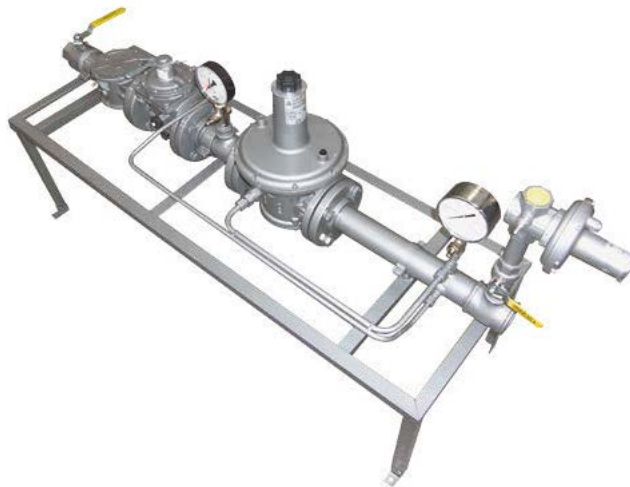
The station is pre-assembled on a frame

Packaging included

The stations are ready to work with natural gas, matching and sizes can vary according to the pressure and type of gas.

Max inlet pressure over 6 bar: price upon request

\*The burner in an example of a typical installation, however the same station can supply different burners of smaller size.



### KEY

6	Gas filter	21	Relief valve
18	Manual cut off (ball valve)	22	Reducer
19	Manual cut off for manometer	23	Safety block valve
20	Manometer		



## VUOTOMETRO

Model	Code	Price €
Glycerine vacuum gauge -1 ÷ 0 bar (1/4" connection)	2520008	



## FILTERS

Model	Code	Price €
Filter 3/8" 0,06 PL	2090001	
Filter 3/8" 0,1 P	2090025	
Filter 1" 0,1 small	2090017	
Filter 1" 0,1 big	2090018	
Filter 1" 0,3 small	2090202	
Filter 1" 0,3 big	2090207	



## MANOMETER

Model	Code	Price €
Glycerine gauge 0 ÷ 40 bar (1/4" connection)	2520003	
Glycerine gauge 0 ÷ 6 bar (1/4" connection)	2520006	
Glycerine gauge 0 ÷ 10 bar (1/4" connection)	2520015	
Glycerine gauge 0 ÷ 16 bar (1/4" connection)	2520014	
Glycerine gauge 0 ÷ 25 bar (1/4" connection)	2520027	



## SUPPORT FOR PRESSURE GAUGE manometer/vacuum gauge

Model	Gas connections	Code	Price €
Isolating valve (1/4" connection)	1/4"	2520005	





## AIR COMPRESSORS

The tables in this page include useful data to match the correct compressor in case compressed air is needed to atomize the liquid fuel (burners PBY/RBY/KPBY/KRBY).

Compressors can be supplied upon request.

Burners with pneumatic atomization are never supplied with compressor.

Air conditions are referred to standard (15°C and 1013 mbar).

In case steam is preferred to air, the characteristics are exactly the same. Steam must be saturated and dry. In any case the max pressure of the steam must not be over 12 bar (190°C).

Type	Power (kW)	Air capacity (kg/h)	Air capacity (l/second)	Air pressure (bar)	Price €
PBY70	1300	14,0	3,1	6÷8	
PBY90	2000	21,5	4,8	6÷8	
PBY91	2500	26,9	6,0	6÷8	
PBY92	3000	32,3	7,2	6÷8	
PBY93	3700	39,8	8,9	6÷8	
RBY510	5000	53,8	12,0	6÷8	
RBY515	6000	64,5	14,3	6÷8	
RBY520	6500	69,9	15,5	6÷8	
RBY525	7300	78,5	17,5	6÷8	
RBY1025	8700	93,5	20,8	6÷8	
RBY1030	10000	107,5	23,9	6÷8	
RBY1040	13000	139,7	31,1	6÷8	
KPBY72	1530	16,5	3,7	6÷8	
KPBY73	2050	22,0	4,9	6÷8	
KPBY91	2670	28,7	6,4	6÷8	
KPBY92	3050	32,8	7,3	6÷8	
KPBY93	4100	44,1	9,8	6÷8	
KRBY512	4500	48,4	10,8	6÷8	
KRBY515	5200	55,9	12,4	6÷8	
KRBY520	6400	68,8	15,3	6÷8	
KRBY525	8000	86,0	19,1	6÷8	
KRBY1025	8700	93,5	20,8	6÷8	
KRBY1030	10600	113,9	25,3	6÷8	
KRBY1040	13000	139,7	31,1	6÷8	





