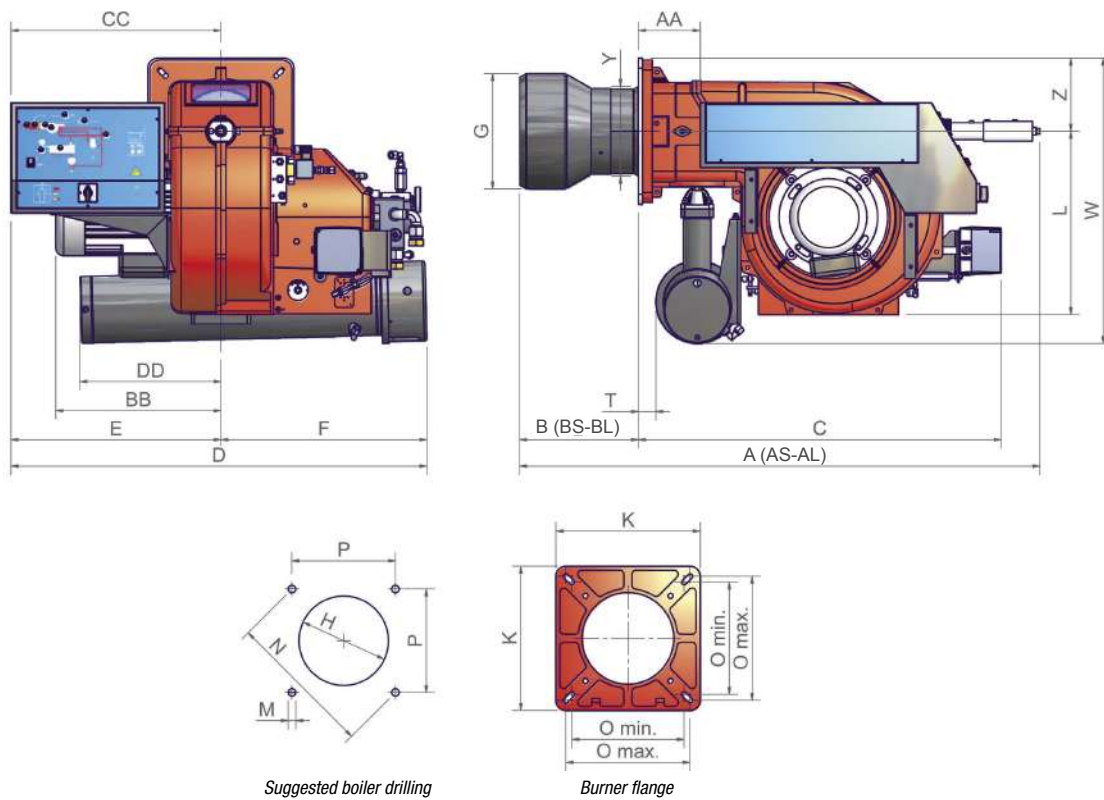


**MECHANICAL ATOMIZATION**  
with viscosity up to 400 cSt at 50°C (50°E at 50°C)

TECHNICAL DETAILS

Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor kW	Pump motor kW	Resistor kW
		min.	max.					
<b>PN91</b>	x-AB.x.xx.A	1.047	2.093	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	4,0	-	12
<b>PN91</b>	x-.xx.x.xx.A	698	2.093	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	4,0	-	18
<b>PN92</b>	x-.xx.x.xx.A	849	2.558	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	5,5	-	18
<b>PN93</b>	x-.xx.x.xx.A	550	4.100	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	7,5	-	24



Type	Packaging dimensions (mm)			
	l	p	h	kg
<b>PN91/92/93</b>	1.730	1.280	1.020	290

Approximate values

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

Approximate values

# novanta SERIES PN91 PN92 PN93

HEAVY OIL

**MECHANICAL ATOMIZATION**  
with viscosity up to 400 cSt at 50°C (50°E at 50°C)

## 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)							
<b>N-AB.S.xx.A</b>	AB	012060302		-		-	
<b>N-PR.S.xx.A</b>	PR (*)	012060303		012060503		012061403	
HEAVY OIL 400 cSt at 50°C (50°E at 50°C)							
<b>D-AB.S.xx.A</b>	AB	012180302		-		-	
<b>D-PR.S.xx.A</b>	PR (*)	012180303		012180503		012181403	

S = Standard combustion head (BS)

L = For long combustion head version (BL) increase the price (see price list)

(\*) Progressive PR control, for modulating version MD add € (see price list)

In the full modulating version MD in order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

**In compliance with:**

- Low Tension Directive 2014/35/UE
- Electromagnetic Compatibility Directive 2014/30/UE
- Machinery Directive 2006/42/CE

## 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.xx.A.ES</b>	MD (**)	01206030S		01206050S		01206040S	
HEAVY OIL 400 cSt at 50°C (50°E at 50°C)							
<b>D-MD.S.xx.A.ES</b>	MD (**)	01218030S		01218050S		01218140S	

S = Standard combustion head (BS)

L = For long combustion head version (BL) increase the price (see price list)

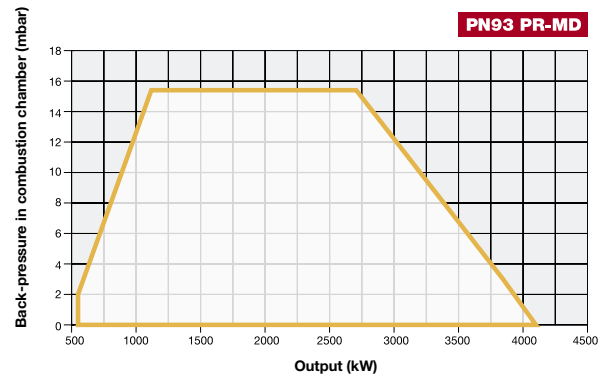
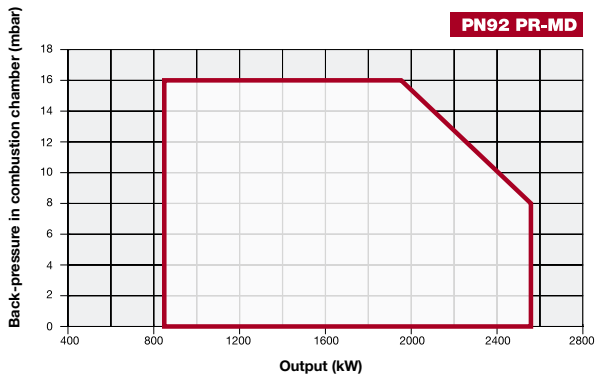
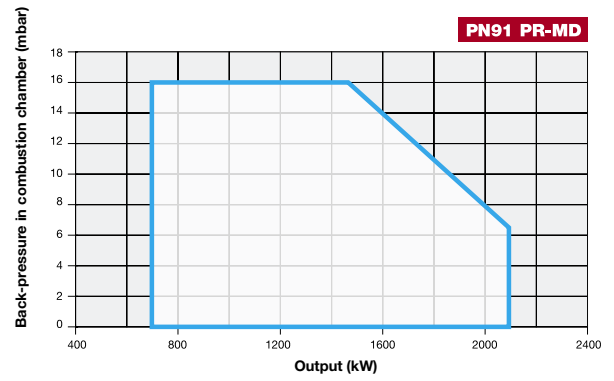
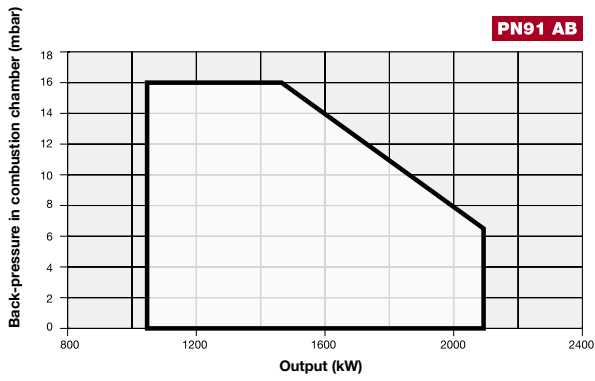
(\*\*) The burners are already MD version.

In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

**In compliance with:**

- Low Tension Directive 2014/35/UE
- Electromagnetic Compatibility Directive 2014/30/UE
- Machinery Directive 2006/42/CE

**PN91 PN92 PN93 novanta** SERIES  
**MECHANICAL ATOMIZATION**  
 with viscosity up to 400 cSt at 50°C (50°E at 50°C)

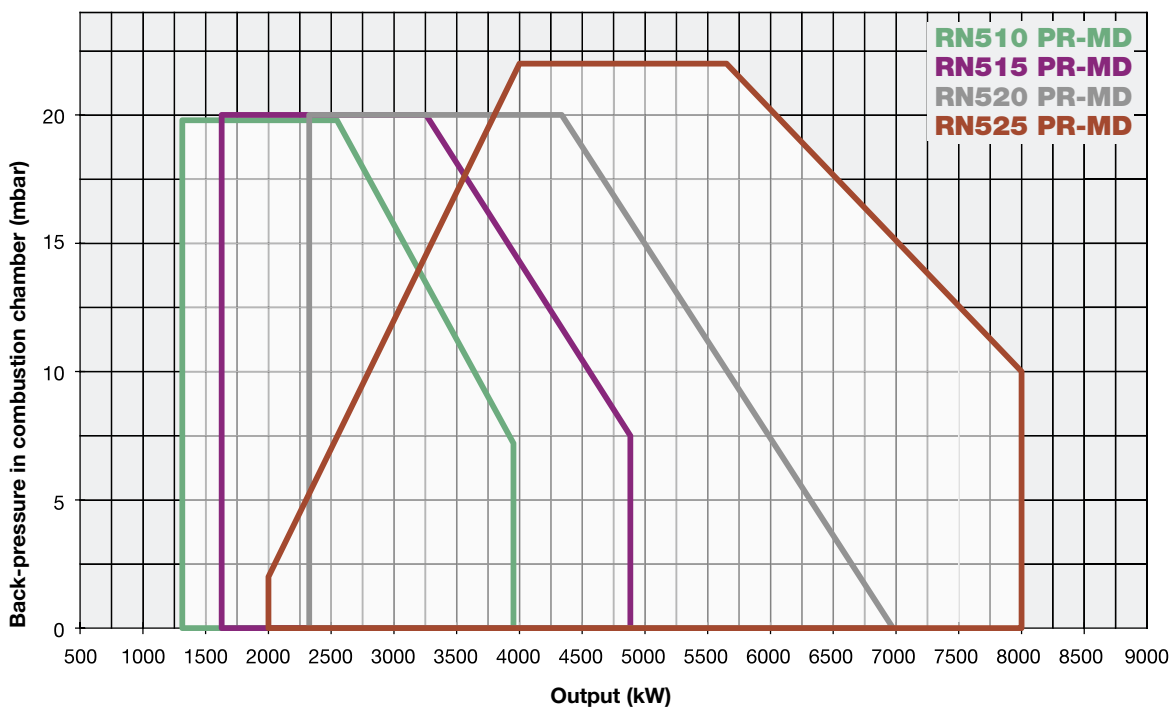


# **cinquecento** SERIES **RN510 RN515 RN520 RN525**

HEAVY OIL

**MECHANICAL ATOMIZATION**  
with viscosity up to 400 cSt at 50°C (50°E at 50°C)

These aluminium monoblock industrial burners with integral fan are available for oils with viscosity up to 50 cSt at 50°C (7°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.





