

elco

VECTRON

MONOBLOCK BURNERS

11 - 2300 kW



VECTRON

ELCO sets the standard for perfection with its gas, light oil and dual fuel program

Reliable heating solutions for every requirement

Wherever small or medium-scale heating solution is needed, ELCO is the best partner you can rely on. A comprehensive offer of tailor-made solutions is proposed by ELCO and offered by its worldwide network of distributors.

A partner in professional heating offering a wide range of burner operations to fit individual and commercial needs with optimum combustion technology respectful of sustainable environment.

VECTRON: an optimal combination of experience and innovation

With its gas and light oil burners series VECTRON, ELCO offers a product range capitalising more than 80 years of experience in the development of burners in all sizes.

All burners series VECTRON are characterized by economical consumption, ease of installation, adjustment and maintenance embedded in an excellent product engineering.

The new generation models are equipped with an integrated display featuring an interactive, intuitive communication system.

Burner and packaging are 100% recyclable.

VECTRON G

Ranging from the output of 14,5 to 2300 kW VECTRON models offer a wide choice of operation, one and two stages, progressive pneumatic, modulating with electronic compound and a complete program of gas burners with speed control.

VECTRON GL

ELCO offers its dual fuel range working in gas and in light oil from 35 to 2050 kW, with models available in one stage, two stages and progressive pneumatic operation.

VECTRON L

The light oil program ranging from the output of 11 to 2080 kW includes powerful variants for all applications and low-emission models with Blue and Yellow flame technology.

Competent advice

Your contacts at ELCO and its partners are recognized experts with years of experience.

Our worldwide support starts from concept creation to planning, design and project management up to commissioning and on-going operation of the plant throughout its life cycle.

Outstanding service

As an ELCO customer, you can rely on your installation to perform reliably.

Our guarantee is backed up by a service that sets standards in our field.

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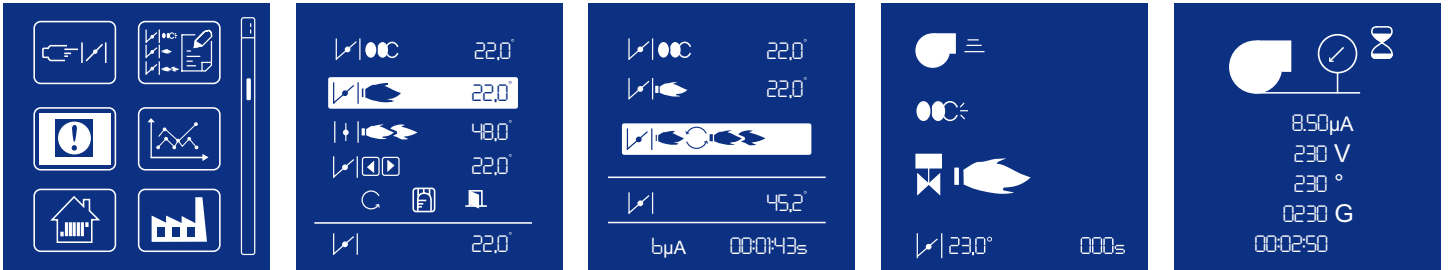
MAIN CHARACTERISTICS OF THE RANGE

Communication

Choose an intuitive and interactive system

The new MDE2 System and the Elcogram, equipped on VECTRON range constantly give real-time information to professional operators.

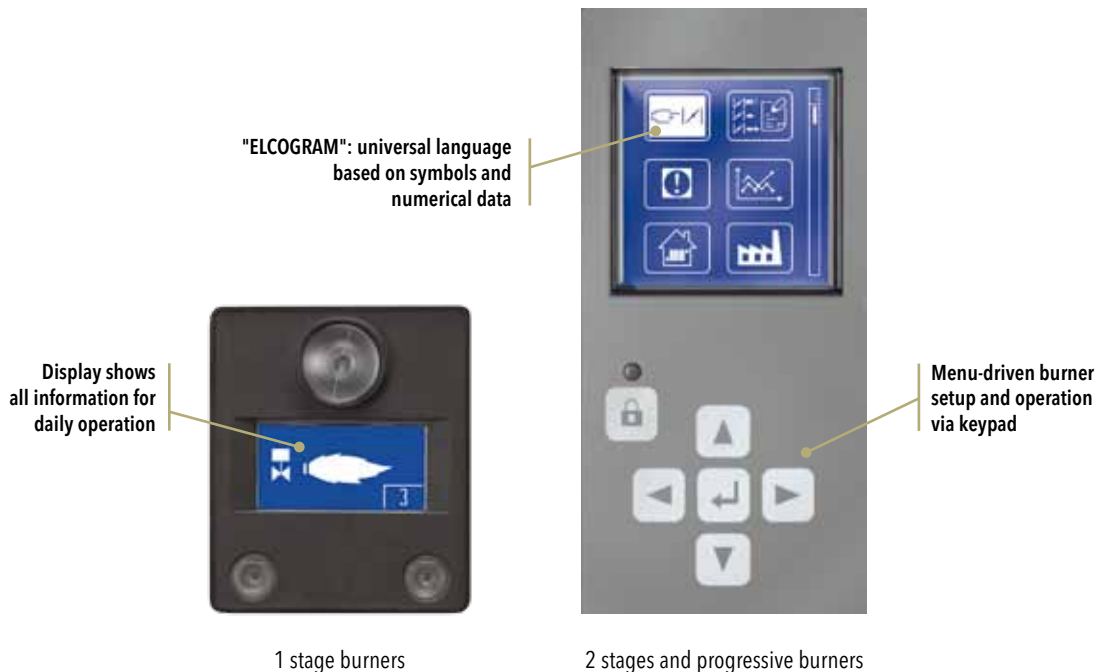
- **During the commissioning**
The setting of all necessary parameters for the burner operation is carried out by a user-friendly method thanks to the 5 buttons and the big size display.
- **During the burner operation**
The instantaneous data of each ignition follow one another in real time, allowing a quick check of the burner running (voltage value, flame signal, time for ignition...)
- **At each operation cycle**
The system records every event that happened during the last heating season and displays the stored data in the form of statistics.



Elcogram, a universal language

As ELCO products are distributed worldwide, the company has developed a universal language composed of pictograms and numerical data.

The pictograms use the majority of the symbols used on the wiring diagrams which are recognised and understood by all Nations. This ensures that information is easier to read than ever before.



ELCO OPERATIONS AND SYSTEMS

Duo (D)

The heat is even cleaner and more efficient

Through an optimized combustion head design, patented as IME (Multi-stage Injection), this burner technology ensures a stable combustion quality and simultaneously ensures excellent energy efficiency.

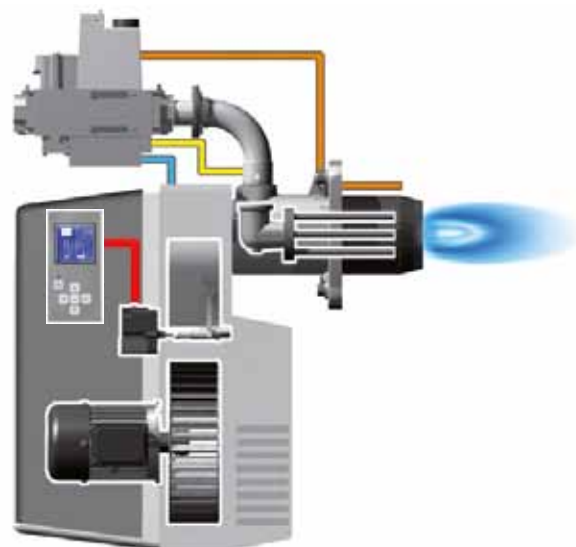
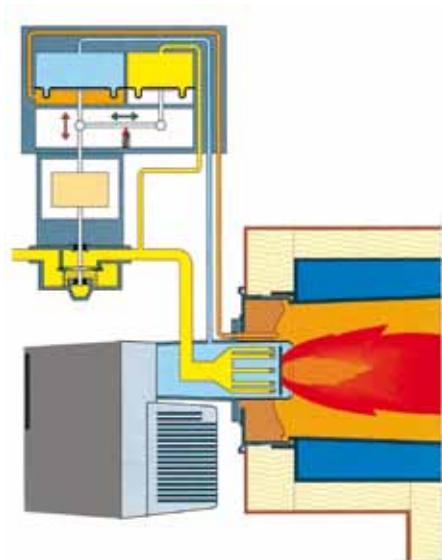


Duo Plus (DP)

An outstanding technology for our gas burners

Developed and produced by ELCO, the AGP (proportional air-gas) system provides:

- perfect stability of the air-gas mixture;
- a constantly high CO₂ content over the whole burner output range;
- precise control of air excess, which is important for high-efficiency operation, in particular for condensing generators.



