

novanta-cinquecento series

GAS/LIGHT OIL

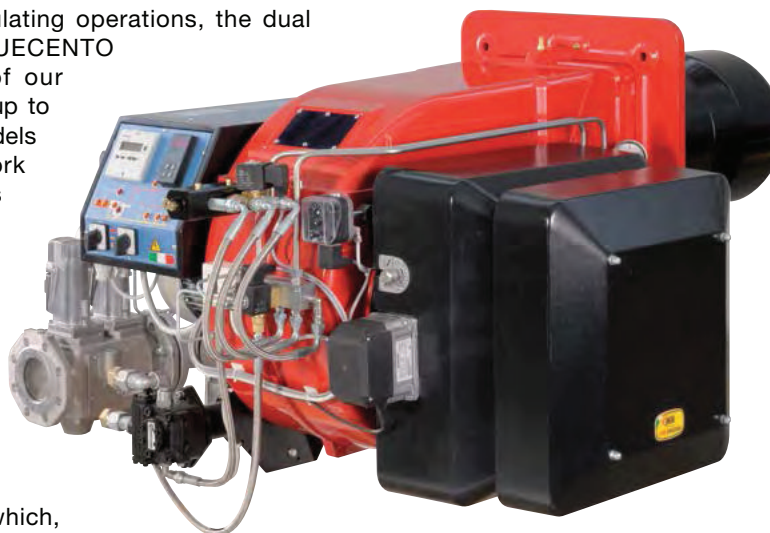
HR91A HR92A HR93A HR512A HR515A HR520A HR525A



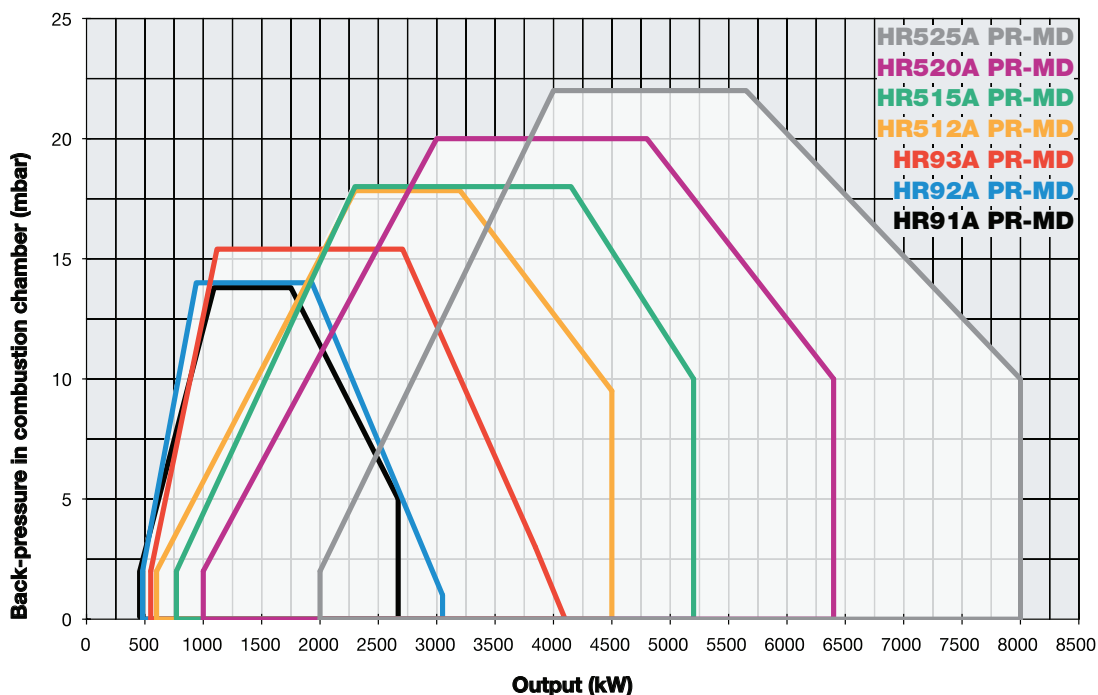
Provided with Progressive and Modulating operations, the dual fuel burners series NOVANTACINQUECENTO represents the max achievement of our experience on medium-large burners (up to 8000 kW). Like all other dual fuel models they combine all mechanisms to work with two different fuels separately. This is possible because of a separated circuit for the oil pump motor; it means that the oil pump motor is not running when burner is working on natural gas.

