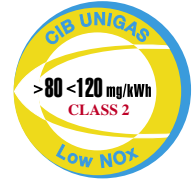


**novanta** SERIES **R91A R92A R93A**

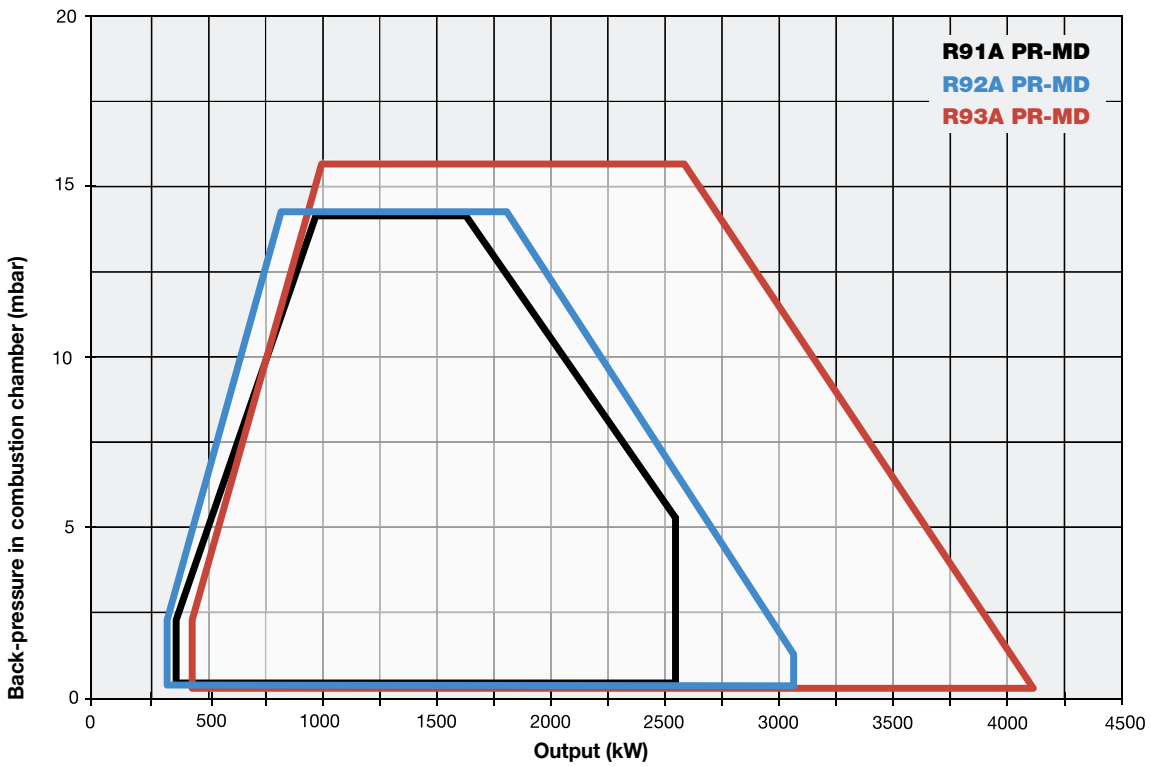


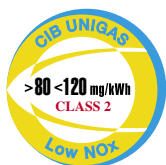
GAS

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 NOVANTA series with a maximum power of 4100 kW, 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)*





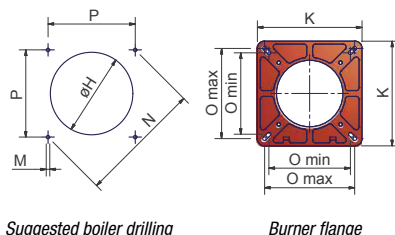
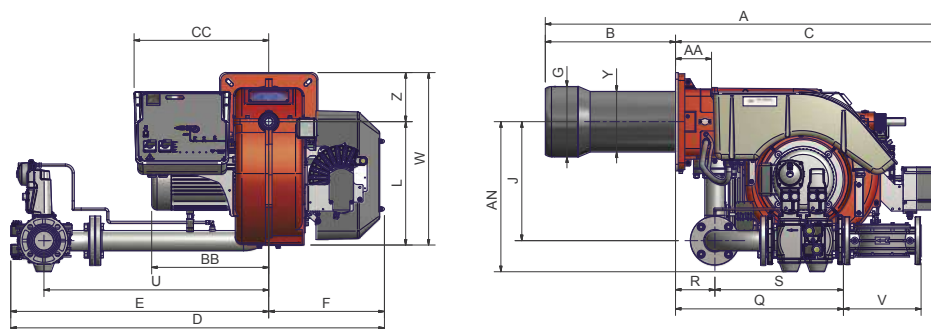
GAS

# R91A R92A R93A novanta SERIES

## TECHNICAL DETAILS

Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor kW	Gas connections Rp	Noise level dBA
		min.	max.					
<b>R91A</b>	M-.xx.S.xx.A.1.xxx	480	2.670	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	4,0	2" - DN65 - DN80 - DN100	74,5
<b>R92A</b>	M-.xx.S.xx.A.1.xxx	480	3.050	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	5,5	2" - DN65 - DN80 - DN100	76,9
<b>R93A</b>	M-.xx.S.xx.A.1.xxx	550	4.100	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	7,5	2" - DN65 - DN80 - DN100	77,4

For the configuration of the gas train, see page 112-113.



Suggested boiler drilling

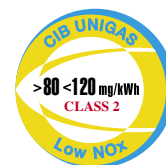
Burner flange

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 DN100)

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.xx.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.xx.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.xx.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.xx.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.xx.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.xx.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.xx.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.xx.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.xx.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.xx.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.xx.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.xx.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



**MECHANICAL OPERATION**

Model	Gas train	Operation	R91A		R92A		R93A	
			Code	Price €	Code	Price €	Code	Price €
<b>M-.PR.S.xx.A.1.50</b>	2"	PR (*)	012014853		012015253		012015653	
<b>M-.PR.S.xx.A.1.65</b>	DN65	PR (*)	012014953		012015353		012015753	
<b>M-.PR.S.xx.A.1.80</b>	DN80	PR (*)	012015053		012015453		012015853	
<b>M-.PR.S.xx.A.1.100</b>	DN100	PR (*)	012015153		012015553		012015953	

(\*) 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 GAR DIRECTIVE 2016/426/EU**

**ELECTRONIC OPERATION**

Model	Gas train	Operation	R91A		R92A		R93A	
			Code	Price €	Code	Price €	Code	Price €
<b>M-.PR.S.xx.A.1.50.EA</b>	2"	PR (*)	01201485A		01201525A		01201565A	
<b>M-.PR.S.xx.A.1.65.EA</b>	DN65	PR (*)	01201495A		01201535A		01201575A	
<b>M-.PR.S.xx.A.1.80.EA</b>	DN80	PR (*)	01201505A		01201545A		01201585A	
<b>M-.PR.S.xx.A.1.100.EA</b>	DN100	PR (*)	01201515A		01201555A		01201595A	

(\*) 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 GAR DIRECTIVE 2016/426/EU**

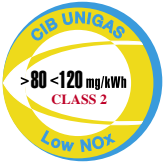
**ELECTRONIC OPERATION**

Model	Gas train	Operation	R91A		R92A		R93A	
			Code	Price €	Code	Price €	Code	Price €
<b>M-.MD.S.xx.A.1.50.ES</b>	2"	MD (**)	01201485S		01201525S		01201565S	
<b>M-.MD.S.xx.A.1.65.ES</b>	DN65	MD (**)	01201495S		01201535S		01201575S	
<b>M-.MD.S.xx.A.1.80.ES</b>	DN80	MD (**)	01201505S		01201545S		01201585S	
<b>M-.MD.S.xx.A.1.100.ES</b>	DN100	MD (**)	01201515S		01201555S		01201595S	

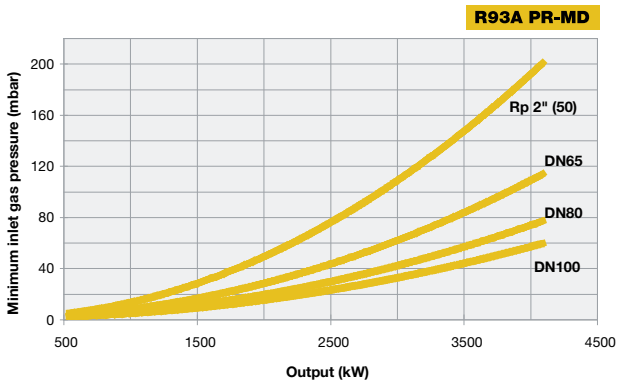
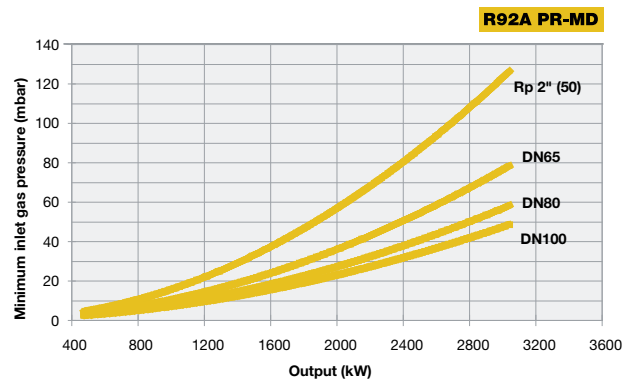
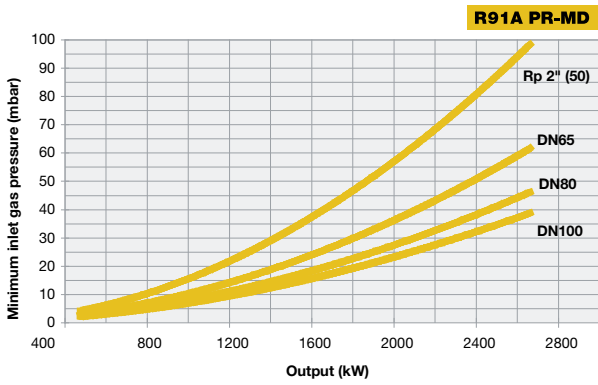
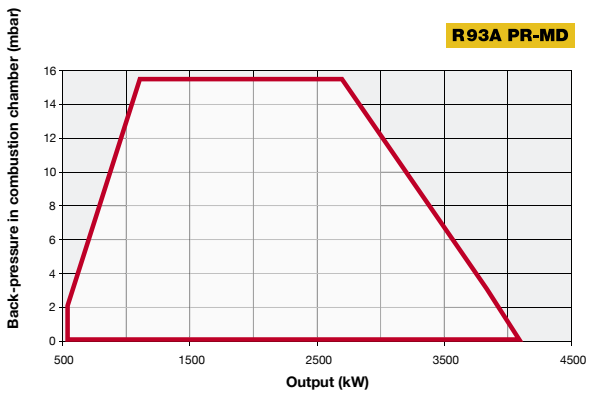
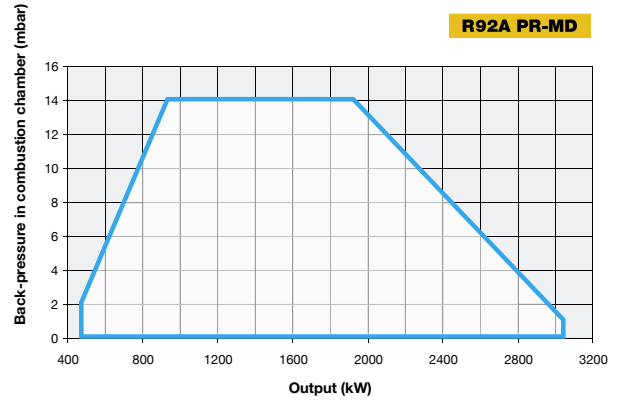
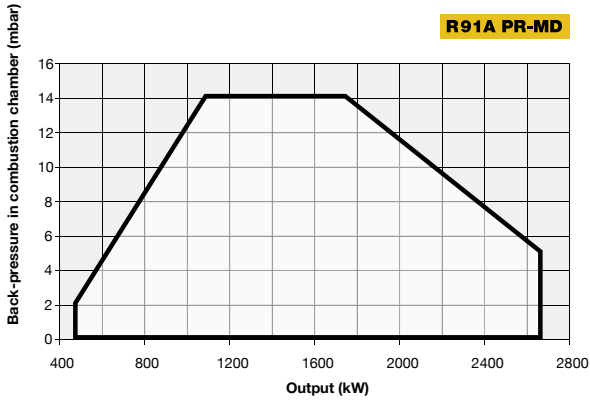
(\*\*) The burners are already MD version.

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 GAR DIRECTIVE 2016/426/EU**



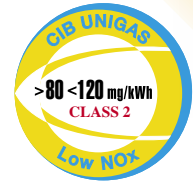
# R91A R92A R93A novanta SERIES



**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.



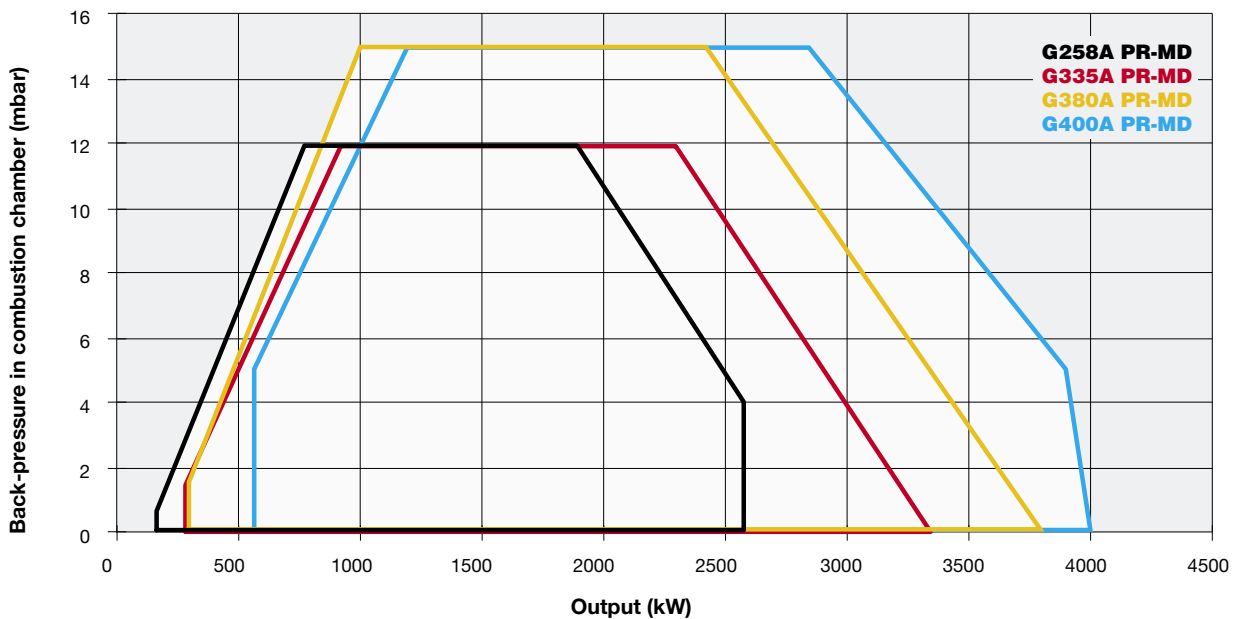
**novanta** SERIES **G258A G335A G380A G400A**

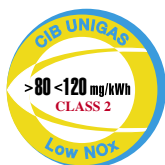


GAS



The new standard G type NOVANTA series **Low NO<sub>x</sub> burners Class 2 (< 120 mg/kWh)**, made in aluminum housing with a backward curved centrifugal impeller is studied and developed to get high performance and efficiency combined with low emissions. This series with a maximum power of 4000 kW, is in this selection of product that is particularly competitive. The user-friendly application and maintenance are the strengths of these burners.





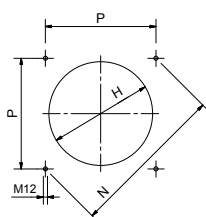
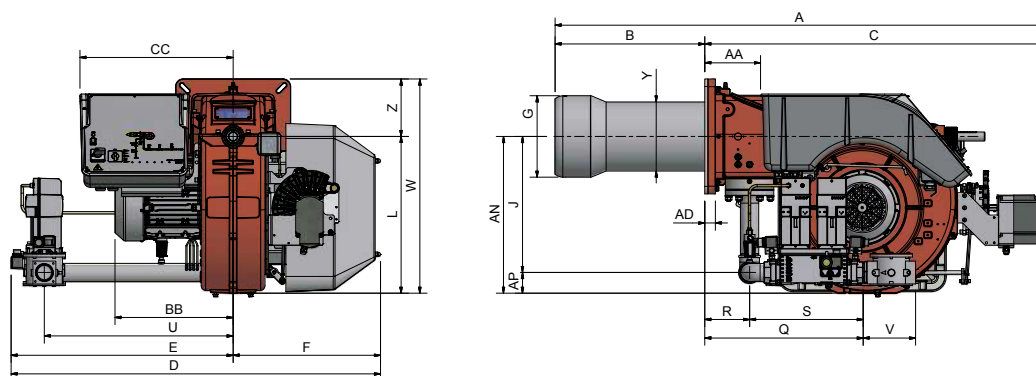
GAS

# G258A G335A G380A G400A novanta SERIES

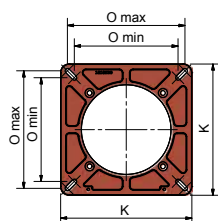
## TECHNICAL DETAILS

Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor kW	Gas connections			Noise level dBA
		min.	max.				Rp			
<b>G258A</b>	M-.xx.SR.xx.A.1.xxx	165	2.580	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	4	2" - DN65 - DN80 - DN100			< 85
<b>G335A</b>	M-.xx.SR.xx.A.1.xxx	280	3.350	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	5,5	2" - DN65 - DN80 - DN100			< 85
<b>G380A</b>	M-.xx.SR.xx.A.1.xxx	295	3.800	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	7,5	2" - DN65 - DN80 - DN100			< 85
<b>G400A</b>	M-.xx.SR.xx.A.1.xxx	580	4.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	7,5	2" - DN65 - DN80 - DN100			< 85

For the configuration of the gas train, see page 112-113.



Suggested boiler drilling



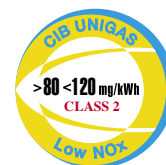
Burner flange

Type	Packaging dimensions (mm)			
	l	p	h	kg
<b>G258A</b>	1780	1200	1020	270
<b>G335A</b>	1780	1200	1020	275
<b>G380A</b>	1780	1200	1020	280
<b>G400A</b>	1780	1200	1020	280

Approximate values (regarding model with gas trains DN80)

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	S	U	V	W	Y	Z	
		min.		max.		min.		max.		min.		max.		min.		max.		min.		max.		min.		max.		min.		max.		min.	
<b>G258A</b>	M-.xx.SR.xx.A.1.50	1579	184	35	550	100	460	391	1119	531	1212	725	487	254	300	450	380	518	M12	453	300	340	320	533	149	384	624	190	708	210	190
<b>G258A</b>	M-.xx.SR.xx.A.1.65	1579	184	35	567	117	460	391	1119	531	1456	969	487	254	300	450	380	518	M12	453	300	340	320	636	149	487	845	292	708	210	190
<b>G258A</b>	M-.xx.SR.xx.A.1.80	1579	184	35	582	132	460	391	1119	531	1489	1002	487	254	300	450	380	518	M12	453	300	340	320	687	149	538	875	310	708	210	190
<b>G258A</b>	M-.xx.SR.xx.A.1.100	1579	184	35	595	145	460	391	1119	531	1569	1082	487	254	300	450	380	518	M12	453	300	340	320	791	149	642	942	353	708	210	190
<b>G335A</b>	M-.xx.SR.xx.A.1.50	1579	184	35	550	100	460	391	1119	531	1212	725	487	254	347	450	380	518	M12	453	300	340	320	533	149	384	624	190	708	210	190
<b>G335A</b>	M-.xx.SR.xx.A.1.65	1579	184	35	567	117	460	391	1119	531	1456	969	487	254	347	450	380	518	M12	453	300	340	320	636	149	487	845	292	708	210	190
<b>G335A</b>	M-.xx.SR.xx.A.1.80	1579	184	35	582	132	460	391	1119	531	1489	1002	487	254	347	450	380	518	M12	453	300	340	320	687	149	538	875	310	708	210	190
<b>G335A</b>	M-.xx.SR.xx.A.1.100	1579	184	35	595	145	460	391	1119	531	1569	1082	487	254	347	450	380	518	M12	453	300	340	320	791	149	642	942	353	708	210	190
<b>G380A</b>	M-.xx.SR.xx.A.1.50	1599	184	35	550	100	480	391	1119	531	1212	725	487	256	347	450	380	518	M12	453	300	340	320	533	149	384	624	190	708	228	190
<b>G380A</b>	M-.xx.SR.xx.A.1.65	1599	184	35	567	117	480	391	1119	531	1456	969	487	256	347	450	380	518	M12	453	300	340	320	636	149	487	845	292	708	228	190
<b>G380A</b>	M-.xx.SR.xx.A.1.80	1599	184	35	582	132	480	391	1119	531	1489	1002	487	256	347	450	380	518	M12	453	300	340	320	687	149	538	875	310	708	228	190
<b>G380A</b>	M-.xx.SR.xx.A.1.100	1599	184	35	595	145	480	391	1119	531	1569	1082	487	256	347	450	380	518	M12	453	300	340	320	791	149	642	942	353	708	228	190
<b>G400A</b>	M-.xx.SR.xx.A.1.50	1619	184	35	550	100	500	391	1119	531	1212	725	487	304	347	450	380	518	M12	453	300	340	320	533	149	384	624	190	708	228	190
<b>G400A</b>	M-.xx.SR.xx.A.1.65	1619	184	35	567	117	500	391	1119	531	1456	969	487	304	347	450	380	518	M12	453	300	340	320	636	149	487	845	292	708	228	190
<b>G400A</b>	M-.xx.SR.xx.A.1.80	1619	184	35	582	132	500	391	1119	531	1489	1002	487	304	347	450	380	518	M12	453	300	340	320	687	149	538	875	310	708	228	190
<b>G400A</b>	M-.xx.SR.xx.A.1.100	1619	184	35	595	145	500	391	1119	531	1569	1082	487	304	347	450	380	518	M12	453	300	340	320	791	149	642	942	353	708	228	190

Approximate values



**MECHANICAL OPERATION**

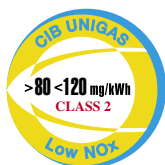
Model	Gas train	Operation	G258A		G335A	
			Code	Price €	Code	Price €
<b>M.PR.SR.xx.A.1.50</b>	2"	PR (*)	036010153		036010553	
<b>M.PR.SR.xx.A.1.65</b>	DN65	PR (*)	036010253		036010653	
<b>M.PR.SR.xx.A.1.80</b>	DN80	PR (*)	036010353		036010753	
<b>M.PR.SR.xx.A.1.100</b>	DN100	PR (*)	036010453		036010853	

Model	Gas train	Operation	G380A		G400A	
			Code	Price €	Code	Price €
<b>M.PR.SR.xx.A.1.50</b>	2"	PR (*)	036013353		036013753	
<b>M.PR.SR.xx.A.1.65</b>	DN65	PR (*)	036013453		036013853	
<b>M.PR.SR.xx.A.1.80</b>	DN80	PR (*)	036013553		036013953	
<b>M.PR.SR.xx.A.1.100</b>	DN100	PR (*)	036013653		036014053	

(\*) 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 GAR DIRECTIVE 2016/426/EU**



GAS

# G258A G335A G380A G400A **novanta** SERIES

## ELECTRONIC OPERATION

Model	Gas train	Operation	G258A		G335A	
			Code	Price €	Code	Price €
M.PR.SR.xx.A.1.50.EA	2"	PR (*)	03601015A		03601055A	
M.PR.SR.xx.A.1.65.EA	DN65	PR (*)	03601025A		03601065A	
M.PR.SR.xx.A.1.80.EA	DN80	PR (*)	03601035A		03601075A	
M.PR.SR.xx.A.1.100.EA	DN100	PR (*)	03601045A		03601085A	

Model	Gas train	Operation	G380A		G400A	
			Code	Price €	Code	Price €
M.PR.SR.xx.A.1.50.EA	2"	PR (*)	03601335A		03601375A	
M.PR.SR.xx.A.1.65.EA	DN65	PR (*)	03601345A		03601385A	
M.PR.SR.xx.A.1.80.EA	DN80	PR (*)	03601355A		03601395A	
M.PR.SR.xx.A.1.100.EA	DN100	PR (*)	03601365A		03601405A	

(\*) 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 GAR DIRECTIVE 2016/426/EU

## ELECTRONIC OPERATION

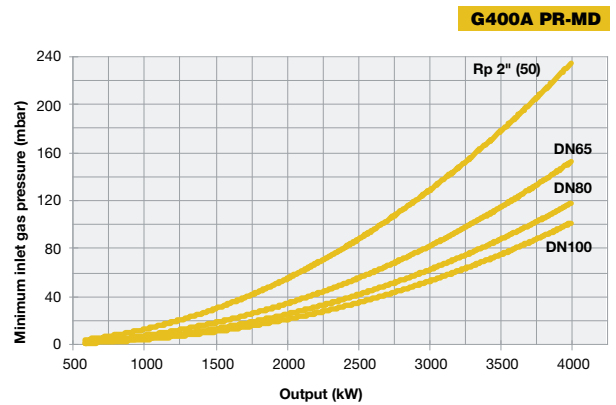
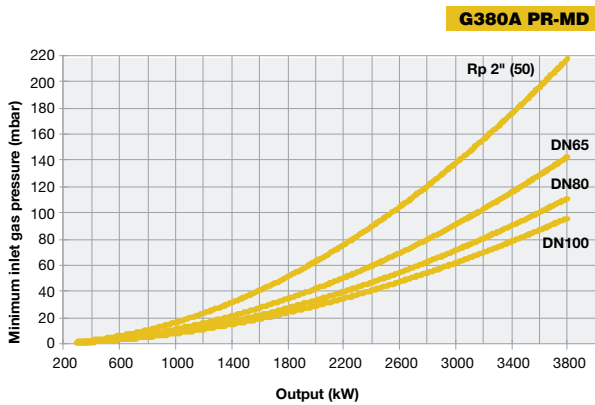
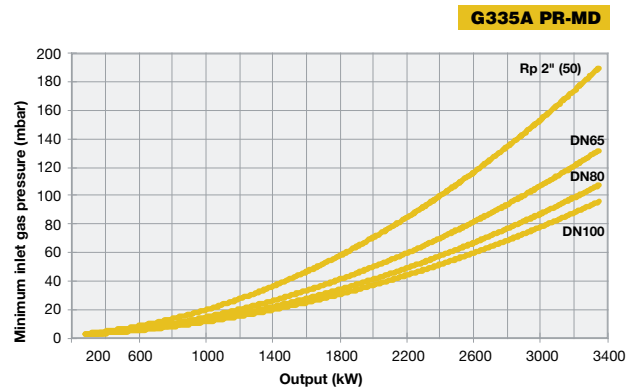
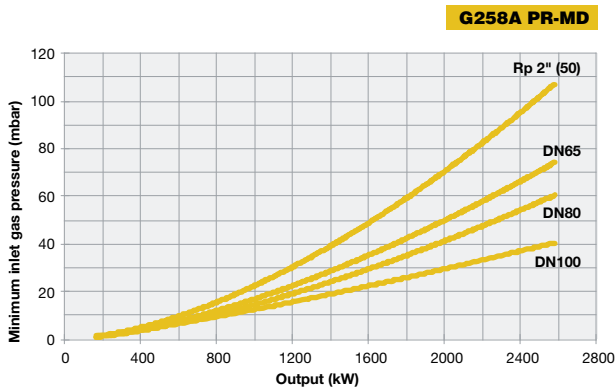
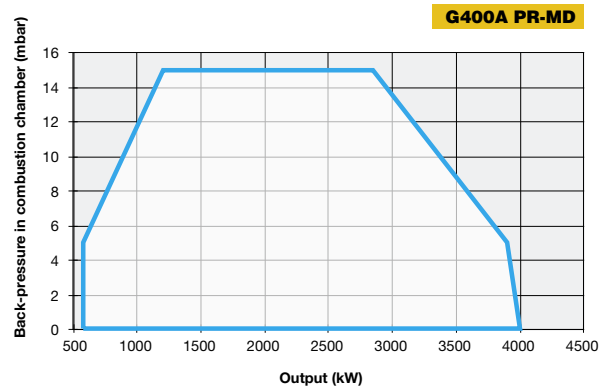
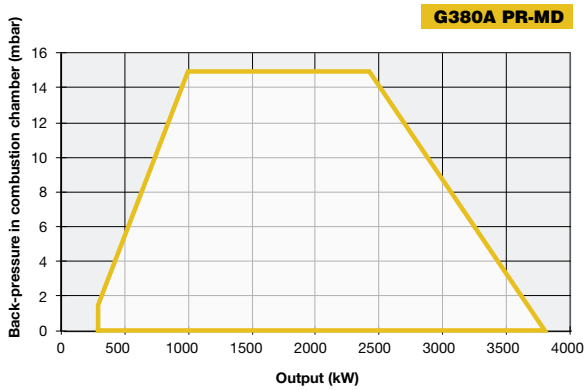
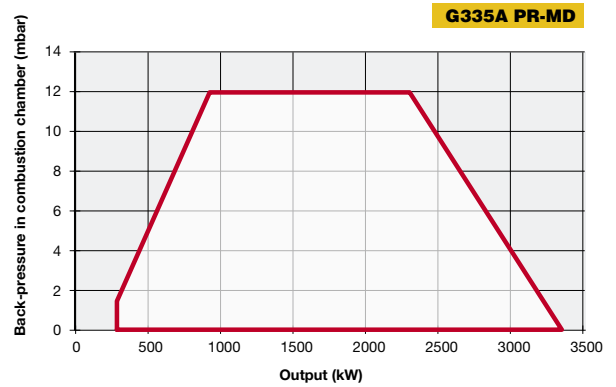
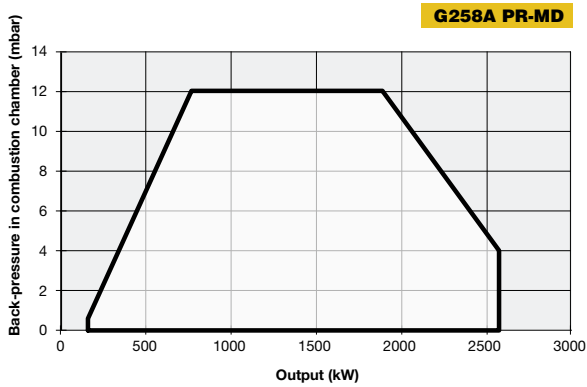
Model	Gas train	Operation	G258A		G335A	
			Code	Price €	Code	Price €
M.MD.SR.xx.A.1.50.ES	2"	MD (**)	03601015S		03601055S	
M.MD.SR.xx.A.1.65.ES	DN65	MD (**)	03601025S		03601065S	
M.MD.SR.xx.A.1.80.ES	DN80	MD (**)	03601035S		03601075S	
M.MD.SR.xx.A.1.100.ES	DN100	MD (**)	03601045S		03601085S	