## HEAVY OIL FILTERS

Model	Code	Price €
Filter 1" 0,3 micron small	2090202	
Filter 1" 0,3 micron big	2090207	
Filter 1½" 0,3 for PBY	2090236	
Filter 51000/05 F (flanged DN 50)*	2090237	
Magnetic filter DN 50 1"	2090203	
Magnetic filter 1½"	2090245	

\* With 300 W heater



## VACUUM GAUGE

Model	Code	Price €
Glycerine vacuum gauge -1 ÷ 0 bar (¼" connection)	2520008	



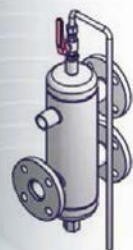
## MANOMETER

Model	Code	Price €
Glycerine gauge 0 ÷ 6 bar (¼" connection)	2520035	
Glycerine gauge 0 ÷ 10 bar (¼" connection)	2520036	
Glycerine gauge 0 ÷ 16 bar (¼" connection)	2520033	
Glycerine gauge 0 ÷ 25 bar (¼" connection)	2520034	
Glycerine gauge 0 ÷ 40 bar (¼" connection)	2520019	



## SUPPORT FOR PRESSURE GAUGE manometer / vacuum gauge

Model	Code	Price €
Isolating valve (¼" connection)	2520005	



## DEGASSING BOTTLE

Model	Diameter	Code	Price €
Threaded	1"½	3040117	
Flanged	DN 40	3040121	



## BELT HEATER CABLE FOR PIPES

Model	Type	Code	Price €
Power 64 Watt/meter	each meter		



## MANUAL CUT OFF VALVE (BALL VALVE)

Model	Code	Price €
1"	2810024	
1"½	2810025	
2"	2810031	
2"½	-	



## OIL PRE-HEATING TANK (STEAM/DIATERMIC OIL)

Type	Capacity kg/h	Tank volume liters	Electrical heaters kW	Max temperature °C	Max pressure bar	Price €
HTS2	200	200	8	80÷100	5	
HTS5	500	500	12	80÷100	5	
HTS10	1.000	1.500	18	80÷100	5	
HTS20	2.000	2.000	24	80÷100	5	
HTS30	3.000	3.000	24	80÷100	5	
HTS40	4.000	4.000	24	80÷100	5	

Vertical cylindrical tanks, provided with electrical resistance and spiral heat exchanger.

Upon order please specify if the spiral must be provided for diathermic oil or steam.

Electrical panel mounted aboard.

Packaging included.

The oil flow rate is indicative: it can vary according to the type of fuel and to the thermal step required.

## OIL PRE-HEATING TANK (ONLY ELECTRICAL RESISTANCES/HOT WATER)

Type	Capacity kg/h	Tank volume liters	Electrical heaters kW	Max temperature °C	Max pressure bar	Price €
HT2	200	200	8	80÷100	5	
HT5	500	500	12	80÷100	5	
HT10	1.000	1.500	18	80÷100	5	
HT20	2.000	2.000	24	80÷100	5	
HT30	3.000	3.000	24	80÷100	5	
HT40	4.000	4.000	24	80÷100	5	

Vertical cylindrical tanks, provided with electrical resistance and spiral heat exchanger (optional).

Upon order please specify electrical resistances only or hot water coil.

Packaging included.

The oil flow rate is indicative: it can vary according to the type of fuel and to the thermal step required.





## options heavy oil burners

### PRESSURE REGULATORS FOR LIGHT/HEAVY OIL RINGS

#### LIGHT OIL PRESSURE REGULATOR GROUPS

Type	Capacity kg/h	Diameter	Price €
GRP-G2	350	3/4"	
GRP-G4	650	3/4"	
GRP-G7	1.000	1"	
GRP-G10	1.600	1"	
GRP-G13	2.000	1"1/2	
GRP-G20	3.000	1"1/2	

Pressure regulator group supplied pre-assembled (no frame)

Packaging included for greater flow rates, quotations upon request

#### CRUDE AND HEAVY OIL PRESSURE REGULATOR GROUPS

Type	Capacity kg/h	Diameter	Price €
GRP-D2	500	DN 50	
GRP-D4	800	DN 50	
GRP-D7	1.300	DN 50	
GRP-D10	2.000	DN 50	
GRP-D13	2.500	DN 50	
GRP-D20	4.000	DN 50	