They are equipped with a high performance combustion head designed to achieve the max efficiency when working on natural gas; combustion head is also equipped with a by-passing nozzle which, using a pressure regulator, can reach a turndown ratio 1:3.

The control panel facia is printed with a mimic diagram fitted with neon lamps to indicate the different stages of the burner operation. The burner is provided by an UV photocell to detect the flame during operation.



Electronic set up (optional)



novanta-cinquecento series

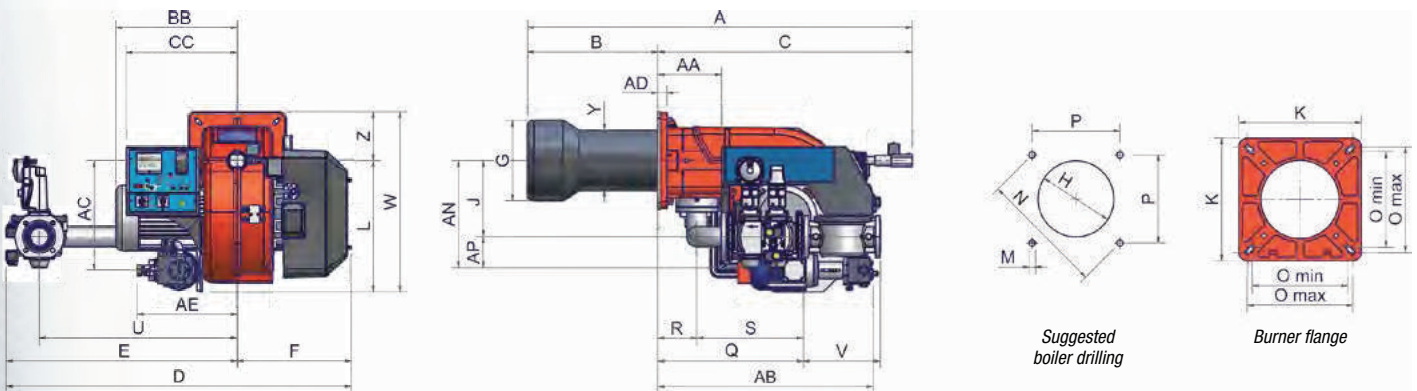
HR91A HR92A HR93A HR512A HR515A HR520A HR525A