# cinquecento SERIES RN510 RN515 RN520 RN525

**MECHANICAL ATOMIZATION**  
with viscosity up to 400 cSt at 50°C (50°E at 50°C)

HEAVY OIL

## MECHANICAL OPERATION

		RN510		RN515	
Model	Operation	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)					
<b>N-.PR.S.xx.A</b>	PR (*)	029060103		029060303	
HEAVY OIL 400 cSt at 50°C (50°E at 50°C)					
<b>D-.PR.S.xx.A</b>	PR (*)	029180103		029180303	
		RN520		RN525	
Model	Operation	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)					
<b>N-.PR.S.xx.A</b>	PR (*)	029060503		029060703	
HEAVY OIL 400 cSt at 50°C (50°E at 50°C)					
<b>D-.PR.S.xx.A</b>	PR (*)	029180503		029180703	

S = Standard combustion head (BS)

L = For long combustion head version (BL) increase the price (see price list)

(\*) Progressive PR control, for modulating version MD add € (see price list)

In the full modulating version MD in order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

**In compliance with:**

- Low Tension Directive 2014/35/UE - Electromagnetic Compatibility Directive 2014/30/UE - Machinery Directive 2006/42/CE

## ELECTRONIC OPERATION

		RN510		RN515	
Model	Operation	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)					
<b>N-.MD.S.xx.A.ES</b>	MD (**)	02906010S		02906030S	
HEAVY OIL 400 cSt at 50°C (50°E at 50°C)					
<b>D-.MD.S.xx.A.ES</b>	MD (**)	02918010S		02918030S	
		RN520		RN525	
Model	Operation	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)					
<b>N-.MD.S.xx.A.ES</b>	MD (**)	02906050S		02906070S	
HEAVY OIL 400 cSt at 50°C (50°E at 50°C)					
<b>D-.MD.S.xx.A.ES</b>	MD (**)	02918050S		02918070S	

S = Standard combustion head (BS)

L = For long combustion head version (BL) increase the price (see price list)

(\*\*) The burners are already MD version.

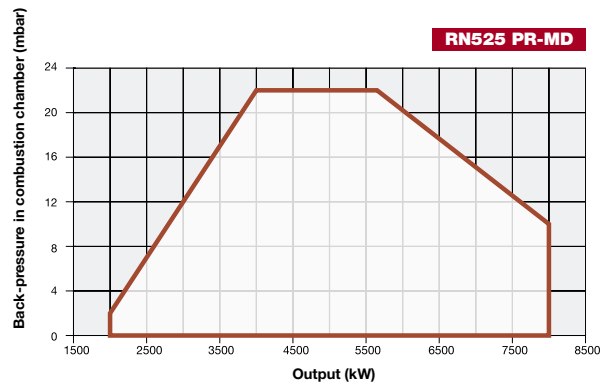
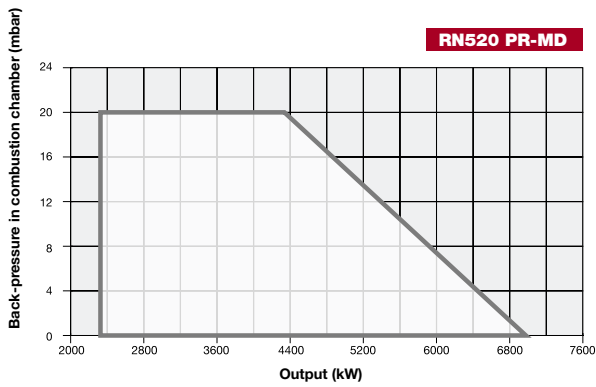
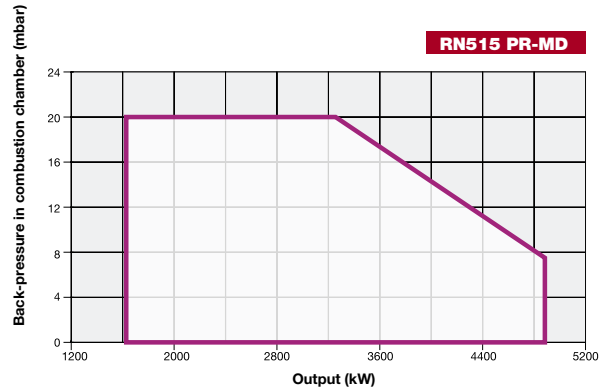
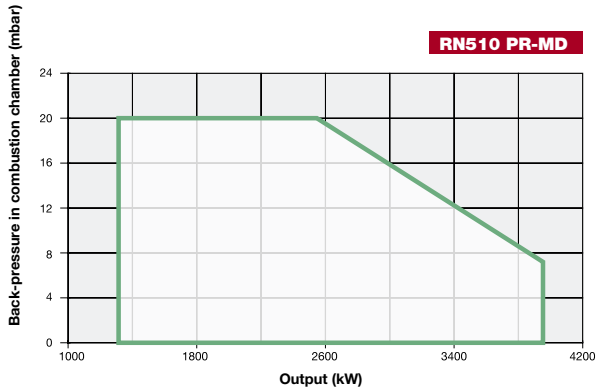
In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

**In compliance with:**

- Low Tension Directive 2014/35/UE - Electromagnetic Compatibility Directive 2014/30/UE - Machinery Directive 2006/42/CE

**RN510 RN515 RN520 RN525** **cinquecento** SERIES

**MECHANICAL ATOMIZATION**  
with viscosity up to 400 cSt at 50°C (50°E at 50°C)



# mille SERIES RN1030 RN1040

## MECHANICAL ATOMIZATION

with viscosity up to 400 cSt at 50°C (50°E at 50°C)

HEAVY OIL

These aluminium monoblock industrial burners with integral fan, are available for oils with viscosity up to 50 cSt at 50°C (7°E at 50°C).

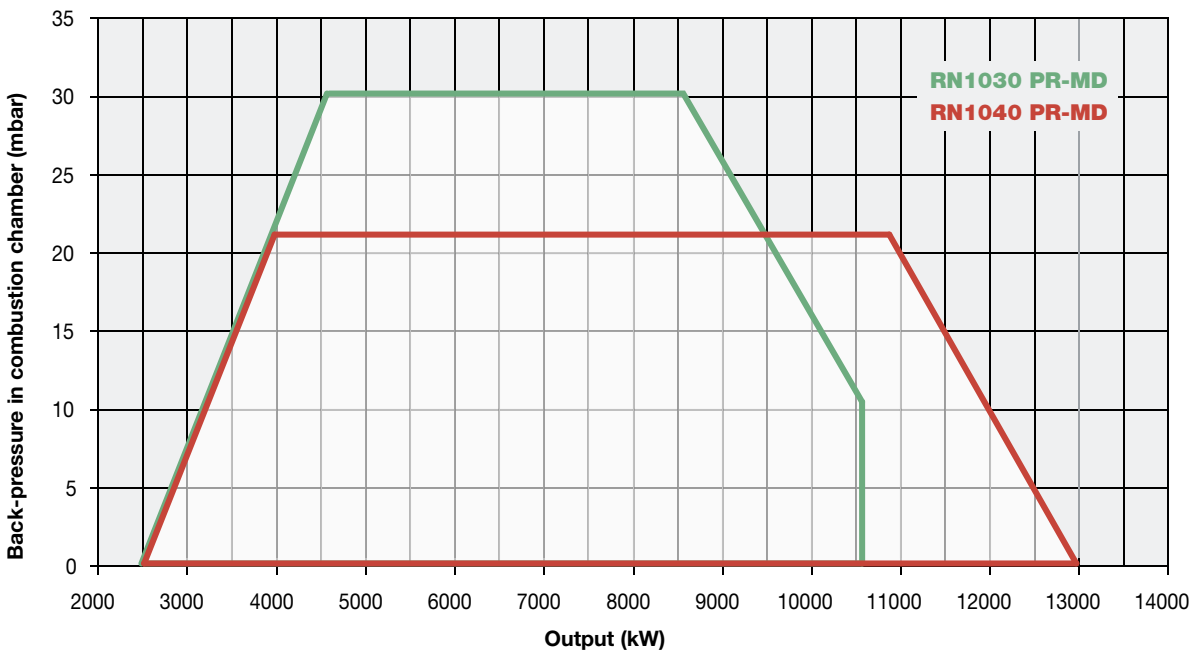
Upon request we can also supply a model for heavy oils up to 400 cSt at 50°C (50°E at 50°C). These burners use a mechanical atomization system and, given the particular viscosity of the fuel, they are equipped with two preheating tanks provided with electronic elements to keep the oil fluid and to avoid 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 specific fan guide that allows maximum exploitation of the fan performance.

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



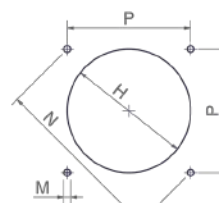
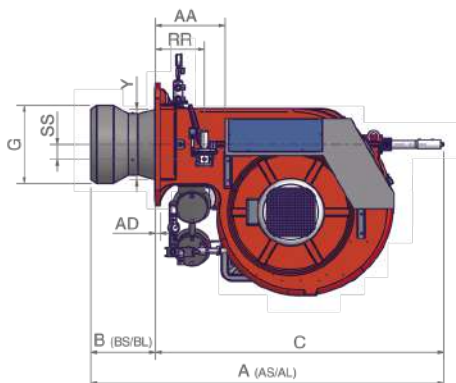
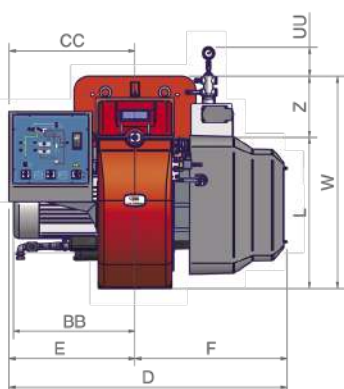
Electronic set up (optional)



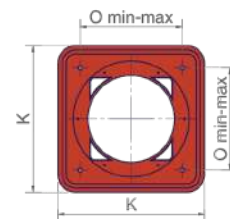


TECHNICAL DETAILS

Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor kW	Pump motor kW	Resistor kW	Noise level dBA
		min.	max.						
<b>RN1030</b>	x-.xx.x.xx.A	2.550	10.600	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	22	5,5	24+24	85,6
<b>RN1040</b>	x-.xx.x.xx.A	2.550	13.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	30	5,5	24+24	85,6



Suggested boiler drilling



Burner flange

Type	Packaging dimensions (mm)			
	l	p	h	kg
<b>RN1030/1040</b>	2.270	1.720	1.320	800

Approximate values

Type	Model	Overall dimensions (mm)																									
		AA	AS	AL	AD	BB	BS	BL	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.xx.A	377	1888	2082	25	657	420	614	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.xx.A	377	1959	2153	25	657	384	578	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 combustion head inside the boiler.

# mille SERIES RN1030 RN1040

HEAVY OIL

**MECHANICAL ATOMIZATION**  
with viscosity up to 400 cSt at 50°C (50°E at 50°C)

## MECHANICAL OPERATION

		RN1030		RN1040	
Model	Operation	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)					
<b>N-PR.S.xx.A</b>	PR (*)	023061603		023061803	
HEAVY OIL 400 cSt at 50°C (50°E at 50°C)					
<b>D-PR.S.xx.A</b>	PR (*)	023181603		023181803	

S = Standard combustion head (BS)

L = For long combustion head version (BL) increase the price (see price list)

(\*) Progressive PR control, for modulating version MD add € (see price list)

In the full modulating version MD in order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

**In compliance with:**

- Low Tension Directive 2014/35/UE - Electromagnetic Compatibility Directive 2014/30/UE - Machinery Directive 2006/42/CE

## ELECTRONIC OPERATION

		RN1030		RN1040	
Model	Operation	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)					
<b>N-PR.S.xx.A.EA</b>	PR (*)	02306160A		02306180A	
HEAVY OIL 400 cSt at 50°C (50°E at 50°C)					
<b>D-PR.S.xx.A.EA</b>	PR (*)	02318160A		02318180A	

S = Standard combustion head (BS)

L = For long combustion head version (BL) increase the price (see price list)

(\*) Progressive PR control, for modulating version MD add € (see price list)

In the full modulating version MD in order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

**In compliance with:**

- Low Tension Directive 2014/35/UE - Electromagnetic Compatibility Directive 2014/30/UE - Machinery Directive 2006/42/CE

## ELECTRONIC OPERATION

		RN1030		RN1040	
Model	Operation	Code	Price €	Code	Price €
HEAVY OIL 50 cSt at 50°C (7°E at 50°C)					
<b>N-MD.S.xx.A.ES</b>	MD (**)	02306160S		02306180S	
HEAVY OIL 400 cSt at 50°C (50°E at 50°C)					
<b>D-MD.S.xx.A.ES</b>	MD (**)	02318160S		02318180S	

S = Standard combustion head (BS)

L = For long combustion head version (BL) increase the price (see price list)

(\*\*) The burners are already MD version.