Variatron (V)

Cutting-edge technology for our modulating gas burners

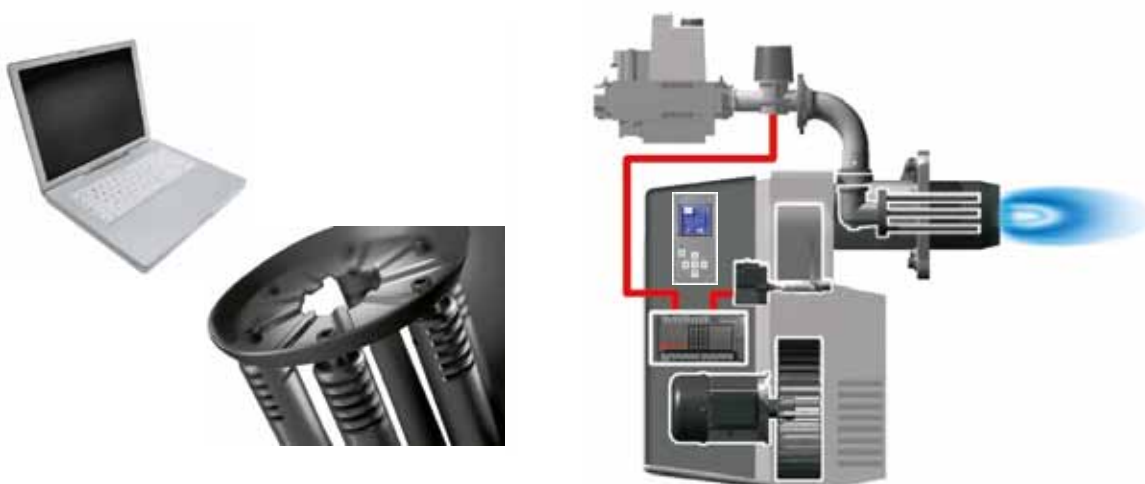
To improve the performance of heating or industrial systems, ELCO applies Variatron (fan speed control) as an option or as a version. In combination with AGP, we can ensure optimum combustion by constantly controlling minimum air excess in all operating conditions.



Modulo (M)

Digital burner manager for our electronic gas burners

Everything is perfectly under control with high reliability and optimum combustion values. The new display ensures easy commissioning and provides real time information on burner operation with precise fault diagnosis based on a detailed error log. The integrated gas leakage control provides additional security. Ready to plug connection for REMOTE SOLUTION monitoring.



ELCO OPERATIONS AND SYSTEMS

VG5 and VG6 "M V" version (M V)

Electronic versions with frequency converter



The built-in frequency converter, completely hidden in the compact design of the burner, allows the precise matching of the performance to the operative conditions and grants a higher modulating ratio. In addition, electrical energy saving and low noise performance is obtained.

VG5 and VG6 "PED" version (PED)

Electronic versions for permanent operation

VG5 and VG6 models in «PED» version are equipped in order to work with permanent operation. The electronic control has specific functions and the flame sensor is a PED-compliant model.



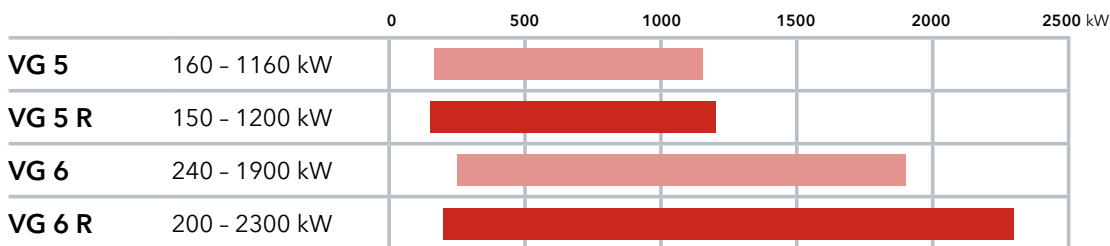
VG5 and VG6 "R" versions (DP R, M R)

Low NOx class 2 burners with extended power range

The new VG5 and VG6 models in R version combine a reliable and flexible combustion with an extended power range (up to 2300 kW) to cover a wider range of heating and industrial applications.



Class 2



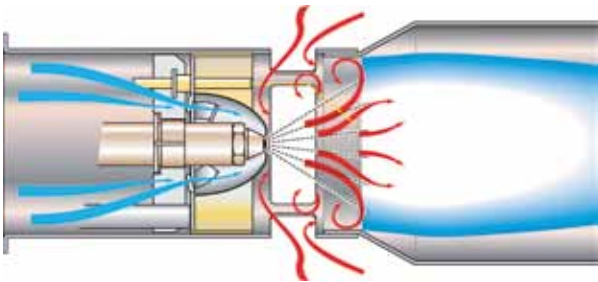
Blue Flame (VB)

Low NOx Blue flame technology

The VECTRON Blue light oil burners have reached an excellent combustion technique for an improved quality of life. The combustion fuel is already in the form of gas-air mixture and ready for the combustion, thanks to the light oil atomizer. The result is a clean combustion with very low NOx emissions. These burners are electronically controlled and with the uncountable adjustable flue gas recirculation they can satisfy any installation requirements, from new boilers to older ones. These burners are 1.BImSchV conform.



Class 3



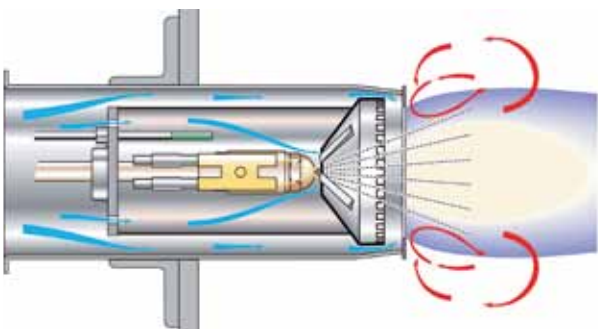
Yellow Flame (VE)

Low NOx Yellow flame technology

The precision of the combustion head of the VECTRON Eco light oil burner series is particularly efficient and grants low NOx emissions. The characteristic crown of baffle plates optimizes the combustion by mixing fuel and air. The result of this innovative combustion head is a low air excess, a clean flame and high-efficiency energy saving. The internal flue gas recirculation considerably reduces NOx emissions. These burners are 1.BImSchV conform.