GAS/LIGHT OIL

TECHNICAL DETAILS

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

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



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

(*) Approximate values

Type	Model	Overall dimensions* (mm)																																
		A	AA	AB	AC	AD	AE	AN	AP	B	BB	C	CC	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	U	V	W	Y	Z	
		min. max.																																
HR91A	MG.xx.S.IT.A.1.50	1431	242	820	425	35	380	429	100	490	419	941	422	1159	725	434	265	295	329	360	505	M12	417	280	310	295	522	148	374	624	216	690	228	185
HR91A	MG.xx.S.IT.A.1.65	1431	242	820	425	35	380	406	118	490	419	941	422	1309	875	434	265	295	288	360	505	M12	417	280	310	295	551	148	403	750	292	690	228	185
HR91A	MG.xx.S.IT.A.1.80	1431	242	820	425	35	380	439	132	490	419	941	422	1311	877	434	265	295	307	360	505	M12	417	280	310	295	592	148	444	750	322	690	228	185
HR91A	MG.xx.S.IT.A.1.100	1431	242	820	425	35	380	592	145	490	419	941	422	1401	967	434	265	295	447	360	505	M12	417	280	310	295	672	148	524	824	382	690	228	185
HR92A	MG.xx.S.IT.A.1.50	1431	242	820	425	35	380	429	100	490	419	941	422	1159	725	434	269	299	329	360	505	M12	417	280	310	295	522	148	374	624	216	690	228	185
HR92A	MG.xx.S.IT.A.1.65	1431	242	820	425	35	380	406	118	490	419	941	422	1309	875	434	269	299	288	360	505	M12	417	280	310	295	551	148	403	750	292	690	228	185
HR92A	MG.xx.S.IT.A.1.80	1431	242	820	425	35	380	439	132	490	419	941	422	1311	877	434	269	299	307	360	505	M12	417	280	310	295	592	148	444	750	322	690	228	185
HR92A	MG.xx.S.IT.A.1.100	1431	242	820	425	35	380	592	145	490	419	941	422	1401	967	434	269	299	447	360	505	M12	417	280	310	295	672	148	524	824	382	690	228	185
HR93A	MG.xx.S.IT.A.1.50	1461	242	820	425	35	380	429	100	495	460	966	422	1159	725	434	304	344	329	360	505	M12	417	280	310	295	522	148	374	624	216	690	228	185
HR93A	MG.xx.S.IT.A.1.65	1461	242	820	425	35	380	406	118	495	460	966	422	1309	875	434	304	344	288	360	505	M12	417	280	310	295	551	148	403	750	292	690	228	185
HR93A	MG.xx.S.IT.A.1.80	1461	242	820	425	35	380	439	132	495	460	966	422	1311	877	434	304	344	307	360	505	M12	417	280	310	295	592	148	444	750	322	690	228	185
HR93A	MG.xx.S.IT.A.1.100	1461	242	820	425	35	380	592	145	495	460	966	422	1401	967	434	304	344	447	360	505	M12	417	280	310	295	672	148	524	824	382	690	228	185

(*) Approximate values

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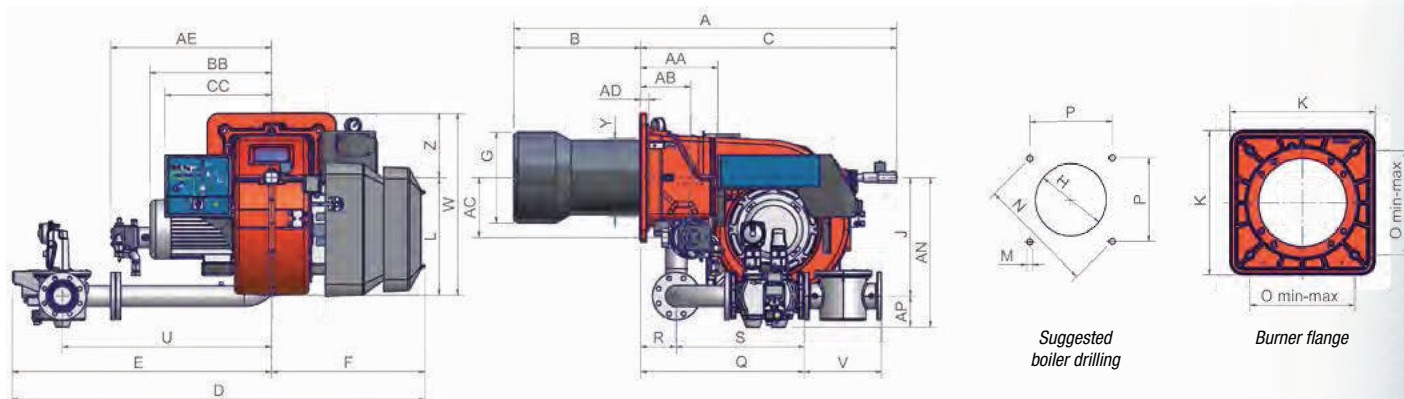
HR91A HR92A HR93A HR512A HR515A HR520A HR525A