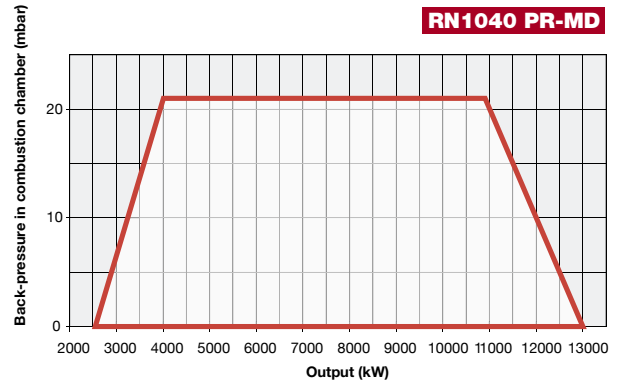
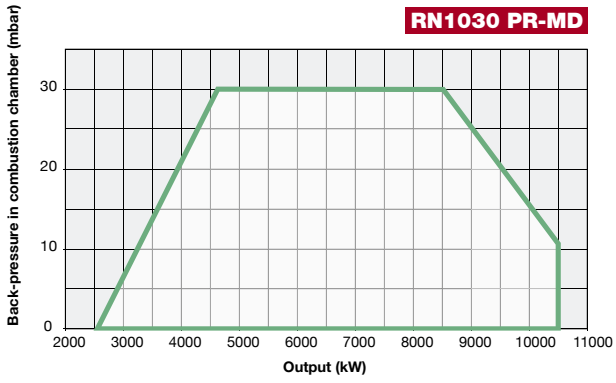
In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

**In compliance with:**

- Low Tension Directive 2014/35/UE - Electromagnetic Compatibility Directive 2014/30/UE - Machinery Directive 2006/42/CE

# RN1030 RN1040 *mille* SERIES

**MECHANICAL ATOMIZATION**  
with viscosity up to 400 cSt at 50°C (50°E at 50°C)



# duemila SERIES RN2050 RN2060 RN2080

HEAVY OIL

**MECHANICAL ATOMIZATION**  
with viscosity up to 400 cSt at 50°C (50°E at 50°C)

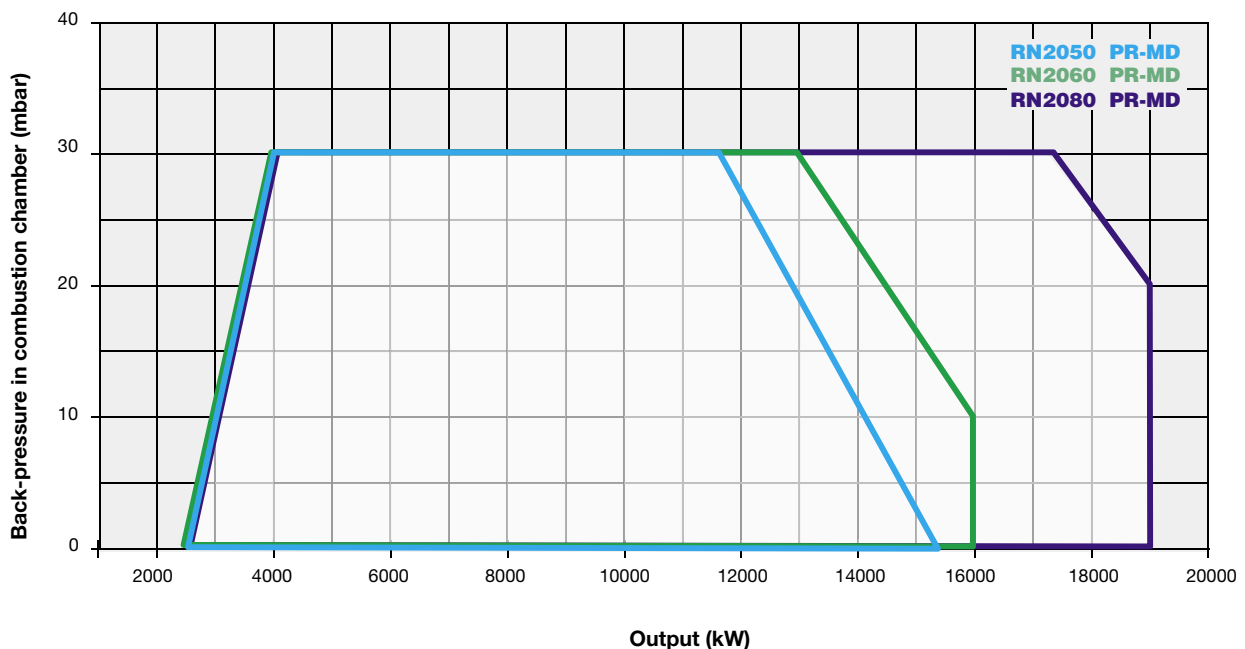
These aluminium monoblock industrial burners with integral fan are available for oils with viscosity up to 400 cSt at 50°C (50°E at 50°C).

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.



Oil pump set (pump, motor, oil tank and filter) in a separate support, (not assembled on the burner)  
OPTION

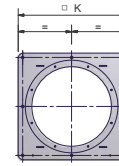
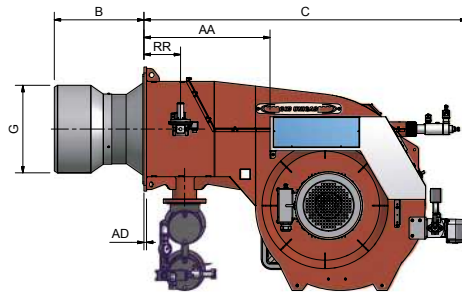
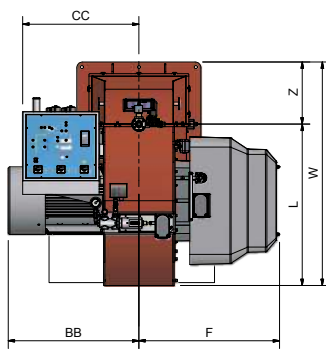


# RN2050 RN2060 RN2080 **duemila** SERIES

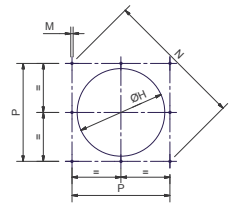
**MECHANICAL ATOMIZATION**  
with viscosity up to 400 cSt at 50°C (50°E at 50°C)

## TECHNICAL DETAILS

Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor kW	Pump motor kW	Resistor kW	Nois level dBA
		min.	max.						
<b>RN2050</b>	x-.xx.S.xx.A	2.500	15.200	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	37	5,5	24 + 24	92,5
<b>RN2060</b>	x-.xx.S.xx.A	2.500	16.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	45	5,5	24 + 24	91,7
<b>RN2080</b>	x-.xx.S.xx.A	2.500	19.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	55	5,5	24 + 24	91,7



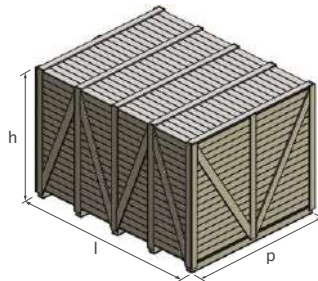
Burner flange



Suggested boiler drilling

The preheaters, the motor and pump unit are included in the scope of supply, assembled in the burner. On request they can be assembled in a separate support (not on board).

Boiler drilling drill must be confirmed according the firing head.



Type	Packaging dimensions (mm)			
	l	p	h	kg
<b>RN2050</b>	2.396	1.886	1.969	1.390
<b>RN2060</b>	2.396	1.886	1.969	1.410
<b>RN2080</b>	2.396	1.886	1.969	1.510

Approximate values

Type	Model	Overall dimensions (mm)																	
		AA	AD	B	BB	C	CC	F	G	H	K	L	M	N	P	RR	W	Z	
<b>RN2050</b>	x-.xx.S.xx.A.xx	741	15	*	768	1898	735	827	*	*	730	949	M16	948	670	215	1314	365	
<b>RN2060</b>	x-.xx.S.xx.A.xx	741	15	*	807	1890	735	846	*	*	850	949	M16	1117	790	215	1374	425	
<b>RN2080</b>	x-.xx.S.xx.A.xx	741	15	*	885	1890	735	846	*	*	850	949	M16	1117	790	215	1374	425	

\* The B, G, H dimensions must be confirmed from our technical DPT.  
Approximate values

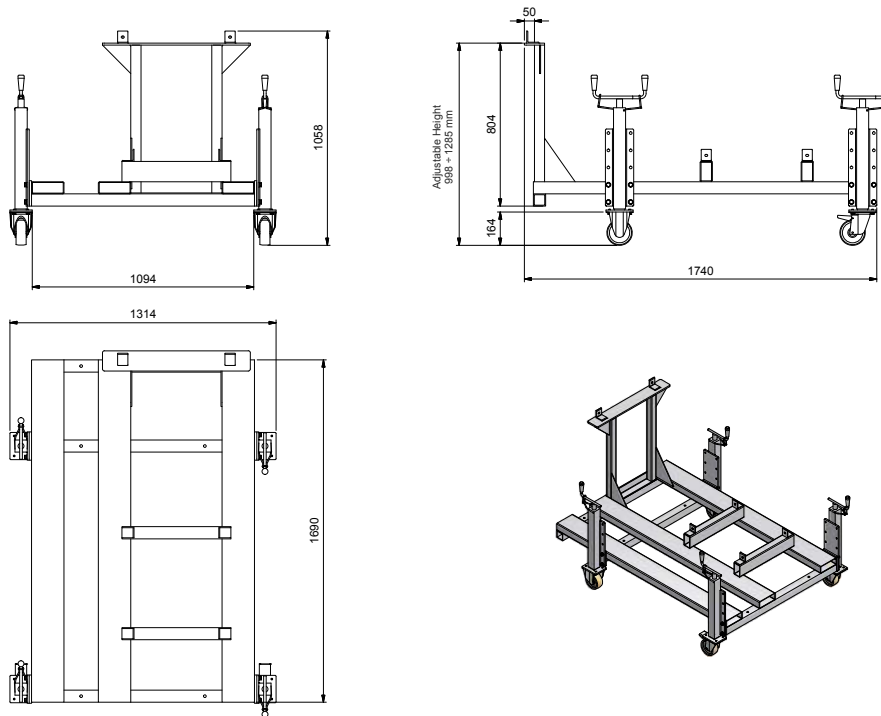
# duemila SERIES RN2050 RN2060 RN2080

HEAVY OIL

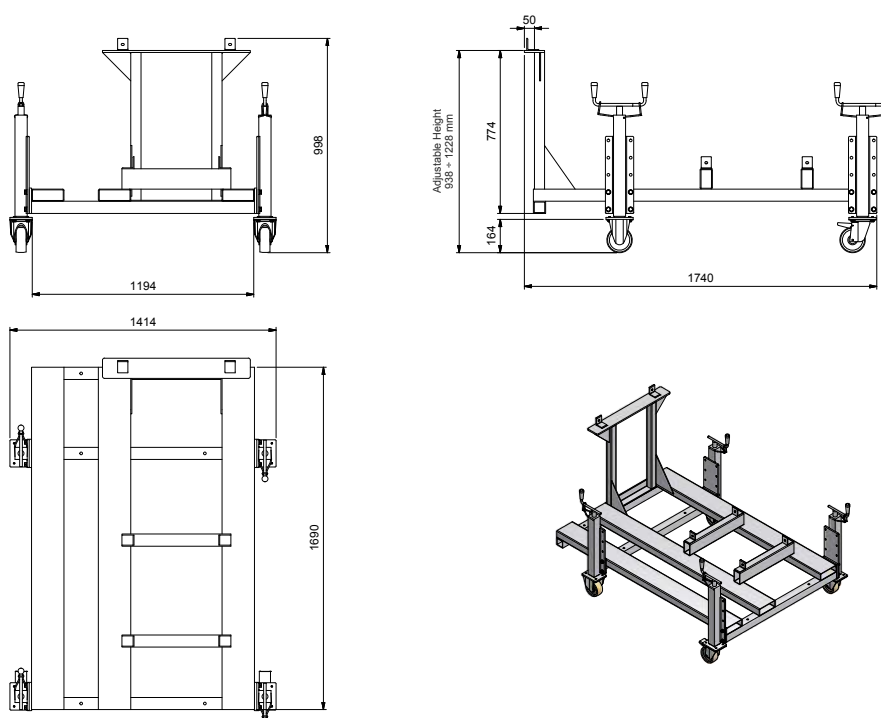
**MECHANICAL ATOMIZATION**  
with viscosity up to 400 cSt at 50°C (50°E at 50°C)