Model	Gas train	Operation	G380A		G400A	
			Code	Price €	Code	Price €
M.MD.SR.xx.A.1.50.ES	2"	MD (**)	03601335S		03601375S	
M.MD.SR.xx.A.1.65.ES	DN65	MD (**)	03601345S		03601385S	
M.MD.SR.xx.A.1.80.ES	DN80	MD (**)	03601355S		03601395S	
M.MD.SR.xx.A.1.100.ES	DN100	MD (**)	03601365S		03601405S	

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

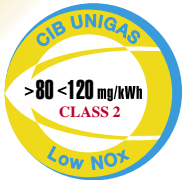
In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

In compliance with GAR DIRECTIVE 2016/426/EU



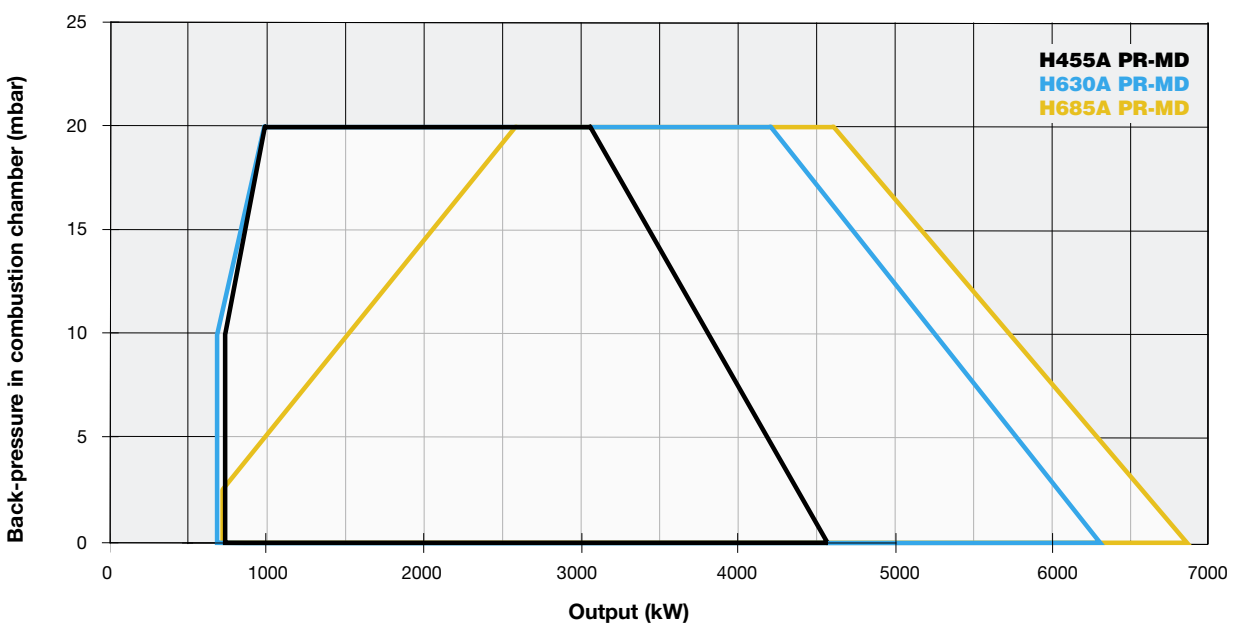
Attention: the graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.

**NEW**  
GAS



# H455A H630A H685A **cinquecento** SERIES

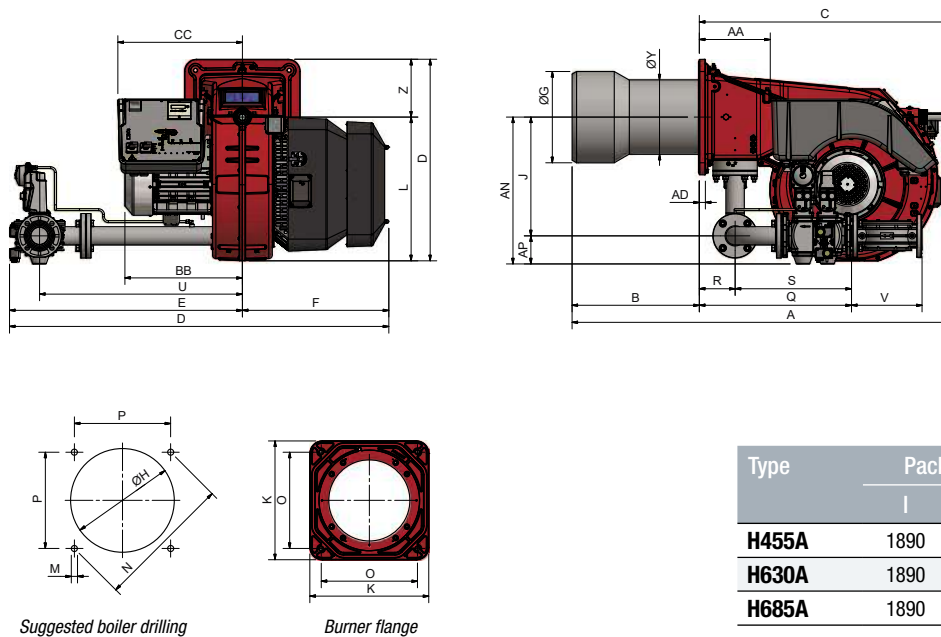
The new standard H type CINQUECENTO series **Low NO<sub>x</sub> burners Class 2 (< 120 mg/kWh)**, made in aluminum housing with a backward curved centrifugal impeller is studied and developed to get high performance and efficiency combined with low emissions.  
This series with a maximum power of 6850 kW, is in this selection of product that is particularly competitive.  
The user-friendly application and maintenance are the strengths of these burners.



TECHNICAL DETAILS

Type	Model	Output kW		Auxiliary electrical power supply			Motor electrical power supply			Fan motor	Gas connections			Noise level
		min.	max.	230 V	1N AC	50 Hz	400 V	3 AC	50 Hz	kW	Rp			dBA
H455A	M-.xx.SR.xx.A.1.xxx	750	4.550	230 V	1N AC	50 Hz	400 V	3 AC	50 Hz	7,5	2" - DN65 - DN80 - DN100			< 85
H630A	M-.xx.SR.xx.A.1.xxx	700	6.300	230 V	1N AC	50 Hz	400 V	3 AC	50 Hz	9,2	2" - DN65 - DN80 - DN100			< 85
H685A	M-.xx.SR.xx.A.1.xxx	740	6.850	230 V	1N AC	50 Hz	400 V	3 AC	50 Hz	9,2	2" - DN65 - DN80 - DN100			< 85

For the configuration of the gas train, see page 112-113.



Suggested boiler drilling

Burner flange

Type	Packaging dimensions (mm)			
	l	p	h	kg
H455A	1890	1290	1220	378
H630A	1890	1290	1220	380
H685A	1890	1290	1220	385

Approximate values (regarding model with gas train DN80)

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	S	U	V	W	Y	Z
H455A	M-.xx.SR.xx.A.1.50	1712	295	25	595	100	495	471	1217	511	1554	946	608	304	350	494	540	586	M14	552	390	390	764	150	613	845	190	856	288	270
H455A	M-.xx.SR.xx.A.1.65	1712	295	25	611	117	495	471	1217	511	1577	969	608	304	350	494	540	586	M14	552	390	390	634	150	484	845	294	856	288	270
H455A	M-.xx.SR.xx.A.1.80	1712	295	25	626	132	495	471	1217	511	1610	1002	608	304	350	494	540	586	M14	552	390	390	686	150	535	875	313	856	288	270
H455A	M-.xx.SR.xx.A.1.100	1712	295	25	639	145	495	471	1217	511	1690	1082	608	304	350	494	540	586	M14	552	390	390	791	150	642	942	353	856	288	270
H630A	M-.xx.SR.xx.A.1.50	1747	295	25	595	100	530	488	1217	511	1554	946	608	340	380	494	540	586	M14	552	390	390	764	150	613	845	190	856	284	270
H630A	M-.xx.SR.xx.A.1.65	1747	295	25	611	117	530	488	1217	511	1577	969	608	340	380	494	540	586	M14	552	390	390	634	150	484	845	294	856	284	270
H630A	M-.xx.SR.xx.A.1.80	1747	295	25	626	132	530	488	1217	511	1610	1002	608	340	380	494	540	586	M14	552	390	390	686	150	535	875	313	856	284	270
H630A	M-.xx.SR.xx.A.1.100	1747	295	25	639	145	530	488	1217	511	1690	1082	608	340	380	494	540	586	M14	552	390	390	791	150	642	942	353	856	284	270
H685A	M-.xx.SR.xx.A.1.50	1747	295	25	595	100	530	488	1217	511	1554	946	608	380	430	494	540	586	M14	552	390	390	764	150	613	845	190	856	328	270
H685A	M-.xx.SR.xx.A.1.65	1747	295	25	611	117	530	488	1217	511	1577	969	608	380	430	494	540	586	M14	552	390	390	634	150	484	845	294	856	328	270
H685A	M-.xx.SR.xx.A.1.80	1747	295	25	626	132	530	488	1217	511	1610	1002	608	380	430	494	540	586	M14	552	390	390	686	150	535	875	313	856	328	270
H685A	M-.xx.SR.xx.A.1.100	1747	295	25	639	145	530	488	1217	511	1690	1082	608	380	430	494	540	586	M14	552	390	390	791	150	642	942	353	856	328	270

Approximate values



# H455A H630A H685A **cinquecento** SERIES

## MECHANICAL OPERATION

Model	Gas train	Operation	H455A		H630A		H685A	
			Code	Price €	Code	Price €	Code	Price €
M-.PR.SR.xx.A.1.50	2"	PR (*)	035010153		035010553		035010953	
M-.PR.SR.xx.A.1.65	DN65	PR (*)	035010253		035010653		035011053	
M-.PR.SR.xx.A.1.80	DN80	PR (*)	035010353		035010753		035011153	
M-.PR.SR.xx.A.1.100	DN100	PR (*)	035010453		035010853		035011253	

(\*) 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 GAR DIRECTIVE 2016/426/EU**

## ELECTRONIC OPERATION

Model	Gas train	Operation	H455A		H630A		H685A	
			Code	Price €	Code	Price €	Code	Price €
M-.PR.SR.xx.A.1.50.EA	2"	PR (*)	03501015A		03501055A		03501095A	
M-.PR.SR.xx.A.1.65.EA	DN65	PR (*)	03501025A		03501065A		03501105A	
M-.PR.SR.xx.A.1.80.EA	DN80	PR (*)	03501035A		03501075A		03501115A	
M-.PR.SR.xx.A.1.100.EA	DN100	PR (*)	03501045A		03501085A		03501125A	

(\*) 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 GAR DIRECTIVE 2016/426/EU**

## ELECTRONIC OPERATION

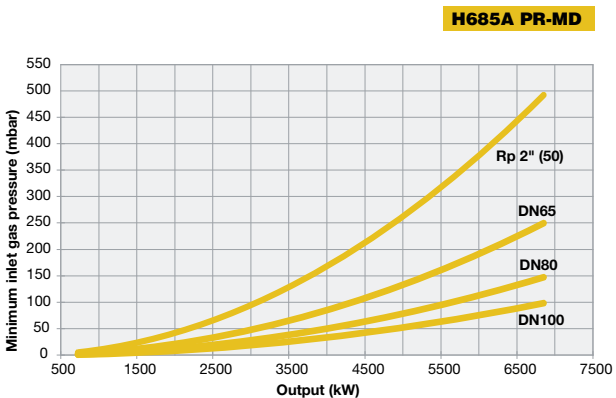
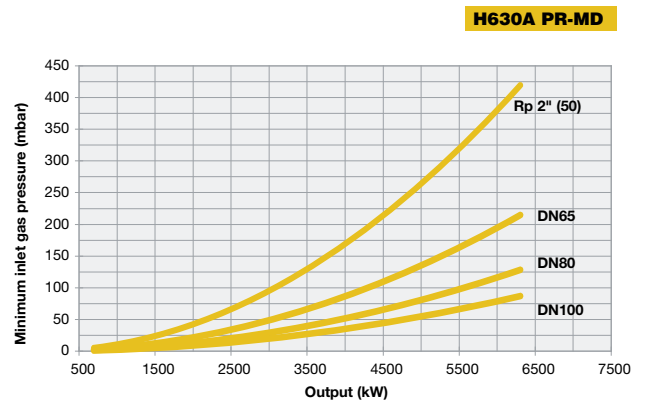
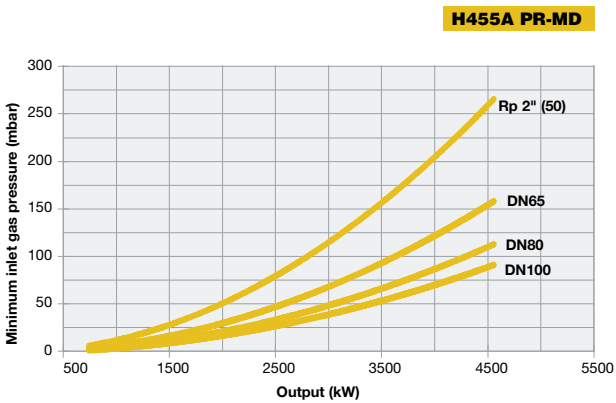
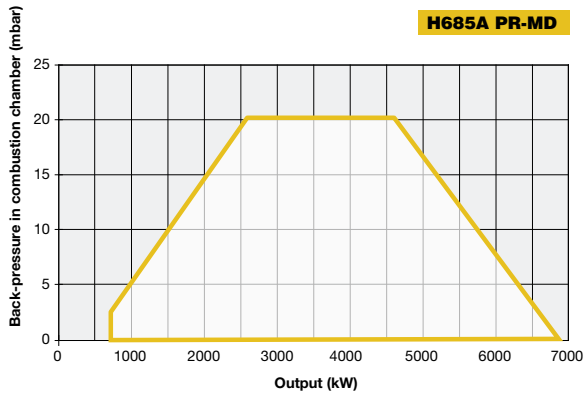
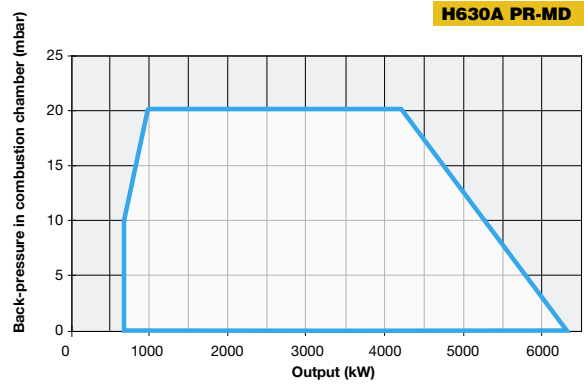
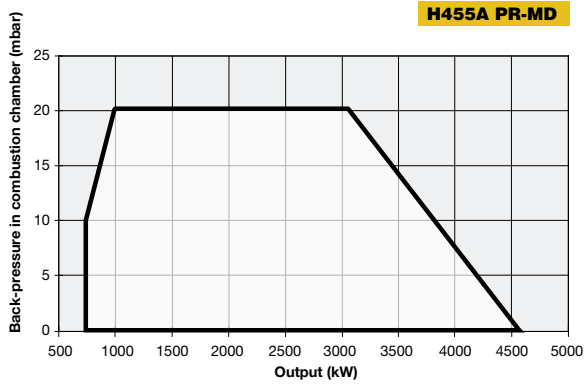
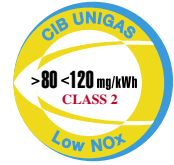
Model	Gas train	Operation	H455A		H630A		H685A	
			Code	Price €	Code	Price €	Code	Price €
M-.MD.SR.xx.A.1.50.ES	2"	MD (**)	03501015S		03501055S		03501095S	
M-.MD.SR.xx.A.1.65.ES	DN65	MD (**)	03501025S		03501065S		03501105S	
M-.MD.SR.xx.A.1.80.ES	DN80	MD (**)	03501035S		03501075S		03501115S	
M-.MD.SR.xx.A.1.100.ES	DN100	MD (**)	03501045S		03501085S		03501125S	

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

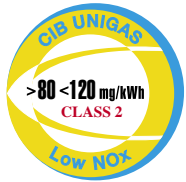
In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

**In compliance with GAR DIRECTIVE 2016/426/EU**





**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.

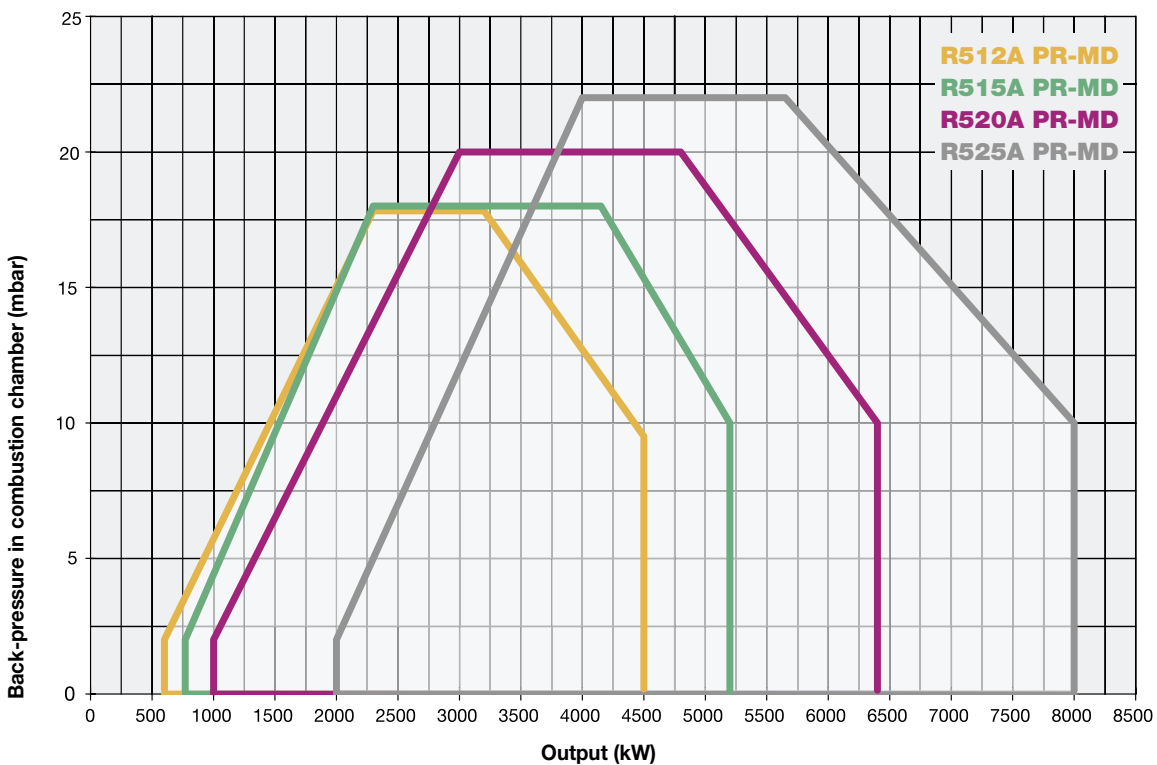


# R512A R515A R520A R525A **cinquecento** SERIES

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 CINQUECENTO series with a maximum power of 8000 kW, is in this selection of product that is particularly competitive. The user-friendly application and maintenance are the strengths of these burners.



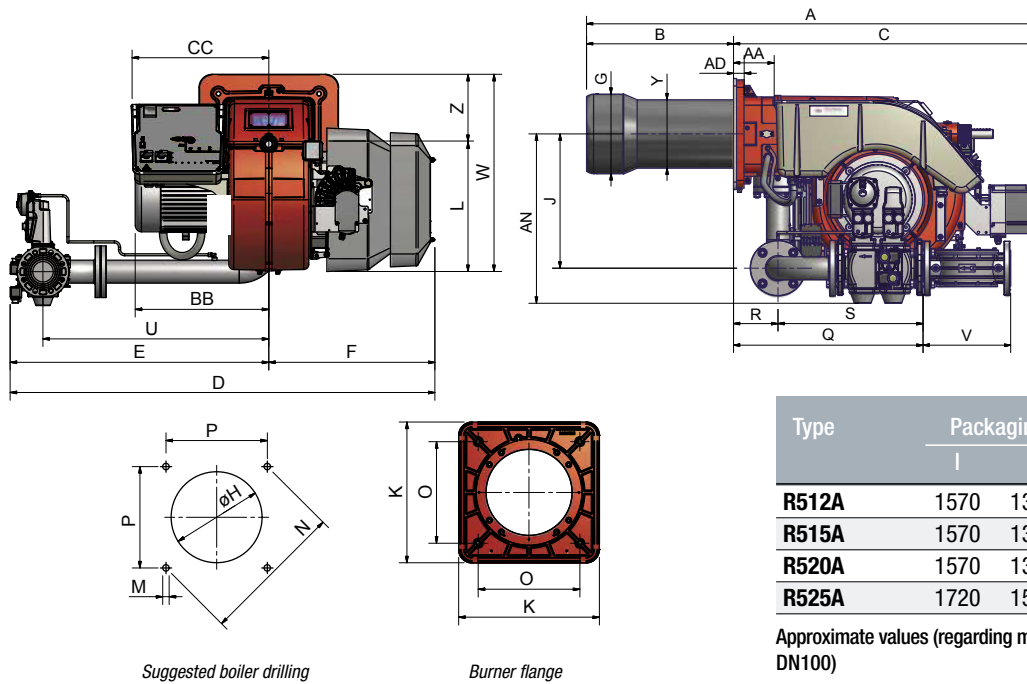
*Electronic set up (optional)*



**TECHNICAL DETAILS**

Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor kW	Gas connections Rp	Noise level dBA
		min.	max.					
<b>R512A</b>	M-.xx.S.xx.A.1.xxx	600	4.500	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	9,2	2" - DN65 - DN80 - DN100	81,7
<b>R515A</b>	M-.xx.S.xx.A.1.xxx	770	5.200	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	11,0	2" - DN65 - DN80 - DN100	82,3
<b>R520A</b>	M-.xx.S.xx.A.1.xxx	1.000	6.400	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	15,0	2" - DN65 - DN80 - DN100	83,2
<b>R525A</b>	M-.xx.S.xx.A.1.xxx	2.000	8.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	18,5	DN65 - DN80 - DN100	84,9

For the configuration of the gas train, see page 112-113.

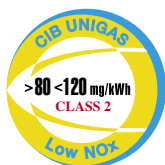


Type	Packaging dimensions (mm)			
	l	p	h	kg
<b>R512A</b>	1570	1350	1120	300
<b>R515A</b>	1570	1350	1120	300
<b>R520A</b>	1570	1350	1120	350
<b>R525A</b>	1720	1500	1150	400

Approximate values (regarding model with gas train DN100)

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.xx.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.xx.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.xx.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.xx.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.xx.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.xx.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.xx.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.xx.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.xx.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.xx.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.xx.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.xx.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.xx.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.xx.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.xx.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

Approximate values


**MECHANICAL OPERATION**

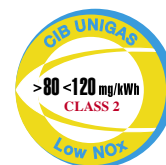
Model	Gas train	Operation	R512A		R515A	
			Code	Price €	Code	Price €
M-.PR.S.xx.A.1.50	2"	PR (*)	029010153		029010553	
M-.PR.S.xx.A.1.65	DN65	PR (*)	029010253		029010653	
M-.PR.S.xx.A.1.80	DN80	PR (*)	029010353		029010753	
M-.PR.S.xx.A.1.100	DN100	PR (*)	029010453		029010853	

Model	Gas train	Operation	R520A		R525A	
			Code	Price €	Code	Price €
M-.PR.S.xx.A.1.50	2"	PR (*)	029010953		-	
M-.PR.S.xx.A.1.65	DN65	PR (*)	029011053		029011453	
M-.PR.S.xx.A.1.80	DN80	PR (*)	029011153		029011553	
M-.PR.S.xx.A.1.100	DN100	PR (*)	029011253		029011653	

(\*) 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 GAR DIRECTIVE 2016/426/EU**



**ELECTRONIC OPERATION**

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

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

(\*) 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 GAR DIRECTIVE 2016/426/EU**

**ELECTRONIC OPERATION**

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

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

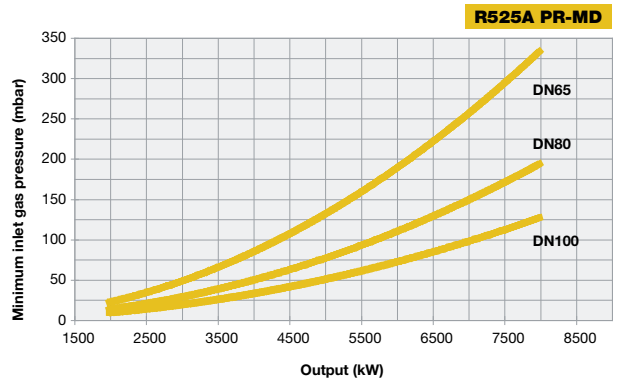
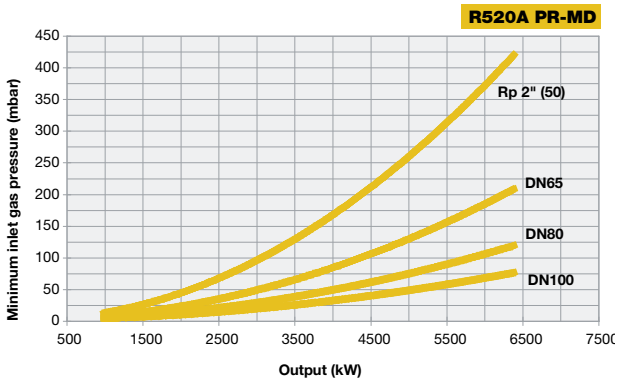
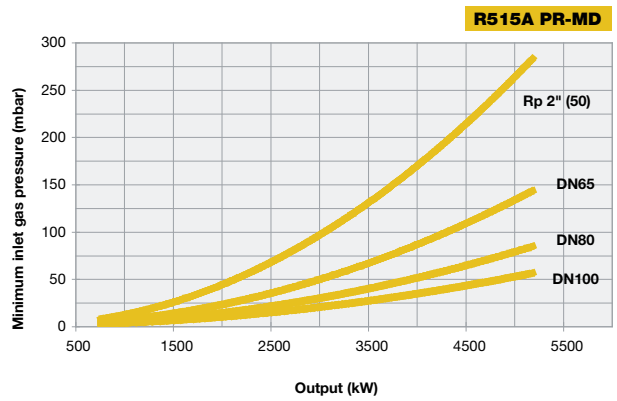
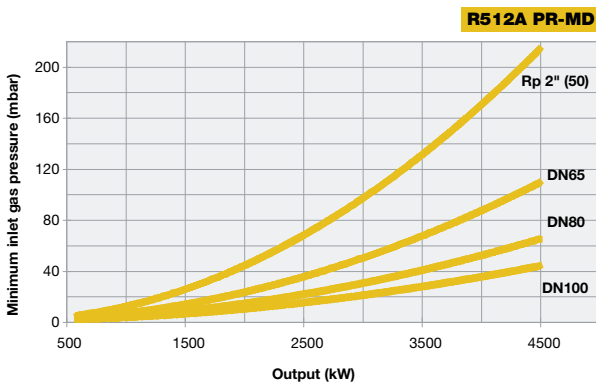
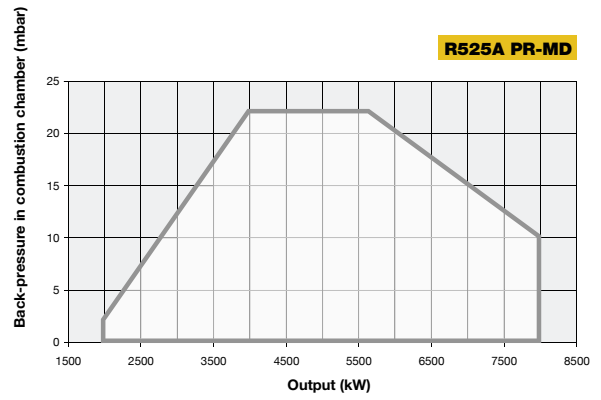
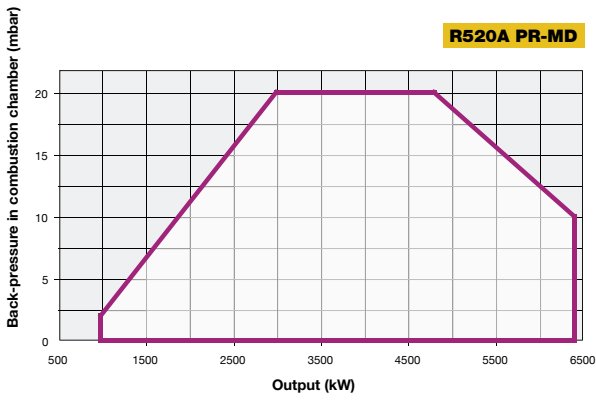
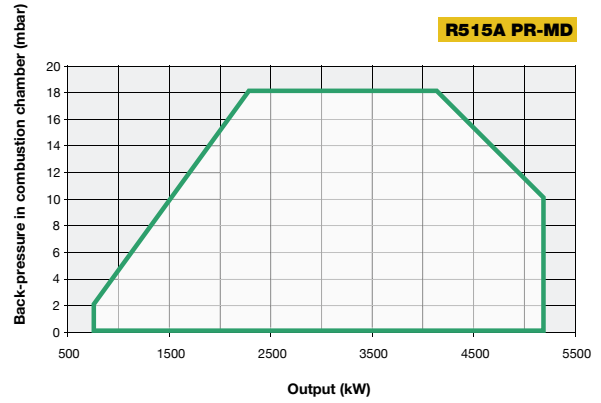
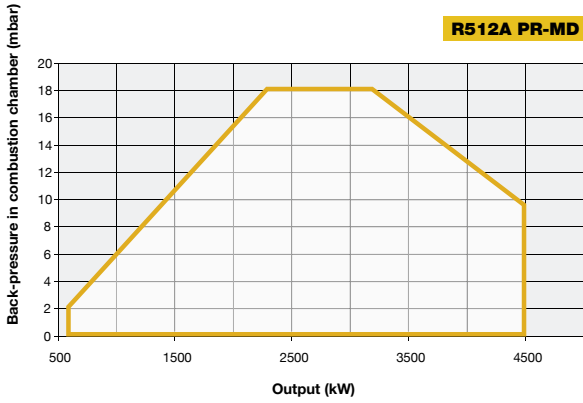
(\*\*) The burners are already MD version.