TECHNICAL DETAILS

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

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



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

(*) Approximate values

Type	Model	Overall dimensions* (mm)																																
		A	AA	AB	AC	AD	AE	AN	AP	B	BB	C	CC	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	U	UU	V	W	Y	Z
HR512A	MG.xx.S.IT.A.1.50	1586	323	209	250	35	609	594	100	530	508	1056	446	1722	1079	643	340	380	494	540	492	M14	552	390	390	755	150	605	843	-	216	762	328	270
HR512A	MG.xx.S.IT.A.1.65	1586	323	209	250	35	609	612	118	530	508	1056	446	1692	1049	643	340	380	494	540	492	M14	552	390	390	633	150	483	843	-	292	762	328	270
HR512A	MG.xx.S.IT.A.1.80	1586	323	209	250	35	609	626	132	530	508	1056	446	1727	1084	643	340	380	494	540	492	M14	552	390	390	685	150	535	875	-	322	762	328	270
HR512A	MG.xx.S.IT.A.1.100	1586	323	209	250	35	609	639	145	530	508	1056	446	1810	1167	643	340	380	494	540	492	M14	552	390	390	792	150	642	942	-	382	762	328	270
HR515A	MG.xx.S.IT.A.1.50	1600	323	209	250	35	672	594	100	530	508	1070	446	1722	1079	643	380	420	494	540	492	M14	552	390	390	755	150	605	843	-	216	762	328	270
HR515A	MG.xx.S.IT.A.1.65	1600	323	209	250	35	672	612	118	530	508	1070	446	1692	1049	643	380	420	494	540	492	M14	552	390	390	633	150	483	843	-	292	762	328	270
HR515A	MG.xx.S.IT.A.1.80	1600	323	209	250	35	672	626	132	530	508	1070	446	1725	1084	643	380	420	494	540	492	M14	552	390	390	685	150	535	875	-	322	762	328	270
HR515A	MG.xx.S.IT.A.1.100	1600	323	209	250	35	672	639	145	530	508	1070	446	1810	1167	643	380	420	494	540	492	M14	552	390	390	792	150	642	942	-	382	762	328	270
HR520A	MG.xx.S.IT.A.1.50	1670	323	199	254	35	672	594	100	530	508	1140	446	1722	1079	643	400	450	494	540	492	M14	552	390	390	755	150	605	843	114	216	876	328	270
HR520A	MG.xx.S.IT.A.1.65	1670	323	199	254	35	672	612	118	530	508	1140	446	1692	1049	643	400	450	494	540	492	M14	552	390	390	633	150	483	843	114	292	876	328	270
HR520A	MG.xx.S.IT.A.1.80	1670	323	199	254	35	672	626	132	530	508	1140	446	1727	1084	643	400	450	494	540	492	M14	552	390	390	685	150	535	875	114	322	876	328	270
HR520A	MG.xx.S.IT.A.1.100	1670	323	199	254	35	672	639	145	530	508	1140	446	1810	1167	643	400	450	494	540	492	M14	552	390	390	792	150	642	942	114	382	876	328	270
HR525A	MG.xx.S.IT.A.1.65	1670	145	189	275	35	682	612	118	530	650	1140	598	1692	1049	643	434	484*	494	540	492	M14	552	390	390	633	150	483	843	172	292	934	328	270
HR525A	MG.xx.S.IT.A.1.80	1670	145	189	275	35	682	626	132	530	650	1140	598	1727	1084	643	434	484*	494	540	492	M14	552	390	390	685	150	535	875	172	322	934	328	270
HR525A	MG.xx.S.IT.A.1.100	1670	145	189	275	35	682	639	145	530	650	1140	598	1810	1167	643	434	484*	494	540	492	M14	552	390	390	792	150	642	942	172	382	934	328	270

(*) Approximate values

novanta-cinquecento series

HR91A HR92A HR93A HR512A HR515A HR520A HR525A

GAS/LIGHT OIL

MECHANICAL OPERATION

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

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

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

■ Burner equipped with external air inlet

(*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, pages 238)