Monoblock burners 2000 series are supplied complete with a steel supporting frame; burner installation and manutention are greatly simplified.  
The frame is equipped with wheels to easily move the burner, and its height is adjustable to match any type of boiler or furnace.

## SUPPORTING FRAME FOR BURNERS 2050 SERIES



## SUPPORTING FRAME FOR BURNERS 2060/2080 SERIES



**ELECTRONIC OPERATION**

Model	Operation	RN2050		RN2060		RN2080	
		Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 400 cSt at 50°C (50°E at 50°C)							
<b>D-.PR.S.xx.A.EA</b>	PR (*)	03218015A		-		-	

(\*) Progressive PR control, for modulating version MD add € (see price list)

In the full modulating version MD in order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

**In compliance with:**

- Low Tension Directive 2014/35/UE
- Electromagnetic Compatibility Directive 2014/30/UE
- Machinery Directive 2006/42/CE

**ELECTRONIC OPERATION**

Model	Operation	RN2050		RN2060		RN2080	
		Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 400 cSt at 50°C (50°E at 50°C)							
<b>D-.MD.S.xx.A.ES</b>	MD (**)	03218015S		03218025S		03218035S	

(\*\*) The burners are already MD version.

In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

**In compliance with:**

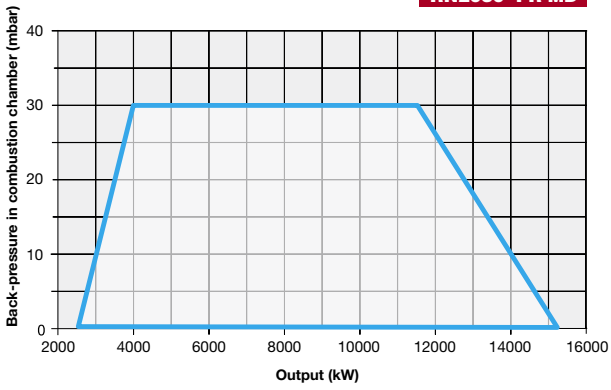
- Low Tension Directive 2014/35/UE
- Electromagnetic Compatibility Directive 2014/30/UE
- Machinery Directive 2006/42/CE

# duemila SERIES RN2050 RN2060 RN2080

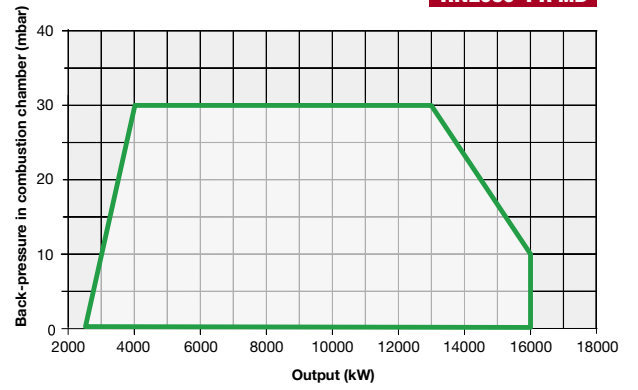
HEAVY OIL

**MECHANICAL ATOMIZATION**  
with viscosity up to 400 cSt at 50°C (50°E at 50°C)

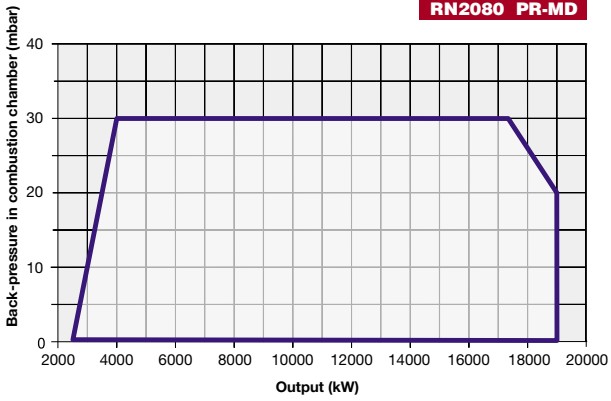
**RN2050 PR-MD**



**RN2060 PR-MD**



**RN2080 PR-MD**





**PBY90 PBY91 PBY92 PBY93 novanta** SERIES

**PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION**  
with viscosity up to 4000 cSt at 50°C (530°E at 50°C)

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.

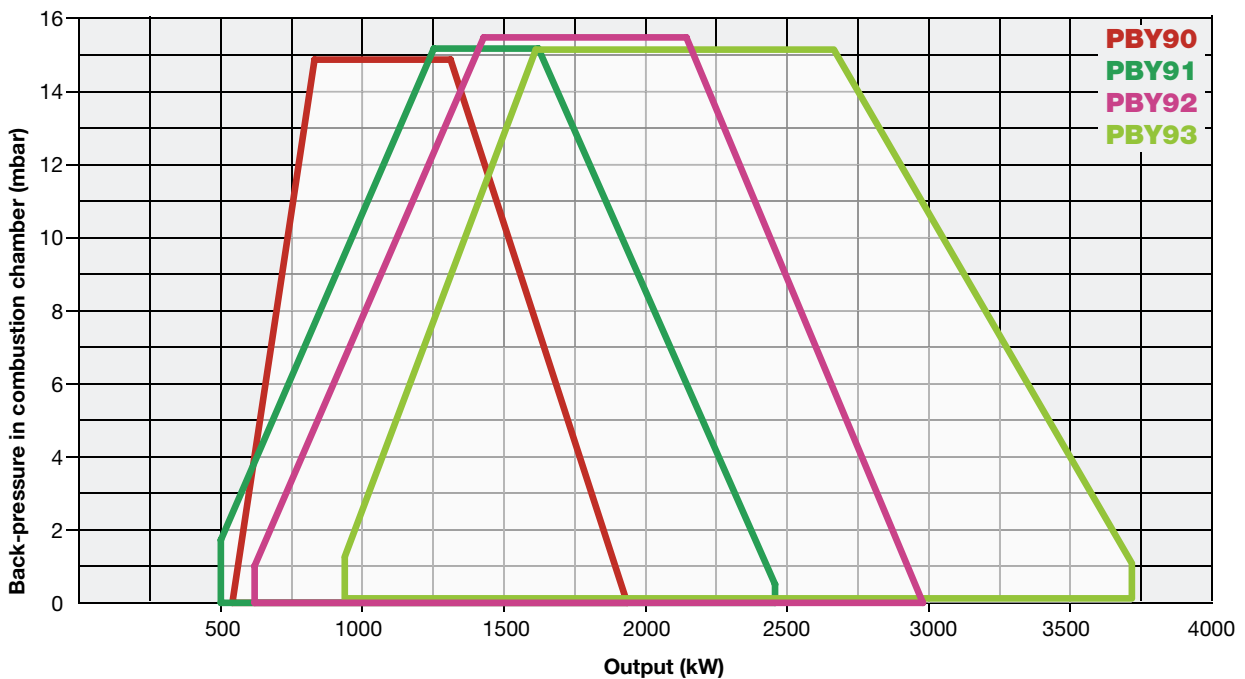
The plant must be provided with compressed air or steam at 6-10 bar.

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 4.000 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.



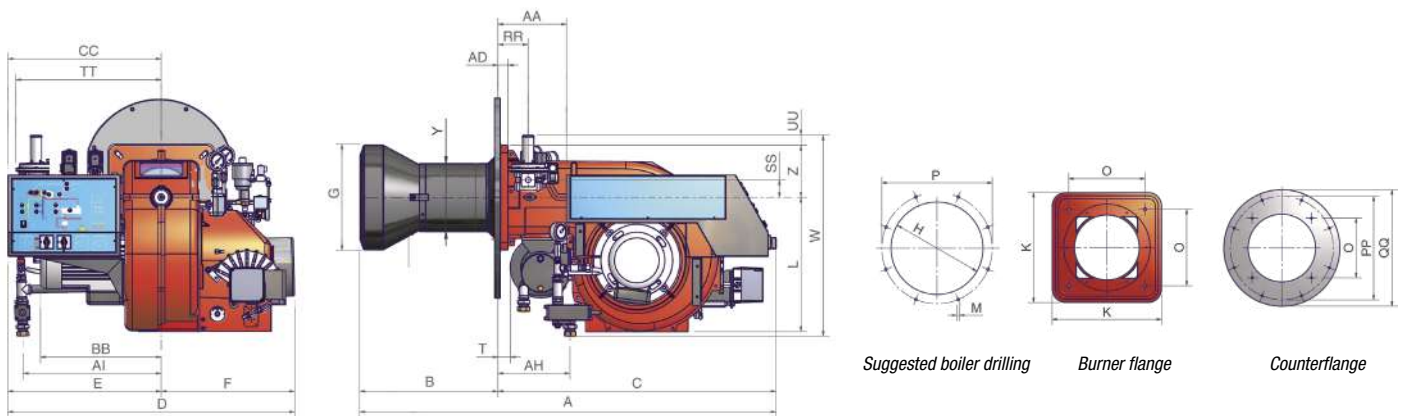
# novanta SERIES **PBY90 PBY91 PBY92 PBY93**

HEAVY OIL

**PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION**  
with viscosity up to 4000 cSt at 50°C (530°E at 50°C)

## TECHNICAL DETAILS

Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor kW	Pump motor kW	Resistor kW
		min.	max.					
<b>PBY90</b>	H-.xx.S.xx.A.xx	670	2.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	3,0	0,75	8,0
<b>PBY91</b>	H-.xx.S.xx.A.xx	500	2.500	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	4,0	0,75	8,0
<b>PBY92</b>	H-.xx.S.xx.A.xx	700	3.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	5,5	0,75	12,0
<b>PBY93</b>	H-.xx.S.xx.A.xx	900	3.700	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	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>PBY90/91/92</b>	1.730	1.280	1.020	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
		min.		max.																												
<b>PBY90</b>	H-.xx.x.xx.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.xx.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.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
<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 dimensions B are reduced by 20 mm with counterflange and gasket.