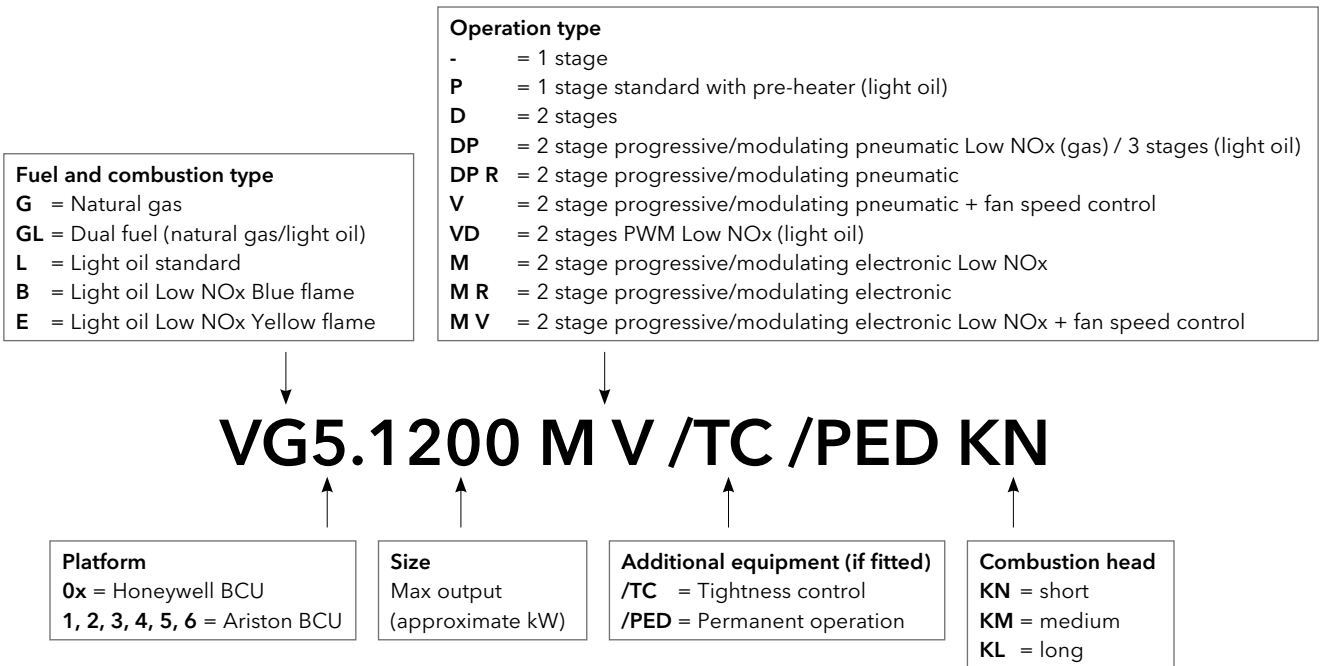


Class 3

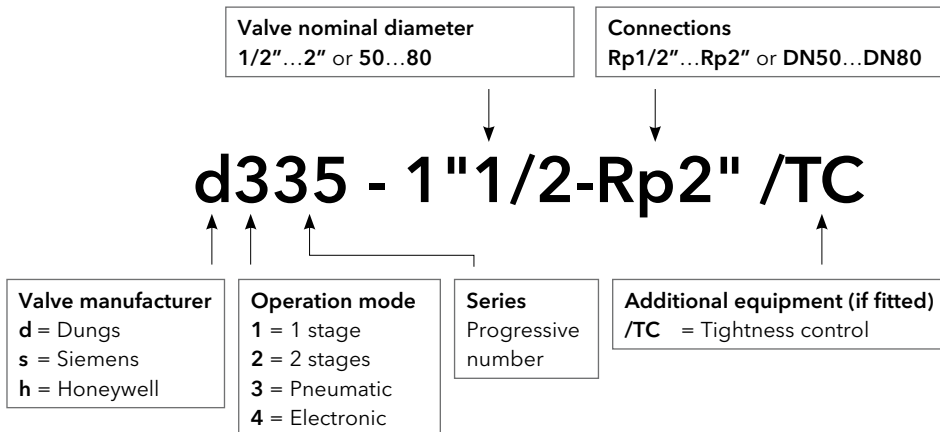


DESIGNATION

Burner



Gas train



RANGE OVERVIEW

Gas range

14,5 - 2300 kW

	Designation	VG1	VG2	VG3	VG4	VG5	VG6
1 stage Low NOx	VG...	●	●				
2 stages Low NOx	VG... D	●	●	● (1)	● (1)		
2 stages progressive pneumatic (AGP) Low NOx	VG... DP		●	● (1)	● (1)	● (1)	●
2 stages progressive pneumatic (AGP)	VG... DP R					● (1)	●
2 stages progressive pneumatic (AGP) Low NOx + fan speed control	VG... V		●	● (1)	● (1)		
2 stages progressive electronic Low NOx	VG... M		●	●	●	●	●
2 stages progressive electronic Low NOx for permanent operation (PED)	VG... M /PED					●	●
2 stages progressive electronic Low NOx + fan speed control	VG... M V					●	●
2 stages progressive electronic Low NOx + fan speed control (PED)	VG... M V /PED					●	●
2 stages progressive electronic	VG... M R					●	●
2 stages progressive electronic for permanent operation (PED)	VG... M R /PED					●	●

(1): version with tightness control on request

Dual fuel range

35 - 2050 kW

	Designation	VGL1	VGL2	VGL3	VGL4	VGL05	VGL06
1 stage in gas and in oil (class 2)	VGL...		●				
2 stages in gas and in oil (class 3 in gas, class 2 in oil)	VGL... D			●			
2 stages progressive pneumatic in gas (class 3) / 2 stages in oil (class 2)	VGL... DP				●	●	
2 stages progressive pneumatic in gas (class 3) / 3 stages in oil (class 2)	VGL... DP						●

Light oil range

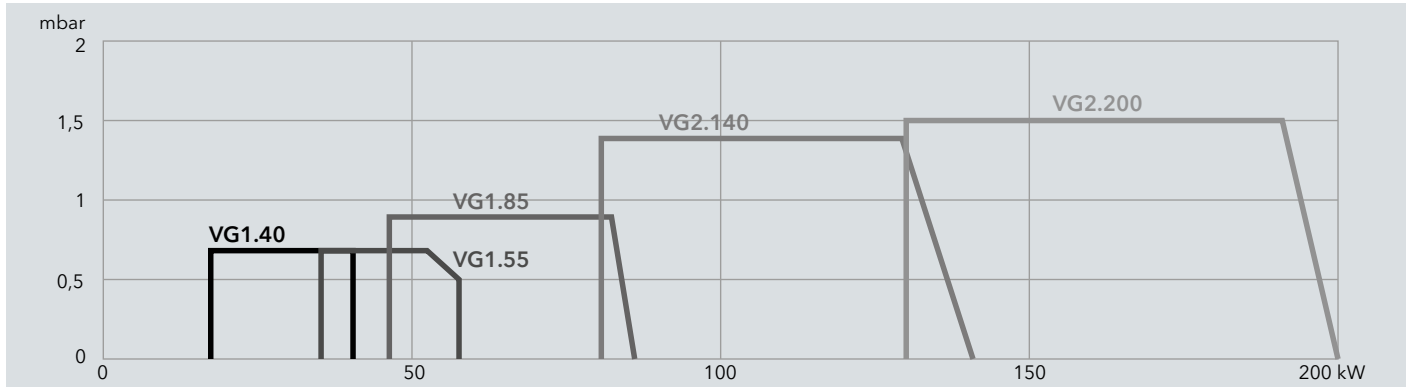
11 - 2080 kW

	Designation	Vx1	Vx2	VL3	VL4	VL5	VL6
1 stage Low NOx Blue Flame	VB...	●					
1 stage Low NOx Yellow Flame	VE...	●					
1 stage standard with pre-heater	VL... P	●					
1 stage standard	VL...	●	●				
2 stages Low NOx Yellow Flame	VE... D		●				
2 stages "PWM" Low NOx Blue Flame	VB... VD		●				
2 stages standard	VL... D		●	●	●	●	
3 stages standard	VL... DP				●	●	●