In compliance with DIRECTIVE 2009/142/CE

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



ELECTRONIC OPERATION

Model	Gas train	Operation	HR91A		HR92A		HR93A	
			Code	Price €	Code	Price €	Code	Price €
MG.PR.S.IT.A.1.50.EC	2"	PR	01207175C		01207215C		01207135C	
MG.PR.S.IT.A.1.65.EC	DN65	PR	01207185C		01207225C		01207145C	
MG.PR.S.IT.A.1.80.EC	DN80	PR	01207195C		01207235C		01207155C	
MG.PR.S.IT.A.1.100.EC	DN100	PR	01207205C		01207245C		01207165C	
MG.MD.S.IT.A.1.50.EC	2"	MD(*)	01207175G		01207215G		01207135G	
MG.MD.S.IT.A.1.65.EC	DN65	MD(*)	01207185G		01207225G		01207145G	
MG.MD.S.IT.A.1.80.EC	DN80	MD(*)	01207195G		01207235G		01207155G	
MG.MD.S.IT.A.1.100.EC	DN100	MD(*)	01207205G		01207245G		01207165G	
MG.MD.S.xx.A.1.50.ES	2"	MD(*)	01207175S		01207215S		01207135S	
MG.MD.S.xx.A.1.65.ES	DN65	MD(*)	01207185S		01207225S		01207145S	
MG.MD.S.xx.A.1.80.ES	DN80	MD(*)	01207195S		01207235S		01207155S	
MG.MD.S.xx.A.1.100.ES	DN100	MD(*)	01207205S		01207245S		01207165S	

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

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

(*) In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, pages 238)