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 GAR DIRECTIVE 2016/426/EU**

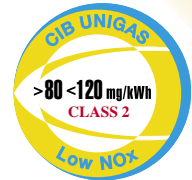


# R512A R515A R520A R525A **cinquecento** SERIES

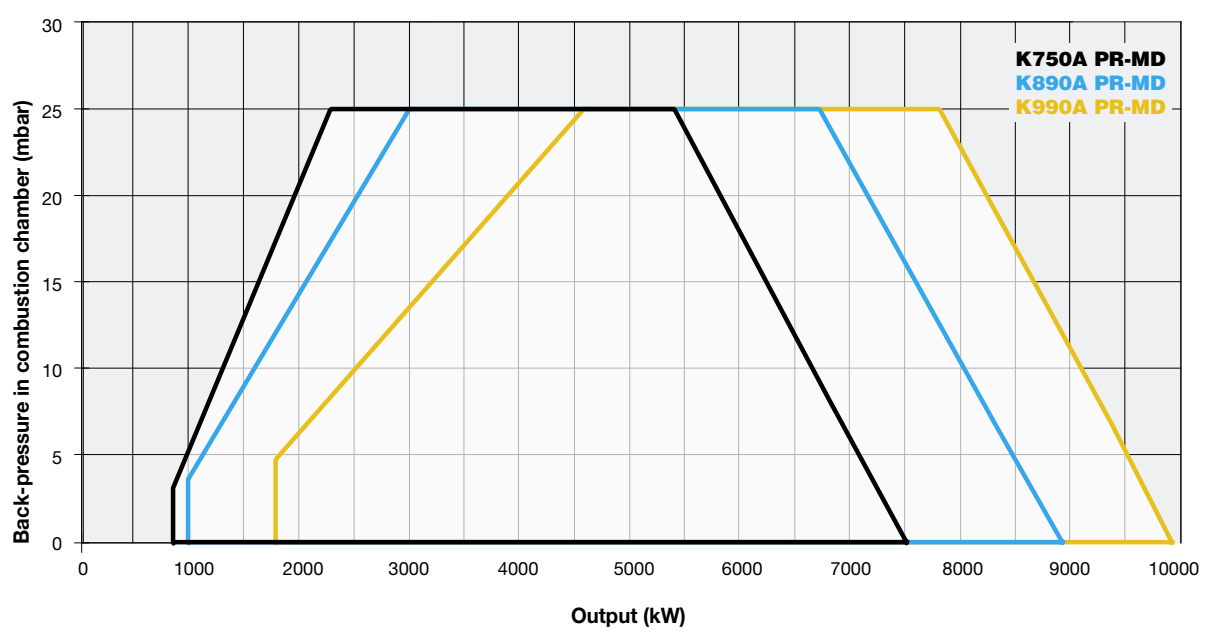


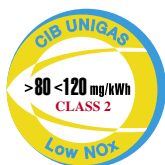
Attention: the graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.

**cinquecento** SERIES **K750A K890A K990A**



The new standard K type CINQUECENTO series **Low NO<sub>x</sub> burners Class 2 (< 120 mg/kWh)**, made in aluminum housing with a backward curved centrifugal impeller is studied and developed to get high performance and efficiency combined with low emissions.  
 This series with a maximum power of 9900 kW, is in this selection of product that is particularly competitive.  
 The user-friendly application and maintenance are the strengths of these burners.





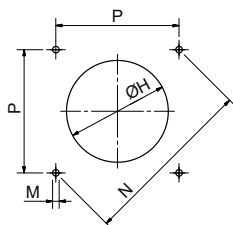
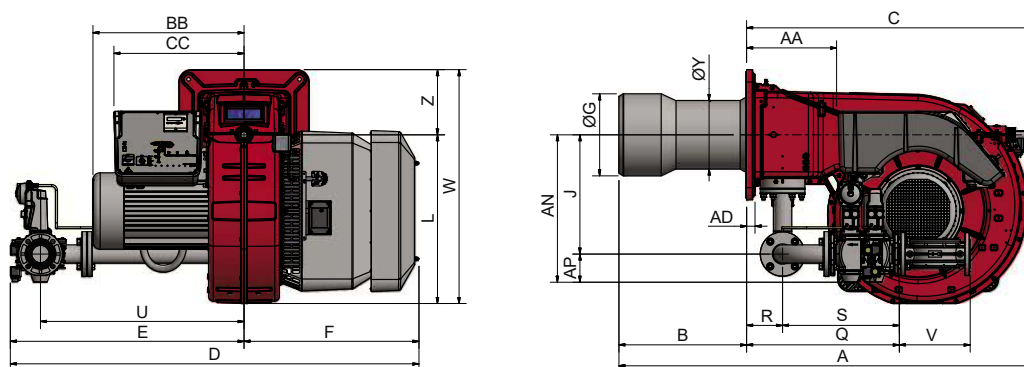
GAS

# K750A K890A K990A **cinquecento** SERIES

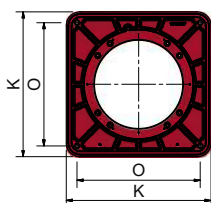
## TECHNICAL DETAILS

Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor kW	Gas connections	Noise level dBA
		min.	max.					
<b>K750A</b>	M-.xx.SR.xx.A.1.xxx	880	7.500	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	15,0	DN65 - DN80 - DN100 - DN125	< 85
<b>K890A</b>	M-.xx.SR.xx.A.1.xxx	1.000	8.900	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	15,0	DN65 - DN80 - DN100 - DN125	< 85
<b>K990A</b>	M-.xx.SR.xx.A.1.xxx	1.820	9.900	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	15,0	DN80 - DN100 - DN125	< 85

For the configuration of the gas train, see page 112-113.



Suggested boiler drilling



Burner flange

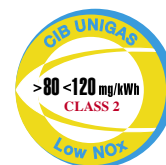
Type	Packaging dimensions (mm)			
	l	p	h	kg
<b>K750A</b>	2040	1450	1220	475
<b>K890A</b>	2040	1450	1220	480
<b>K990A</b>	2040	1450	1220	485

Approximate values (regarding model with gas train DN80)

Type	Model	Overall dimensions (mm)																												
		AA	A	AD	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
<b>K750A</b>	M-.xx.SR.xx.A.1.65	366	1841	25	611	117	530	626	1311	524	1695	969	726	340	380	494	540	690	M16	651	460	460	636	150	487	845	292	960	328	270
<b>K750A</b>	M-.xx.SR.xx.A.1.80	366	1841	25	626	132	530	626	1311	524	1728	1002	726	340	380	494	540	690	M16	651	460	460	687	150	538	875	313	960	328	270
<b>K750A</b>	M-.xx.SR.xx.A.1.100	366	1841	25	639	145	530	626	1311	524	1808	1082	726	340	380	494	540	690	M16	651	460	460	791	150	642	942	353	960	328	270
<b>K750A</b>	M-.xx.SR.xx.A.1.125	366	1841	25	738	175	530	626	1311	524	2073	1347	726	340	380	562	540	690	M16	651	460	460	904	150	754	1192	479	960	328	270
<b>K890A</b>	M-.xx.SR.xx.A.1.65	366	1840	25	611	117	530	626	1310	524	1695	969	726	400	440	494	540	690	M16	651	460	460	636	150	487	845	292	960	328	270
<b>K890A</b>	M-.xx.SR.xx.A.1.80	366	1840	25	626	132	530	626	1310	524	1728	1002	726	400	440	494	540	690	M16	651	460	460	687	150	538	875	313	960	328	270
<b>K890A</b>	M-.xx.SR.xx.A.1.100	366	1840	25	639	145	530	626	1310	524	1808	1082	726	400	440	494	540	690	M16	651	460	460	791	150	642	942	353	960	328	270
<b>K890A</b>	M-.xx.SR.xx.A.1.125	366	1840	25	738	175	530	626	1310	524	2073	1347	726	400	440	562	540	690	M16	651	460	460	904	150	754	1192	479	960	328	270
<b>K990A</b>	M-.xx.SR.xx.A.1.80	366	1840	25	626	132	530	626	1310	524	1728	1002	726	434	484	494	540	690	M16	651	460	460	687	150	538	875	313	960	328	270
<b>K990A</b>	M-.xx.SR.xx.A.1.100	366	1840	25	639	145	530	626	1310	524	1808	1082	726	434	484	494	540	690	M16	651	460	460	791	150	642	942	353	960	328	270
<b>K990A</b>	M-.xx.SR.xx.A.1.125	366	1840	25	738	175	530	626	1310	524	2073	1347	726	434	484	562	540	690	M16	651	460	460	904	150	754	1192	479	960	328	270

Approximate values





## MECHANICAL OPERATION

Model	Gas train	Operation	K750A		K890A		K990A	
			Code	Price €	Code	Price €	Code	Price €
M-.PR.SR.xx.A.1.65	DN65	PR (*)	034010153		034010553		-	
M-.PR.SR.xx.A.1.80	DN80	PR (*)	034010253		034010653		034010953	
M-.PR.SR.xx.A.1.100	DN100	PR (*)	034010353		034010753		034011053	
M-.PR.SR.xx.A.1.125	DN 125	PR (*)	034010453		034010853		034011153	

(\*) 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 GAR DIRECTIVE 2016/426/EU

## ELECTRONIC OPERATION

Model	Gas train	Operation	K750A		K890A		K990A	
			Code	Price €	Code	Price €	Code	Price €
M-.PR.SR.xx.A.1.65.EA	DN65	PR (*)	03401015A		03401055A		-	
M-.PR.SR.xx.A.1.80.EA	DN80	PR (*)	03401025A		03401065A		03401095A	
M-.PR.SR.xx.A.1.100.EA	DN100	PR (*)	03401035A		03401075A		03401105A	
M-.PR.SR.xx.A.1.125.EA	DN125	PR (*)	03401045A		03401085A		03401115A	

(\*) 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 GAR DIRECTIVE 2016/426/EU

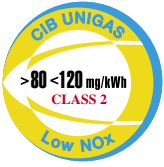
## ELECTRONIC OPERATION

Model	Gas train	Operation	K750A		K890A		K990A	
			Code	Price €	Code	Price €	Code	Price €
M-.MD.SR.xx.A.1.65.ES	DN65	MD (**)	03401015S		03401055S		-	
M-.MD.SR.xx.A.1.80.ES	DN80	MD (**)	03401025S		03401065S		03401095S	
M-.MD.SR.xx.A.1.100.ES	DN100	MD (**)	03401035S		03401075S		03401105S	
M-.MD.SR.xx.A.1.125.ES	DN 125	MD (**)	03401045S		03401085S		03401115S	

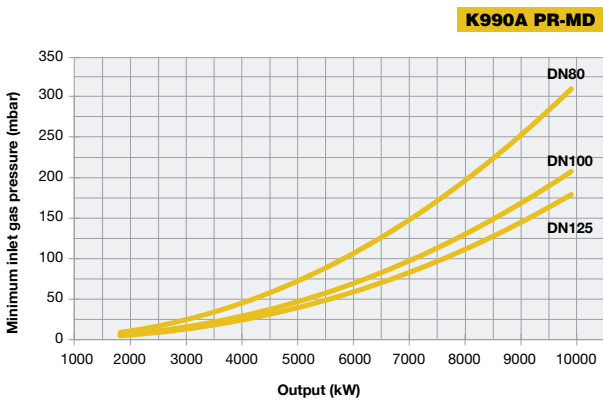
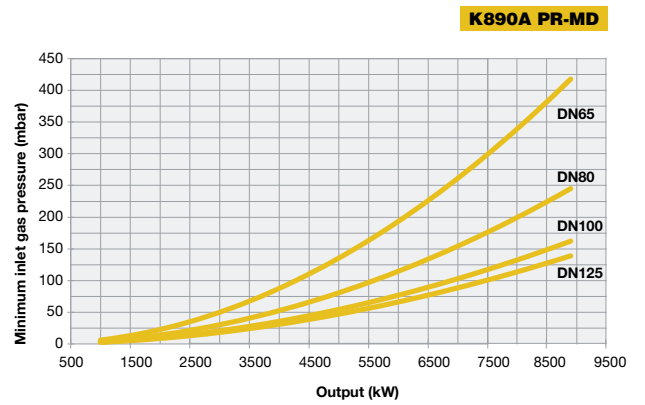
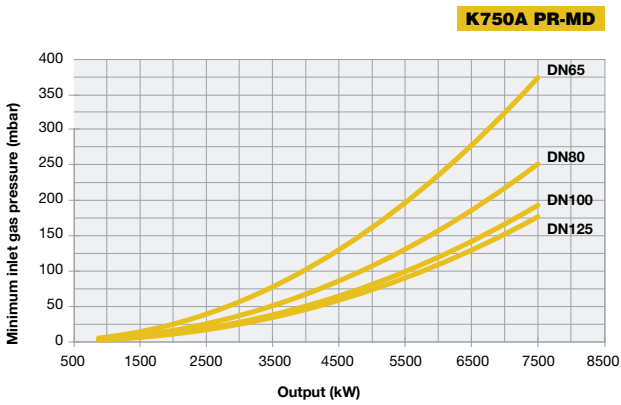
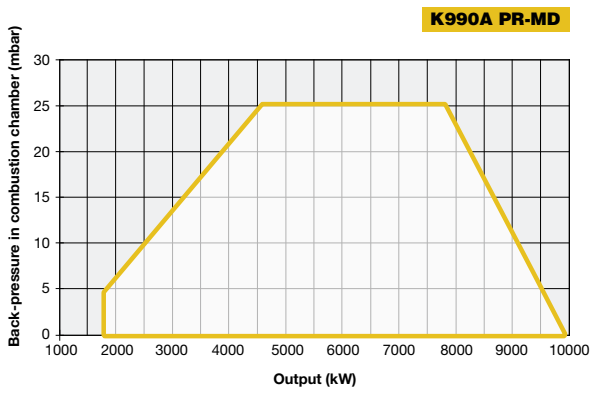
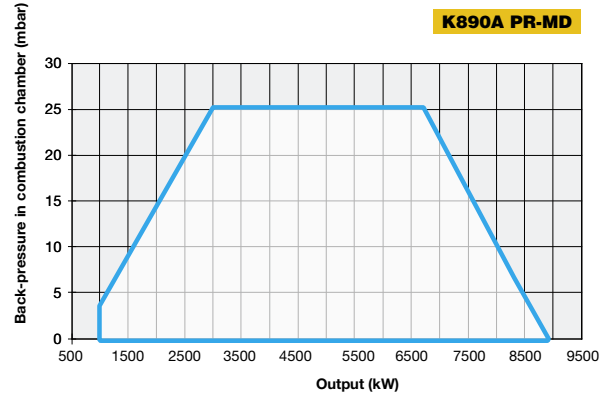
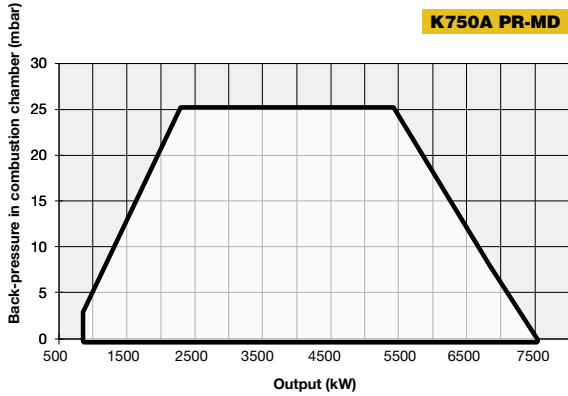
(\*\*) The burners are already MD version.

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 GAR DIRECTIVE 2016/426/EU

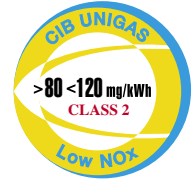


# K750A K890A K990A **cinquecento** SERIES



**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 R1025 R1030 R1040

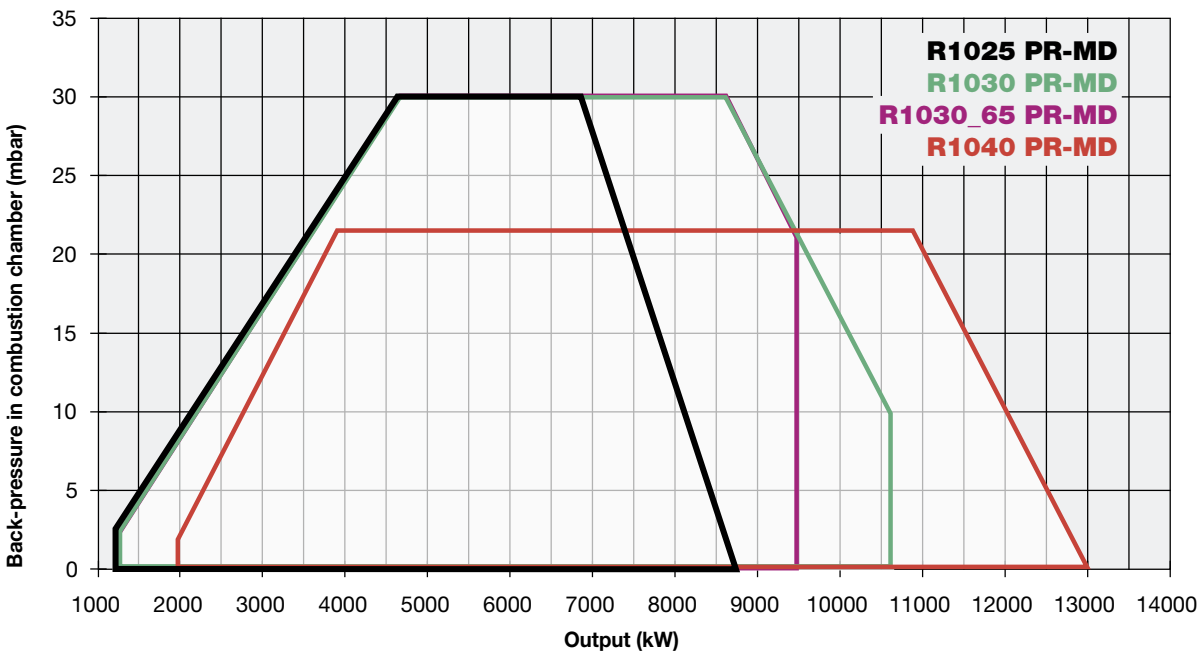


GAS

Designed to satisfy the most demanding industrial applications, the array “MILLE series” **Low NO<sub>x</sub> Class 2 (< 120 mg/kWh)** 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 products 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.



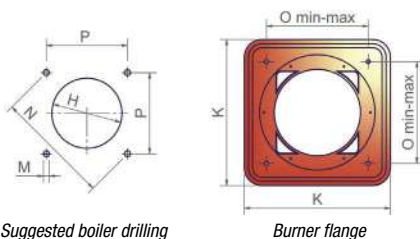
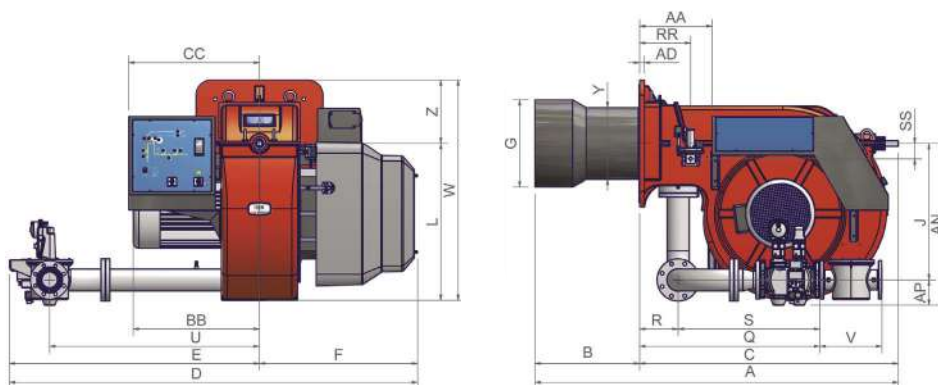
*Allestimento con controllo elettronico (opzionale)*



**TECHNICAL DETAILS**

Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor kW	Gas connections	Noise level dBA
		min.	max.					
<b>R1025</b>	M-.xx.S.xx.A.1.xxx	1.200	8.700	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	18,5	DN65 - DN80 - DN100	82,2
<b>R1030</b>	M-.xx.S.xx.A.1.65	1.200	9.500	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	22,0	DN65	85,6
<b>R1030</b>	M-.xx.S.xx.A.1.xxx	1.200	10.600	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	22,0	DN80 - DN100	85,6
<b>R1040</b>	M-.xx.S.xx.A.1.xxx	2.000	13.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	30,0	DN80 - DN100 - DN125	85,6

For the configuration of the gas train, see page 112-113.



Suggested boiler drilling

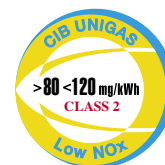
Burner flange

Type	Packaging dimensions (mm)			
	l	p	h	kg
<b>R1025</b>	2300	1720	1410	550
<b>R1030</b>	2300	1720	1410	550
<b>R1040</b>	2300	1720	1410	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.xx.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.xx.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.xx.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.xx.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.xx.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.xx.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.xx.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.xx.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.xx.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 €
<b>M-.PR.S.xx.A.1.65</b>	DN65	PR (*)	023011953		023012253		-	-
<b>M-.PR.S.xx.A.1.80</b>	DN80	PR (*)	023012053		023012353		023012553	
<b>M-.PR.S.xx.A.1.100</b>	DN100	PR (*)	023012153		023012453		023012653	
<b>M-.PR.S.xx.A.1.125</b>	DN125	PR (*)	-		-		023012753	

(\*) 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 GAR DIRECTIVE 2016/426/EU**

**ELECTRONIC OPERATION**

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

(\*) 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 GAR DIRECTIVE 2016/426/EU**

**ELECTRONIC OPERATION**

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

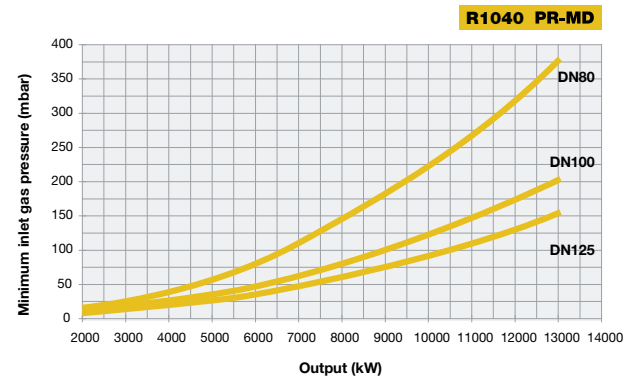
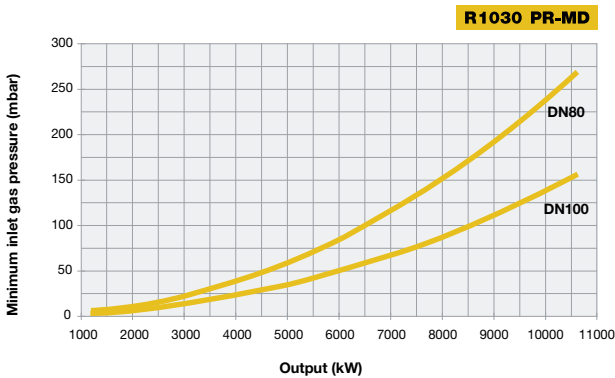
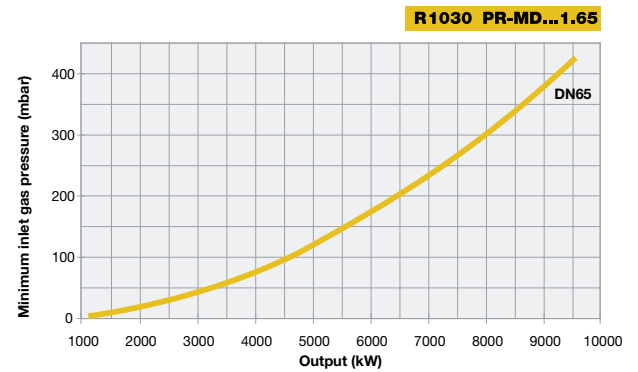
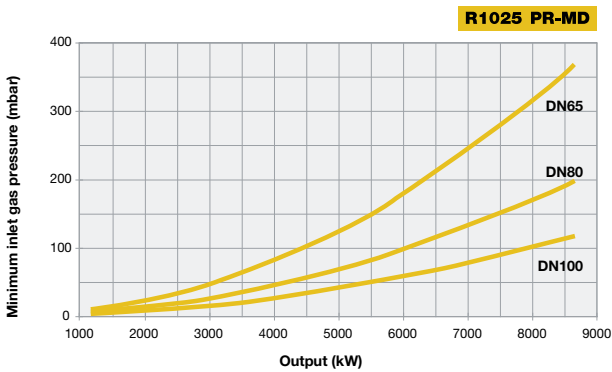
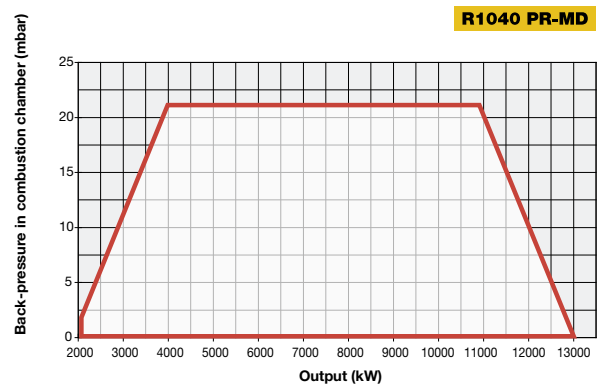
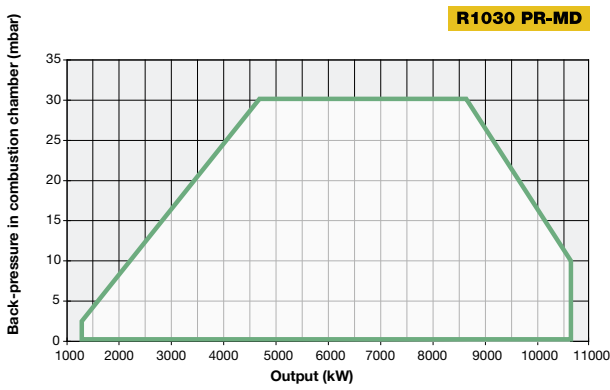
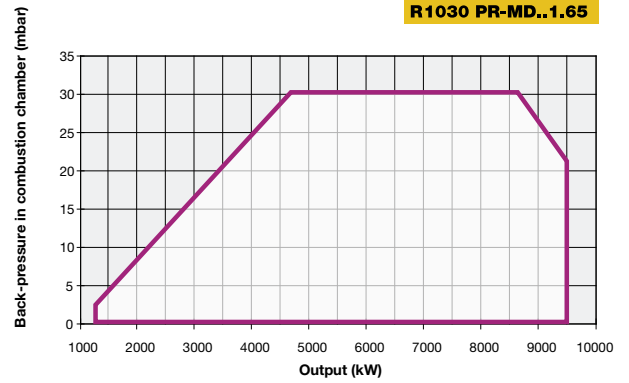
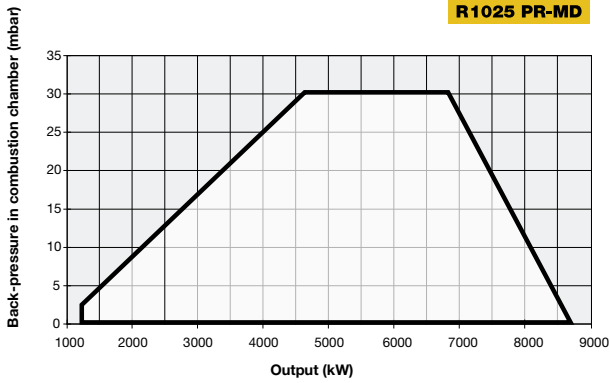
(\*\*) The burners are already MD version.