Pressure regulator group supplied pre-assembled (no frame)

Packaging included for greater flow rates, quotations upon request





## LOW PRESSURE OIL HANDLING UNIT (RING) - LIGHT OIL - 2 PUMPS IN PARALLEL (ONE AS BACK-UP)

Type	Capacity kg/h	Power kW	Diameter	Dimensions a x b x h (mm)	Price €
GS-G2	350	2.300	1"	1.200 x 900 x 500	
GS-G4	650	4.300	1"1/2	1.300 x 900 x 600	
GS-G7	1.000	6.600	1"1/2	1.400 x 1.200 x 600	
GS-G10	1.600	10.600	DN 50	1.500 x 1.200 x 700	
GS-G13	2.000	13.300	DN 50	1.600 x 1.400 x 700	
GS-G20	3.000	20.000	DN 50	1.800 x 1.400 x 800	

## LOW PRESSURE OIL HANDLING UNIT (RING) - LIGHT OIL - SINGLE PUMP

Type	Capacity kg/h	Power kW	Diameter	Dimensions a x b x h (mm)	Price €
GS-G2s	350	2.300	1"	1.200 x 600 x 500	
GS-G4s	650	4.300	1"1/2	1.300 x 600 x 600	
GS-G7s	1.000	6.600	1"1/2	1.400 x 800 x 600	
GS-G10s	1.600	10.600	DN 50	1.500 x 800 x 700	

## LOW PRESSURE OIL HANDLING UNIT (RING) - HEAVY/RAW OIL - 2 PUMPS IN PARALLEL (ONE AS BACK-UP)

Type	Capacity kg/h	Power kW	Diameter	Dimensions a x b x h (mm)	Price €
GS-D2	500	2.700	DN 50	1.300 x 900 x 800	
GS-D4	800	4.500	DN 50	1.500 x 900 x 800	
GS-D7	1.300	6.900	DN 50	1.600 x 1.200 x 800	
GS-D10	2.000	10.800	DN 50	1.600 x 1.200 x 800	
GS-D13	2.500	13.900	DN 50	1.800 x 1.500 x 800	
GS-D20	4.000	20.000	DN 50	1.800 x 1.500 x 800	

## LOW PRESSURE OIL HANDLING UNIT (RING) - HEAVY/RAW OIL - SINGLE PUMP

Type	Capacity kg/h	Power kW	Diameter	Dimensions a x b x h (mm)	Price €
GS-D2s	500	2.700	DN 50	1.300 x 600 x 800	
GS-D4s	800	4.500	DN 50	1.500 x 600 x 800	
GS-D7s	1.300	6.900	DN 50	1.600 x 800 x 800	
GS-D10s	2.000	10.800	DN 50	1.600 x 800 x 800	

The output is referred to the burners which can be supplied by the low pressure ring.

The flow rate is referred to the heavy oil flow rate pumped into the ring.

Dimensions are indicative.

Dimensions do not include the electrical panel, the panel can be installed on the the oil ring, or wall-hung (dimensions 400x250x600h mm).

For greater flow rates quotations upon request.

In order to pick up the correct oil ring to your application, refer to the output and choose the ring one size larger. Couple the ring with the regulation group of the same size. To finish the job remember to choose the the degassing tanks (the use of degassing tanks is mandatory when 2 or more burners are supplied by the same ring, only recommended in all other cases).



INPUT DATA FOR QUOTATION



**CIB UNIGAS** S.p.A.

Via L. Galvani, 9 (Zona Industriale)  
35011 CAMPODARSEGO (PD) - Italy  
Tel. +39 049 9200944 - Fax +39 049 9201269  
E-mail ufficio ordini: ordini@cibunigas.it