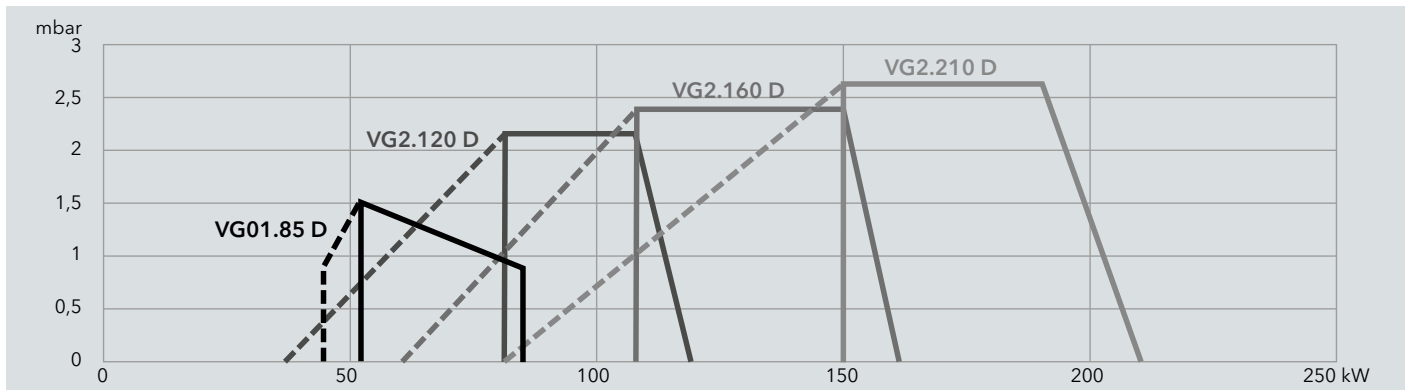
TECHNICAL DATA | GAS RANGE

VG1, VG2, VG01...4 D

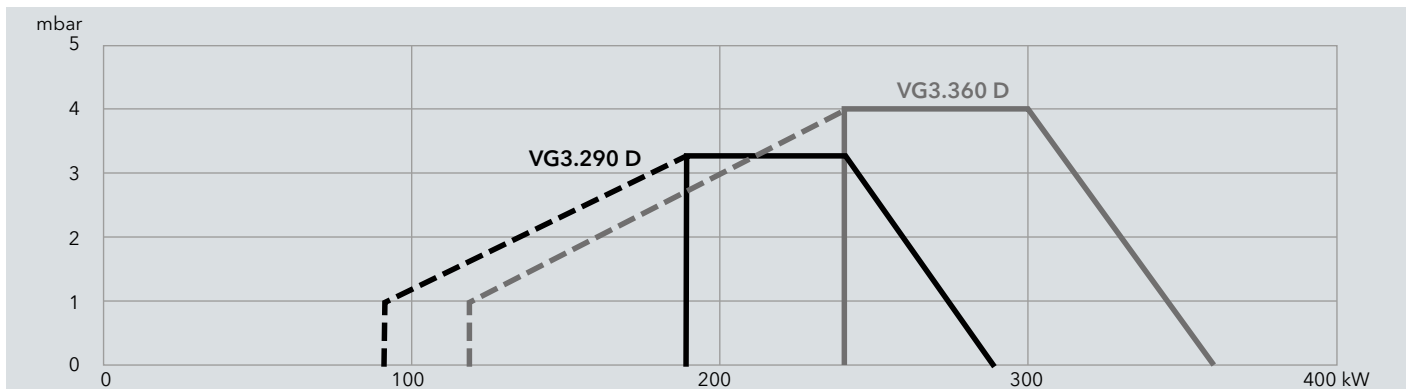
VG1, VG2



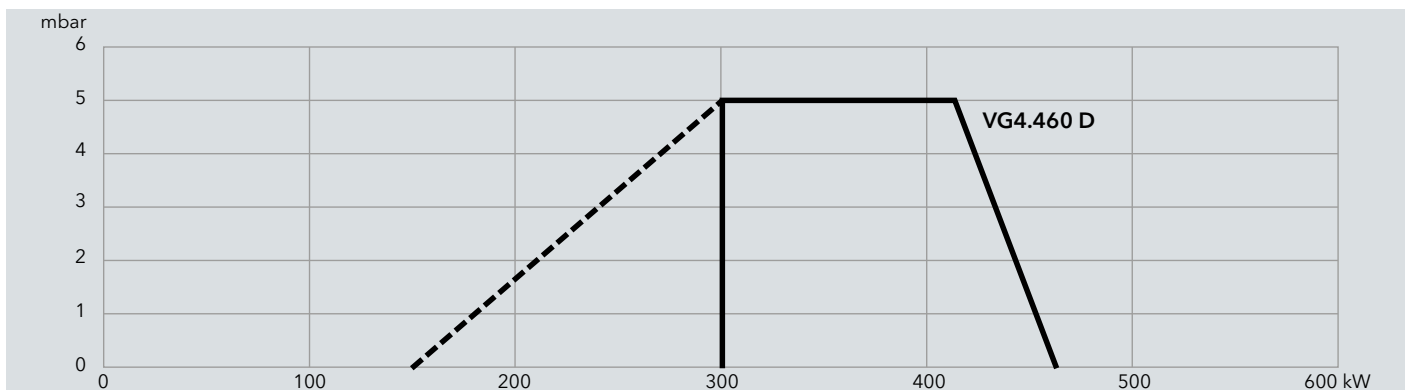
VG01 D, VG2 D



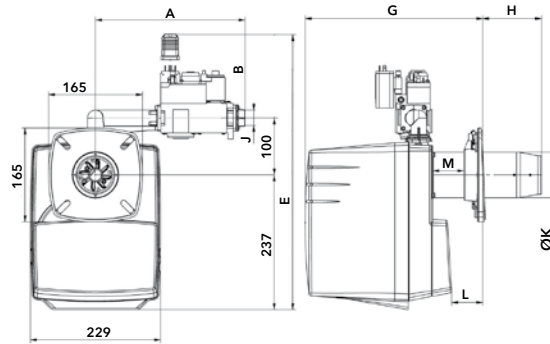
VG3 D



VG4 D

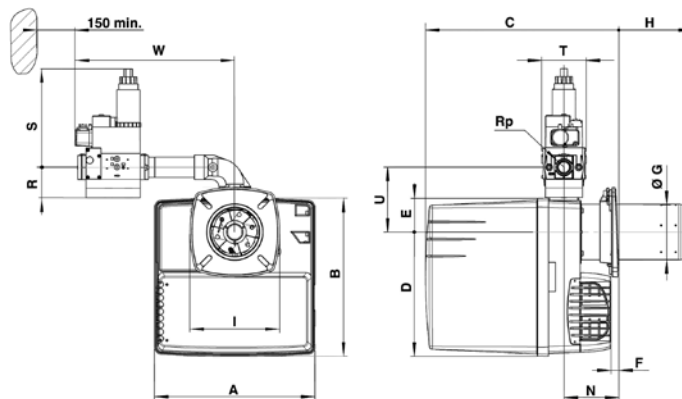


**VG1
VG01 D**



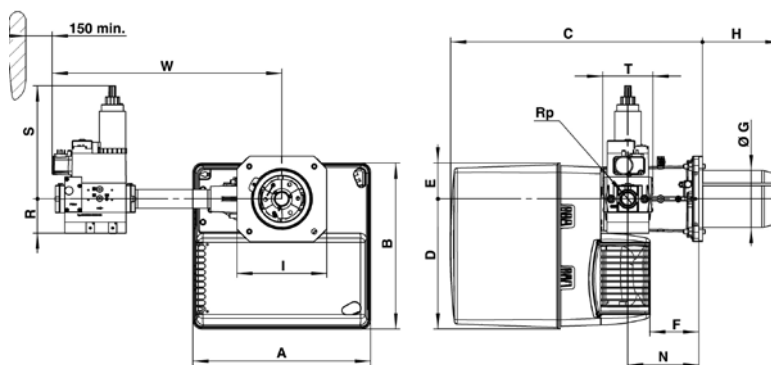
Model	Gas train	A	B	E	G		H		J	Ø K	L		M
					min	max	min	max			min	max	
VG1.40/55	h3/8"-Rp1/2" /TC	263	120	484	297	337	70	110	Rp1/2"	80	21	61	48
VG1.85	d3/4"-Rp3/4" /TC	282	140	477	300	355	70	138	Rp3/4"	90	15	83	52
VG01.85 D	d3/4"-Rp3/4"	290	210	535	300	355	70	138	Rp3/4"	90	15	83	52

**VG2
VG2 D**



Model	Gas train	A	B	C	D	E	F	ØG	H	I	N	Rp	R	S	T	U	W			
VG2.140	d3/4"-Rp3/4"	331	325	KN	KL	256	69	100	KN	KL	185	min 113	46	140	120	133	330			
VG2.200	d3/4"-Rp3/4"			398...518	398...638			115					30...150	30...270	3/4"	46	140	120	133	330
	d1"1/4-Rp1"1/4			398...518	398...638			115					30...150	30...270	1"1/4	55	160	145	133	360
VG2.120 D	d3/4"-Rp3/4"	331	325	KN	KL	256	69	115	KN	KL	185	min 113	46	210	120	64	330			
VG2.160 D	d3/4"-Rp3/4"			398...518	398...638			115					30...150	30...270	3/4"	46	210	120	64	330
VG2.210 D	d1"1/4-Rp1"1/4			398...518	398...638			115					30...150	30...270	1"1/4	55	260	145	64	360

**VG3 D
VG4 D**

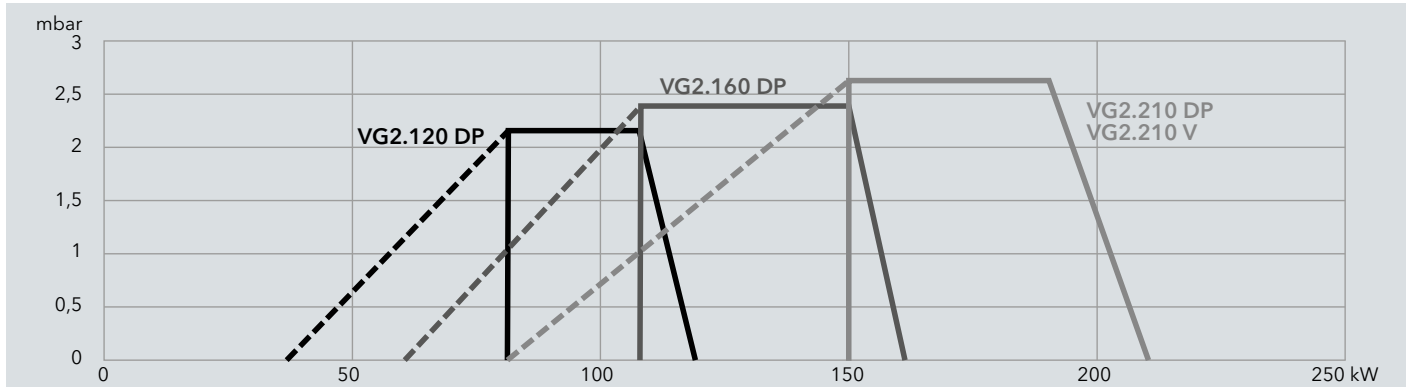


Model	Gas train	A	B	C	D	E	F	ØG	H	I	N	Rp	R	S	T	W
VG3.290 D	d3/4"-Rp3/4"	406	379	576	297	82	120	130	KN 180	KL 320	195 x 205	170	46	210	120	479
VG3.360 D	d1"1/4-Rp1"1/4												55	260	145	526
	d1"1/2-Rp2"												80	330	100	603
VG4.460 D	d3/4"-Rp3/4"	465	475	640	377	97	149	150	KN 220	KL 360	245 x 245	195	46	210	120	489
	d1"1/4-Rp1"1/4												55	260	145	536
	d1"1/2-Rp2"												80	330	100	613