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 GAR DIRECTIVE 2016/426/EU**

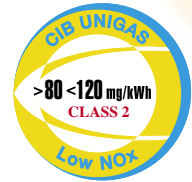


# R1025 R1030 R1040 mille SERIES



**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.

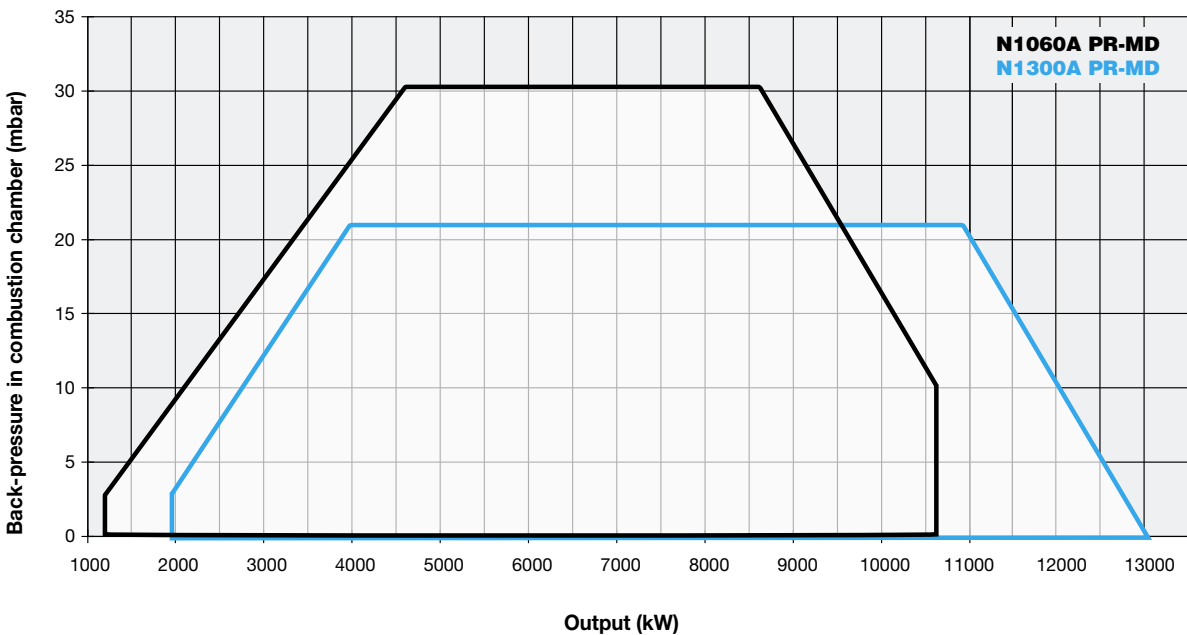
**mille** SERIES **N1060A N1300A**



GAS



The new standard N type MILLE series **Low NO<sub>x</sub> burners Class 2 (< 120 mg/kWh)**, made in aluminum housing with a backward curved centrifugal impeller is studied and developed to get high performance and efficiency combined with low emissions. The performance range of this array of products goes from 2.550 to 13.000 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.

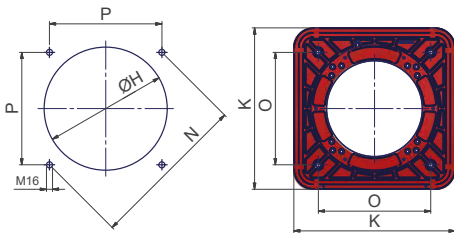
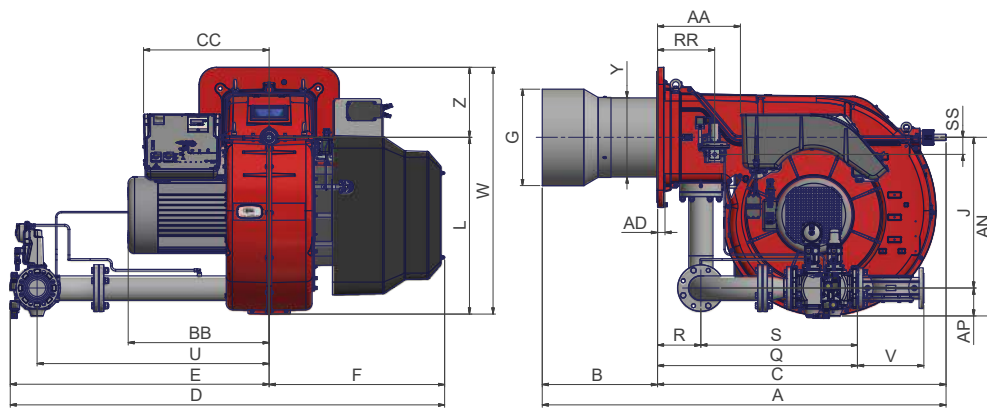




TECHNICAL DETAILS

Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor kW	Gas connections	Noise level dBA
		min.	max.					
<b>N1060A</b>	M-.xx.SR.xx.A.1.xxx	1.200	10.600	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	22,0	DN80 - DN100 - DN125	< 85,6
<b>N1300A</b>	M-.xx.SR.xx.A.1.xxx	2.000	13.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	30,0	DN80 - DN100 - DN125	< 85,6

For the configuration of the gas train, see page 112-113.



Suggested boiler drilling

Burner flange

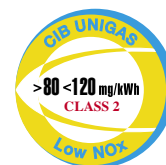
Type	Packaging dimensions (mm)			
	l	p	h	kg
<b>N1060A</b>	2300	1720	1410	550
<b>N1300A</b>	2300	1720	1410	600

Approximate values (regarding model with gas train DN100)

Type	Model	Overall dimensions (mm)																													
		AA	A	AD	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	
		min. max.																													
<b>N1060A</b>	M-.xx.SR.xx.A.1.80	384	1900	35	841	132	542	664	1358	684	1842	1219	623	454	504	709	660	831	M16	651	460	460	460	944	204	740	1092	310	1161	399	330
<b>N1060A</b>	M-.xx.SR.xx.A.1.100	384	1900	35	854	145	542	664	1358	684	1858	1235	623	454	504	709	660	831	M16	651	460	460	460	848	204	644	1092	350	1161	399	330
<b>N1060A</b>	M-.xx.SR.xx.A.1.125	384	1900	35	884	175	542	664	1358	684	1972	1349	623	454	504	709	660	831	M16	651	460	460	460	958	204	754	1192	478	1161	399	330
<b>N1300A</b>	M-.xx.SR.xx.A.1.80	390	1908	35	841	132	542	664	1366	684	1842	1219	623	514	564	709	660	831	M16	651	460	460	460	944	204	740	1092	310	1161	399	330
<b>N1300A</b>	M-.xx.SR.xx.A.1.100	390	1908	35	854	145	542	664	1366	684	1858	1235	623	514	564	709	660	831	M16	651	460	460	460	848	204	644	1092	350	1161	399	330
<b>N1300A</b>	M-.xx.SR.xx.A.1.125	390	1908	35	884	175	542	664	1366	684	1972	1349	623	514	564	709	660	831	M16	651	460	460	460	958	204	754	1192	478	1161	399	330

Approximate values





**MECHANICAL OPERATION**

Model	Gas train	Operation	N1060A		N1300A	
			Code	Price €	Code	Price €
<b>M-.PR.SR.xx.A.1.80</b>	DN80	PR (*)	023013753		023014053	
<b>M-.PR.SR.xx.A.1.100</b>	DN100	PR (*)	023013853		023014153	
<b>M-.PR.SR.xx.A.1.125</b>	DN 125	PR (*)	023013953		023014253	

(\*) 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 GAR DIRECTIVE 2016/426/EU**

**ELECTRONIC OPERATION**

Model	Gas train	Operation	N1060A		N1300A	
			Code	Price €	Code	Price €
<b>M-.PR.SR.xx.A.1.80.EA</b>	DN80	PR (*)	02301375A		02301405A	
<b>M-.PR.SR.xx.A.1.100.EA</b>	DN100	PR (*)	02301385A		02301415A	
<b>M-.PR.SR.xx.A.1.125.EA</b>	DN125	PR (*)	02301395A		02301425A	

(\*) 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 GAR DIRECTIVE 2016/426/EU**

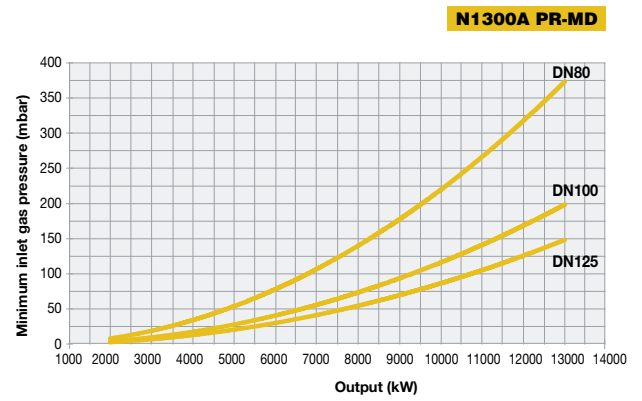
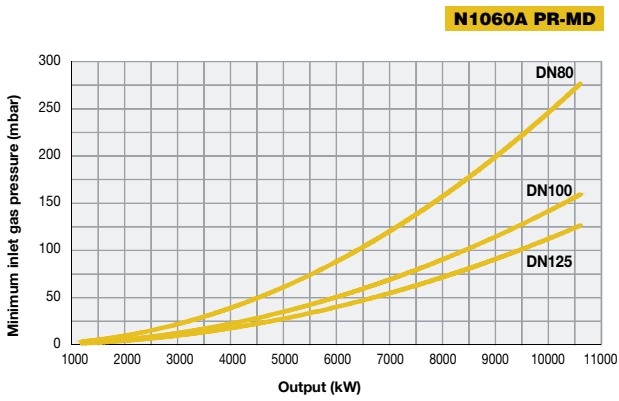
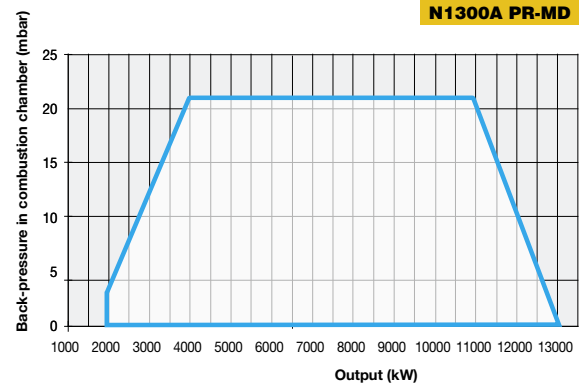
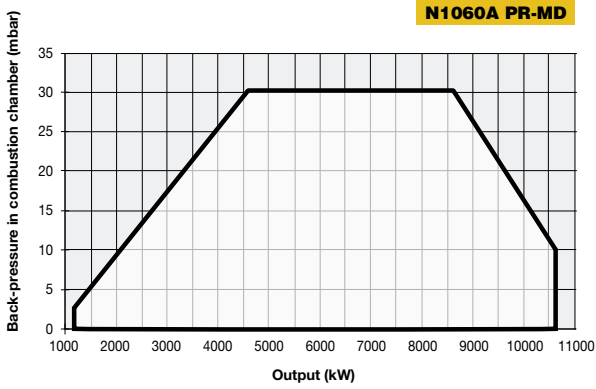
**ELECTRONIC OPERATION**

Model	Gas train	Operation	N1060A		N1300A	
			Code	Price €	Code	Price €
<b>M-.MD.SR.xx.A.1.80.ES</b>	DN80	MD (**)	02301375S		02301405S	
<b>M-.MD.SR.xx.A.1.100.ES</b>	DN100	MD (**)	02301385S		02301415S	
<b>M-.MD.SR.xx.A.1.125.ES</b>	DN 125	MD (**)	02301395S		02301425S	

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

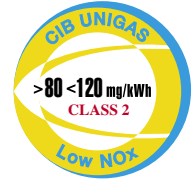
In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

**In compliance with GAR DIRECTIVE 2016/426/EU**



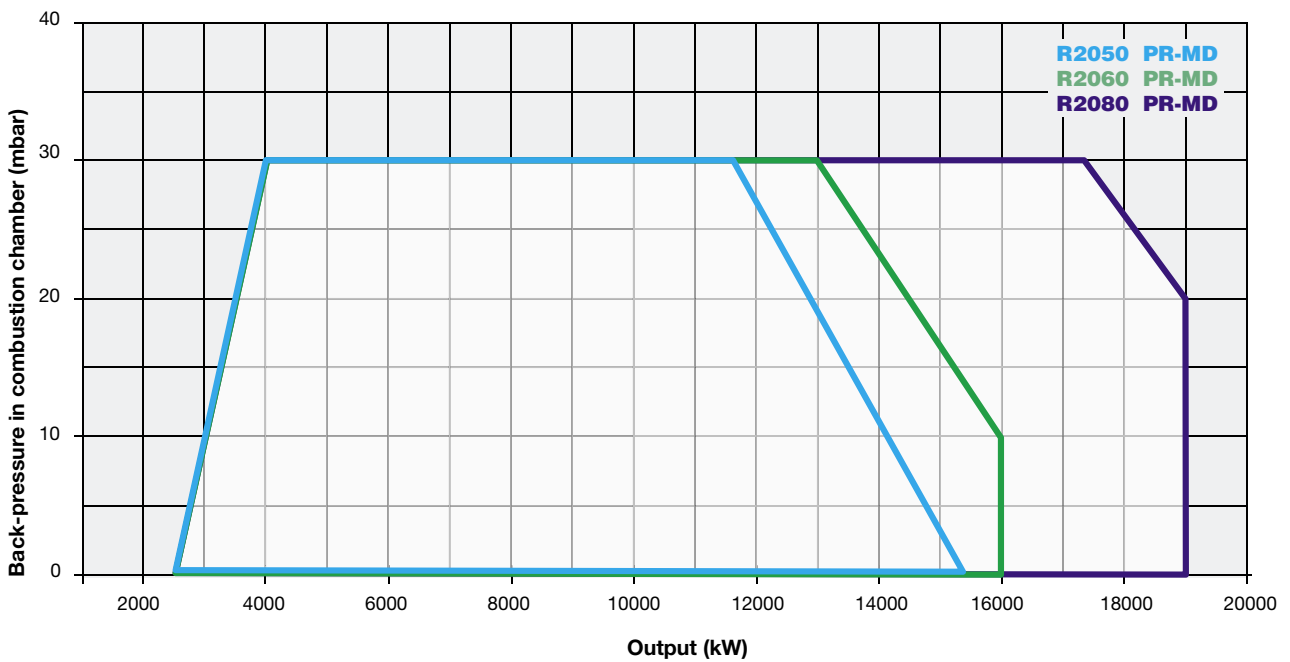
Attention: the graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.

# duemila SERIES R2050 R2060 R2080



GAS

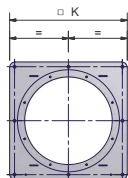
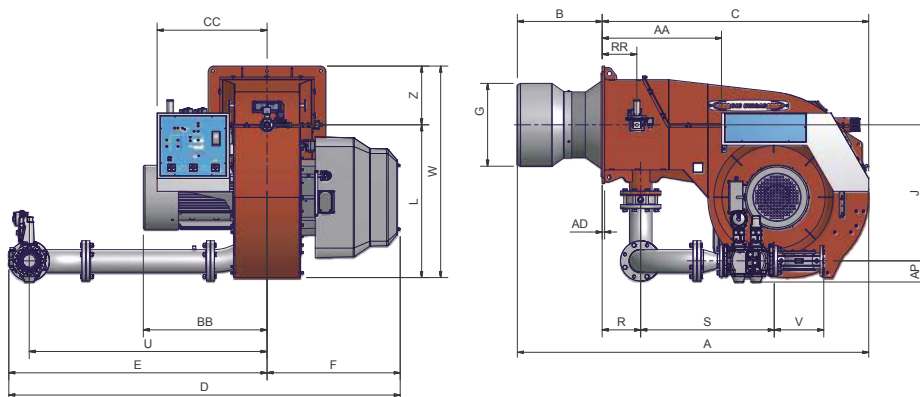
Designed to satisfy the most demanding industrial applications, the array “DUEMILA series” **Class 2 (< 120 mg/kWh)** is the largest of the aluminium monoblock burners; it features an steel housing and a backward curved centrifugal impeller. The performance range of this array of product goes from 2.500 to 19.000 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.



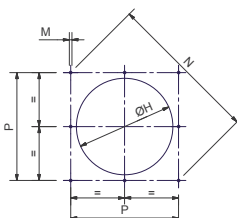
## TECHNICAL DETAILS

Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor kW	Gas connections	Noise level dBA
		min.	max.					
<b>R2050</b>	M-.xx.S.xx.A.1.xxx	2.500	15.200	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	37,0	DN80 - DN100 - DN125	92,5
<b>R2060</b>	M-.xx.S.xx.A.1.xxx	2.500	16.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	45,0	DN80 - DN100 - DN125	91,7
<b>R2080</b>	M-.xx.S.xx.A.1.xxx	2.500	19.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	55,0	DN100 - DN125	91,7

For the configuration of the gas train, see page 112-113.



Burner flange



Suggested boiler drilling

Type	Packaging dimensions (mm)			
	l	p	h	kg
<b>R2050</b>	2396	1886	1969	1280
<b>R2060</b>	2396	1886	1969	1360
<b>R2080</b>	2396	1886	1969	1460

Approximate values

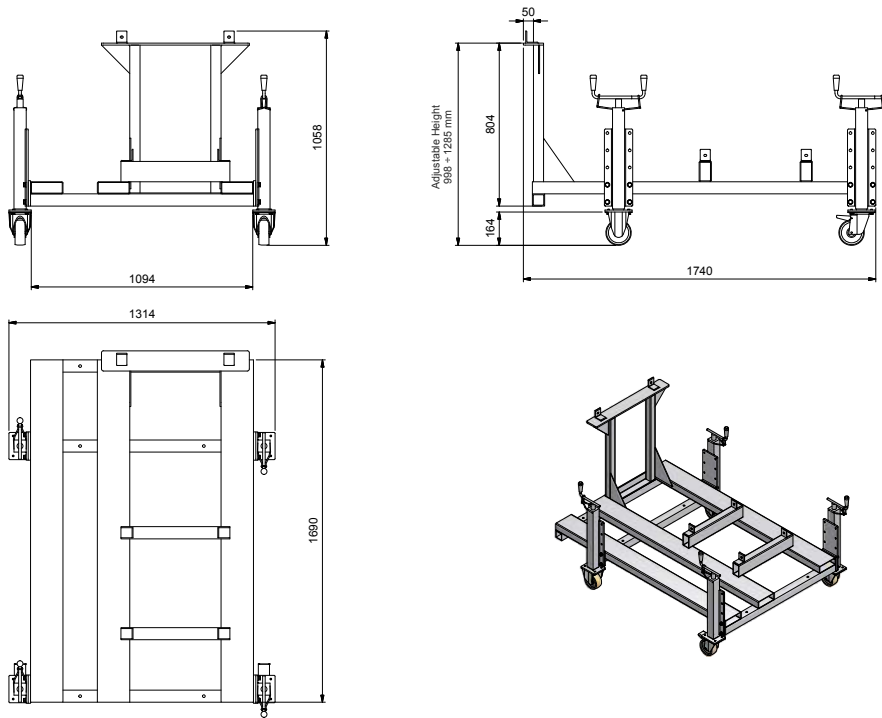
Type	Model	Overall dimensions (mm)																									
		AA	A	AD	AP	BB	B*	C	CC	D	E	F	G*	H*	J	K	L	M	N	P	R	RR	S	U	V	W	Z
<b>R2050</b>	M-.xx.S.xx.A.1.80	741	2180	15	132	768	520	1660	735	2431	1604	827	514	564	845	730	949	M16	948	670	239	215	827	1478	310	1314	365
<b>R2050</b>	M-.xx.S.xx.A.1.100	741	2180	15	145	768	520	1660	735	2447	1620	827	514	564	845	730	949	M16	948	670	239	215	874	1478	350	1314	365
<b>R2050</b>	M-.xx.S.xx.A.1.125	741	2180	15	175	768	520	1660	735	2461	1634	827	514	564	845	730	949	M16	948	670	239	215	755	1478	480	1314	365
<b>R2060</b>	M-.xx.S.xx.A.1.80	741	2160	15	132	768	500	1660	735	2431	1604	827	550	600	845	730	949	M16	948	670	239	215	827	1478	310	1314	365
<b>R2060</b>	M-.xx.S.xx.A.1.100	741	2160	15	145	768	500	1660	735	2447	1620	827	550	600	845	730	949	M16	948	670	239	215	874	1478	350	1314	365
<b>R2060</b>	M-.xx.S.xx.A.1.125	741	2160	15	175	768	500	1660	735	2461	1634	827	550	600	845	730	949	M16	948	670	239	215	755	1478	480	1314	365
<b>R2080</b>	M-.xx.S.xx.A.1.100	741	2160	15	132	807	520	1656	735	2309	1463	846	700	750	775	850	949	M16	1117	790	239	215	827	1336	310	1374	425
<b>R2080</b>	M-.xx.S.xx.A.1.125	741	2160	15	145	807	520	1656	735	2325	1479	846	700	750	775	850	949	M16	1117	790	239	215	874	1336	350	1374	425

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

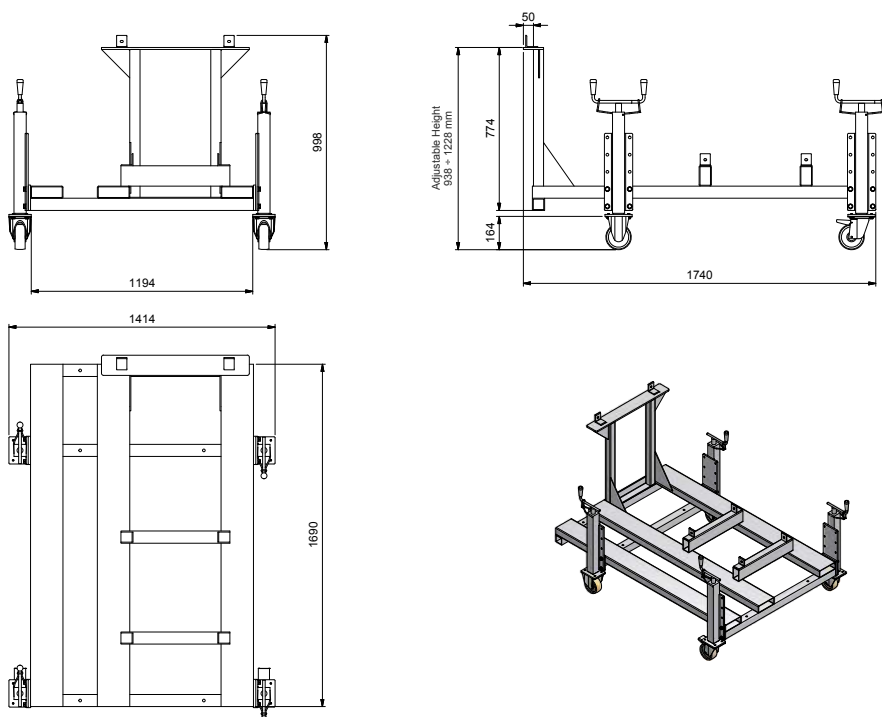
Approximate values

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**





# R2050 R2060 R2080 **duemila** SERIES

## ELECTRONIC OPERATION

Model	Gas train	Operation	R2050		R2060		R2080	
			Code	Price €	Code	Price €	Code	Price €
<b>M-.PR.S.xx.A.1.80.EA</b>	DN80	PR (*)	03201015A		-		-	
<b>M-.PR.S.xx.A.1.100.EA</b>	DN100	PR (*)	03201025A		-		-	
<b>M-.PR.S.xx.A.1.125.EA</b>	DN125	PR (*)	03201035A		-		-	

(\*) 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 GAR DIRECTIVE 2016/426/EU**

## ELECTRONIC OPERATION

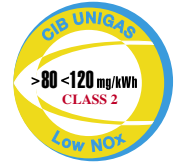
Model	Gas train	Operation	R2050		R2060		R2080	
			Code	Price €	Code	Price €	Code	Price €
<b>M-.MD.S.xx.A.1.80.ES</b>	DN80	MD (**)	03201015S		03201045S		-	
<b>M-.MD.S.xx.A.1.100.ES</b>	DN100	MD (**)	03201025S		03201055S		03201085S	
<b>M-.MD.S.xx.A.1.125.ES</b>	DN125	MD (**)	03201035S		03201065S		03201095S	

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

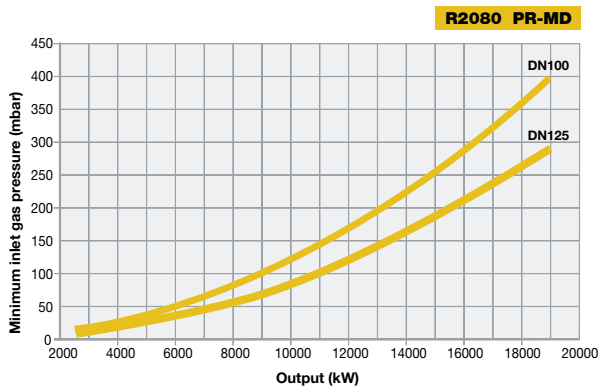
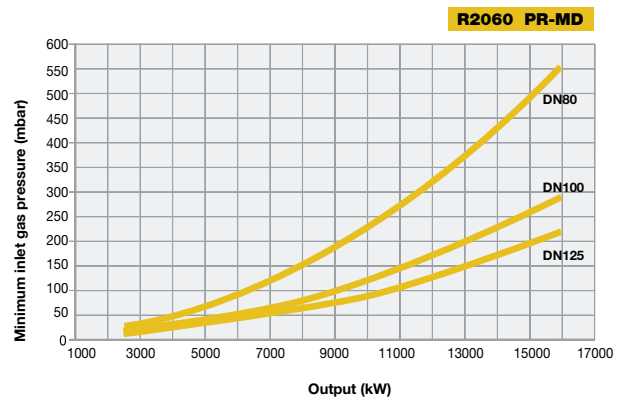
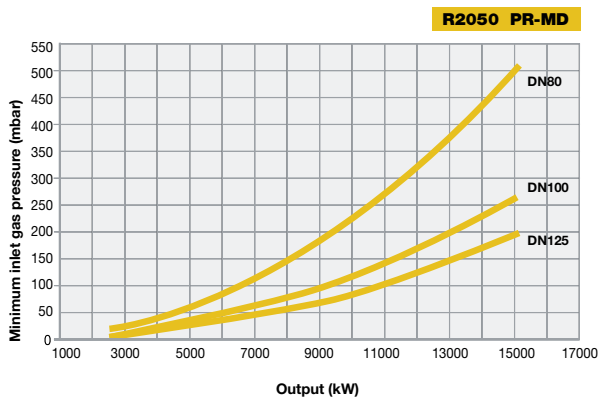
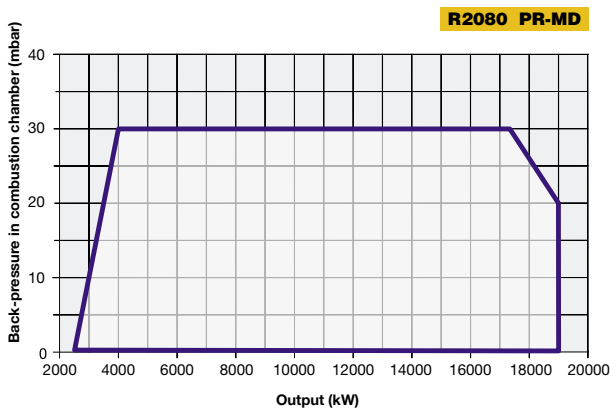
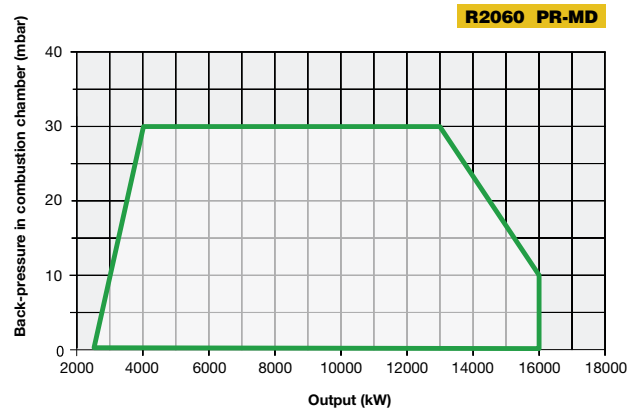
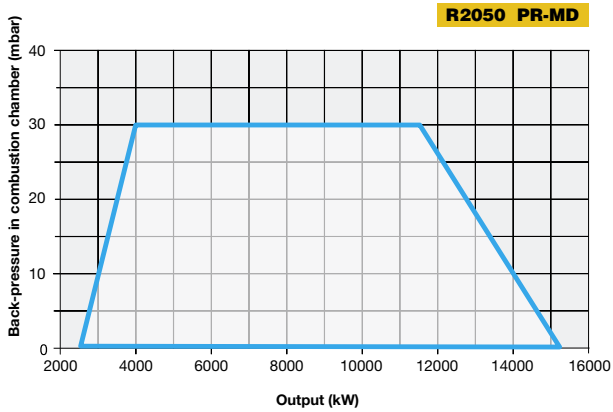
In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

**In compliance with GAR DIRECTIVE 2016/426/EU**

# duemila SERIES R2050 R2060 R2080



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.