**ELECTRONIC OPERATION**

		<b>PBY90</b>		<b>PBY91</b>	
Model	Operation	Code	Price €	Code	Price €

HEAVY OIL 4000 cSt at 50°C (530°E at 50°C)					
<b>H-PR.S.xx.A.EA</b>	PR (*)	01218090A		01218100A	

		<b>PBY92</b>		<b>PBY93</b>	
Model	Operation	Code	Price €	Code	Price €

HEAVY OIL 4000 cSt at 50°C (530°E at 50°C)					
<b>H-PR.S.xx.A.EA</b>	PR (*)	01218110A		-	

S = Standard combustion head (BS)

(\*) Progressive PR control, for modulating version MD add € (see price list)

In the full modulating version MD in order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

**In compliance with:**

- Low Tension Directive 2014/35/UE - Electromagnetic Compatibility Directive 2014/30/UE - Machinery Directive 2006/42/CE

**ELECTRONIC OPERATION**

		<b>PBY90</b>		<b>PBY91</b>	
Model	Operation	Code	Price €	Code	Price €

HEAVY OIL 4000 cSt at 50°C (530°E at 50°C)					
<b>H-MD.S.xx.A.ES</b>	MD (**)	01218090S		01218100S	

		<b>PBY92</b>		<b>PBY93</b>	
Model	Operation	Code	Price €	Code	Price €

HEAVY OIL 4000 cSt at 50°C (530°E at 50°C)					
<b>H-MD.S.xx.A.ES</b>	MD (**)	01218110S		-	

S = Standard combustion head (BS)

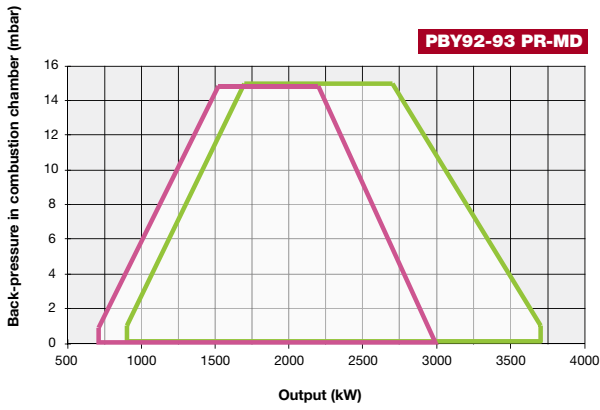
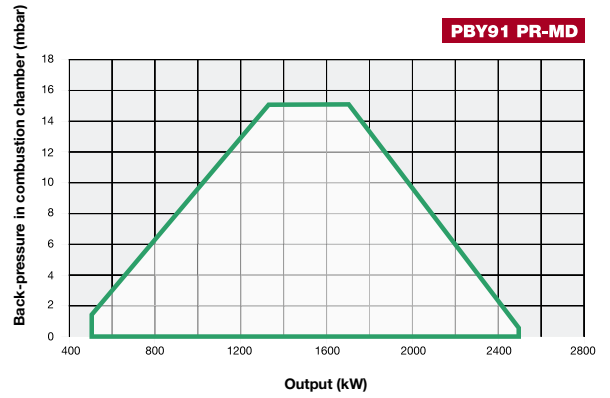
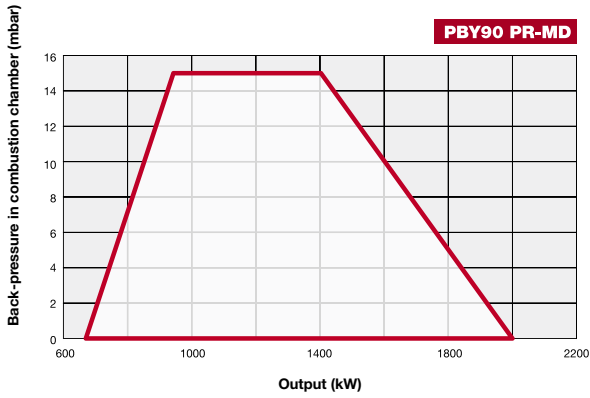
(\*\*) The burners are already MD version.

In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

**In compliance with:**

- Low Tension Directive 2014/35/UE - Electromagnetic Compatibility Directive 2014/30/UE - Machinery Directive 2006/42/CE

**PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION**  
with viscosity up to 4000 cSt at 50°C (530°E at 50°C)



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.

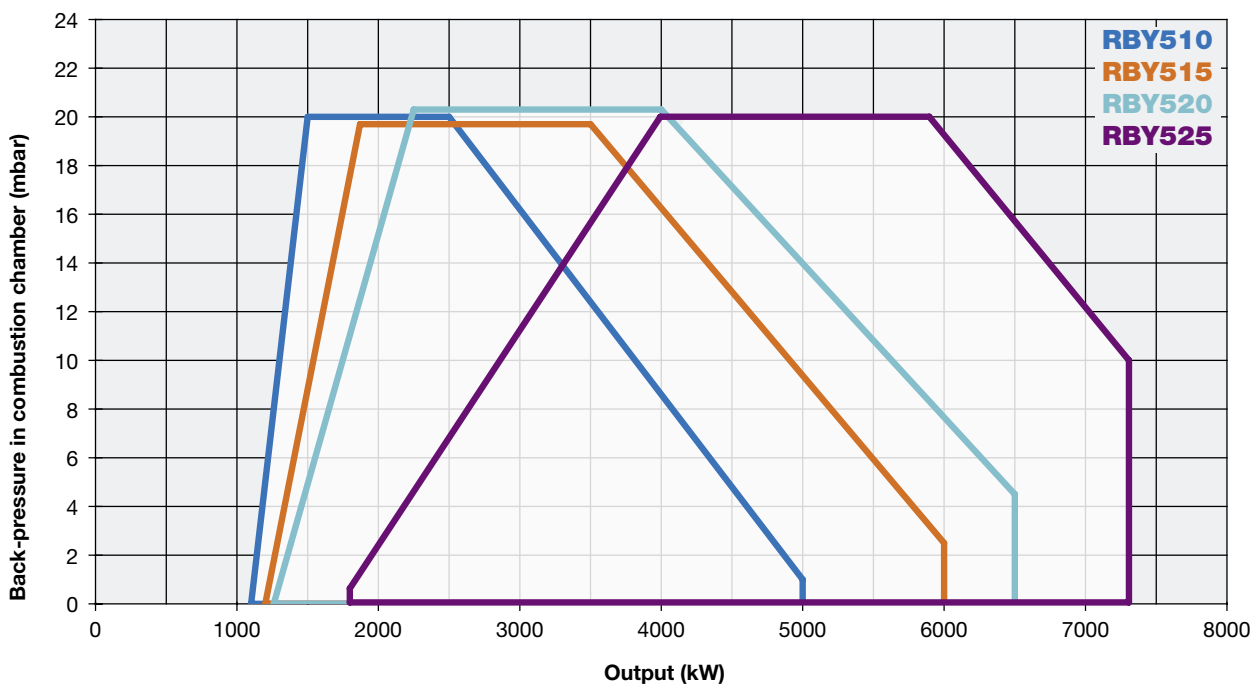
The plant must be provided with compressed air or steam at 6-10 bar.

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 4.000 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.



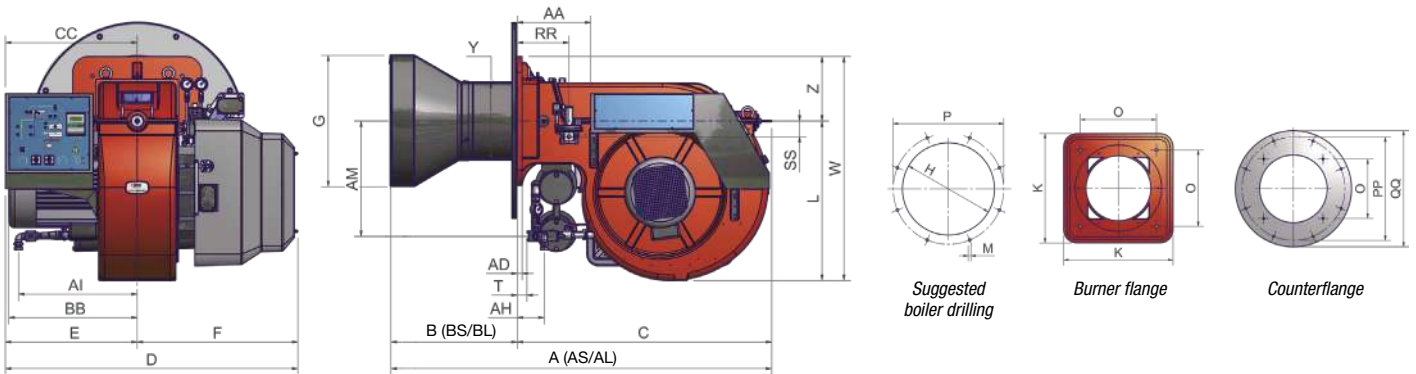
# cinquecento SERIES RBY510 RBY515 RBY520 RBY525

HEAVY OIL

**PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION**  
with viscosity up to 4000 cSt at 50°C (530°E at 50°C)

## TECHNICAL DETAILS

Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor kW	Pump motor kW	Resistor kW	Noise level dBA
		min.	max.						
<b>RBY510</b>	H-.xx.S.xx.A.xx	1.100	5.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	7,5	0,75	18,0	81,7
<b>RBY515</b>	H-.xx.S.xx.A.xx	1.200	6.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	11,0	0,75	18,0	82,3
<b>RBY520</b>	H-.xx.S.xx.A.xx	1.200	6.500	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	15,0	0,75	24,0	83,2
<b>RBY525</b>	H-.xx.S.xx.A.xx	1.800	7.300	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	18,5	0,75	24,0	84,9



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>RBY510/515/520</b>	1.730	1.430	1.130	410
<b>RBY525</b>	1.730	1.430	1.130	430

Approximate values

Type	Model	Overall dimensions (mm)																															
		AA	AD	AH	AI	AL	AS	BS	BL	BB	BB	C	CC	D	E	F	G	H	K	L	M	N	O	P	RR	SS	T	TT	W	Y	Z	PP	QQ
<b>RBY510</b>	H-.xx.x.xx.A.xx	219	35	265	448	-	1432	374	-	468	468	1058	571	1213	571	642	387	427	540	498	M14	552	390	800	109	115	44	547	827	329	270	800	850
<b>RBY515</b>	H-.xx.x.xx.A.xx	219	35	265	448	1616	1436	378	558	508	508	1058	571	1213	571	642	474	524	540	498	M14	552	390	800	109	115	44	547	827	329	270	800	850
<b>RBY520</b>	H-.xx.x.xx.A.xx	219	35	265	448	1616	1436	378	558	508	508	1058	571	1213	571	642	474	524	540	498	M14	552	390	800	109	115	44	547	827	329	270	800	850
<b>RBY525</b>	H-.xx.x.xx.A.xx	219	35	265	448	1616	1436	378	558	642	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 dimensions B are reduced by 25 mm with counterflange and gasket.

**ELECTRONIC OPERATION**

<b>RB510</b>				<b>RB515</b>	
Model	Operation	Code	Price €	Code	Price €

HEAVY OIL 4000 cSt at 50°C (530°E at 50°C)					
<b>H-PR.S.xx.A.EA</b>	PR (*)	02918090A		02918110A	

<b>RB520</b>				<b>RB525</b>	
Model	Operation	Code	Price €	Code	Price €

HEAVY OIL 4000 cSt at 50°C (530°E at 50°C)					
<b>H-PR.S.xx.A.EA</b>	PR (*)	-		02918150A	

S = Standard combustion head (BS)

L = For long combustion head version (BL) increase the price (see price list)

(\*) Progressive PR control, for modulating version MD add € (see price list)

In the full modulating version MD in order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

**In compliance with:**

- Low Tension Directive 2014/35/UE - Electromagnetic Compatibility Directive 2014/30/UE - Machinery Directive 2006/42/CE

**ELECTRONIC OPERATION**

<b>RB510</b>				<b>RB515</b>	
Model	Operation	Code	Price €	Code	Price €

HEAVY OIL 4000 cSt at 50°C (530°E at 50°C)					
<b>H-MD.S.xx.A.ES</b>	MD (**)	02918090S		02918110S	

<b>RB520</b>				<b>RB525</b>	
Model	Operation	Code	Price €	Code	Price €

HEAVY OIL 4000 cSt at 50°C (530°E at 50°C)					
<b>H-MD.S.xx.A.ES</b>	MD (**)	-		02918150S	

S = Standard combustion head (BS)

L = For long combustion head version (BL) increase the price (see price list)

(\*\*) The burners are already MD version.