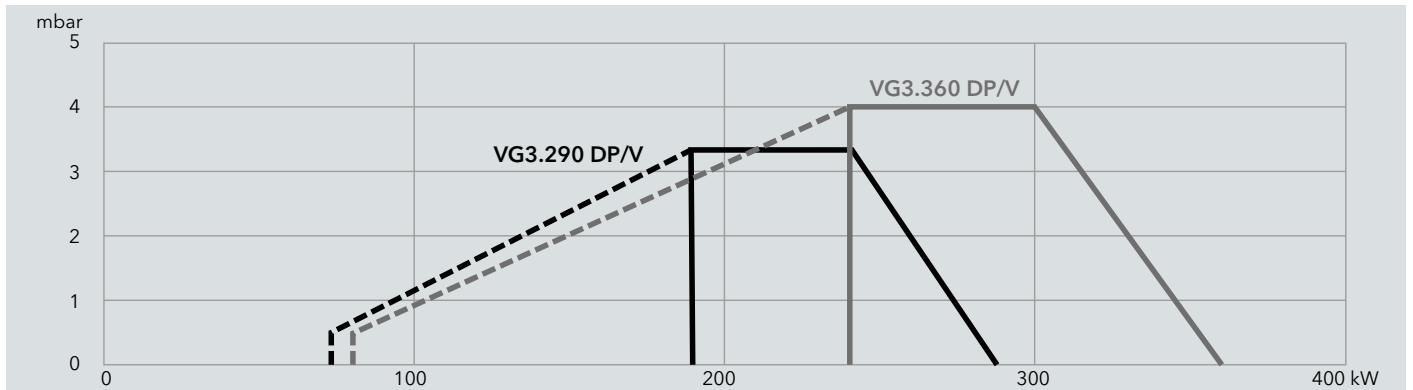
TECHNICAL DATA | GAS RANGE

VG2...4 DP, VG2...4 V

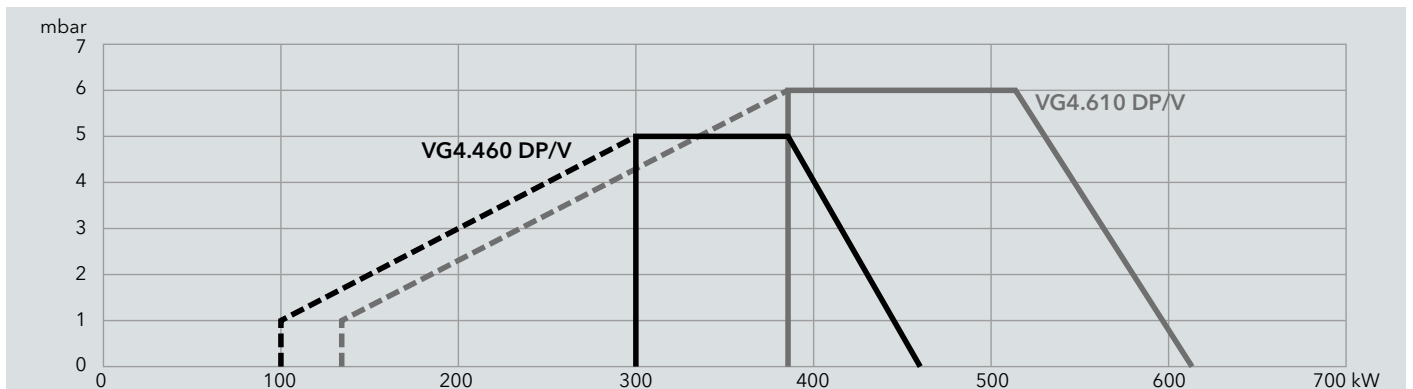
VG2 DP, VG2 V



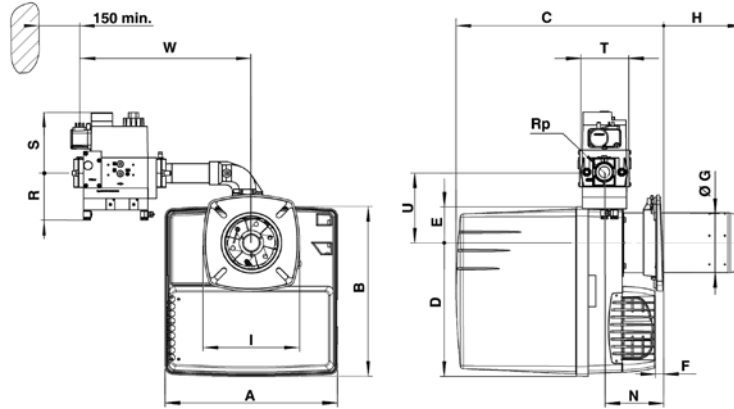
VG3 DP, VG3 V



VG4 DP, VG4 V

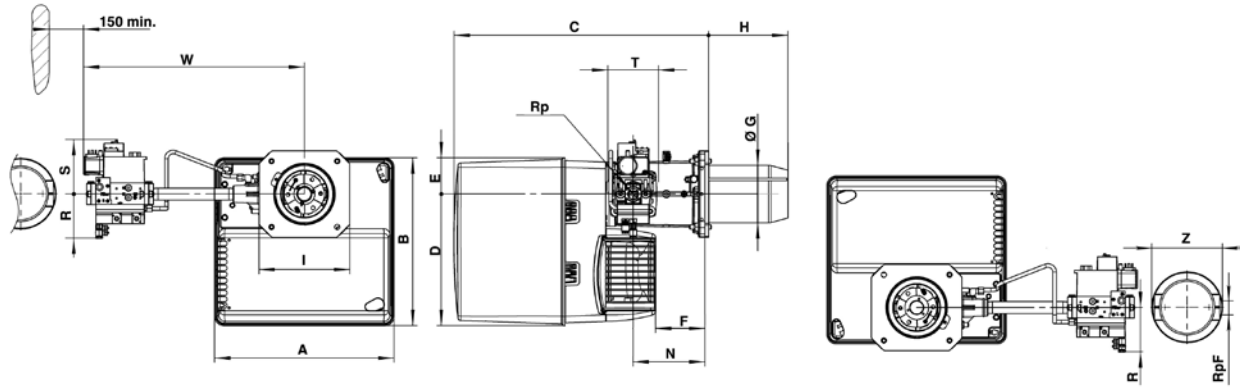


**VG2 DP
VG2 V**



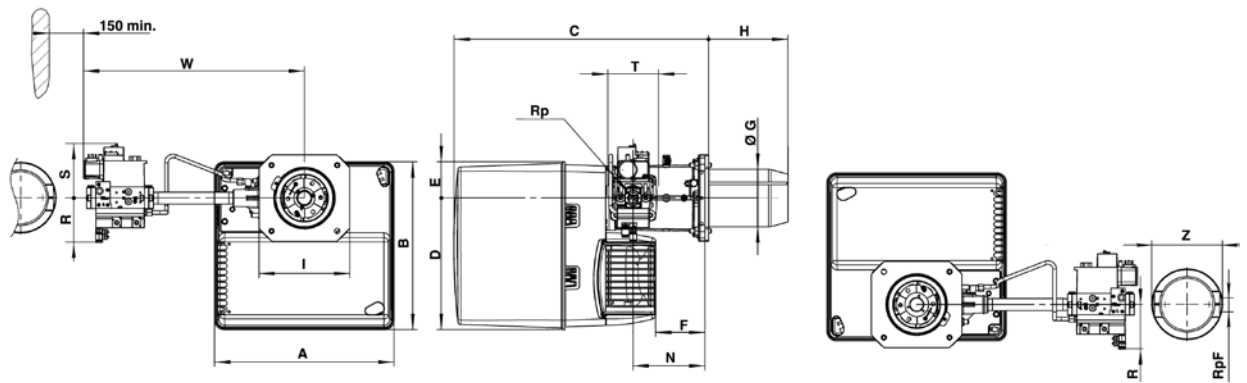
Model	Gas train	A	B	C	D	E	F	ØG	H	I	N	Rp	R	S	T	U	W		
VG2.120 DP	d3/4" - Rp3/4"	331	326	KN	KL	256	69	min 15	115	KN	KL	185 x 185	min	3/4"	70	160	120	64	345
VG2.160 DP	d1"1/4 - Rp1"1/4			398...518	398...638					30...150	30...270		113	1"1/4	80	175	145	64	380
VG2.210 V	d3/4" - Rp3/4"	331	326	KN	KL	256	69	min 15	115	KN	KL	185 x 185	min	3/4"	70	160	120	64	345
	d1"1/4 - Rp1"1/4			398...518	398...638					30...150	30...270		113	1"1/4	80	175	145	64	380