## CIB UNIGAS and its mission: Natural gas low NO<sub>x</sub> burners (natural gas only)

Real progress is based on the distribution of the advantages it brings, among which are included the improvement of the living standards and the protection of the environment. Well-aware of the vital role it plays in the development of ecologically compatible products and thanks to 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 its sector. The continuous investment in the development of technologically advanced products, which takes place in the company research laboratory, has allowed the creation of special burners which are suited to applications demanding the lowest NO<sub>x</sub> emissions. These burners homologated with the



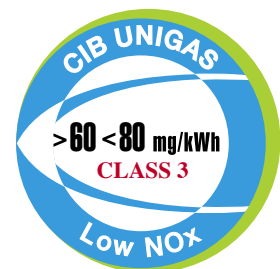
CE Mark (Gas Appliances Directive), by one of the most authoritative European certification agencies in the sector, embrace the entire range of our products, from burners for civil application (20 kW) up to burners for industrial application (80 MW).

Our expert technicians, specialized and dedicated to the implementation of these products, have capitalized on the experience accumulated over 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 the scrupulous respect of the limits prescribed by the European directives regulating the pollutant emissions, all these models guarantee values well below those limits; reaching a level of emissions of less than 80 mg/KWh (class 3 EN 676) if CIB UNIGAS's recommendation about boiler thermal load value is 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 to circulate freely inside.

The applications in which these emission values are required vary widely, such as for example in the systems used for cultivation in greenhouses. Thanks to 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, thus optimizing the performance. The electronic modulation system makes perfect use of the fuel/combustion air curve, which proves to be wider than the curve obtained by mechanical modulation system. As a consequence the electronic system is faster, timely and optimal in



the adjustment phase. In addition, thanks to the presence of a microprocessor that controls the various phases of the process, the absolute precision in the repetition of the operation sequences is ensured. 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 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 provide through its technical assistance that operates around the world and that is regularly re-trained through 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: it is the home of our present and future.

# LOW NO<sub>x</sub> NATURAL GAS BURNERS

## novanta series

**RX92R** - PR/MD  
**RX92.1** - PR/MD

## **NEW** novanta series

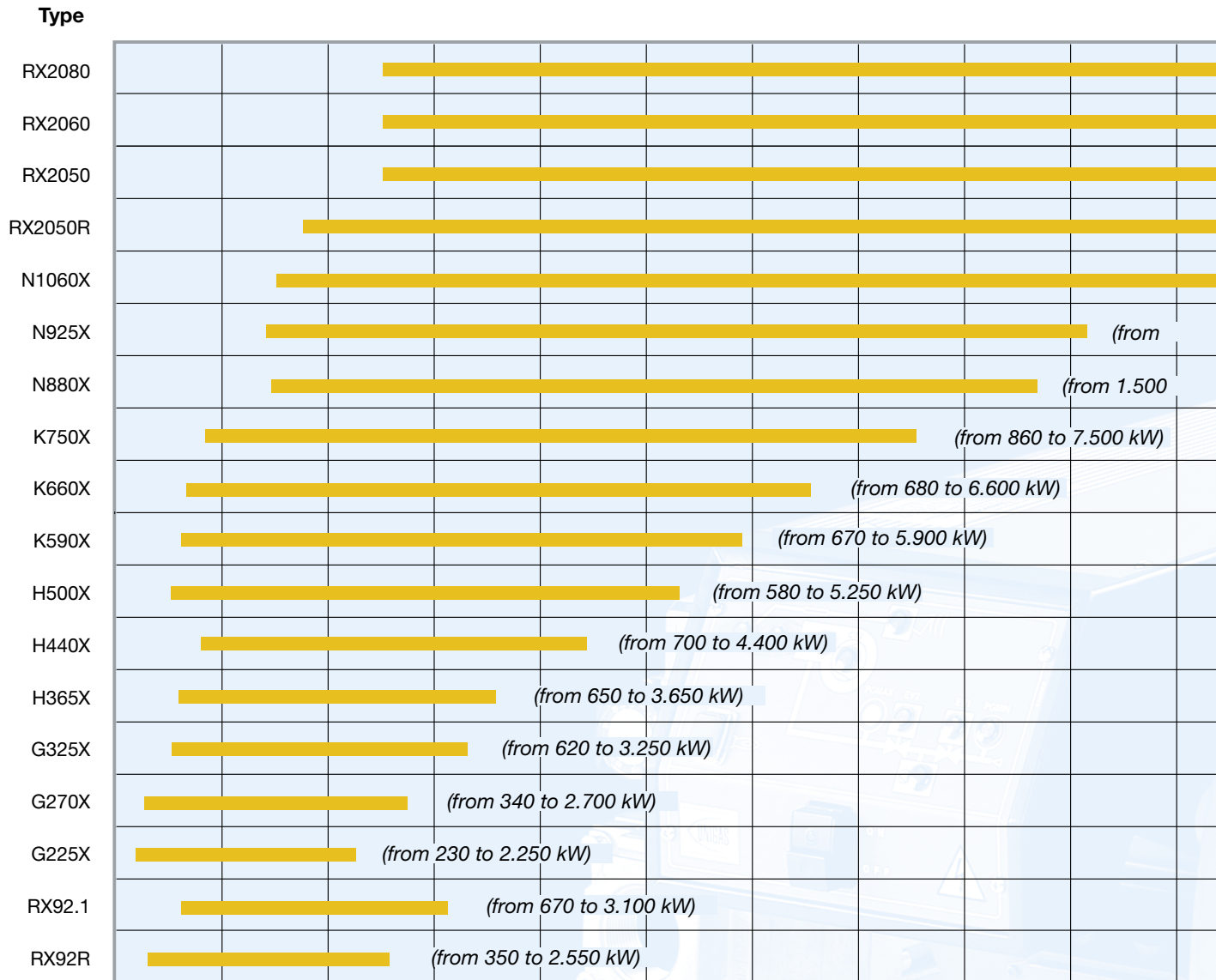
**G225X** - PR/MD  
**G270X** - PR/MD  
**G325X** - PR/MD

## **NEW** cinquecento series

**H365X** - PR/MD  
**H440X** - PR/MD  
**H500X** - PR/MD

## **NEW** cinquecento series

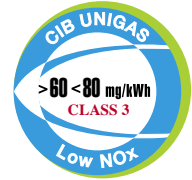
**K590X** - PR/MD  
**K660X** - PR/MD  
**K750X** - PR/MD





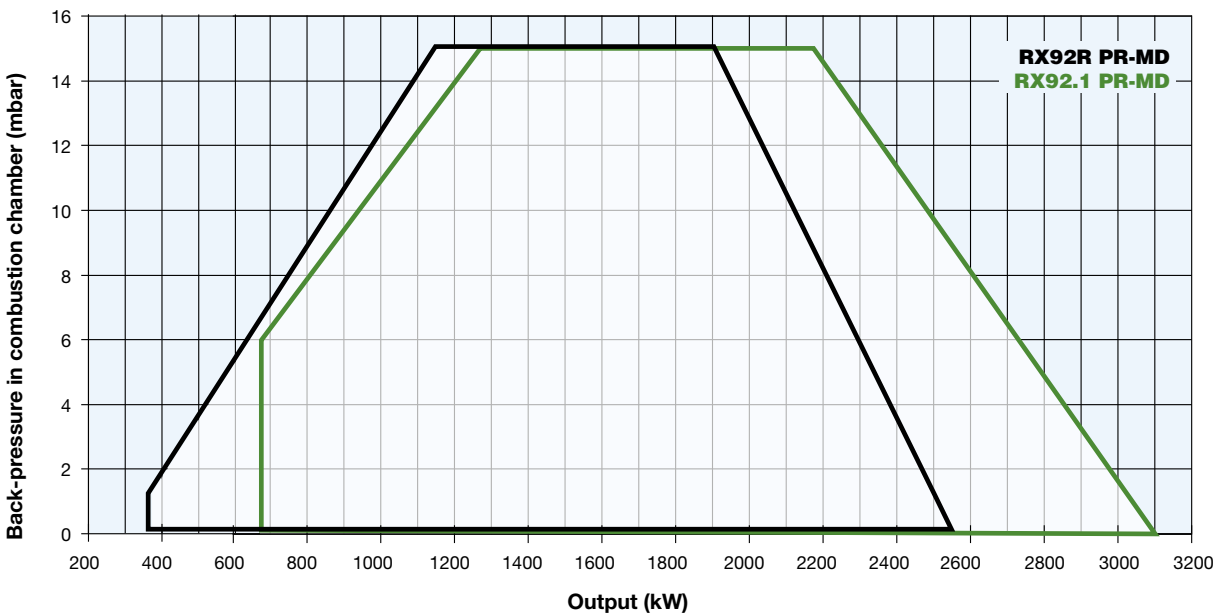


# novanta SERIES RX92R RX92.1



GAS

The series NOVANTA Low NO<sub>x</sub> Class 3 (< 80 mg/kWh) has been developed to meet the current and future requests regarding the low emissions of NO<sub>x</sub>. 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.





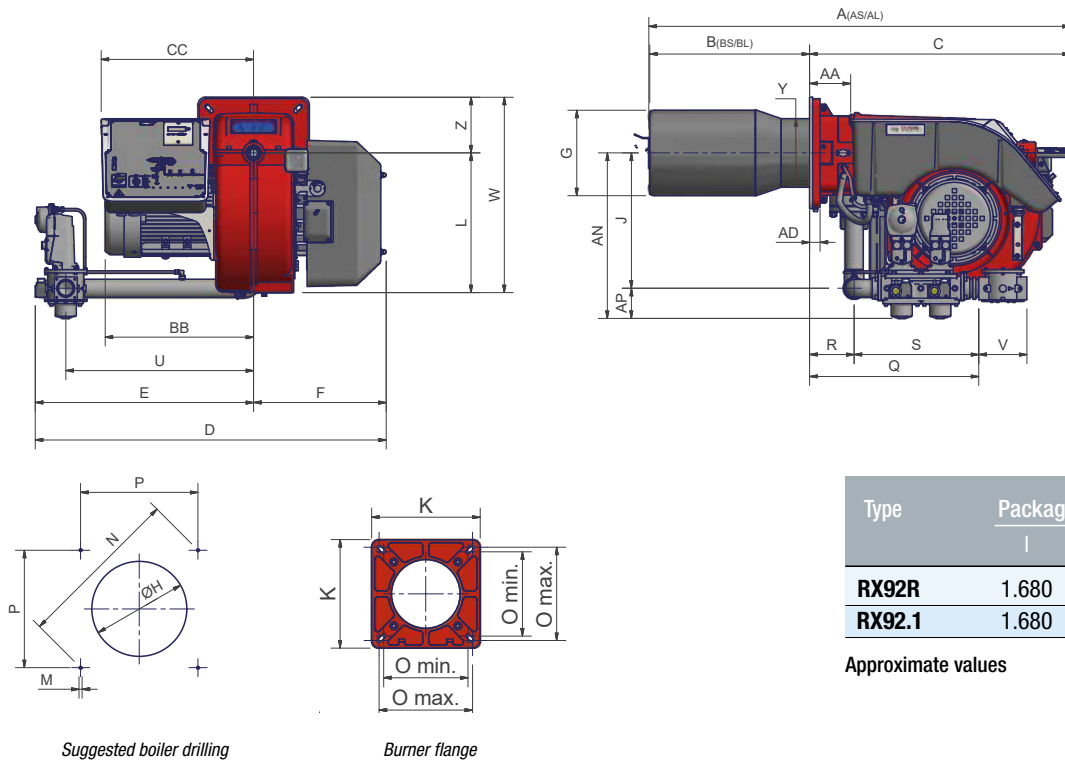
GAS

# RX92R RX92.1 novanta SERIES

## TECHNICAL DETAILS

Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor kW	Gas connections Rp	Noise level dBA
		min.	max.					
<b>RX92R</b>	M-.xx.x.xx.A.1.xxx	350	2.550	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	7,5	2" - DN65 - DN80 - DN100	74,5
<b>RX92.1</b>	M-.xx.x.xx.A.1.xxx	670	3.100	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	7,5	2" - DN65 - DN80 - DN100	76,9

For the configuration of the gas train, see page 112-113.



Type	Packaging dimensions (mm)			
	l	p	h	kg
<b>RX92R</b>	1.680	1.080	1.080	260
<b>RX92.1</b>	1.680	1.080	1.080	270

Approximate values

Type	Model	Overall dimensions (mm)																															
		AS	AL	AA	AD	AN	AP	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>RX92R</b>	M-.xx.x.xx.A.1.50	1261	1361	135	35	550	100	390	490	493	871	506	1160	725	435	259	289	450	360	464	M12	424	280	310	300	532	148	384	624	190	649	228	185
<b>RX92R</b>	M-.xx.x.xx.A.1.65	1261	1361	135	35	564	117	390	490	493	871	506	1406	971	435	259	289	447	360	464	M12	424	280	310	300	632	148	484	846	292	649	228	185
<b>RX92R</b>	M-.xx.x.xx.A.1.80	1261	1361	135	35	579	132	390	490	493	871	506	1437	1002	435	259	289	447	360	464	M12	424	280	310	300	683	148	535	875	313	649	228	185
<b>RX92R</b>	M-.xx.x.xx.A.1.100	1261	1361	135	35	592	145	390	490	493	871	506	1520	1085	435	259	289	447	360	464	M12	424	280	310	300	790	148	642	942	353	649	228	185
<b>RX92.1</b>	M-.xx.x.xx.A.1.50	1300	1400	135	35	550	100	420	530	493	866	506	1165	725	440	284	314	450	360	464	M12	424	280	310	300	532	148	384	624	190	649	228	185
<b>RX92.1</b>	M-.xx.x.xx.A.1.65	1300	1400	135	35	564	117	420	530	493	866	506	1411	971	440	284	314	447	360	464	M12	424	280	310	300	632	148	484	846	292	649	228	185
<b>RX92.1</b>	M-.xx.x.xx.A.1.80	1300	1400	135	35	579	132	420	530	493	866	506	1442	1002	440	284	314	447	360	464	M12	424	280	310	300	683	148	535	875	313	649	228	185
<b>RX92.1</b>	M-.xx.x.xx.A.1.100	1300	1400	135	35	592	145	420	530	493	866	506	1525	1085	440	284	314	447	360	464	M12	424	280	310	300	790	148	642	942	353	649	228	185

Approximate values



**ELECTRONIC OPERATION**

Model	Gas train	Operation	RX92R		RX92.1	
			Code	Price €	Code	Price €
M-.PR.S.xx.A.1.50.EA	2"	PR (*)	01201865A		01201925A	
M-.PR.S.xx.A.1.65.EA	DN65	PR (*)	01201885A		01201945A	
M-.PR.S.xx.A.1.80.EA	DN80	PR (*)	01201785A		01201965A	
M-.PR.S.xx.A.1.100.EA	DN100	PR (*)	01201795A		01201985A	

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 GAR DIRECTIVE 2016/426/EU**

**ELECTRONIC OPERATION**

Model	Gas train	Operation	RX92R		RX92.1	
			Code	Price €	Code	Price €
M-.MD.S.xx.A.1.50.ES	2"	MD (**)	01201865S		01201925S	
M-.MD.S.xx.A.1.65.ES	DN65	MD (**)	01201885S		01201945S	
M-.MD.S.xx.A.1.80.ES	DN80	MD (**)	01201785S		01201965S	
M-.MD.S.xx.A.1.100.ES	DN100	MD (**)	01201795S		01201985S	

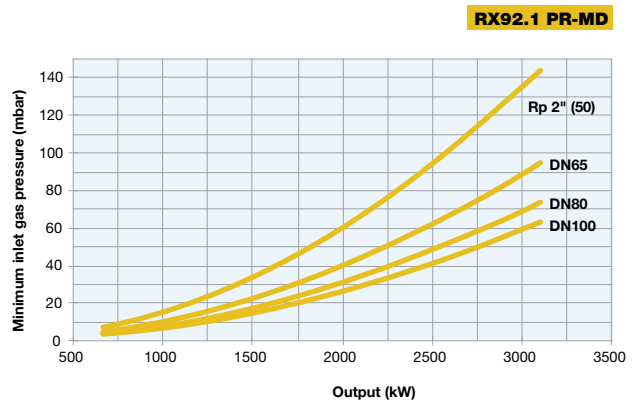
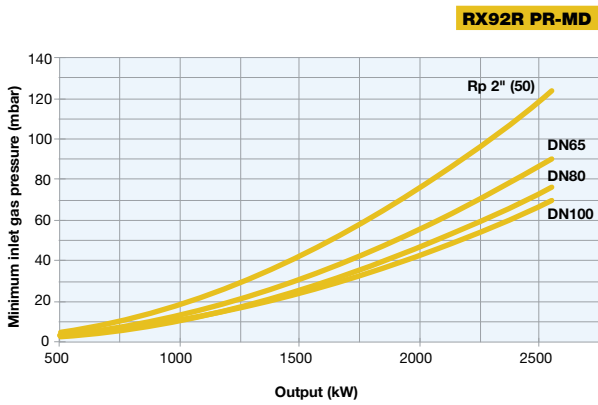
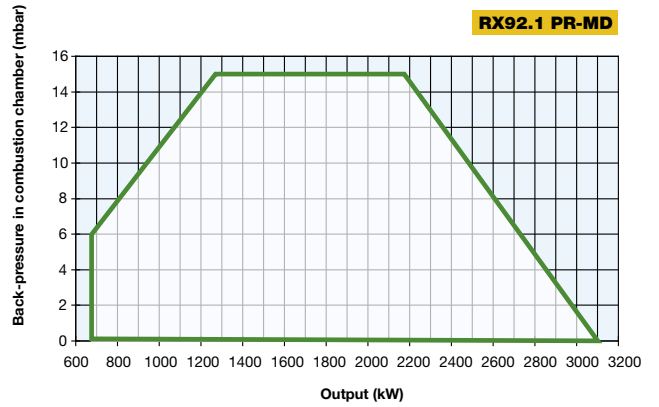
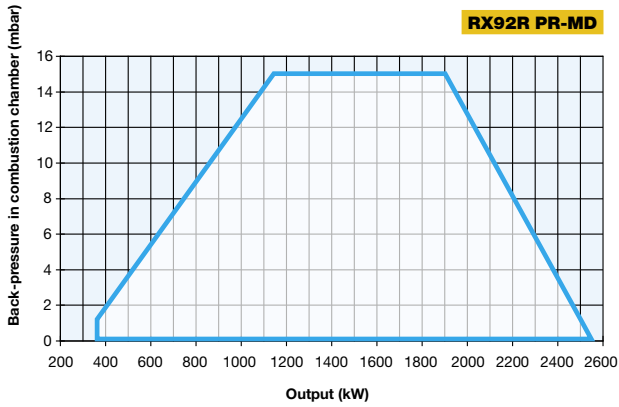
S = Standard combustion head (BS)

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).

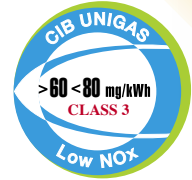
**In compliance with GAR DIRECTIVE 2016/426/EU**



**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.



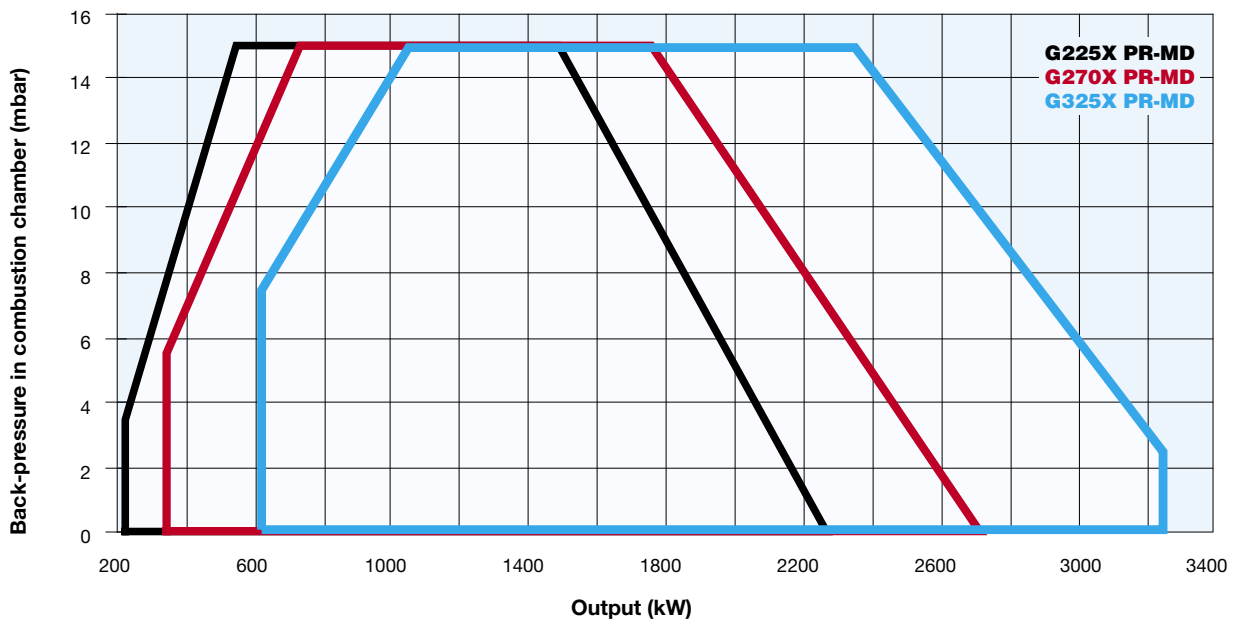
**novanta** SERIES **G225X G270X G325X**

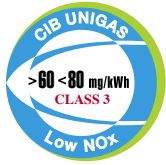


GAS



The new G type NOVANTA series **Low NO<sub>x</sub> burners Class 3 (< 80 mg/kWh)** made in aluminum housing with a backward curved centrifugal impeller has been developed to meet the current and future requests regarding the low emissions of NO<sub>x</sub>. 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.





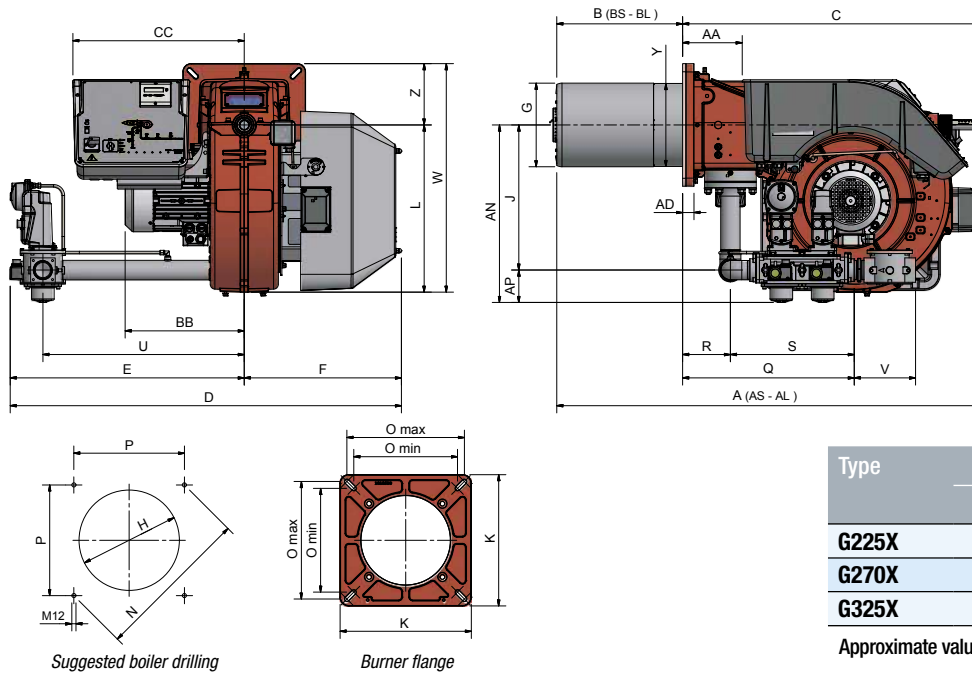
GAS

# G225X G270X G325X novanta SERIES

## TECHNICAL DETAILS

Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor kW	Gas connections			Noise level dBA
		min.	max.				Rp			
<b>G225X</b>	M-.xx.xR.xx.A.1.xxx	230	2.250	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	5,5	2" - DN65 - DN80 - DN100			< 85
<b>G270X</b>	M-.xx.xR.xx.A.1.xxx	340	2.700	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	5,5	2" - DN65 - DN80 - DN100			< 85
<b>G325X</b>	M-.xx.xR.xx.A.1.xxx	620	3.250	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	7,5	2" - DN65 - DN80 - DN100			< 85

For the configuration of the gas train, see page 112-113.