In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

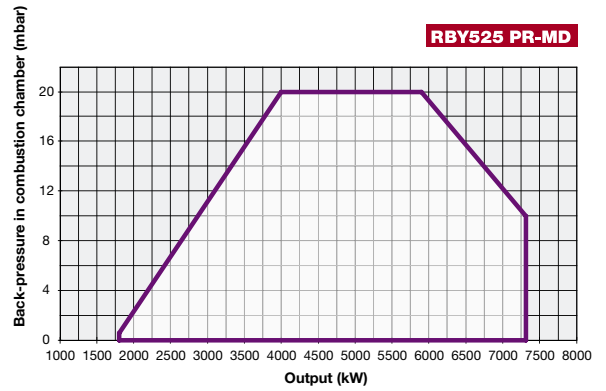
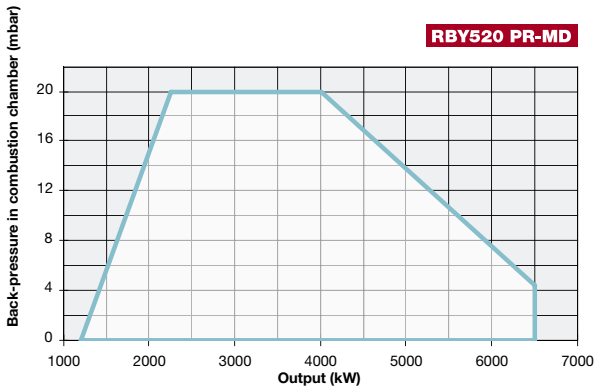
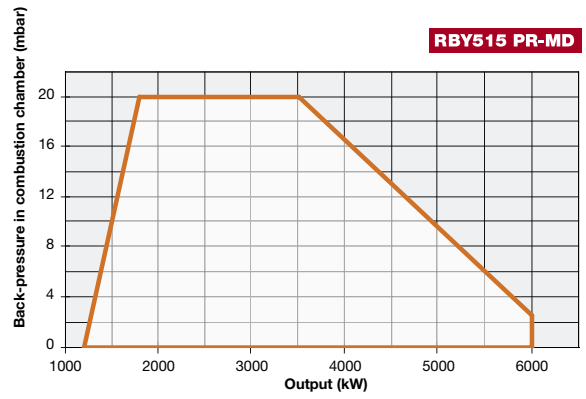
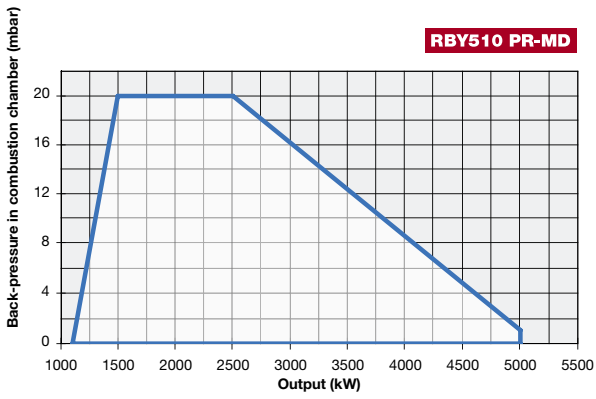
**In compliance with:**

- Low Tension Directive 2014/35/UE - Electromagnetic Compatibility Directive 2014/30/UE - Machinery Directive 2006/42/CE

# cinquecento SERIES RBY510 RBY515 RBY520 RBY525

HEAVY OIL

**PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION**  
 with viscosity up to 4000 cSt at 50°C (530°E at 50°C)





# RBY1025 RBY1030 RBY1040 **mille** SERIES

**PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION**  
with viscosity up to 4000 cSt at 50°C (530°E at 50°C)

Just like the corresponding MILLE series, these oil burners - up to 4.000 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.

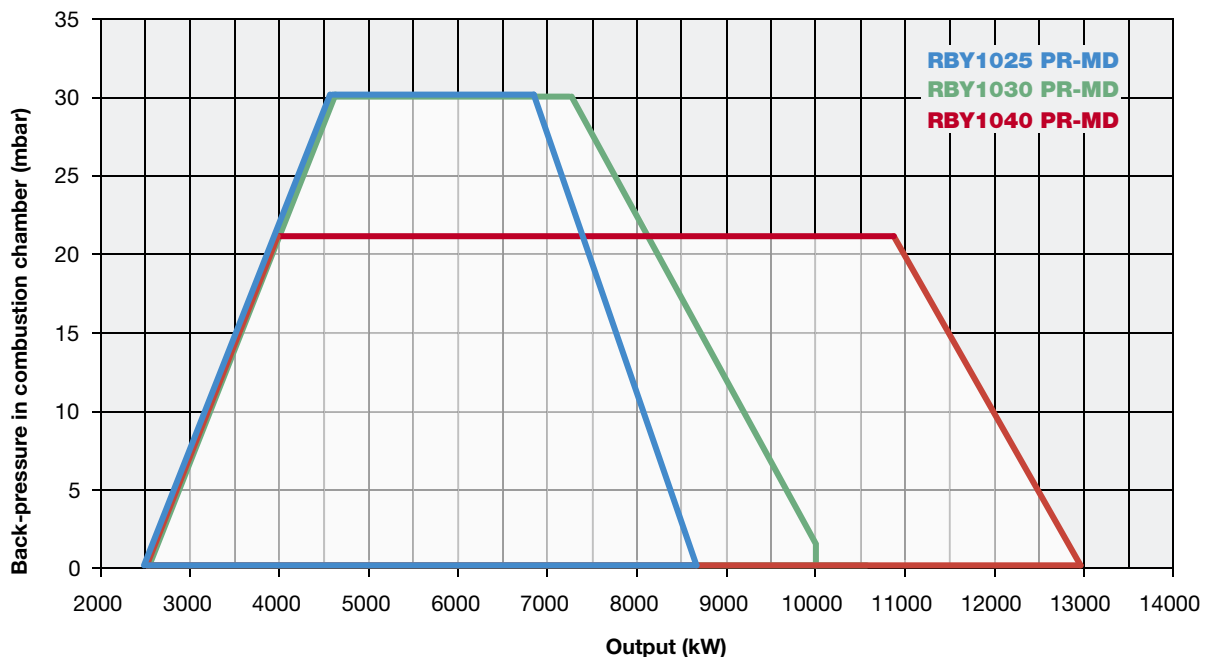
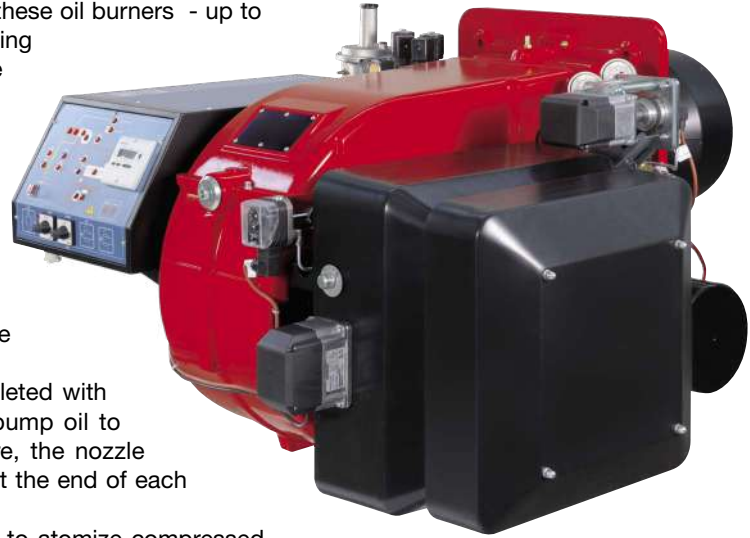
These burners are provided with a low pressure nozzle which allows consumption levels to be kept low and which also limits the general wear of the whole atomization system.

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.



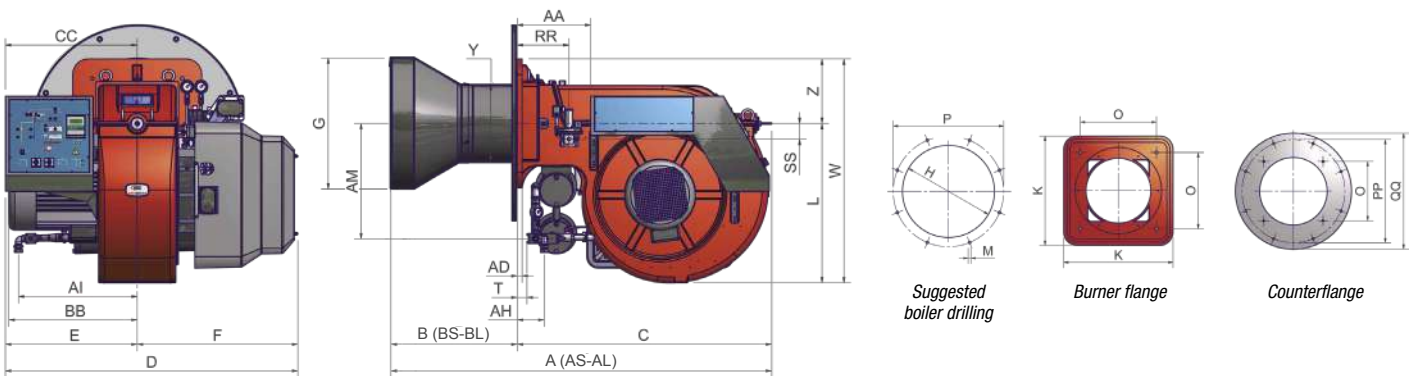
# milie SERIES RBY1025 RBY1030 RBY1040

HEAVY OIL

**PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION**  
with viscosity up to 4000 cSt at 50°C (530°E at 50°C)

## TECHNICAL DETAILS

Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor kW	Pump motor kW	Resistor kW	Noise level dBA
		min.	max.						
<b>RBY1025</b>	H-.xx.S.xx.A.xx	2.550	8.700	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	18,5	0,75	24	82,2
<b>RBY1030</b>	H-.xx.S.xx.A.xx	2.550	10.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	22,0	1,10	18+18	85,6
<b>RBY1040</b>	H-.xx.S.xx.A.xx	2.550	13.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	30,0	1,10	24+24	85,6



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>	2.280	1.730	1.360	850

Approximate values

Type	Model	Overall dimensions (mm)																															
		AA	AS	AL	AD	AH	AI	AM	B	BB	BS	BL	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.xx.A.xx	377	1669	1865	25	304	465	335	410	641	376	572	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.xx.A.xx	377	1646	-	25	138	608	589	353	657	353	-	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.xx.A.xx	377	1654	1873	25	138	608	589	361	657	361	580	1293	680	1502	680	822	671	731	660	816	M16	-	460	800	265	80	50	1146	412	330	800	900

Approximate values

The dimensions B are reduced by 25 mm with counterflange and gasket.