**VG3 DP
VG3 V**



Model	Gas train	A	B	C	D	E	F	ØG	H	I	N	Rp	R	S	T	W	RpF	Z	
VG3.290 DP	d3/4" - Rp3/4"	406	379	576	297	82	120	130	KN 180	KL 320	195 x 205	170	1"	70	160	120	479	1"	160
VG3.360 DP	d1"1/4 - Rp1"1/4												1"1/4	80	175	145	526	-	-
VG3.290 V	d1"1/2 - Rp2"												2"	100	185	100	603	-	-

**VG4 DP
VG4 V**

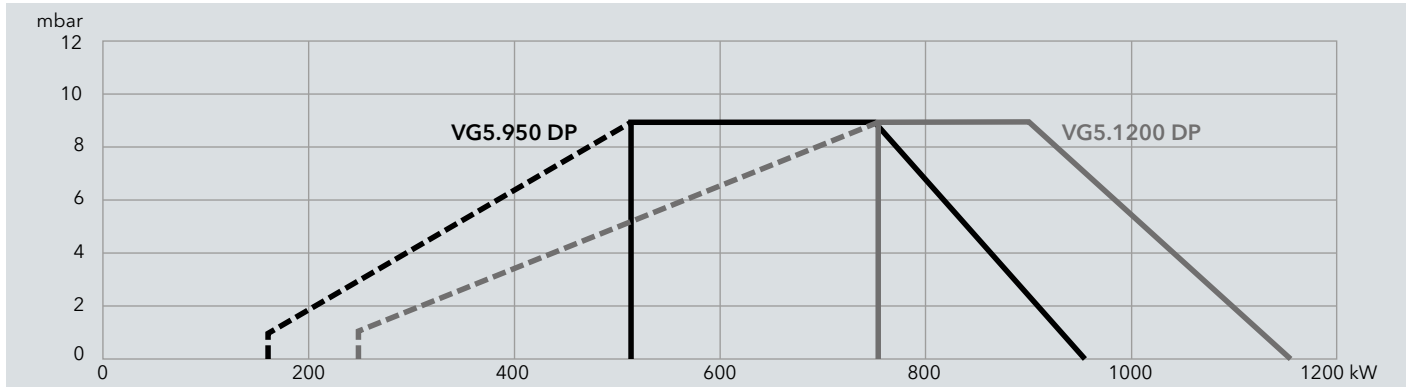


Model	Gas train	A	B	C	D	E	F	ØG	H	I	N	Rp	R	S	T	W	RpF	Z	
VG4.460 DP	d3/4" - Rp1"	465	475	640	377	97	149	150	KN 220	KL 360	245 x 245	195	1"	70	160	120	489	1"	160
VG4.610 DP	d1"1/4 - Rp1"1/4												1"1/4	80	175	145	536	-	-
VG4.460 V	d1"1/2 - Rp2"												2"	100	185	100	613	-	-