Type	Packaging dimensions (mm)			
	l	p	h	kg
<b>G225X</b>	1680	1250	1050	275
<b>G270X</b>	1680	1250	1050	275
<b>G325X</b>	1680	1250	1050	280

Approximate values (regarding model with gas train DN80)

Type	Model	Overall dimensions (mm)																															
		AS	AL	AA	AD	AN	AP	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.		min.		max.		min.		max.		min.		max.		min.		max.		min.		max.		min.		max.		min.		max.	
<b>G225X</b>	M-.xx.SR.xx.A.1.50	1360	1460	181	35	550	100	380	480	395	980	509	1198	725	473	259	290	450	380	518	M12	453	300	340	320	533	149	384	624	190	708	257	190
<b>G225X</b>	M-.xx.SR.xx.A.1.65	1360	1460	181	35	564	117	380	480	395	980	509	1443	970	473	259	290	447	380	518	M12	453	300	340	320	636	149	487	845	292	708	257	190
<b>G225X</b>	M-.xx.SR.xx.A.1.80	1360	1460	181	35	579	132	380	480	395	980	509	1475	1002	473	259	290	447	380	518	M12	453	300	340	320	687	149	538	875	310	708	257	190
<b>G225X</b>	M-.xx.SR.xx.A.1.100	1360	1460	181	35	592	145	380	480	395	980	509	1558	1085	473	259	290	447	380	518	M12	453	300	340	320	791	149	642	942	353	708	257	190
<b>G270X</b>	M-.xx.SR.xx.A.1.50	1401	1501	181	35	550	100	380	480	395	1021	509	1251	725	526	259	290	450	380	518	M12	453	300	340	320	533	149	384	624	190	708	257	190
<b>G270X</b>	M-.xx.SR.xx.A.1.65	1401	1501	181	35	564	117	380	480	395	1021	509	1496	970	526	259	290	447	380	518	M12	453	300	340	320	636	149	487	845	292	708	257	190
<b>G270X</b>	M-.xx.SR.xx.A.1.80	1401	1501	181	35	579	132	380	480	395	1021	509	1528	1002	526	259	290	447	380	518	M12	453	300	340	320	687	149	538	875	310	708	257	190
<b>G270X</b>	M-.xx.SR.xx.A.1.100	1401	1501	181	35	592	145	380	480	395	1021	509	1611	1085	526	259	290	447	380	518	M12	453	300	340	320	791	149	642	942	353	708	258	257
<b>G325X</b>	M-.xx.SR.xx.A.1.50	1451	1551	181	35	550	100	430	530	471	1021	509	1251	725	526	284	320	450	380	518	M12	453	300	340	320	533	149	384	624	190	708	257	190
<b>G325X</b>	M-.xx.SR.xx.A.1.65	1451	1551	181	35	564	117	430	530	471	1021	509	1496	970	526	284	320	447	380	518	M12	453	300	340	320	636	149	487	845	292	708	257	190
<b>G325X</b>	M-.xx.SR.xx.A.1.80	1451	1551	181	35	579	132	430	530	471	1021	509	1528	1002	526	284	320	447	380	518	M12	453	300	340	320	687	149	538	875	310	708	257	190
<b>G325X</b>	M-.xx.SR.xx.A.1.100	1451	1551	181	35	592	145	430	530	471	1021	509	1611	1085	526	284	320	447	380	518	M12	453	300	340	320	791	149	642	942	353	708	257	190

Approximate values

**ELECTRONIC OPERATION**

Model	Gas train	Operation	G225X		G270X		G325X	
			Code	Price €	Code	Price €	Code	Price €
M-.PR.SR.xx.A.1.50.EA	2"	PR (*)	03601095A		03601175A		03601255A	
M-.PR.SR.xx.A.1.65.EA	DN65	PR (*)	03601115A		03601195A		03601275A	
M-.PR.SR.xx.A.1.80.EA	DN80	PR (*)	03601135A		03601215A		03601295A	
M-.PR.SR.xx.A.1.100.EA	DN100	PR (*)	03601155A		03601235A		03601315A	

SR = Standard combustion head (BS)

LR = 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 GAR DIRECTIVE 2016/426/EU**

**ELECTRONIC OPERATION**

Model	Gas train	Operation	G225X		G270X		G325X	
			Code	Price €	Code	Price €	Code	Price €
M-.MD.SR.xx.A.1.50.ES	2"	MD (**)	03601095S		03601175S		03601255S	
M-.MD.SR.xx.A.1.65.ES	DN65	MD (**)	03601115S		03601195S		03601275S	
M-.MD.SR.xx.A.1.80.ES	DN80	MD (**)	03601135S		03601215S		03601295S	
M-.MD.SR.xx.A.1.100.ES	DN100	MD (**)	03601155S		03601235S		03601315S	

SR = Standard combustion head (BS)

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

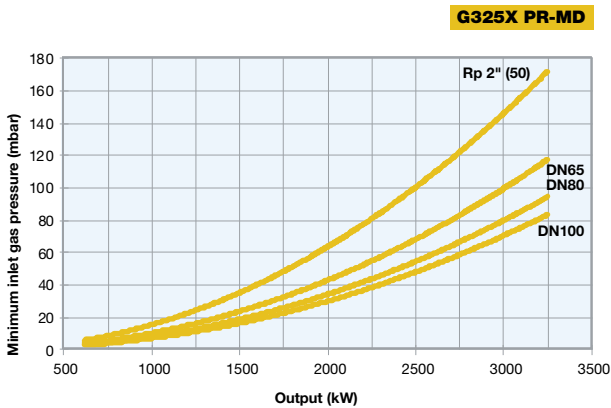
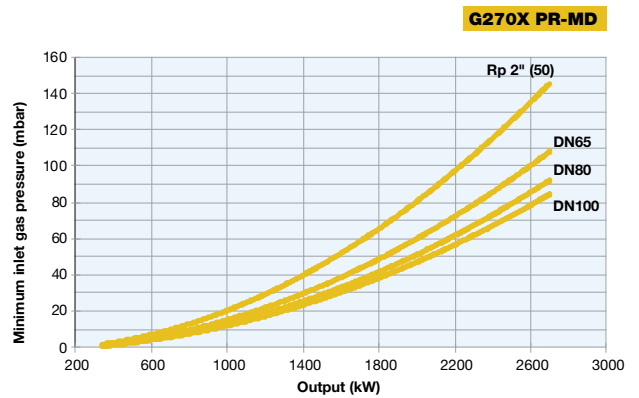
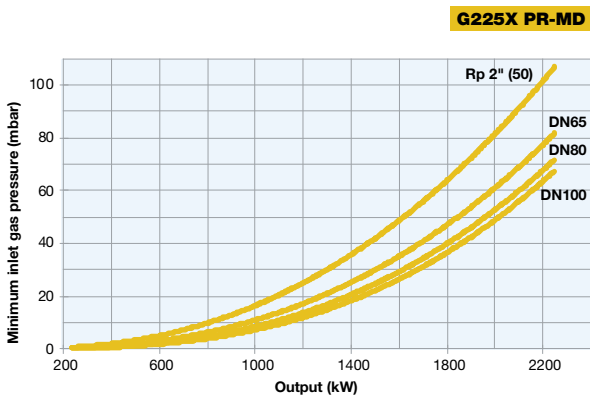
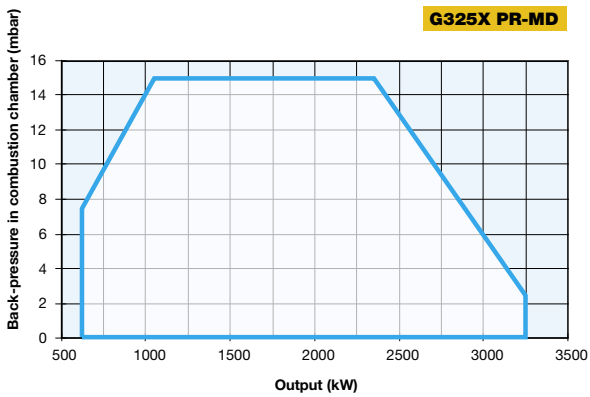
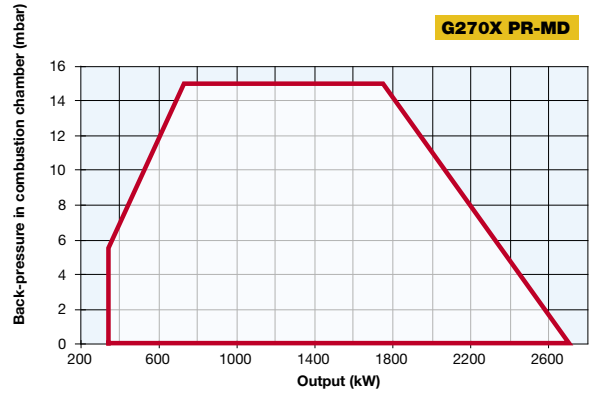
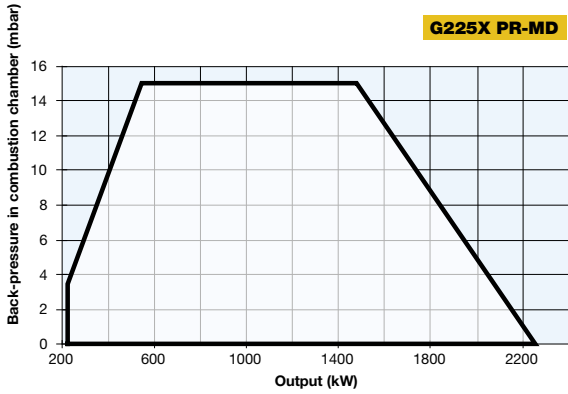
(\*\*) The burners are already MD version.

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 GAR DIRECTIVE 2016/426/EU**

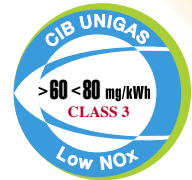


# G225X G270X G325X novanta SERIES

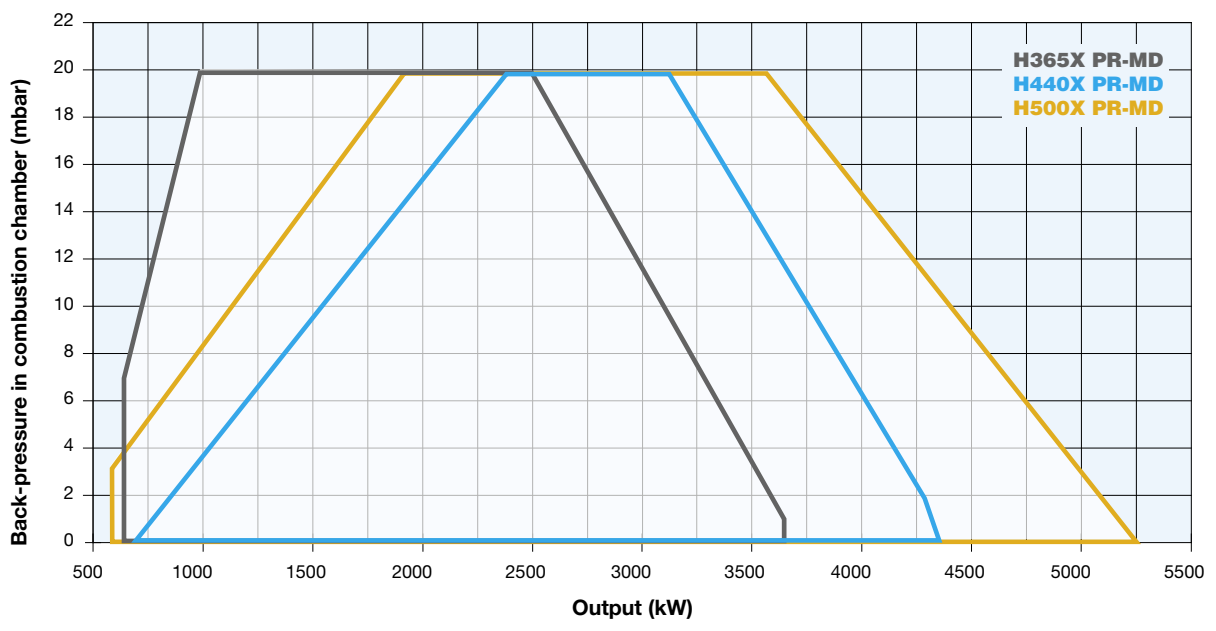


**Attention:** the graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.

**cinquecento** SERIES **H365X H440X H500X**



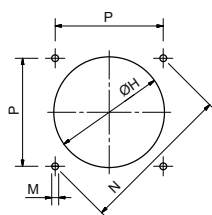
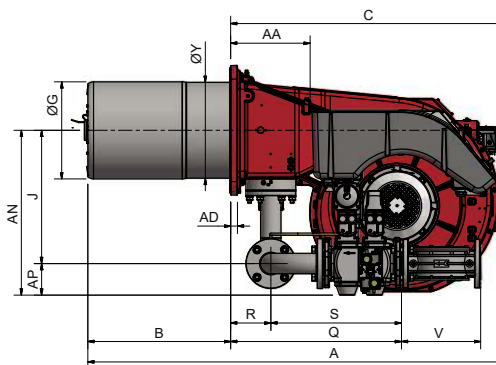
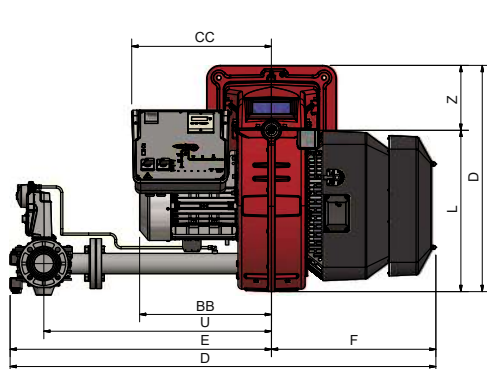
The new H type CINQUECENTO series **Low NO<sub>x</sub> burners Class 3 (< 80 mg/kWh)** made in aluminum housing with a backward curved centrifugal impeller has been developed to meet the current and future requests regarding the low emissions of NO<sub>x</sub>. The innovation of the combustion head allows 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.



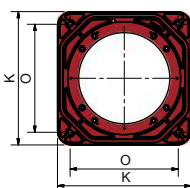
## TECHNICAL DETAILS

Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor kW	Gas connections			Noise level dBA
		min.	max.				Rp			
<b>H365X</b>	M-.xx.xR.xx.A.1.xxx	650	3.650	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	7,5	2" - DN65 - DN80 - DN100			< 85
<b>H440X</b>	M-.xx.xR.xx.A.1.xxx	700	4.400	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	9,2	2" - DN65 - DN80 - DN100			< 85
<b>H500X</b>	M-.xx.xR.xx.A.1.xxx	580	5.250	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	9,2	2" - DN65 - DN80 - DN100			< 85

For the configuration of the gas train, see page 112-113.



Suggested boiler drilling



Burner flange

Type	Packaging dimensions (mm)			
	l	p	h	kg
<b>H365X</b>	1890	1290	1220	315
<b>H440X</b>	1890	1290	1220	335
<b>H500X</b>	1890	1290	1220	350

Approximate values (regarding model with gas train DN80)

Type	Model	Overall dimensions (mm)																														
		AS	AL	AA	AD	AN	AP	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
<b>H365X</b>	M-.xx.xR.xx.A.1.50	1647	1747	295	25	595	100	430	530	471	1217	511	1554	946	608	284	316	494	540	586	M14	552	390	390	764	150	613	845	190	856	284	270
<b>H365X</b>	M-.xx.xR.xx.A.1.65	1647	1747	295	25	611	117	430	530	471	1217	511	1577	969	608	284	316	494	540	586	M14	552	390	390	634	150	484	845	294	856	284	270
<b>H365X</b>	M-.xx.xR.xx.A.1.80	1647	1747	295	25	626	132	430	530	471	1217	511	1610	1002	608	284	316	494	540	586	M14	552	390	390	686	150	535	875	313	856	284	270
<b>H365X</b>	M-.xx.xR.xx.A.1.100	1647	1747	295	25	639	145	430	530	471	1217	511	1690	1082	608	284	316	494	540	586	M14	552	390	390	791	150	642	942	353	856	284	270
<b>H440X</b>	M-.xx.xR.xx.A.1.50	1647	1747	295	25	595	100	430	530	488	1217	511	1554	946	608	328	370	494	540	586	M14	552	390	390	764	150	613	845	190	856	328	270
<b>H440X</b>	M-.xx.xR.xx.A.1.65	1647	1747	295	25	611	117	430	530	488	1217	511	1577	969	608	328	370	494	540	586	M14	552	390	390	634	150	484	845	294	856	328	270
<b>H440X</b>	M-.xx.xR.xx.A.1.80	1647	1747	295	25	626	132	430	530	488	1217	511	1610	1002	608	328	370	494	540	586	M14	552	390	390	686	150	535	875	313	856	328	270
<b>H440X</b>	M-.xx.xR.xx.A.1.100	1647	1747	295	25	639	145	430	530	488	1217	511	1690	1082	608	328	370	494	540	586	M14	552	390	390	791	150	642	942	353	856	328	270
<b>H500X</b>	M-.xx.xR.xx.A.1.50	1647	1747	295	25	595	100	430	530	488	1217	511	1554	946	608	360	410	494	540	586	M14	552	390	390	764	150	613	845	190	856	356	270
<b>H500X</b>	M-.xx.xR.xx.A.1.65	1647	1747	295	25	611	117	430	530	488	1217	511	1577	969	608	360	410	494	540	586	M14	552	390	390	634	150	484	845	294	856	356	270
<b>H500X</b>	M-.xx.xR.xx.A.1.80	1647	1747	295	25	626	132	430	530	488	1217	511	1610	1002	608	360	410	494	540	586	M14	552	390	390	686	150	535	875	313	856	356	270
<b>H500X</b>	M-.xx.xR.xx.A.1.100	1647	1747	295	25	639	145	430	530	488	1217	511	1690	1082	608	360	410	494	540	586	M14	552	390	390	791	150	642	942	353	856	356	270

Approximate values

## ELECTRONIC OPERATION

Model	Gas train	Operation	H365X		H440X		H500X	
			Code	Price €	Code	Price €	Code	Price €
M-.PR.SR.xx.A.1.50.EA	2"	PR (*)	03501135A		03501215A		03501295A	
M-.PR.SR.xx.A.1.65.EA	DN65	PR (*)	03501155A		03501235A		03501315A	
M-.PR.SR.xx.A.1.80.EA	DN80	PR (*)	03501175A		03501255A		03501335A	
M-.PR.SR.xx.A.1.100.EA	DN100	PR (*)	03501195A		03501275A		03501355A	

SR = Standard combustion head (BS)

LR = 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 GAR DIRECTIVE 2016/426/EU**

## ELECTRONIC OPERATION

Model	Gas train	Operation	H365X		H440X		H500X	
			Code	Price €	Code	Price €	Code	Price €
M-.MD.SR.xx.A.1.50.ES	2"	MD (**)	03501135S		03501215S		03501295S	
M-.MD.SR.xx.A.1.65.ES	DN65	MD (**)	03501155S		03501235S		03501315S	
M-.MD.SR.xx.A.1.80.ES	DN80	MD (**)	03501175S		03501255S		03501335S	
M-.MD.SR.xx.A.1.100.ES	DN100	MD (**)	03501195S		03501275S		03501355S	

SR = Standard combustion head (BS)

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

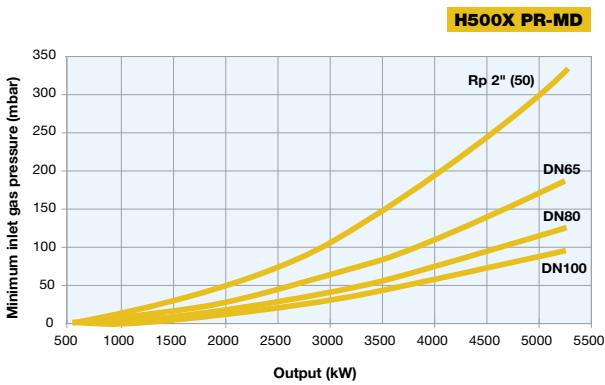
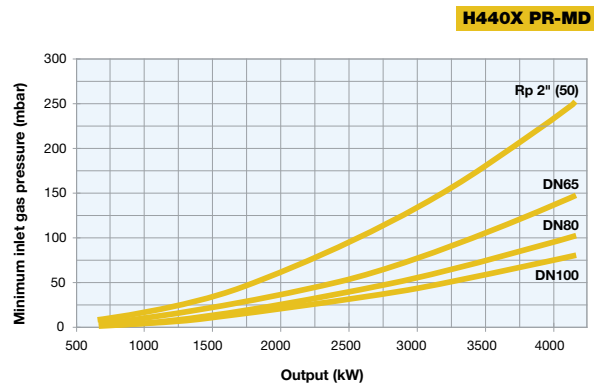
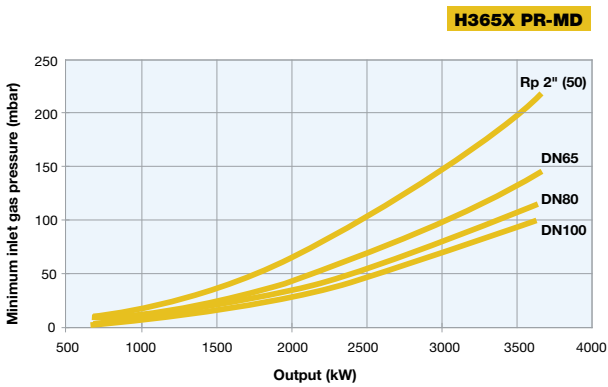
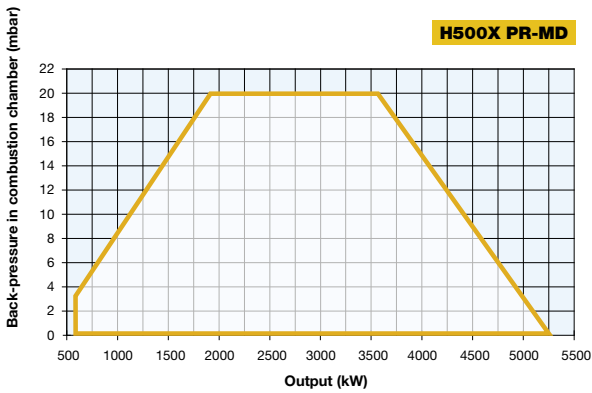
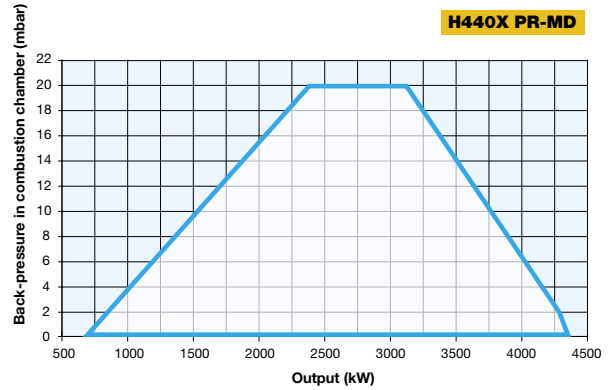
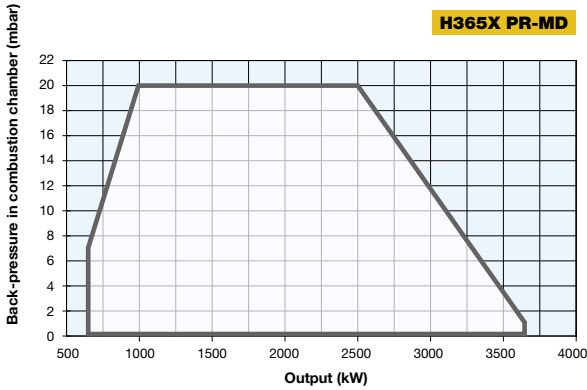
(\*\*) The burners are already MD version.

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 GAR DIRECTIVE 2016/426/EU**



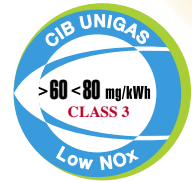
# H365X H440X H500X **cinquecento** SERIES



**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.



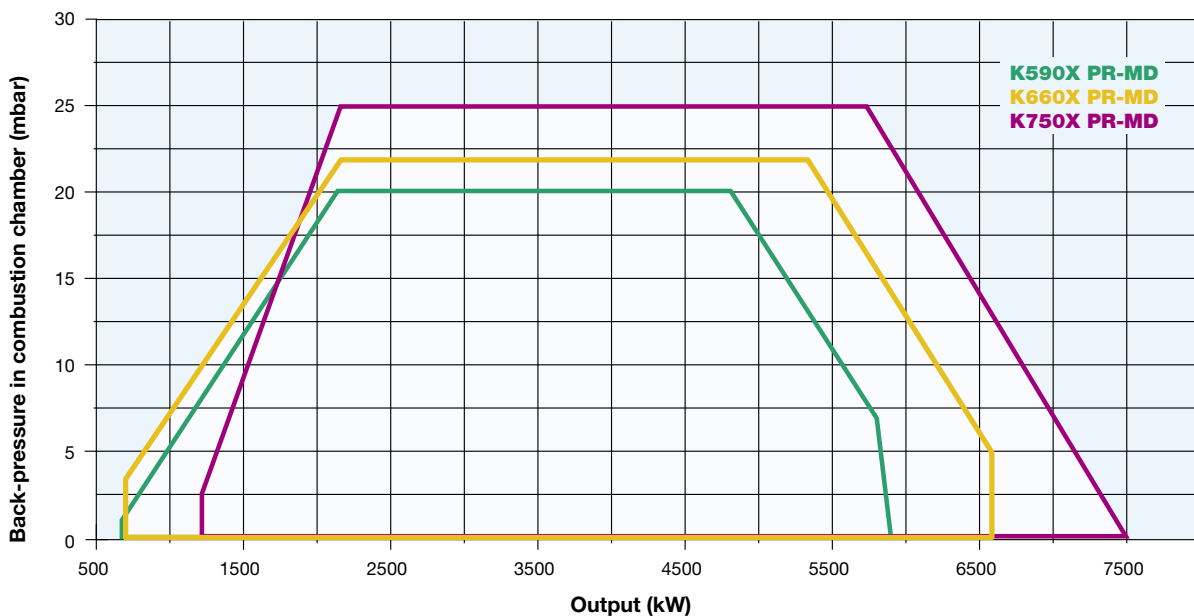
# cinquecento SERIES K590X K660X K750X



GAS



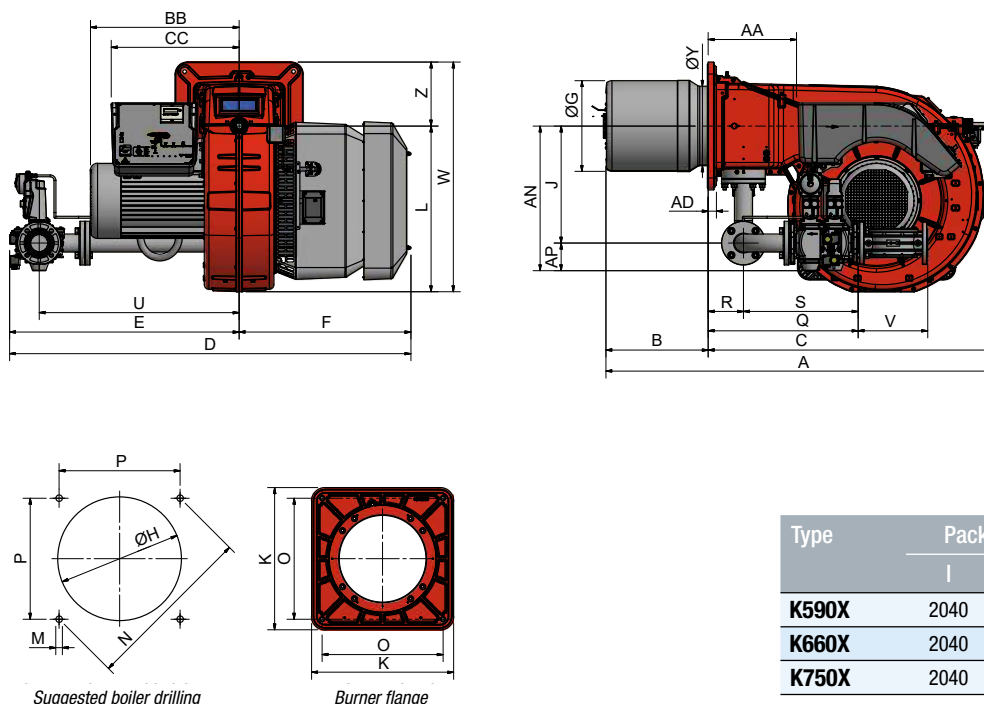
The new K type CINQUECENTO series **Low NO<sub>x</sub> burners Class 3 (< 80 mg/kWh)** made in aluminum housing with a backward curved centrifugal impeller has been developed to meet the current and future requests regarding the low emissions of NO<sub>x</sub>.  
 The innovation of the combustion head 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.



## TECHNICAL DETAILS

Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor kW	Gas connections	Noise level dBA
		min.	max.					
<b>K590X</b>	M-.xx.xR.xx.A.1.xxx	670	5.900	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	15,0	DN65 - DN80 - DN100 - DN125	< 85
<b>K660X</b>	M-.xx.xR.xx.A.1.xxx	680	6.600	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	15,0	DN65 - DN80 - DN100 - DN125	< 85
<b>K750X</b>	M-.xx.xR.xx.A.1.xxx	860	7.500	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	15,0	DN65 - DN80 - DN100 - DN125	< 85

For the configuration of the gas train, see page 112-113.