# RBY1025 RBY1030 RBY1040 **mille** SERIES

**PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION**  
with viscosity up to 4000 cSt at 50°C (530°E at 50°C)

## 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)							
<b>H-PR.S.xx.A.EA</b>	PR (*)	02318220A		02318240A		02318260A	

S = Standard combustion head (BS)

L = For long combustion head version (BL) increase the price (see price list)

(\*) Progressive PR control, for modulating version MD add € (see price list)

In the full modulating version MD in order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

**In compliance with:**

- Low Tension Directive 2014/35/UE - Electromagnetic Compatibility Directive 2014/30/UE - Machinery Directive 2006/42/CE

## 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)							
<b>H-MD.S.xx.A.ES</b>	MD (**)	02318220S		02318240S		02318260S	

S = Standard combustion head (BS)

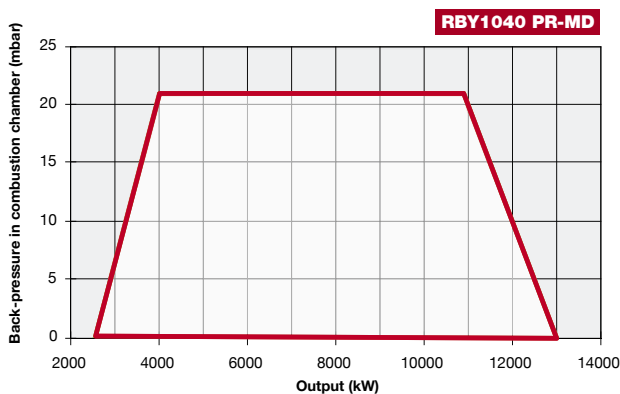
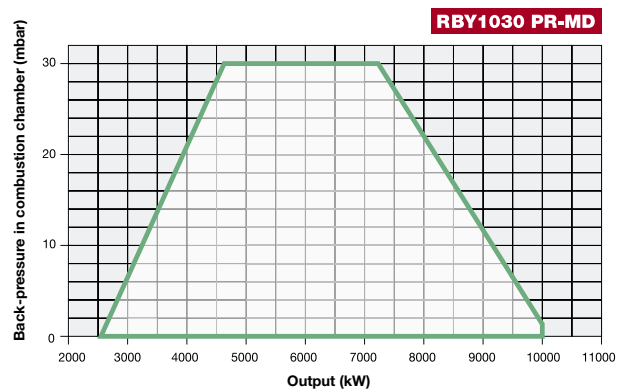
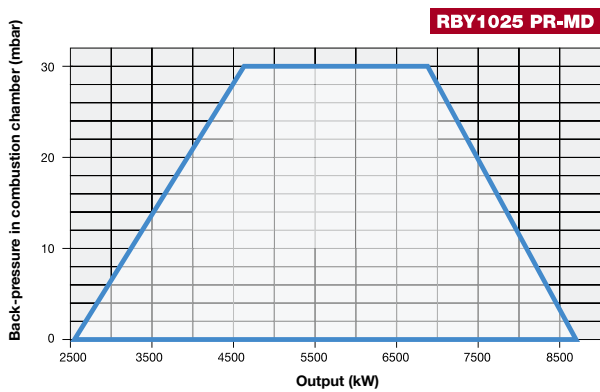
L = For long combustion head version (BL) increase the price (see price list)

(\*\*) The burners are already MD version.

In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

**In compliance with:**

- Low Tension Directive 2014/35/UE - Electromagnetic Compatibility Directive 2014/30/UE - Machinery Directive 2006/42/CE



# duemila SERIES RBY2050 RBY2060 RBY2080

HEAVY OIL

**PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION**  
with viscosity up to 4000 cSt at 50°C (530°E at 50°C)

Just like the corresponding DUEMILA series, these oil burners - up to 4.000 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.

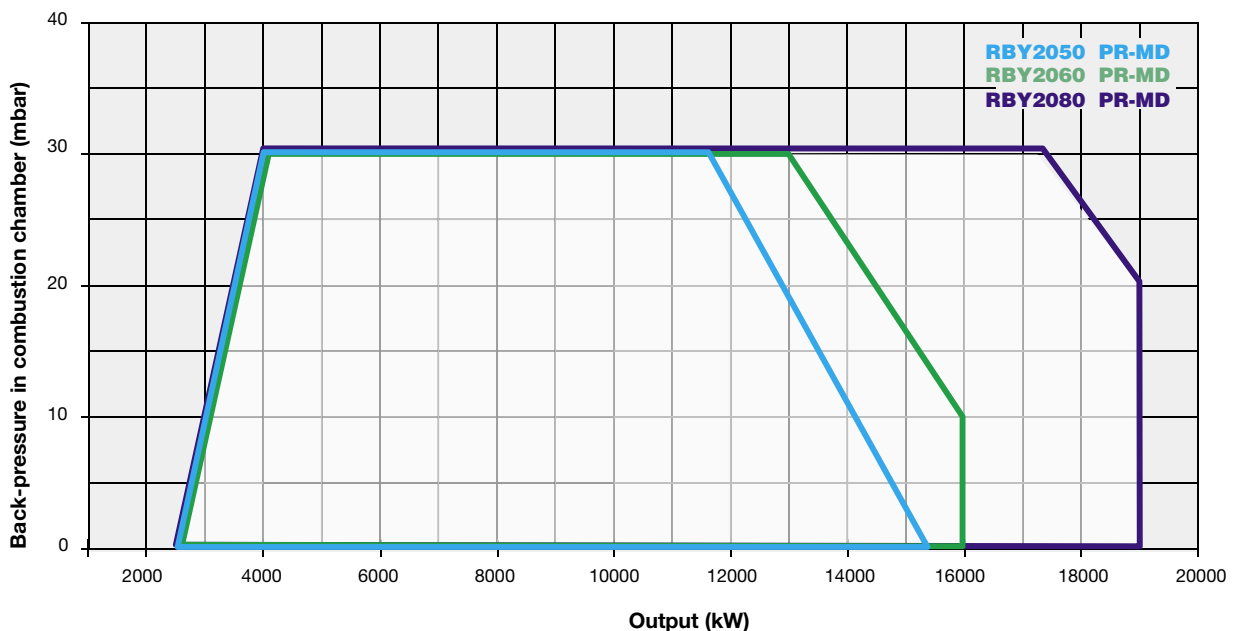
The standard version of burners is set up to atomize compressed air only, when steam is requested for the atomization, the burner will be modified through a specific kit.

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.

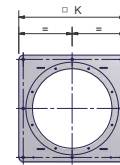
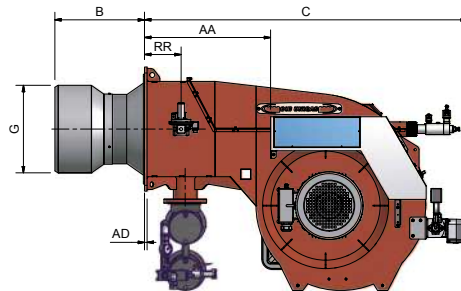
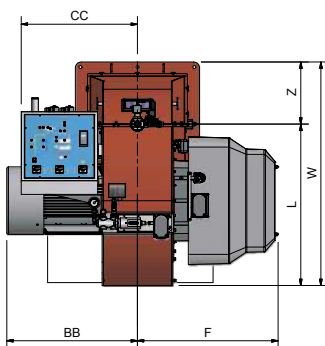


Oil pump set (pump, motor, oil tank and filter) in a separate support, (not assembled on the burner)  
**OPTION**

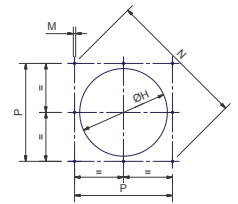


## TECHNICAL DETAILS

Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor kW	Pump motor kW	Resistor kW	Noise level dBA
		min.	max.						
<b>RBY2050</b>	H-.xx.S.xx.A.xx	2.500	15.200	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	37	1,1	24 + 24	92,5
<b>RBY2060</b>	H-.xx.S.xx.A.xx	2.500	16.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	45	1,1	24 + 24	91,7
<b>RBY2080</b>	H-.xx.S.xx.A.xx	2.500	19.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	55	1,1	24 + 24	91,7



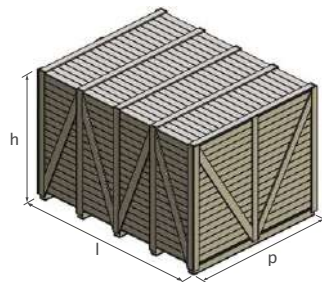
Burner flange



Suggested boiler drilling

The preheaters are included in the scope of supply, assembled in the burner.  
Low pressure pump set (pump, motor and filter) is included, but supplied loose (not on board).  
On request the preheaters and low pressure pump set (pump, motor and filter) can be assembled in a separate support (not on board).

Boiler drilling drill must be confirmed according the firing head.



Type	Packaging dimensions (mm)			
	l	p	h	kg
<b>RBY2050</b>	2.396	1.886	1.969	1.370
<b>RBY2060</b>	2.396	1.886	1.969	1.450
<b>RBY2080</b>	2.396	1.886	1.969	1.550

Approximate values

Type	Model	Overall dimensions (mm)																
		AA	AD	B	BB	C	CC	F	G	H	K	L	M	N	P	RR	W	Z
<b>RBY2050</b>	H-.xx.S.xx.A.xx	741	15	*	768	1898	735	827	*	*	730	949	M16	948	670	215	1314	365
<b>RBY2060</b>	H-.xx.S.xx.A.xx	741	15	*	807	1890	735	846	*	*	850	949	M16	1117	790	215	1374	425
<b>RBY2080</b>	H-.xx.S.xx.A.xx	741	15	*	885	1890	735	846	*	*	850	949	M16	1117	790	215	1374	425

\* The B, G, H dimensions must be confirmed from our technical DPT.

Approximate values

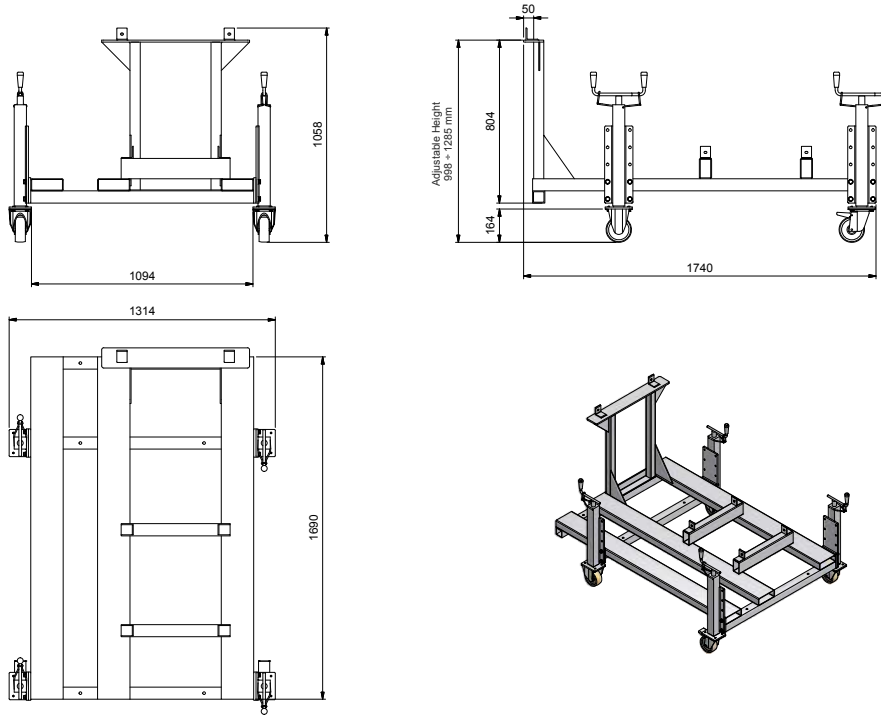
# duemila SERIES RBY2050 RBY2060 RBY2080