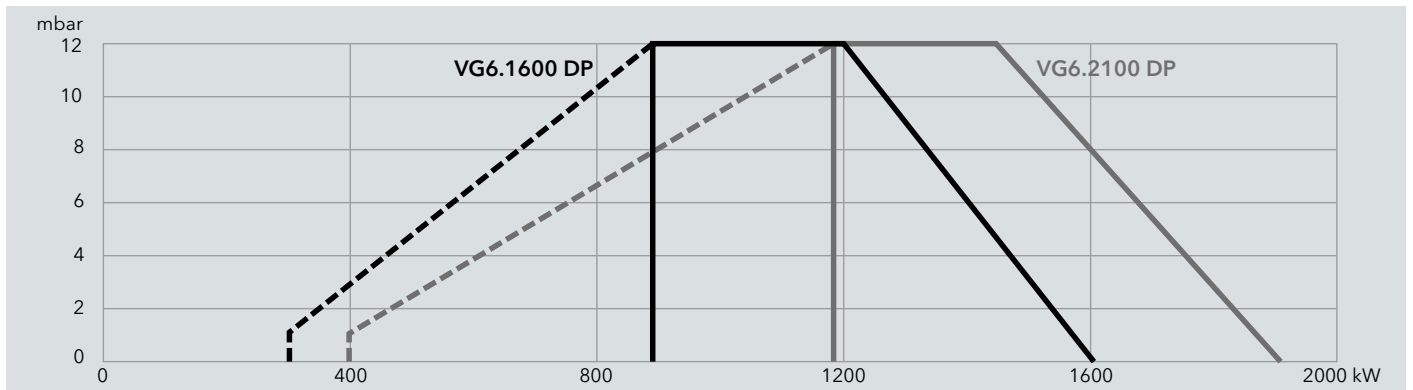
TECHNICAL DATA | GAS RANGE

VG5 / VG6 DP and VG5 / VG6 DP R

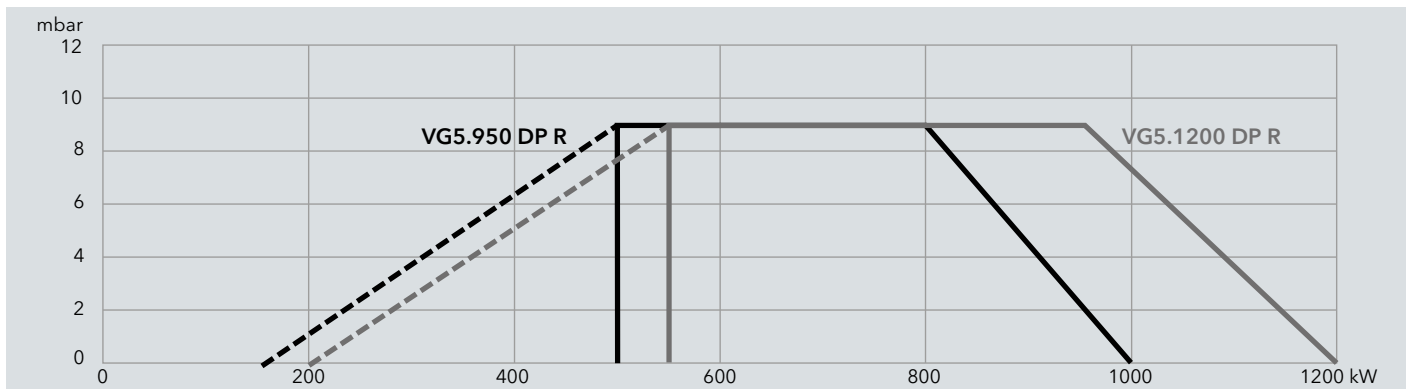
VG5 DP



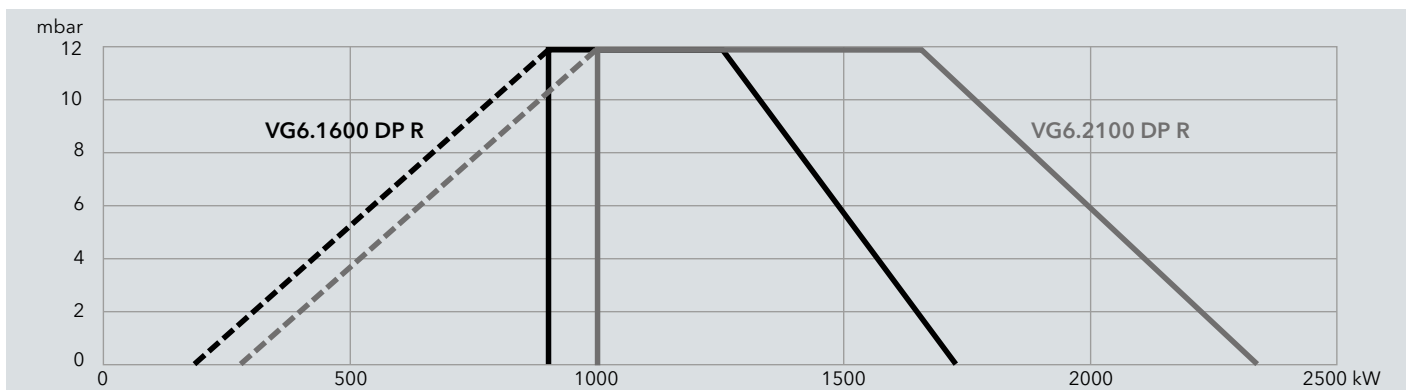
VG6 DP



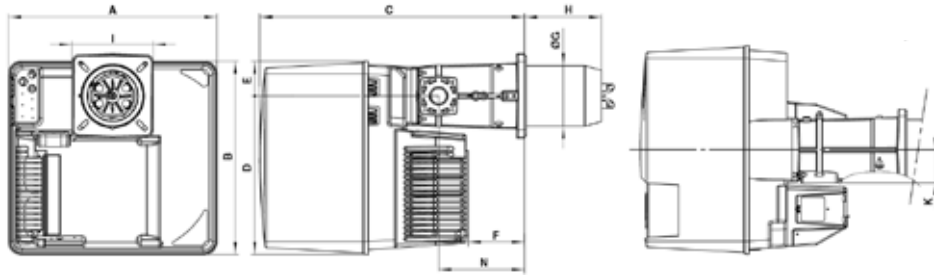
VG5 DP R



VG6 DP R

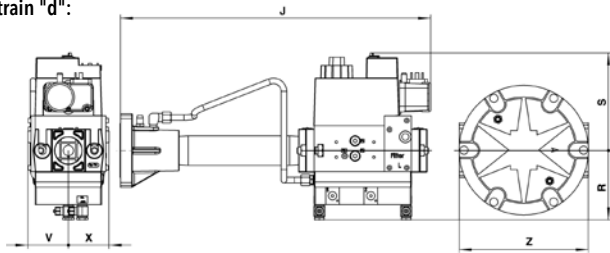


VG5 DP
VG5 DP R



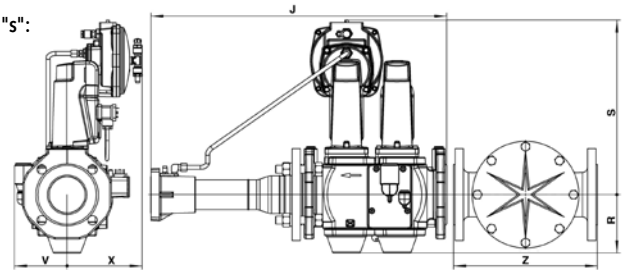
Model	A	B	C	D	E	F	ØG	H	I	K	N
VG5.950 DP	581	549	752	450	99	164	170	KN	KM	KL	230x238
VG5.1200 DP								215	325	435	

Gas train "d":



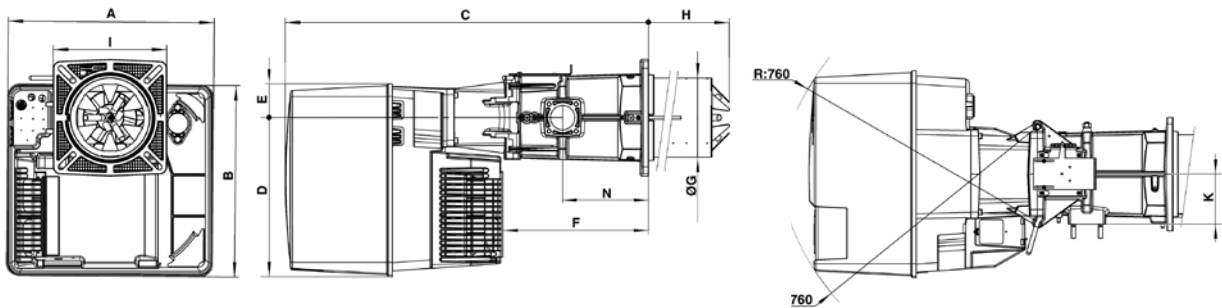
Model	J	R	S	V	X	Z
d1"1/2-Rp2"	540	123	190	55	55	-
d1"1/4-Rp2"	450	100	141	58	58	186
d3/4"-Rp1"	420	100	122	55	50	160

Gas train "s":



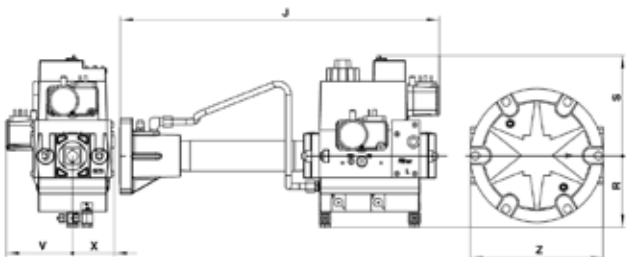
Model	J	R	S	V	X	Z
s65-DN65	600	135	360	110	150	290
s2"-Rp2"	612	103	330	110	150	186

VG6 DP
VG6 DP R



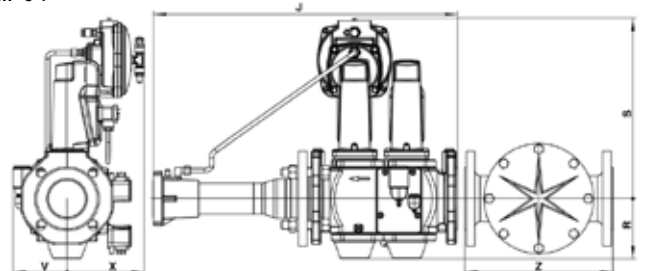
Model	A	B	C	D	E	F	ØG	H	I	K	N
VG6.1600 DP	592	553	1050	456	97	421	227	KN	KM	KL	326 x 335
VG6.2100 DP								360	460	560	
VG6.1600 DP R	592	553	1050	456	97	421	227	KN	KM	KL	326 x 335
VG6.2100 DP R								270	370	470	

Gas train "d":



Model	J	R	S	V	X	Z
d1"1/4-Rp2" /TC	450	100	141	95	58	186
d1"1/2-Rp2" /TC	540	123	190	95	55	-

Gas train "s":

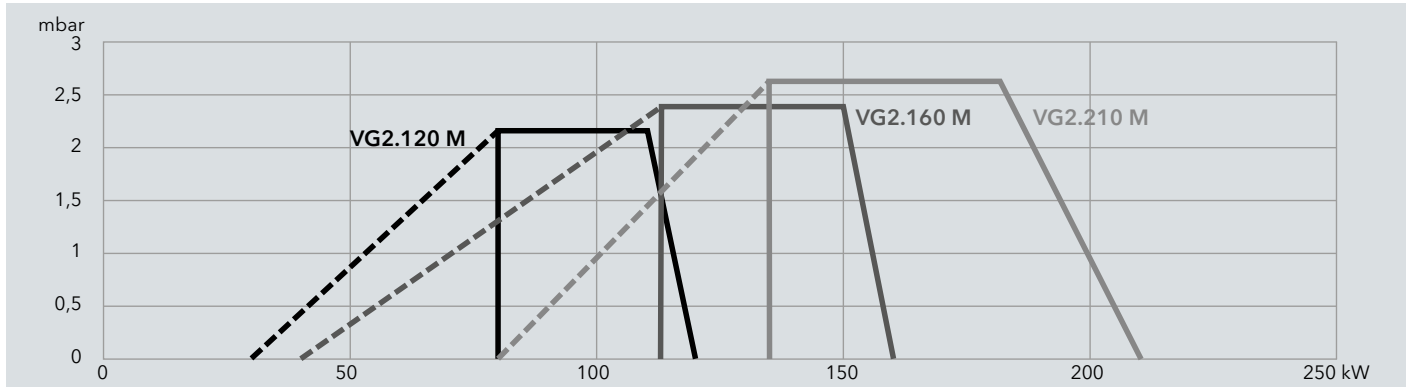


Model	J	R	S	V	X	Z
s2"-Rp2" /TC	612	103	330	110	150	186
s65-DN65 /TC	600	135	360	110	150	320
s80-DN80 /TC	600	120	350	110	150	290