Type	Packaging dimensions (mm)			
	l	p	h	kg
<b>K590X</b>	2040	1450	1220	430
<b>K660X</b>	2040	1450	1220	455
<b>K750X</b>	2040	1450	1220	455

Approximate values (regarding model with gas train DN80)

Type	Model	Overall dimensions (mm)																														
		AS	AL	AA	AD	AN	AP	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
<b>K590X</b>	M-.xx.xR.xx.A.1.65	1741	1841	366	25	611	117	430	530	626	1311	524	1695	969	726	360	400	494	540	690	M16	651	460	460	636	150	487	845	292	960	356	270
<b>K590X</b>	M-.xx.xR.xx.A.1.80	1741	1841	366	25	626	132	430	530	626	1311	524	1728	1002	726	360	400	494	540	690	M16	651	460	460	687	150	538	875	313	960	356	270
<b>K590X</b>	M-.xx.xR.xx.A.1.100	1741	1841	366	25	639	145	430	530	626	1311	524	1808	1082	726	360	400	494	540	690	M16	651	460	460	791	150	642	942	353	960	356	270
<b>K590X</b>	M-.xx.xR.xx.A.1.125	1741	1841	366	25	738	175	430	530	626	1311	524	2073	1347	726	360	400	562	540	690	M16	651	460	460	904	150	754	1192	479	960	356	270
<b>K660X</b>	M-.xx.xR.xx.A.1.65	1741	1841	366	25	611	117	430	530	626	1311	524	1695	969	726	383	423	494	540	690	M16	651	460	460	636	150	487	845	292	960	356	270
<b>K660X</b>	M-.xx.xR.xx.A.1.80	1741	1841	366	25	626	132	430	530	626	1311	524	1728	1002	726	383	423	494	540	690	M16	651	460	460	687	150	538	875	313	960	356	270
<b>K660X</b>	M-.xx.xR.xx.A.1.100	1741	1841	366	25	639	145	430	530	626	1311	524	1808	1082	726	383	423	494	540	690	M16	651	460	460	791	150	642	942	353	960	356	270
<b>K660X</b>	M-.xx.xR.xx.A.1.125	1741	1841	366	25	738	175	430	530	626	1311	524	2073	1347	726	383	423	562	540	690	M16	651	460	460	904	150	754	1192	479	960	356	270
<b>K750X</b>	M-.xx.xR.xx.A.1.65	1741	1841	366	25	611	117	430	530	626	1311	524	1695	969	726	419	470	494	540	690	M16	651	460	460	636	150	487	845	292	960	336	270
<b>K750X</b>	M-.xx.xR.xx.A.1.80	1741	1841	366	25	626	132	430	530	626	1311	524	1728	1002	726	419	470	494	540	690	M16	651	460	460	687	150	538	875	313	960	336	270
<b>K750X</b>	M-.xx.xR.xx.A.1.100	1741	1841	366	25	639	145	430	530	626	1311	524	1808	1082	726	419	470	494	540	690	M16	651	460	460	791	150	642	942	353	960	336	270
<b>K750X</b>	M-.xx.xR.xx.A.1.125	1741	1841	366	25	738	175	430	530	626	1311	524	2073	1347	726	419	470	562	540	690	M16	651	460	460	904	150	754	1192	479	960	336	270

Approximate values



## ELECTRONIC OPERATION

Model	Gas train	Operation	K590X		K660X		K750X	
			Code	Price €	Code	Price €	Code	Price €
M-.PR.SR.xx.A.1.65.EA	DN65	PR (*)	03401125A		03401285A		03401205A	
M-.PR.SR.xx.A.1.80.EA	DN80	PR (*)	03401145A		03401305A		03401225A	
M-.PR.SR.xx.A.1.100.EA	DN100	PR (*)	03401165A		03401325A		03401245A	
M-.PR.SR.xx.A.1.125.EA	DN125	PR (*)	03401185A		03401345A		03401265A	

SR = Standard combustion head (BS)

LR = 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 GAR DIRECTIVE 2016/426/EU**

## ELECTRONIC OPERATION

Model	Gas train	Operation	K590X		K660X		K750X	
			Code	Price €	Code	Price €	Code	Price €
M-.MD.SR.xx.A.1.65.ES	DN65	MD (**)	03401125S		03401285S		03401205S	
M-.MD.SR.xx.A.1.80.ES	DN80	MD (**)	03401145S		03401305S		03401225S	
M-.MD.SR.xx.A.1.100.ES	DN100	MD (**)	03401165S		03401325S		03401245S	
M-.MD.SR.xx.A.1.125.ES	DN125	MD (**)	03401185S		03401345S		03401265S	

SR = Standard combustion head (BS)

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

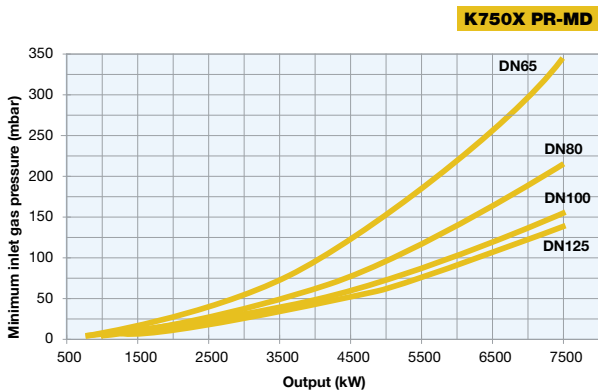
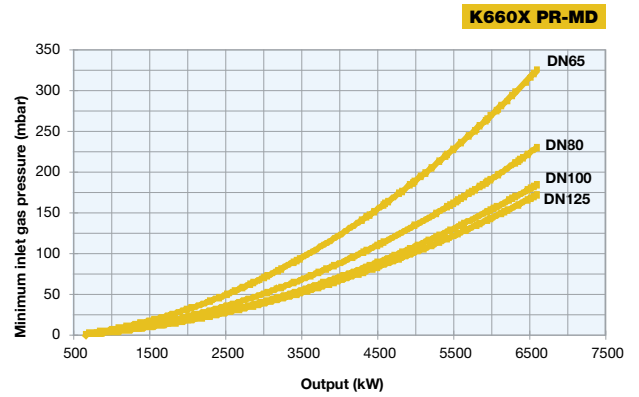
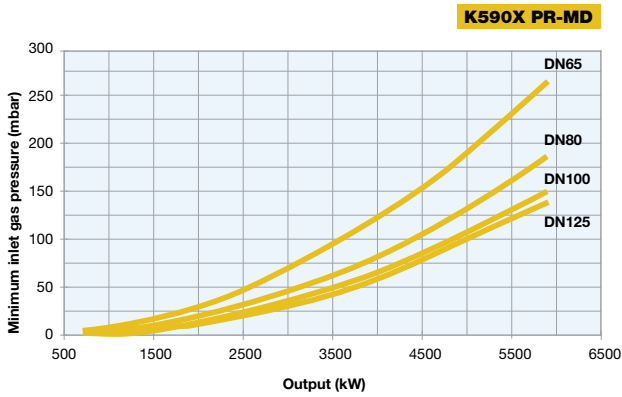
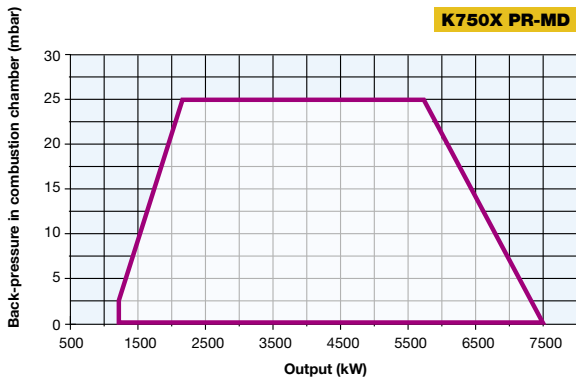
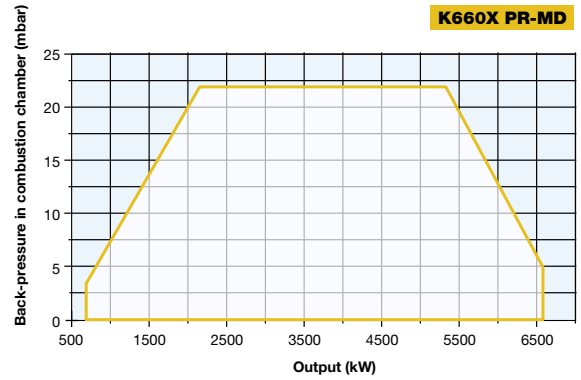
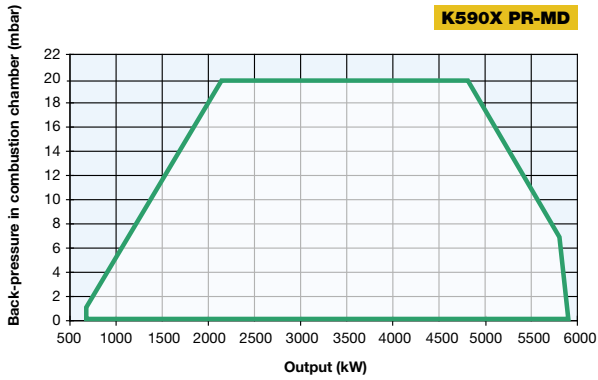
(\*\*) The burners are already MD version.

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 GAR DIRECTIVE 2016/426/EU**

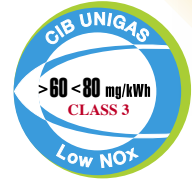


# K590X K660X K750X **cinquecento** SERIES



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.

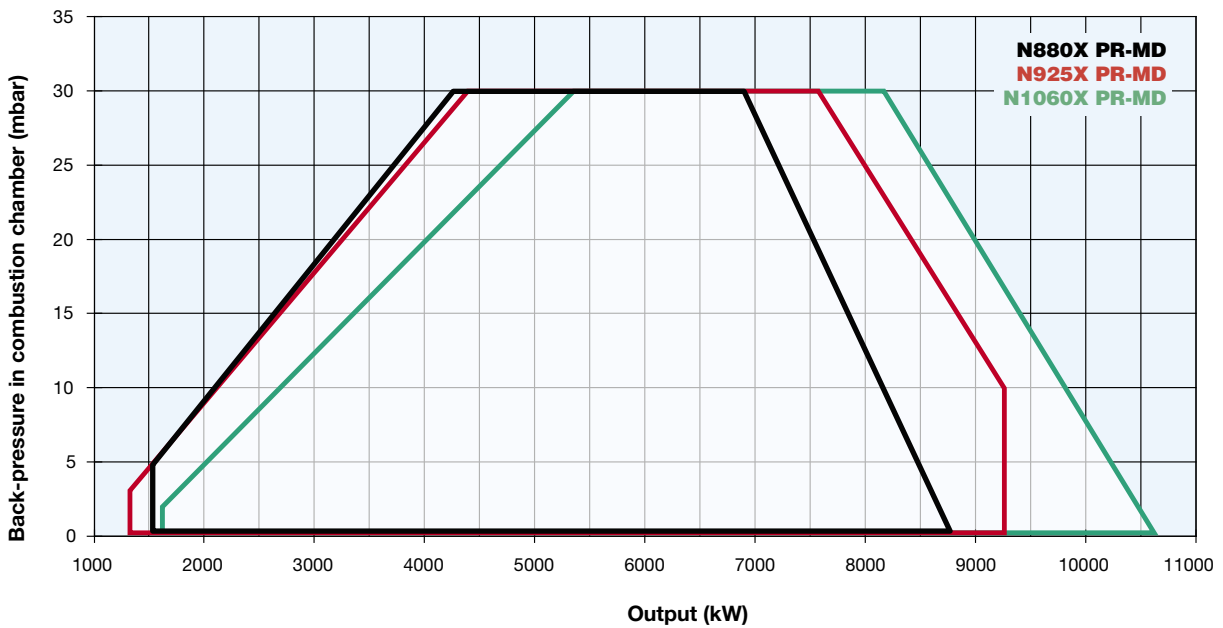
**mille** SERIES **N880X N925X N1060X**



The new N type MILLE series **Low NO<sub>x</sub> burners Class 3 (< 80 mg/kWh)** made in aluminum housing with a backward curved centrifugal impeller has been developed to meet the current and future requests regarding the low emissions of NO<sub>x</sub>.

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. These burners can be equipped with electronic control box, O<sub>2</sub> probe and frequency inverter.





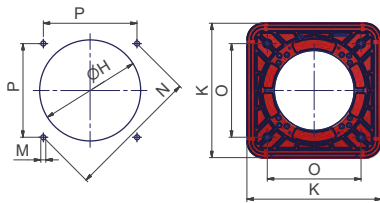
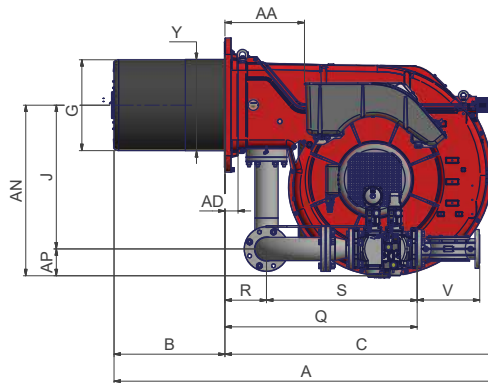
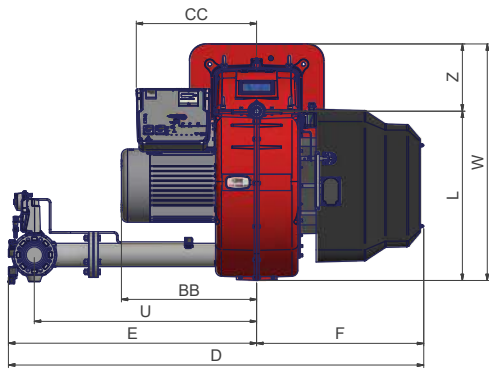
GAS

# N880X N925X N1060X mille SERIES

## TECHNICAL DETAILS

Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor kW	Gas connections	Noise level dBA
		min.	max.					
<b>N880X</b>	M-.xx.xR.xx.A.1.xxx	1.500	8.800	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	18,5	DN80 - DN100 - DN125	< 82,2
<b>N925X</b>	M-.xx.xR.xx.A.1.xxx	1.300	9.250	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	22,0	DN80 - DN100 - DN125	< 85,6
<b>N1060X</b>	M-.xx.xR.xx.A.1.xxx	1.550	10.600	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	30,0	DN80 - DN100 - DN125	< 85,6

For the configuration of the gas train, see page 112-113.



Suggested boiler drilling

Burner flange

Type	Packaging dimensions (mm)			
	l	p	h	kg
<b>N880X</b>	2300	1720	1410	630
<b>N925X</b>	2300	1720	1410	670
<b>N1060X</b>	2300	1720	1410	720

Approximate values (regarding model with gas train DN100)

Type	Model	Overall dimensions (mm)																														
		AS	AL	AA	AD	AN	AP	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
<b>N880X</b>	M-.xx.xR.xx.A.x.1.80	1850	1950	384	35	841	132	445	545	648	1345	684	1842	1219	623	446	496	709	660	831	M16	651	460	460	944	204	740	1092	310	1161	399	330
<b>N880X</b>	M-.xx.xR.xx.A.x.1.100	1850	1950	384	35	854	145	445	545	664	1345	684	1858	1235	623	446	496	709	660	831	M16	651	460	460	848	204	644	1092	350	1161	399	330
<b>N880X</b>	M-.xx.xR.xx.A.x.1.125	1850	1950	384	35	884	175	445	545	664	1345	684	1972	1349	623	446	496	709	660	831	M16	651	460	460	958	204	754	1192	478	1161	399	330
<b>N925X</b>	M-.xx.xR.xx.A.x.1.80	1850	1950	384	35	841	132	445	545	664	1345	684	1842	1219	623	446	496	709	660	831	M16	651	460	460	944	204	740	1092	310	1161	399	330
<b>N925X</b>	M-.xx.xR.xx.A.x.1.100	1850	1950	384	35	854	145	445	545	664	1345	684	1858	1235	623	446	496	709	660	831	M16	651	460	460	848	204	644	1092	350	1161	399	330
<b>N925X</b>	M-.xx.xR.xx.A.x.1.125	1850	1950	384	35	884	175	445	545	664	1345	684	1972	1349	623	446	496	709	660	831	M16	651	460	460	958	204	754	1192	478	1161	399	330
<b>N1060X</b>	M-.xx.xR.xx.A.x.1.80	1850	1950	384	35	841	132	445	545	664	1345	684	1842	1219	623	489	539	709	660	831	M16	651	460	460	944	204	740	1092	310	1161	399	330
<b>N1060X</b>	M-.xx.xR.xx.A.x.1.100	1850	1950	384	35	854	145	445	545	664	1345	684	1858	1235	623	489	539	709	660	831	M16	651	460	460	848	204	644	1092	350	1161	399	330
<b>N1060X</b>	M-.xx.xR.xx.A.x.1.125	1850	1950	384	35	884	175	445	545	664	1345	684	1972	1349	623	489	539	709	660	831	M16	651	460	460	958	204	754	1192	478	1161	399	330

Approximate values



**ELECTRONIC OPERATION**

Model	Gas train	Operation	N880X		N925X		N1060X	
			Code	Price €	Code	Price €	Code	Price €
<b>M-.PR.SR.xx.A.1.80.EA</b>	DN80	PR (*)	02301455A		02301535A		02301595A	
<b>M-.PR.SR.xx.A.1.100.EA</b>	DN100	PR (*)	02301475A		02301555A		02301615A	
<b>M-.PR.SR.xx.A.1.125.EA</b>	DN125	PR (*)	02301495A		02301575A		02301635A	

SR = Standard combustion head (BS)

LR = 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 GAR DIRECTIVE 2016/426/EU**

**ELECTRONIC OPERATION**

Model	Gas train	Operation	N880X		N925X		N1060X	
			Code	Price €	Code	Price €	Code	Price €
<b>M-.MD.SR.xx.A.1.80.ES</b>	DN80	MD (**)	02301455S		02301535S		02301595S	
<b>M-.MD.SR.xx.A.1.100.ES</b>	DN100	MD (**)	02301475S		02301555S		02301615S	
<b>M-.MD.SR.xx.A.1.125.ES</b>	DN125	MD (**)	02301495S		02301575S		02301635S	

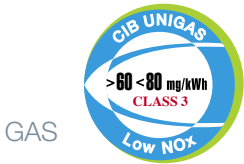
SR = Standard combustion head (BS)

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

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

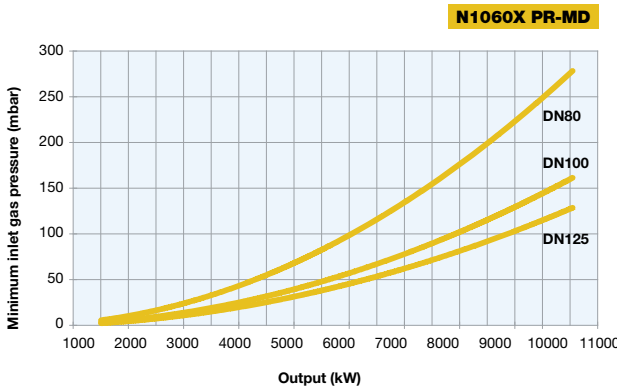
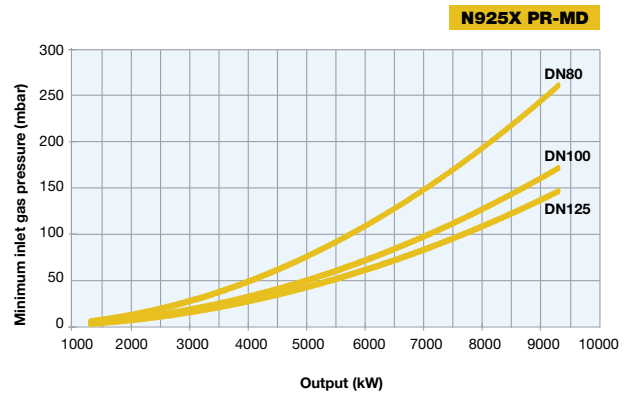
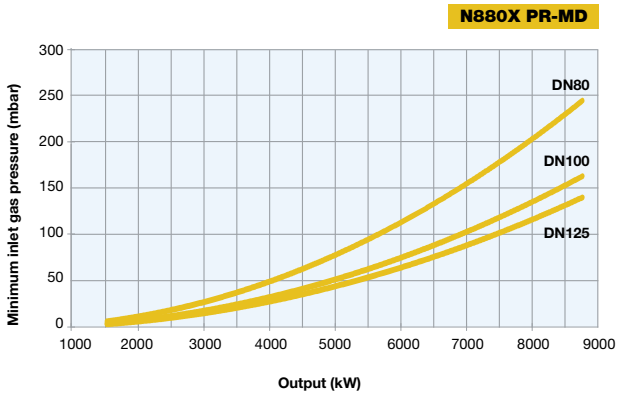
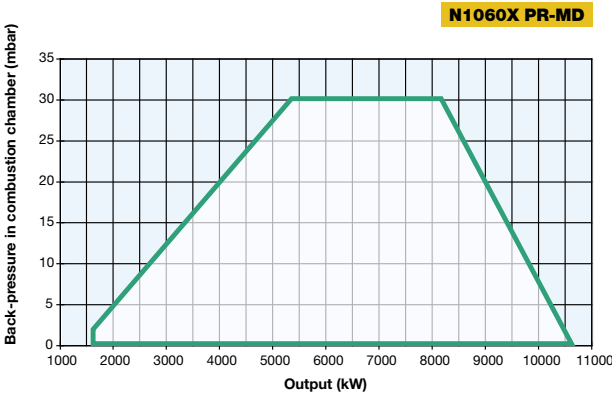
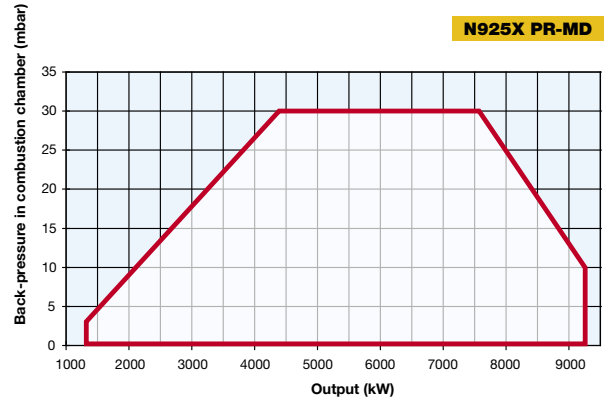
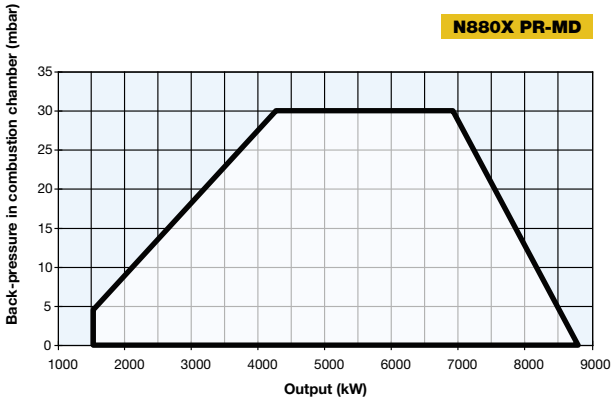
In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

**In compliance with GAR DIRECTIVE 2016/426/EU**



GAS

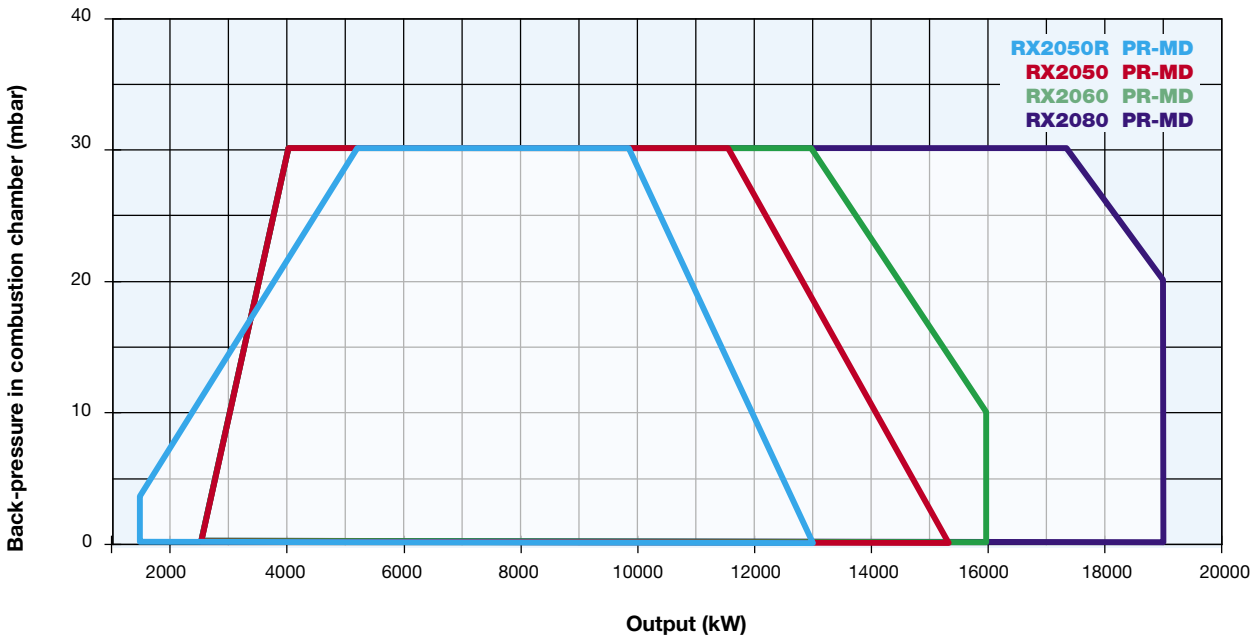
# N880X N925X N1060X mille SERIES



**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.



Designed to satisfy the most demanding industrial applications, the array “DUEMILA series” **Low NO<sub>x</sub> Class 3 (< 80 mg/kWh)** 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 products goes from 2.500 to 19.000 kW and its modulating ratio is 1:3. Higher modulating ratio (up to 1:10) is available, upon request, in those models with frequency inverter, O<sub>2</sub> probe and electronic control box.





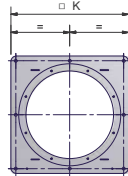
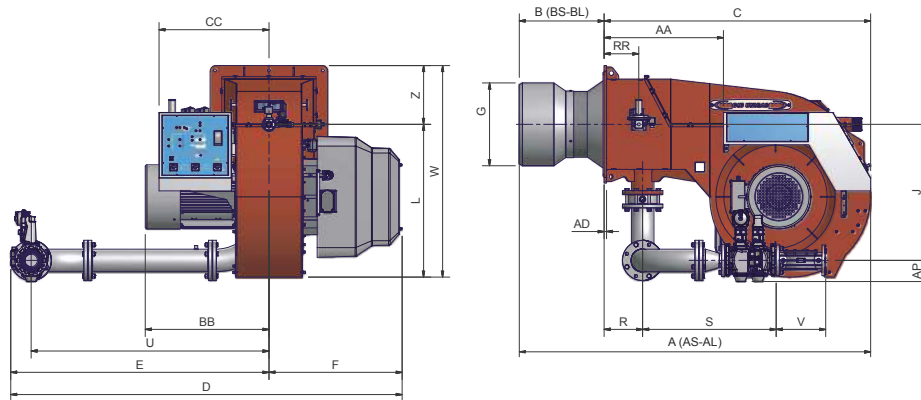
GAS

# RX2050R RX2050 RX2060 RX2080 **duemila** SERIES

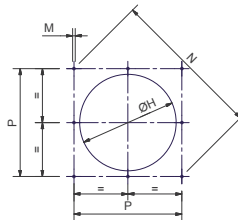
## TECHNICAL DETAILS

Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor kW	Gas connections	Noise level dBA
		min.	max.					
<b>RX2050R</b>	M-.xx.x.xx.A.1.xxx	1.780	13.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	37,0	DN80 - DN100 - DN125	92,5
<b>RX2050</b>	M-.xx.x.xx.A.1.xxx	2.500	15.200	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	37,0	DN80 - DN100 - DN125	92,5
<b>RX2060</b>	M-.xx.S.xx.A.1.xxx	2.500	16.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	45,0	DN80 - DN100 - DN125	91,7
<b>RX2080</b>	M-.xx.S.xx.A.1.xxx	2.500	19.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	55,0	DN100 - DN125	91,7

For the configuration of the gas train, see page 112-113.