COMPANY			
ADDRESS		CITY	CITY CODE
TEL. /	FAX /		
<b>BOILER:</b>			
MANUFACTURER:		MODEL:	
BOILER TYPE:	SMOKE TUBES <input type="checkbox"/>	WATER TUBES <input type="checkbox"/>	
BOILER OUTPUT: (kW)		STEAM PRODUCTION: (kg/h)	
BURNER OUTPUT: (kW)			
COMBUSTION CHAMBER PRESSURE: (mbar)			
COMBUSTION AIR TEMPERATURE (°C):			
COMBUSTION CHAMBER SIZE - LENGHT:		WIDTH (or dia):	HEIGHT:
<b>THERMAL MEDIUM:</b> <input type="checkbox"/> STEAM <input type="checkbox"/> WATER <input type="checkbox"/> OIL <input type="checkbox"/> HOT AIR			
STEAM PRESSURE		bar	
FEEDING MEDIUM TEMPERATURE:		°C	
OUTLET MEDIUM TEMPERATURE (water, air, oil)		°C	
FUEL DATA			
FUEL:		LOWER CALORIFIC VALUE (kcal/kg):	
DENSITY (kg/m³):		VISCOSITY: °E (a .....°C)	
FUEL TEMPERATURE: (°C)			
PRESSURE AT GAS TRAIN INLET:		mbar	
OTHER:			
<b>GENERAL:</b>			
POWER SUPPLY		VOLT	Hz
COMBUSTION CONTROL: <input type="checkbox"/> ON-OFF <input type="checkbox"/> HIGH-LOW FLAME			
<input type="checkbox"/> PROGRESSIVE <input type="checkbox"/> MODULATING			
REQUIRED TURN-DOWN 1			
PROBE: <input type="checkbox"/> TEMPERATURE °C <input type="checkbox"/> PRESSURE (bar) <input type="checkbox"/> OTHER			
<b>REQUIRED COMPONENTS:</b> <input type="checkbox"/> BURNER <input type="checkbox"/> CONTROL PANEL			
<input type="checkbox"/> GAS TRAIN <input type="checkbox"/> DRAUGHT AIR FAN			
OIL HANDLING UNIT			
<input type="checkbox"/> BACK OIL PUMP	<input type="checkbox"/> BACK UP OIL FILTER	<input type="checkbox"/> STEAM HEATER	<input type="checkbox"/> ELECTRIC HEATER
<b>DRAUGHT FAN SPECIFICATION (when existing fan is used):</b>			
FLOW RATE (m³/h)		AT	mbar OUTPUT PRESSURE
ELECTRIC MOTOR POWER (kW)		BLOWER MODEL	
NOTE:			
EDIT BY:		DATE:	