HEAVY OIL

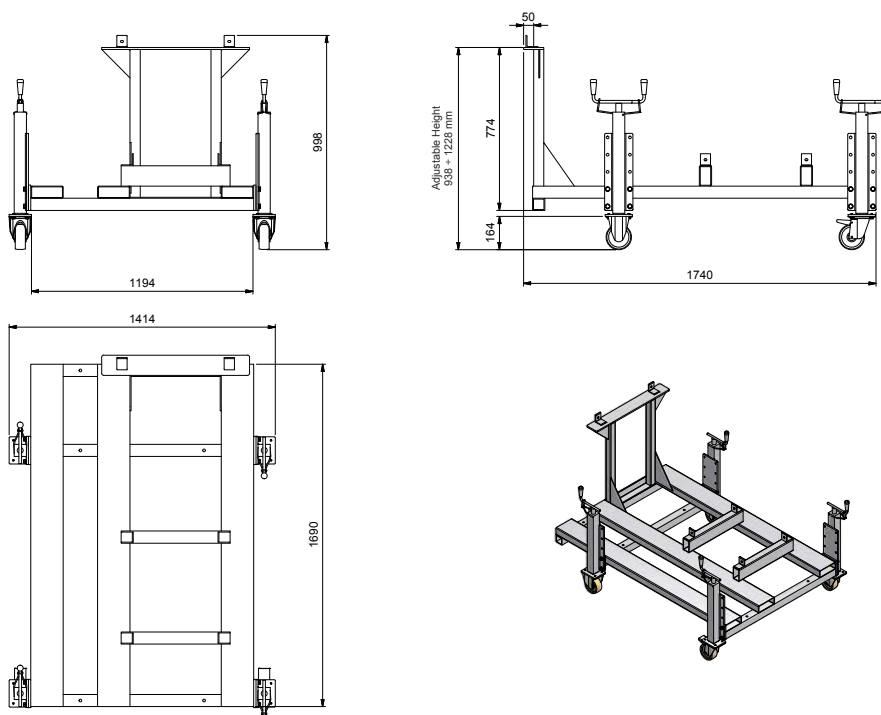
**PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION**  
with viscosity up to 4000 cSt at 50°C (530°E at 50°C)

Monoblock burners 2000 series are supplied complete with a steel supporting frame; burner installation and manutention are greatly simplified. The frame is equipped with wheels to easily move the burner, and its height is adjustable to match any type of boiler or furnace.

## SUPPORTING FRAME FOR BURNERS 2050 SERIES



## SUPPORTING FRAME FOR BURNERS 2060/2080 SERIES



# RBY2050 RBY2060 RBY2080 **duemila** SERIES

**PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION**  
with viscosity up to 4000 cSt at 50°C (530°E at 50°C)

## ELECTRONIC OPERATION

Model	Operation	RBY2050		RBY2060		RBY2080	
		Code	Price €	Code	Price €	Code	Price €

HEAVY OIL 4000 cSt at 50°C (530°E at 50°C)							
H-PR.S.xx.A.EA	PR (*)	03218045A		-		-	

(\*) Progressive PR control, for modulating version MD add € (see price list)  
In the full modulating version MD in order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

**In compliance with:**

- Low Tension Directive 2014/35/UE - Electromagnetic Compatibility Directive 2014/30/UE - Machinery Directive 2006/42/CE

## ELECTRONIC OPERATION

Model	Operation	RBY2050		RBY2060		RBY2080	
		Code	Price €	Code	Price €	Code	Price €

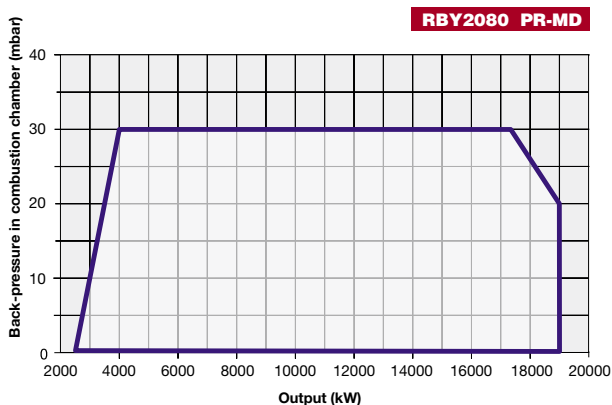
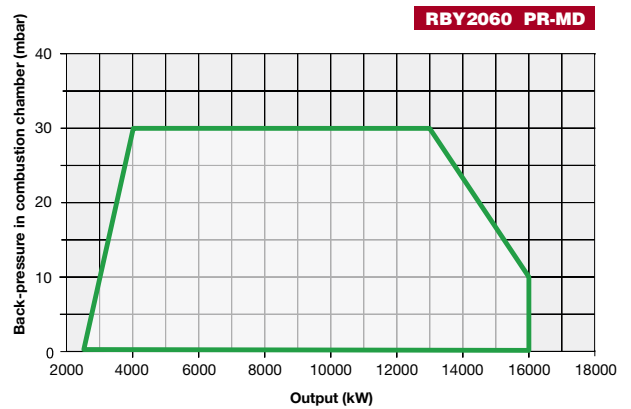
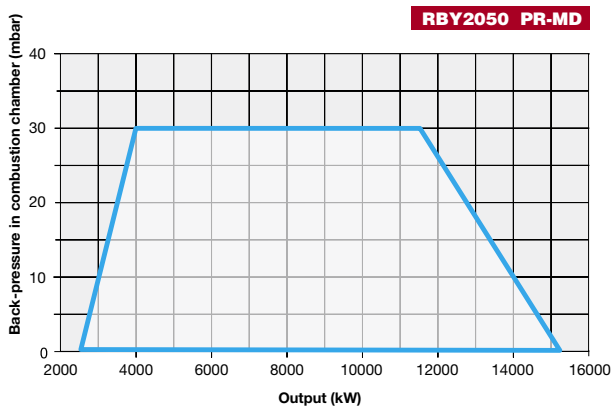
HEAVY OIL 4000 cSt at 50°C (530°E at 50°C)							
H-MD.S.xx.A.ES	MD (**)	03218045S		03218055S		03218065S	

(\*\*) The burners are already MD version.

In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

**In compliance with:**

- Low Tension Directive 2014/35/UE - Electromagnetic Compatibility Directive 2014/30/UE - Machinery Directive 2006/42/CE



# DUAL FUEL BURNERS NATURAL GAS/LIGHT OIL

## novanta series

**HR91A** - PR/MD  
**HR92A** - PR/MD  
**HR93A** - PR/MD



## novanta series

**G258A** - PR/MD  
**G335A** - PR/MD  
**G380A** - PR/MD  
**G400A** - PR/MD

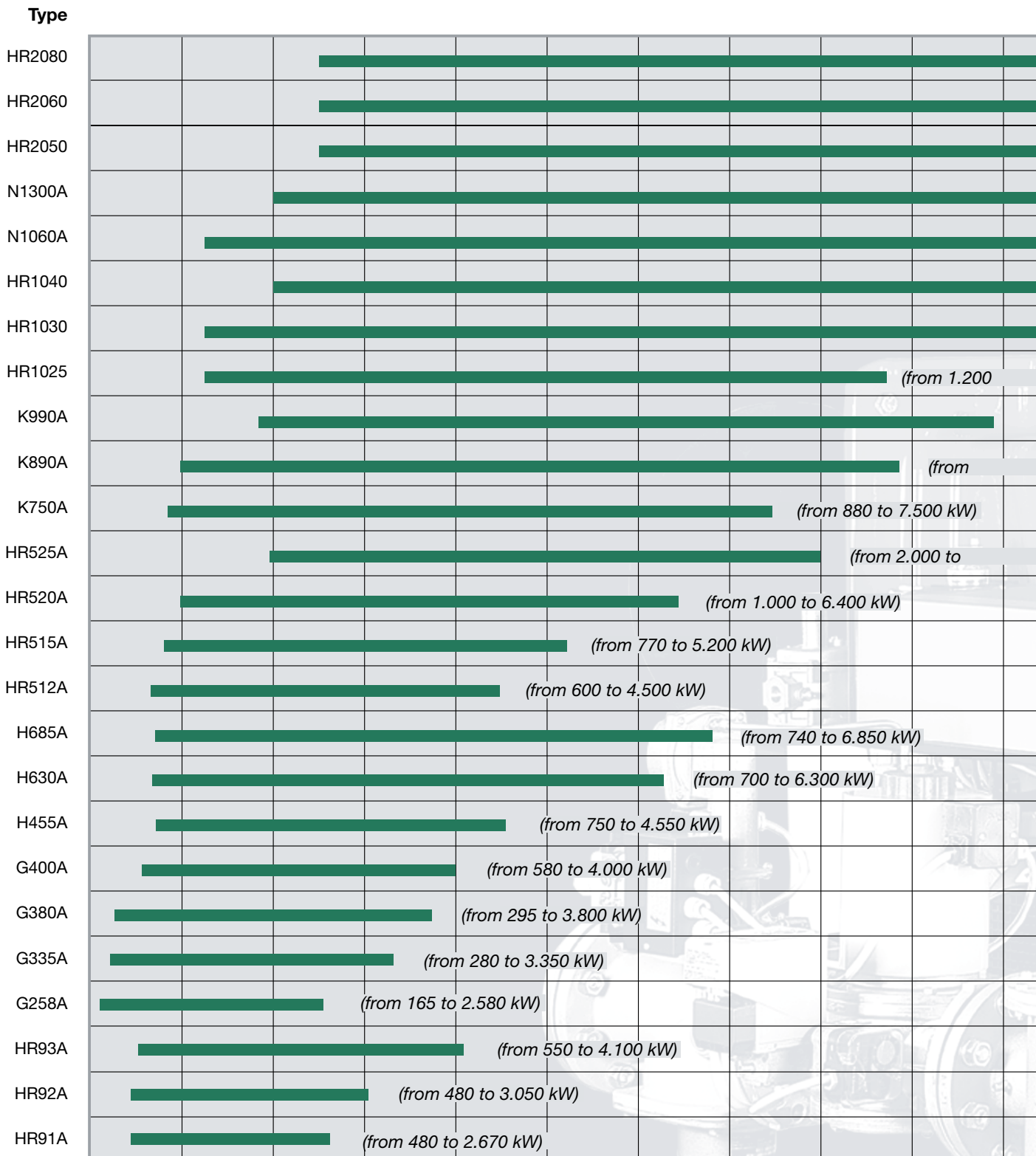


## cinquecento series

**H455A** - PR/MD  
**H630A** - PR/MD  
**H685A** - PR/MD

## cinquecento series

**HR512A** - PR/MD  
**HR515A** - PR/MD  
**HR520A** - PR/MD  
**HR525A** - PR/MD





# OPTIONS HEAVY OIL BURNERS

## 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 PBV/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 1.013 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 €
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	
RBY2050	15200	163,4	36,3	6÷8	
RBY2060	16000	172,0	38,2	6÷8	
RBY2080	19000	204,2	45,4	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	
KRBY2050	15200	163,4	36,3	6÷8	
KRBY2060	16000	172,0	38,2	6÷8	
KRBY2080	19000	204,2	45,4	6÷8	



# OPTIONS HEAVY OIL BURNERS

## HEAVY OIL FILTERS



Model	Code	Price €
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



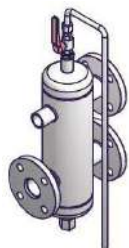
Model	Code	Price €
Glycerine gauge 0 ÷ 6 bar (¼" connection)	2520035	
Glycerine gauge 0 ÷ 10 bar (¼" connection)	2520036	
Glycerine gauge 0 ÷ 16 bar (¼" connection)	2520033	
Glycerine gauge 0 ÷ 25 bar (¼" connection)	2520034	
Glycerine gauge 0 ÷ 40 bar (¼" connection)	2520019	

## 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	-	

# OPTIONS HEAVY OIL BURNERS

## OIL PRE-HEATING TANK (STEAM/DIATERMIC OIL)

Type	Capacity kg/h	Tank volume liters	Electrical heaters kW	Max temperature °C	Max pressure bar	Price €
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 diatermic 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.

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.