Burner flange



Suggested boiler drilling

Type	Packaging dimensions (mm)			
	l	p	h	kg
<b>RX2050R</b>	2.540	1.890	1.820	1.360
<b>RX2050</b>	2.540	1.890	1.820	1.390
<b>RX2060</b>	2.396	1.886	1.969	1.360
<b>RX2080</b>	2.396	1.886	1.969	1.460

Approximate values

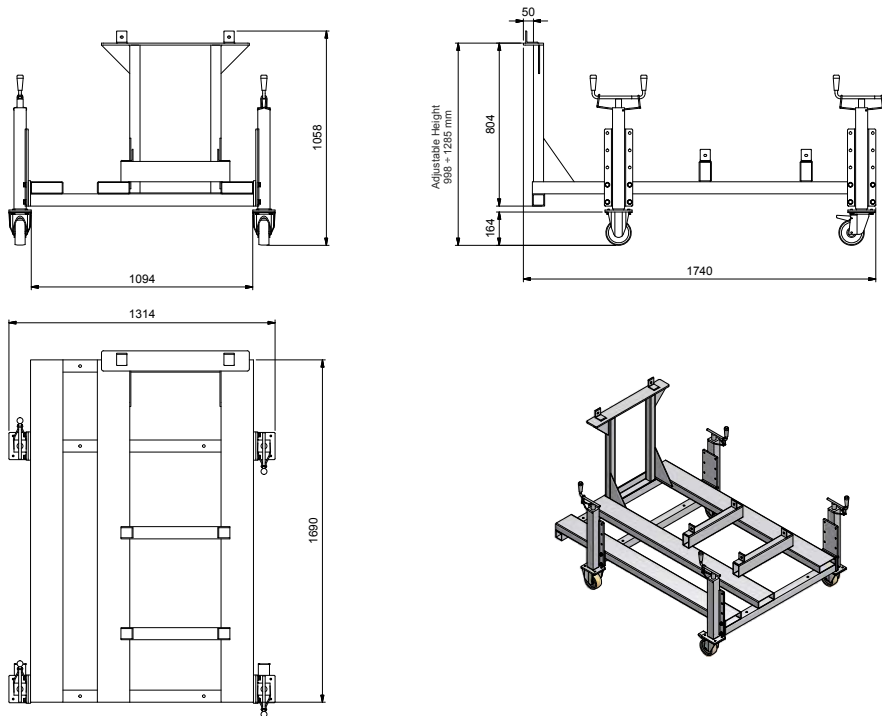
Type	Model	Overall dimensions (mm)																											
		AA	AS	AL	AD	AP	BB	BS*	BL*	C	CC	D	E	F	G*	H*	J	K	L	M	N	P	R	RR	S	U	V	W	Z
<b>RX2050R</b>	M-.xx.x.xx.A.1.80	741	2160	2260	15	132	768	500	650	1660	735	2431	1604	827	545	595	845	730	949	M16	948	670	239	215	827	1478	310	1314	365
<b>RX2050R</b>	M-.xx.x.xx.A.1.100	741	2160	2260	15	145	768	500	650	1660	735	2447	1620	827	545	595	845	730	949	M16	948	670	239	215	874	1478	350	1314	365
<b>RX2050R</b>	M-.xx.x.xx.A.1.125	741	2160	2260	15	175	768	500	650	1660	735	2461	1634	827	545	595	845	730	949	M16	948	670	239	215	755	1478	480	1314	365
<b>RX2050</b>	M-.xx.x.xx.A.1.80	741	2160	2260	15	132	768	500	650	1660	735	2431	1604	827	545	595	845	730	949	M16	948	670	239	215	827	1478	310	1314	365
<b>RX2050</b>	M-.xx.x.xx.A.1.100	741	2160	2260	15	145	768	500	650	1660	735	2447	1620	827	545	595	845	730	949	M16	948	670	239	215	874	1478	350	1314	365
<b>RX2050</b>	M-.xx.x.xx.A.1.125	741	2160	2260	15	175	768	500	650	1660	735	2461	1634	827	545	595	845	730	949	M16	948	670	239	215	755	1478	480	1314	365
<b>RX2060</b>	M-.xx.S.xx.A.1.80	741	2160	-	15	132	807	500	-	1660	735	2309	1463	846	550	600	775	850	949	M16	1117	790	239	215	827	1336	310	1374	425
<b>RX2060</b>	M-.xx.S.xx.A.1.100	741	2160	-	15	145	807	500	-	1660	735	2325	1479	846	550	600	775	850	949	M16	1117	790	239	215	874	1336	350	1374	425
<b>RX2060</b>	M-.xx.S.xx.A.1.125	741	2160	-	15	175	807	500	-	1660	735	2343	1497	846	550	600	775	850	949	M16	1117	790	239	215	755	1336	480	1374	425
<b>RX2080</b>	M-.xx.S.xx.A.1.100	741	2180	-	15	145	885	520	-	1660	735	2325	1479	846	700	750	775	850	949	M16	1117	790	239	215	874	1336	350	1374	425
<b>RX2080</b>	M-.xx.S.xx.A.1.125	741	2180	-	15	175	885	520	-	1660	735	2343	1497	846	700	750	775	850	949	M16	1117	790	239	215	755	1336	480	1374	425

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

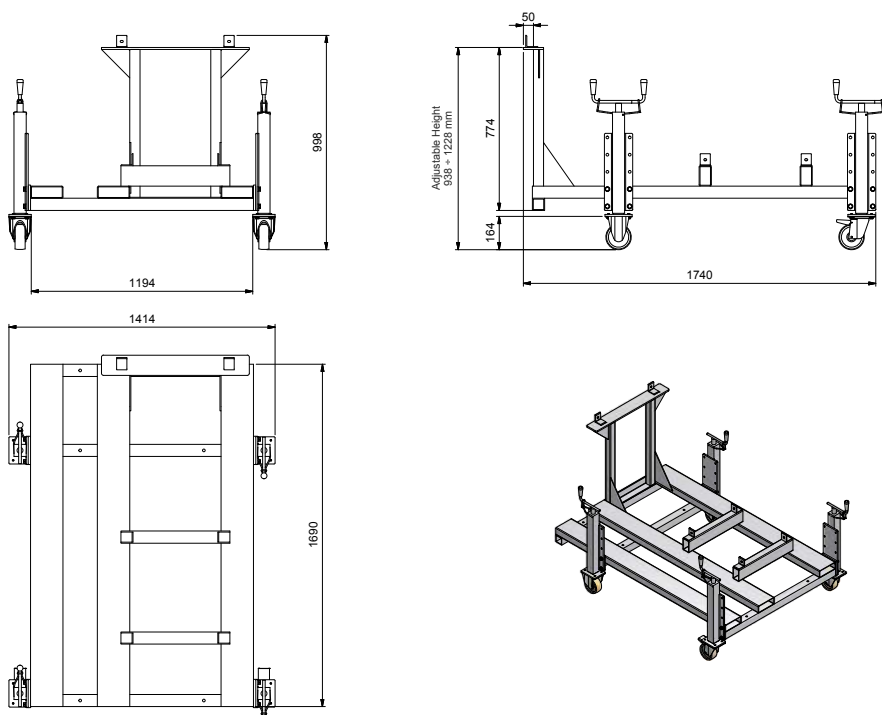
Approximate values

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**





# RX2050R RX2050 duemila SERIES RX2060 RX2080

## ELECTRONIC OPERATION

Model	Gas train	Operation	RX2050R		RX2050	
			Code	Price €	Code	Price €
M-.PR.S.xx.A.1.80.EA	DN80	PR (*)	03201195A		03201255A	
M-.PR.S.xx.A.1.100.EA	DN100	PR (*)	03201215A		03201275A	
M-.PR.S.xx.A.1.125.EA	DN125	PR (*)	03201235A		03201295A	

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 GAR DIRECTIVE 2016/426/EU**

## ELECTRONIC OPERATION

Model	Gas train	Operation	RX2050R		RX2050	
			Code	Price €	Code	Price €
M-.MD.S.xx.A.1.80.ES	DN80	MD (**)	03201195S		03201255S	
M-.MD.S.xx.A.1.100.ES	DN100	MD (**)	03201215S		03201275S	
M-.MD.S.xx.A.1.125.ES	DN125	MD (**)	03201235S		03201295S	

Model	Gas train	Operation	RX2060		RX2080	
			Code	Price €	Code	Price €
M-.MD.S.xx.A.1.80.ES	DN80	MD (**)	03201135S		-	
M-.MD.S.xx.A.1.100.ES	DN100	MD (**)	03201145S		03201175S	
M-.MD.S.xx.A.1.125.ES	DN125	MD (**)	03201155S		03201185S	

S = Standard combustion head (BS)

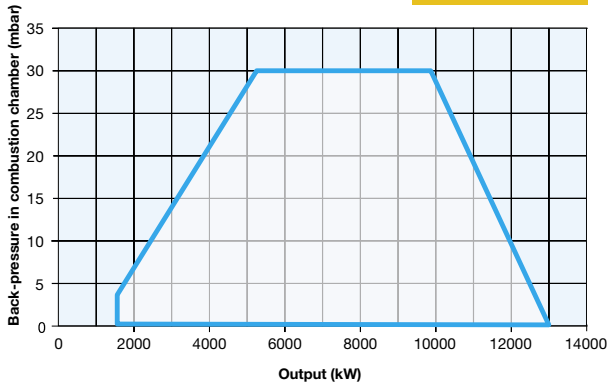
L = For long combustion head version (BL) increase the price (see price list)

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

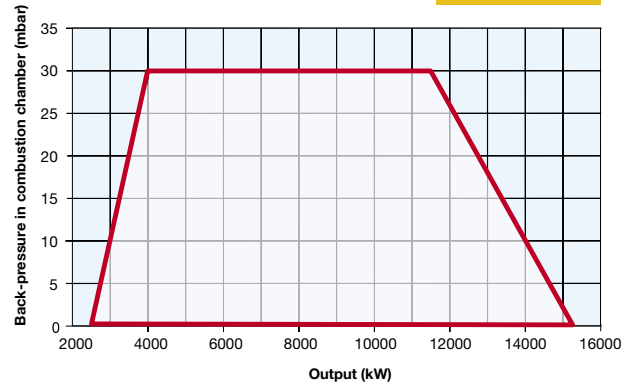
In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

**In compliance with GAR DIRECTIVE 2016/426/EU**

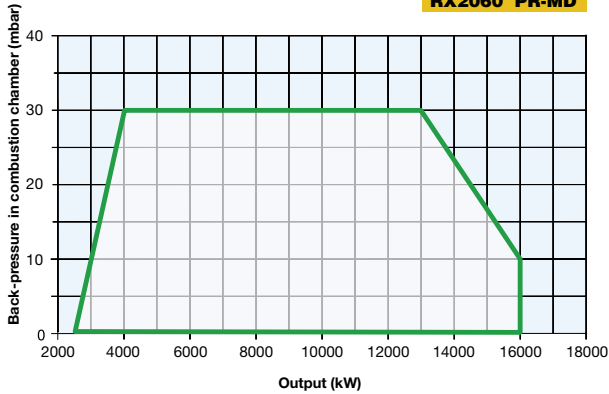
**RX2050R PR-MD**



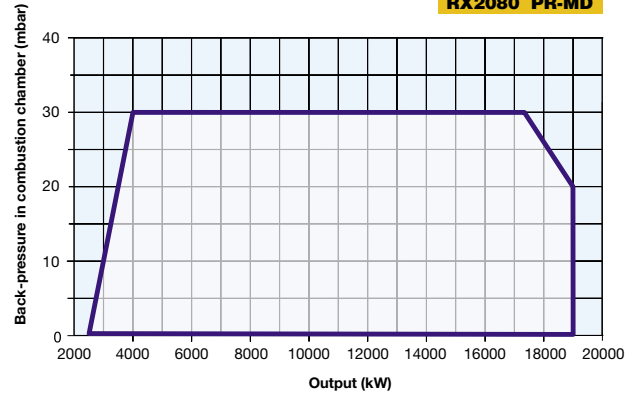
**RX2050 PR-MD**



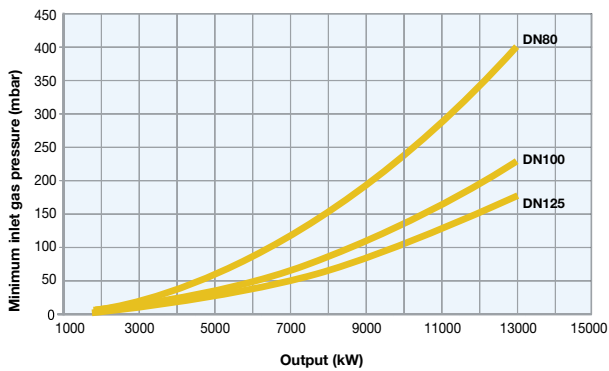
**RX2060 PR-MD**



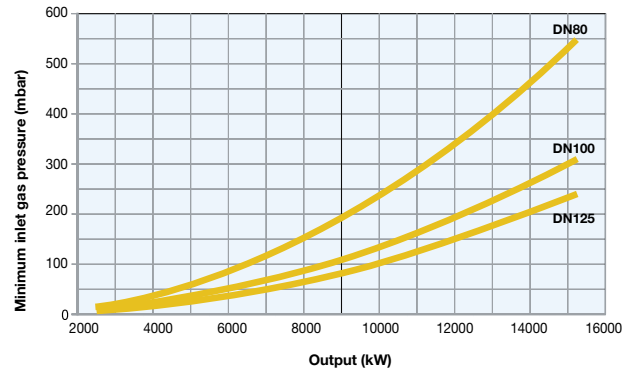
**RX2080 PR-MD**



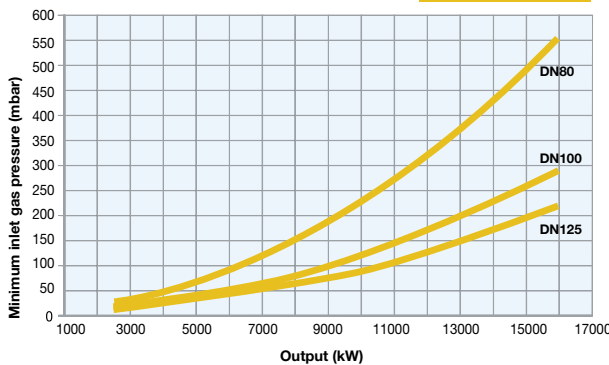
**RX2050R PR-MD**



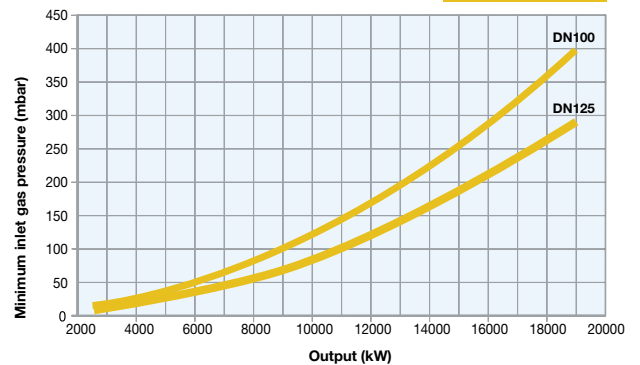
**RX2050 PR-MD**



**RX2060 PR-MD**



**RX2080 PR-MD**



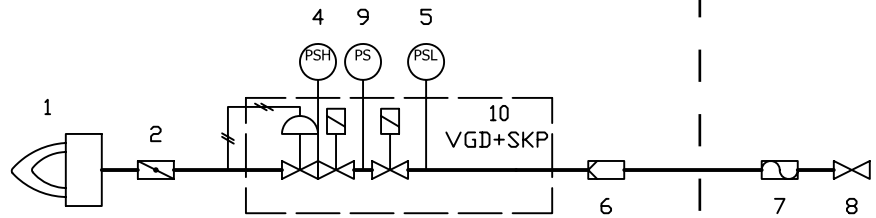
Attention: the graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.



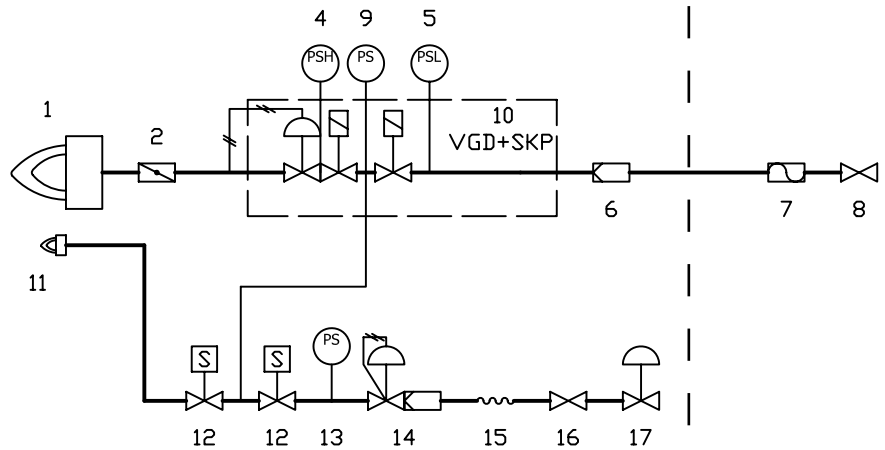
# GAS TRAINS SIEMENS VGD

MANUFACTURER | INSTALLER

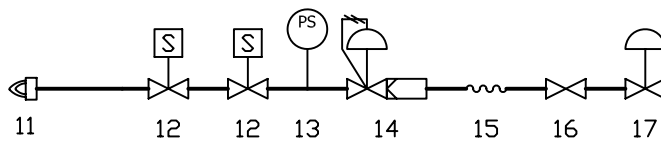
Gas train with valve group VGD,  
c/w built-in pressure governor  
+ leakage control pressure switch.



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.



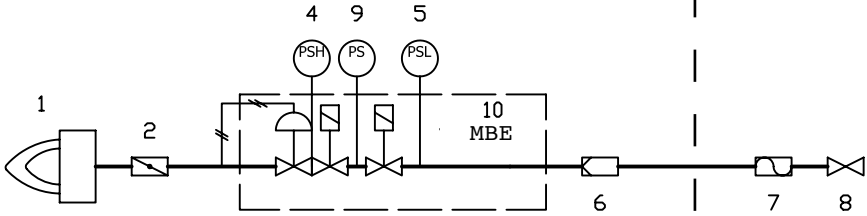
## KEY

- |   |  |    |                                       |
|---|--|----|---------------------------------------|
| 1 | Burner                                 | 10 | Valves group VGD                      |
| 2 | Butterfly valve                        | 11 | Pilot burner                          |
| 3 | -                                      | 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 (optional) |
| 7 | Anti-vibrating joint                   | 16 | Pilot manual cut off valve (optional) |
| 8 | Manual cut off valve                   | 17 | Pilot gas reducer (optional)          |
| 9 | Leakage control pressure switch        |    |                                       |

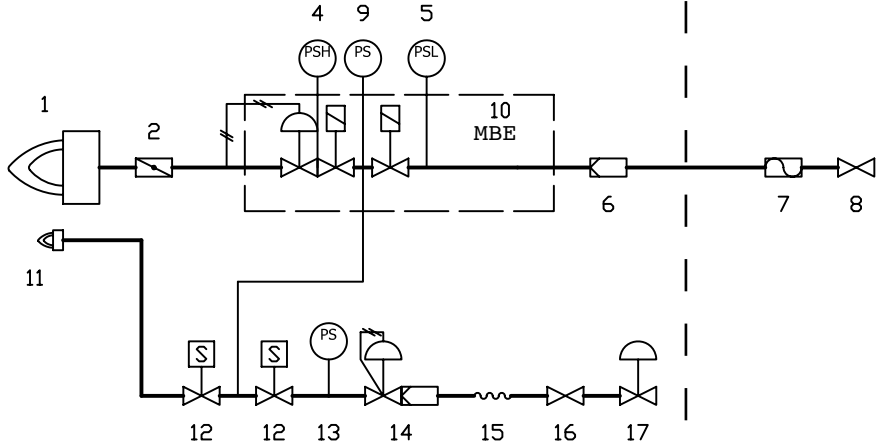
# GAS TRAINS DUNGS MBE

MANUFACTURER | INSTALLER

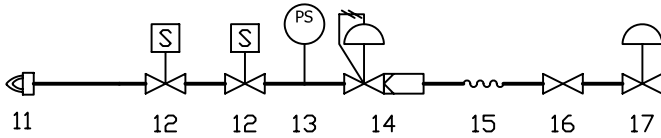
Gas train with valve group MBE,  
c/w built-in pressure governor  
+ leakage control pressure switch  
+ max pressure switch.



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



Pilot train with double valve and pressure  
governor with filter.



**KEY**

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>1 Burner</li> <li>2 Butterfly valve</li> <li>3 -</li> <li>4 Maximum gas pressure switch</li> <li>5 Minimum gas pressure switch</li> <li>6 Gas filter</li> <li>7 Anti-vibrating joint</li> <li>8 Manual cut off valve</li> <li>9 Leakage control pressure switch</li> </ul> | <ul style="list-style-type: none"> <li>10 Valves group MBE</li> <li>11 Pilot burner</li> <li>12 Pilot valve</li> <li>13 Pilot minimum gas pressure switch</li> <li>14 Pilot pressure governor</li> <li>15 Pilot anti-vibrating joint (optional)</li> <li>16 Pilot manual cut off valve (optional)</li> <li>17 Pilot gas reducer (optional)</li> </ul> |
|---|---|



# LIGHT OIL BURNERS

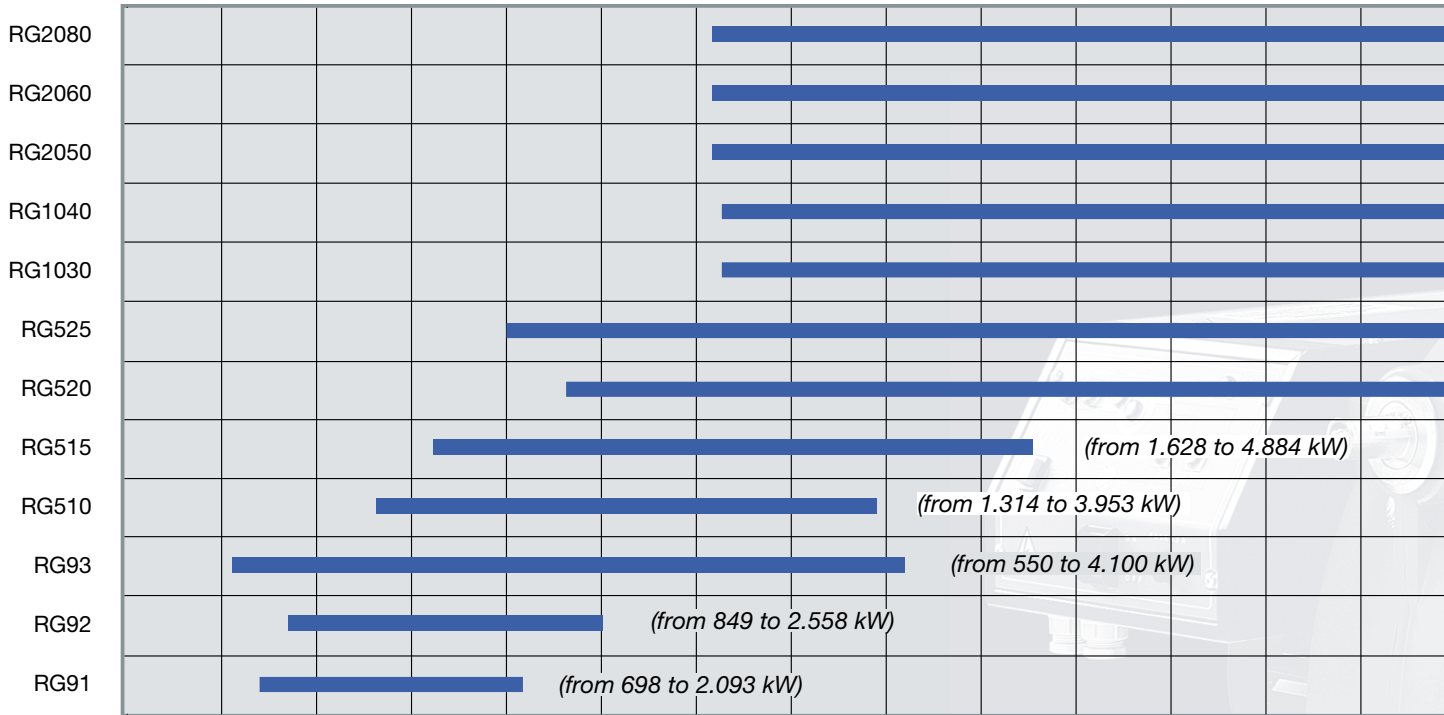
## novanta series

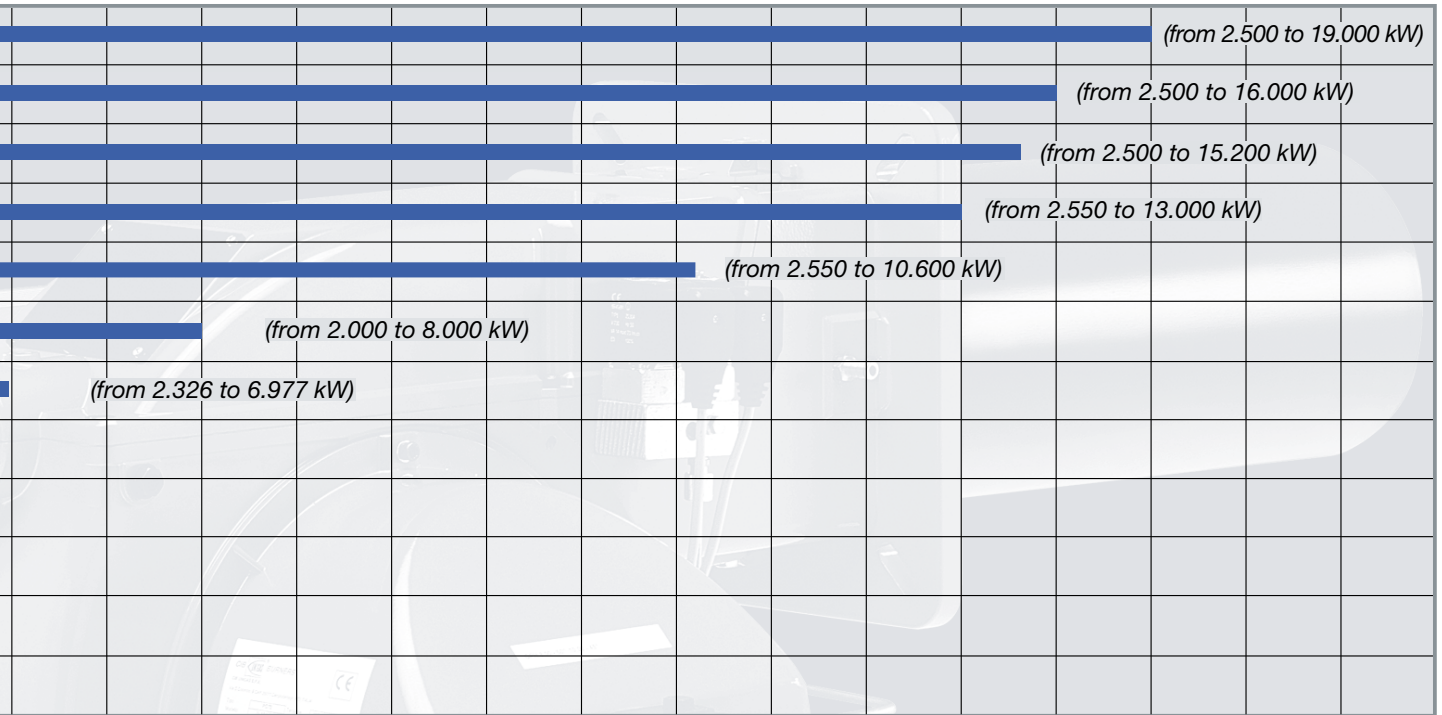
- RG91** - AB/PR/MD
- RG92** - PR/MD
- RG93** - PR/MD

## cinquecento series

- RG510** - PR/MD
- RG515** - PR/MD
- RG520** - PR/MD
- RG525** - PR/MD

### Type





# OPTIONS GAS BURNERS



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

Gas connections	Model	Code	Price €
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 €
2"	GA50	2.34.00.66	



## 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 €
2"	F50	2.09.01.06	



## 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	



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

Gas connections	Model	Code	Price €
2"	S.P.50	2.80.00.67	



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

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	



## MAXIMUM PRESSURE

Description	Code	Price €
GAS MAXIMUM PRESSURE SWITCH KIT	2.19.12.41	



### SUPPORT FOR PRESSURE GAUGE

Model	Code	Price €
Push botton 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 €
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 figure

The station includes all the components as shown in the picture (see scheme and legend)

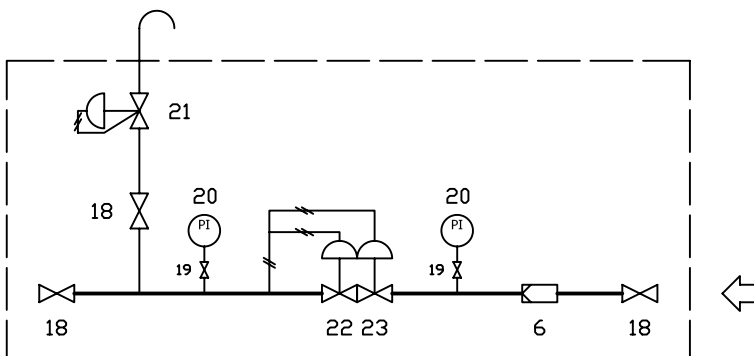
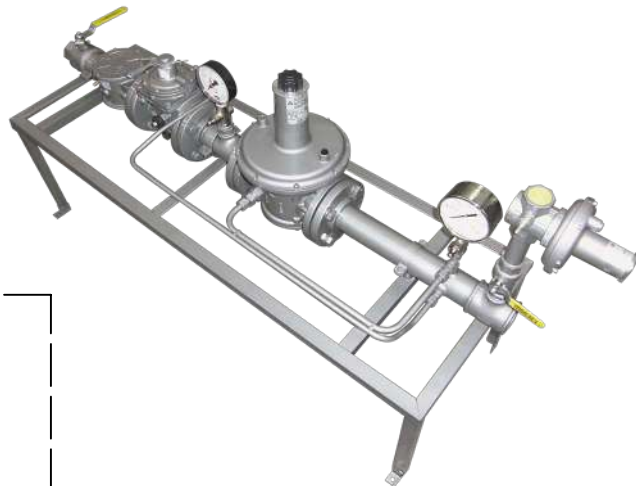
The station is pre-assembled on a frame

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		