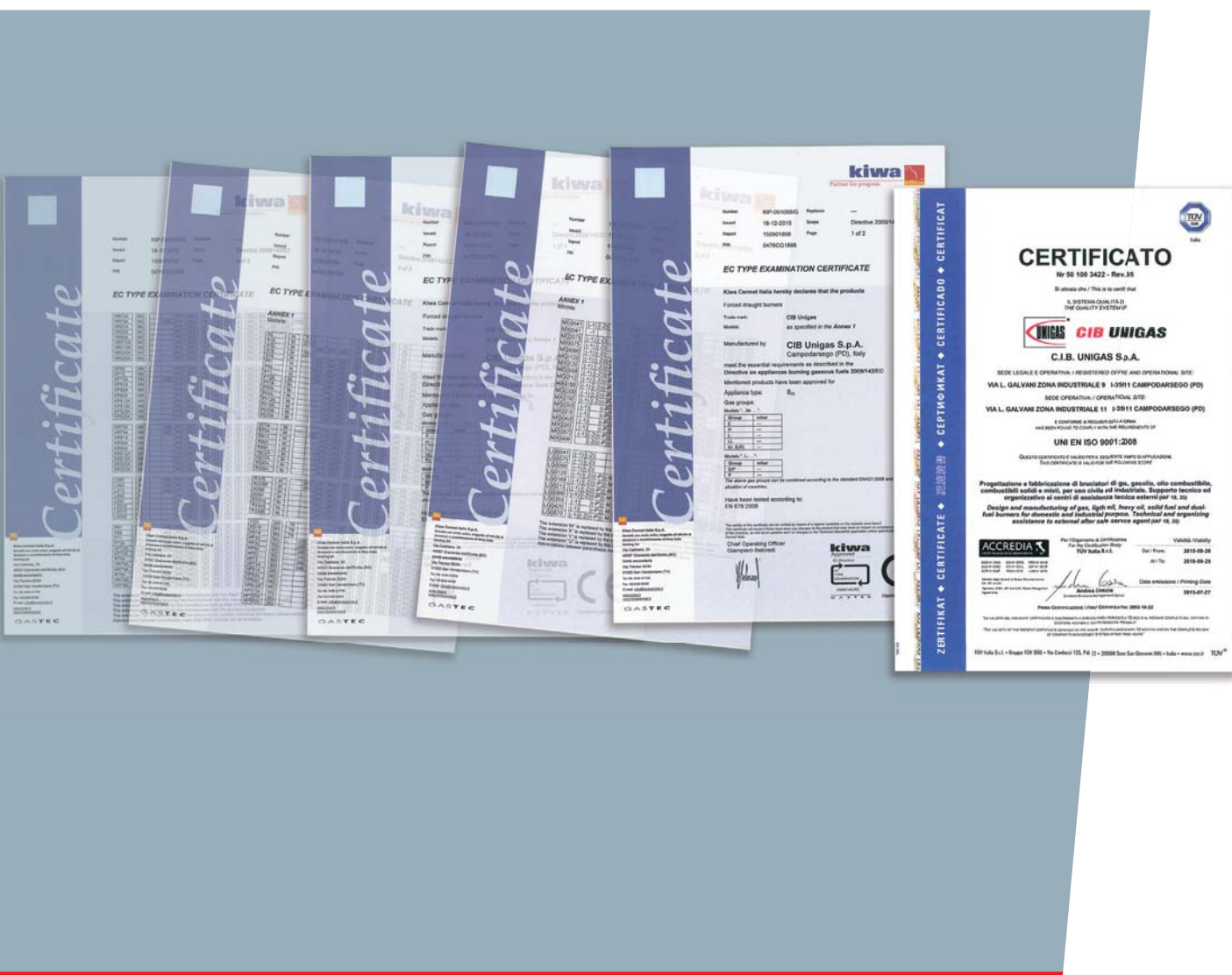












# CERTIFICATO

Nr 50 100 3422 - Rev.05

Il sottoscritto / This is to certify that  
il sistema QUALITY  
THE QUALITY SYSTEM



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

SEDE LEGALE E OPERATIVA / REGISTERED OFFICE AND OPERATIONAL SITE:  
VIA L. GALVANI ZONA INDUSTRIALE 9 10591 CAMPOARSSGO (PD)

SEDE OPERATIVA / OPERATIONAL SITE:  
VIA L. GALVANI ZONA INDUSTRIALE 11 10511 CAMPOARSSGO (PD)

E' CONFORME AI REQUISITI DELLA  
NORMA UNI EN ISO 9001:2008

Questo certificato è valido per il seguente campo di applicazione:  
Tale certificato è valido anche per il seguente campo:

Preparazione e fabbricazione di bruciatori di gas, gasolio, olio combustibile, combustibili solidi e liquidi, per uso civile ed industriale. Supporto tecnico ed organizzativo al cliente di stabilimenti tecnici esterni (art. 18, 30)

Design and manufacturing of gas, liquid oil, heavy oil, solid fuel and coal fuel burners for domestic and industrial purpose. Technical and organizing assistance to external after sale service agent (art. 18, 30)

ACCREDIA  
Per l'Organismo di certificazione  
Per la Distribuzione  
TUV Italia S.p.A.  
Data emissione / Printing Date  
2015-07-27

Validità / Validity  
Dal / From: 2015-09-29  
Al / To: 2018-09-28

100 Italia S.p.A. • Via S. Tomaso 100 • 10128 San Tomaso 100 • Italia • www.100.it

## EC TYPE EXAMINATION CERTIFICATE

Kiwa Cert Italia hereby declares that the products  
Force draught burners  
as specified in the Annex 1

Manufactured by  
CIB Unigas S.p.A.  
Camposansog (PD), Italy

meet the essential requirements as described in the  
Directive on appliances burning gaseous fuels 2009/143/EC  
Mentioned products have been approved for  
Application type: B<sub>2</sub>

Gas group:  
G<sub>30</sub> - M<sub>21</sub>

Marking: L<sub>1</sub> -  
L<sub>2</sub> -  
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The above products can be certified according to the standard EN676:2008

Have been tested according to:  
EN 676:2008

Chief Operating Officer  
Giuseppe Basso



Certificate

Certificate

Certificate

Certificate

Certificate

ZERTIFIKAT • CERTIFICATE • CERTIFICADO • CERTIFICAT • CERTIFICAZIONE



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**CIB UNIGAS**

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

Via L. Galvani, 9 - 35011 CAMPODARSEGO (PD) - Italy  
Tel. +39 049 9200944 - Fax +39 049 9200945 - 9201269  
Fax Export +39 049 9202105  
cibunigas@cibunigas.it  
www.cibunigas.it