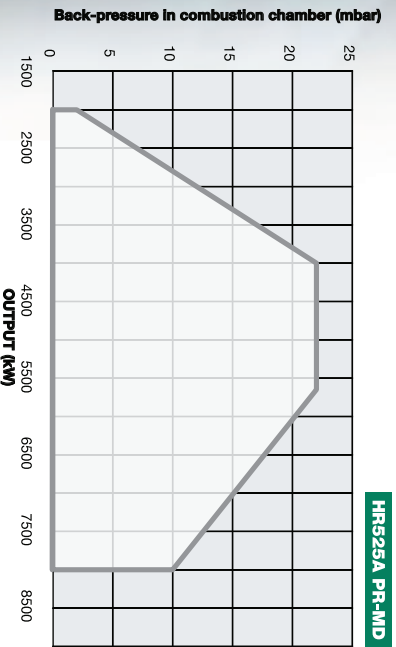
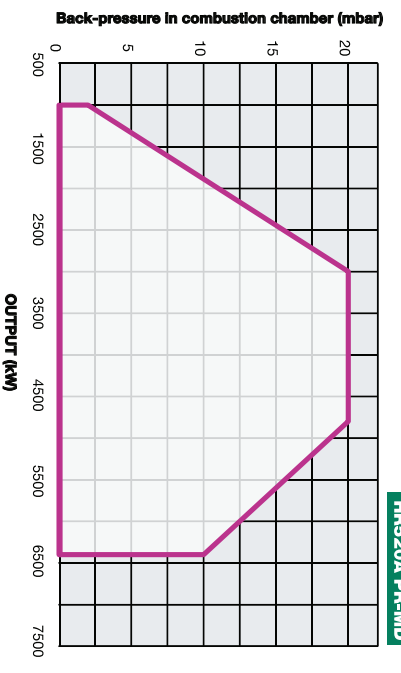
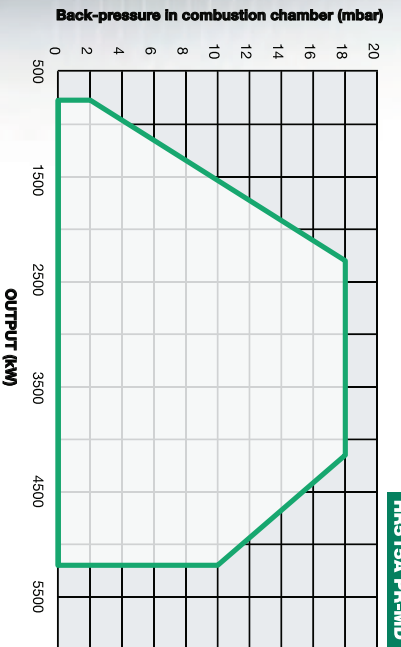
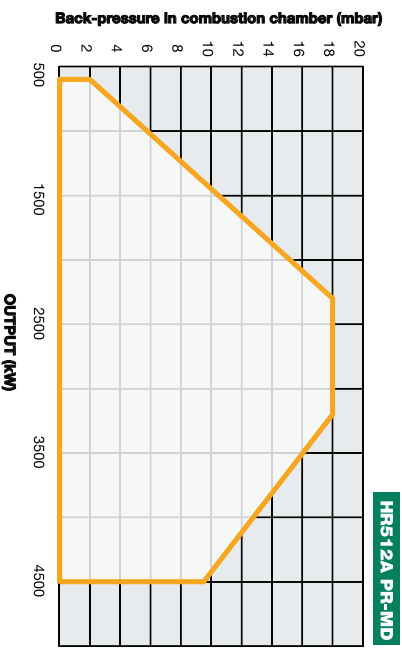
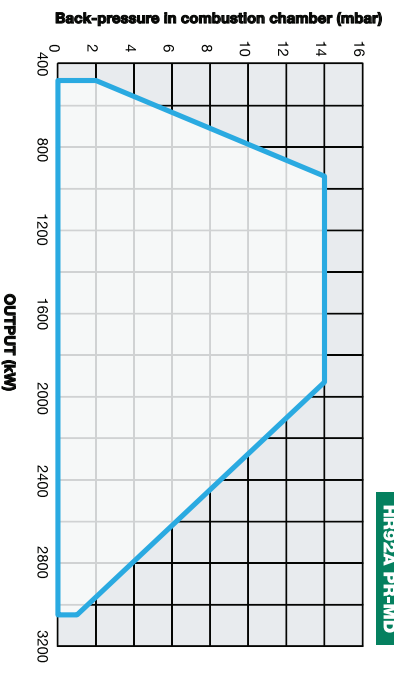
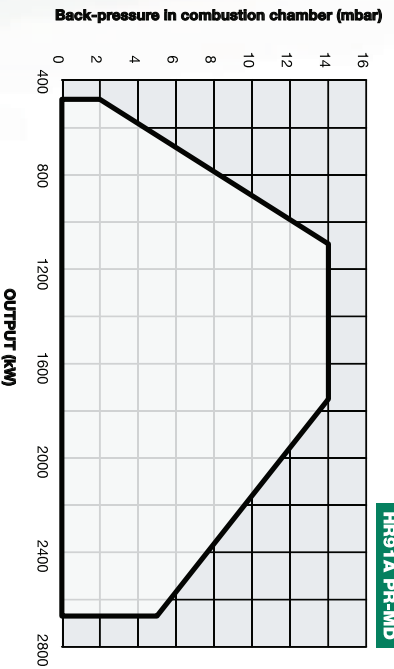
In compliance with DIRECTIVE 2009/142/CE

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

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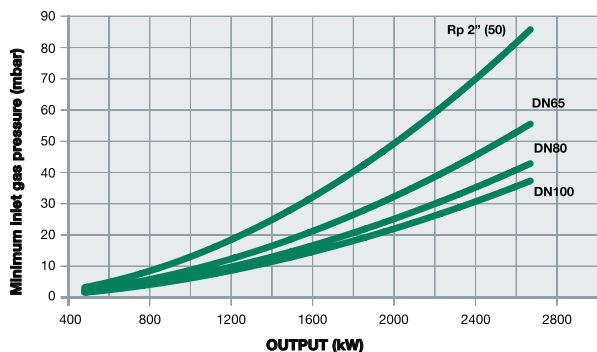
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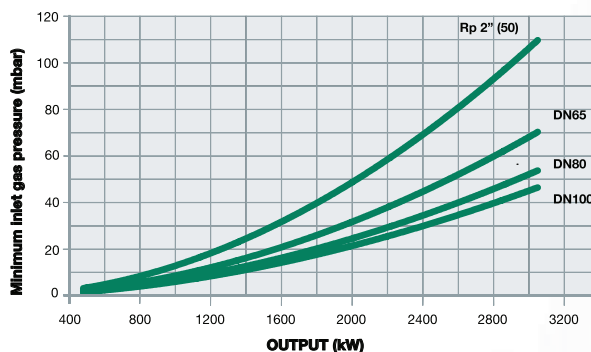
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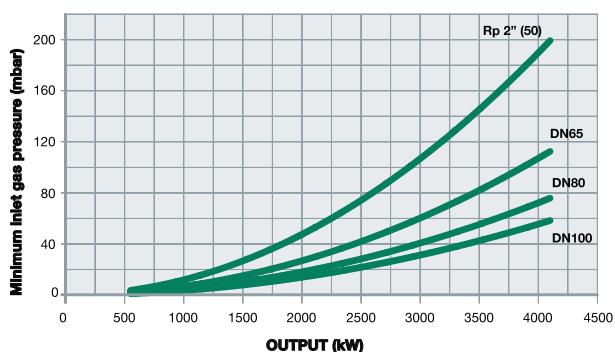
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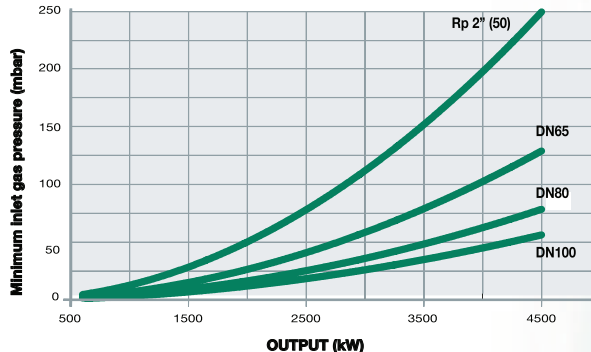
HR92A PR-MD



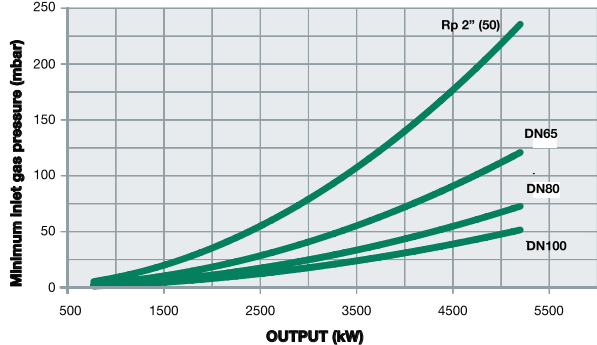
HR93A PR-MD



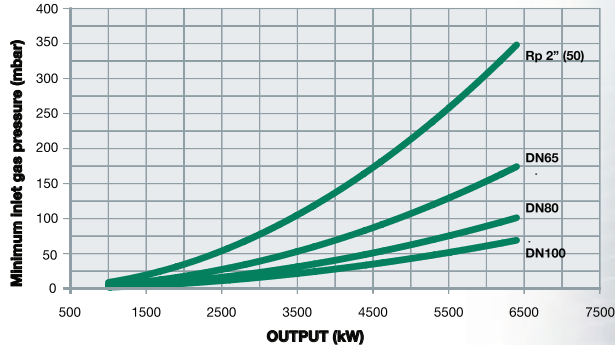
HR512A PR-MD



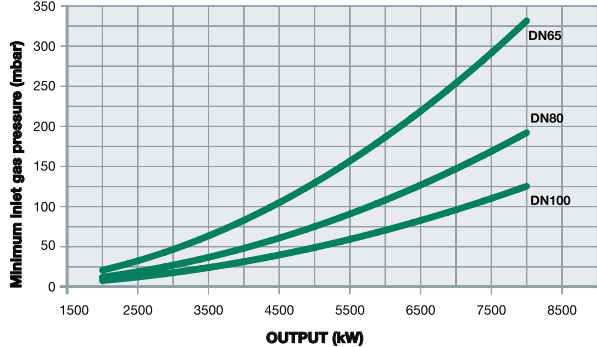
HR515A PR-MD



HR520A PR-MD



HR525A PR-MD



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