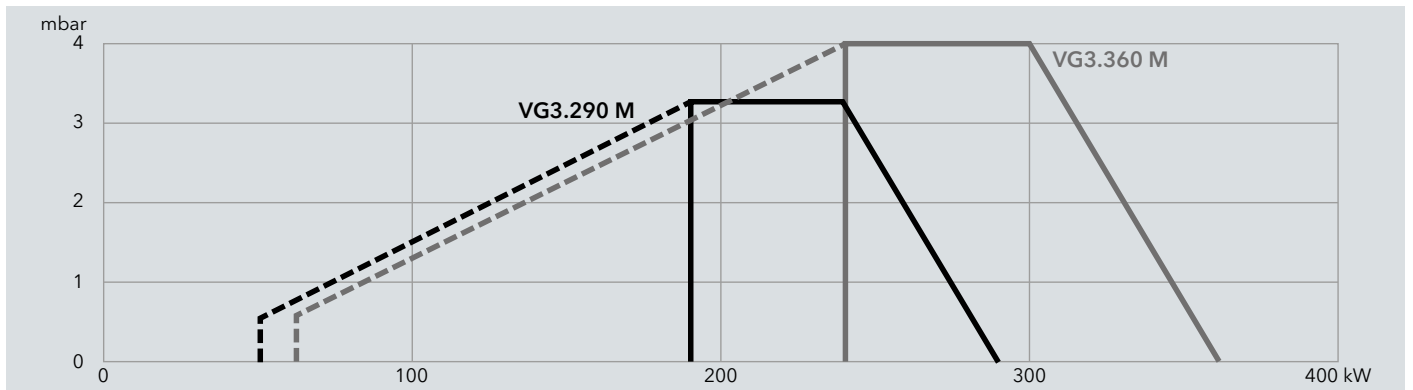
TECHNICAL DATA | GAS RANGE

VG2...4 M

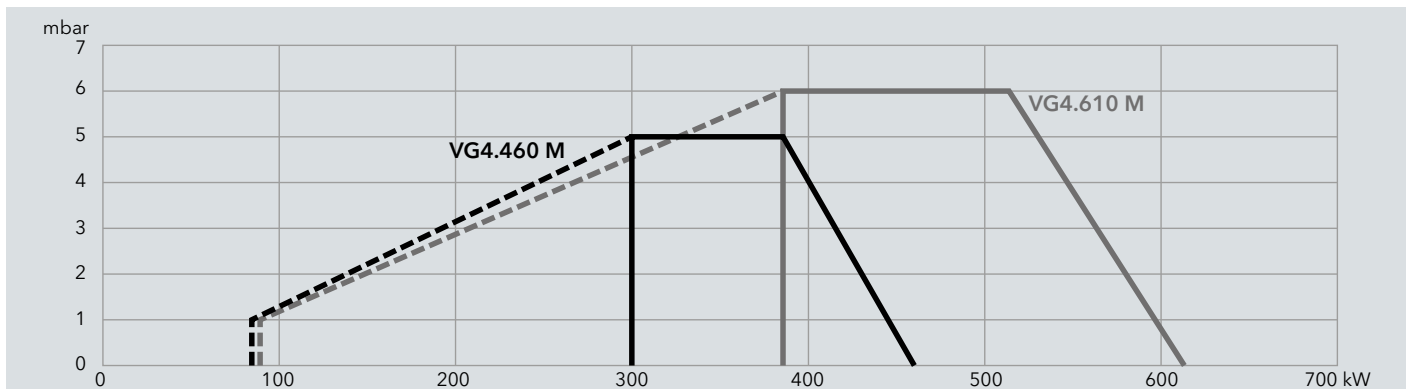
VG2 M



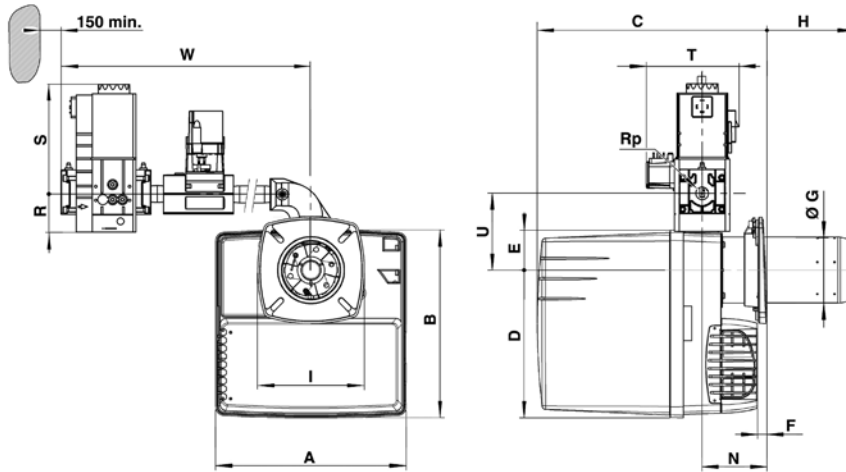
VG3 M



VG4 M

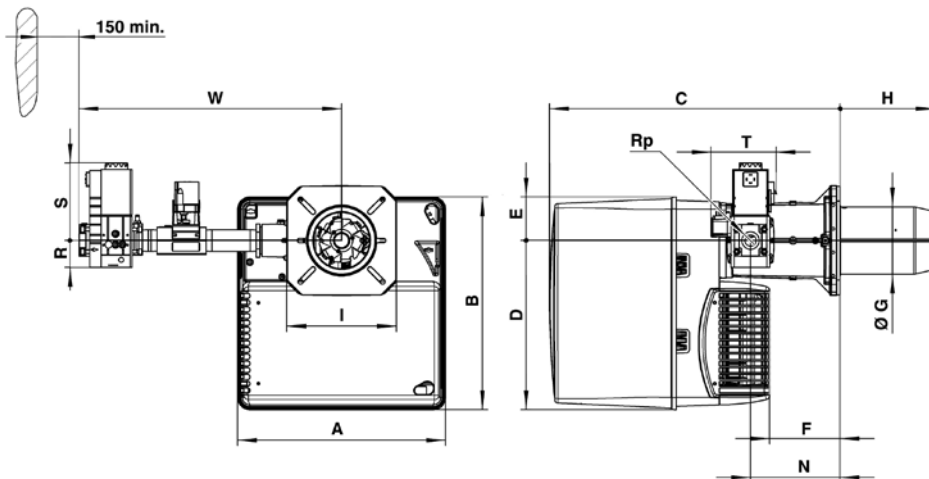


VG2 M



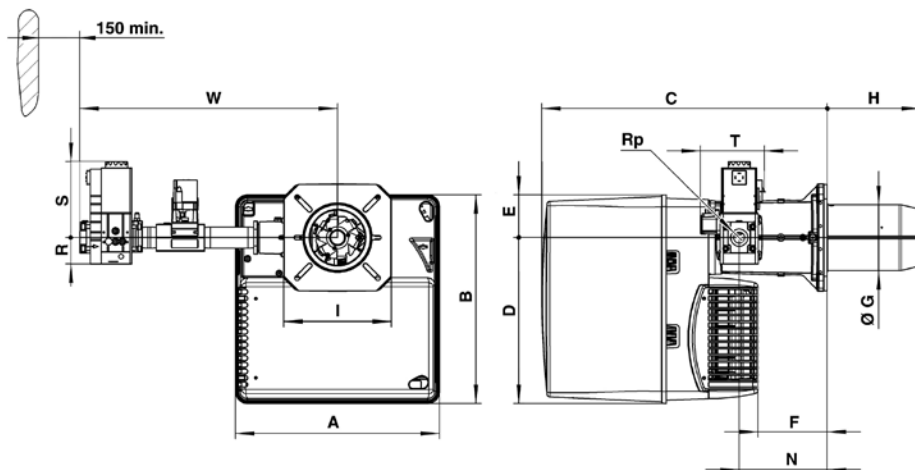
Model	Gas train	A	B	C	D	E	F	ØG	H	I	N	P	Rp	R	S	T	U	W		
VG2.120 M VG2.160 M VG2.210 M	d3/4"-Rp1"1/4 /TC	331	325	KN 398...518	KL 398...638	256	69	min 15	115	KN 30...150	KL 30...270	185	30...150	193	3/4"	60	173	146	133	455

VG3 M



Model	Gas train	A	B	C	D	E	F	ØG	H	I	N	Rp	R	S	T	W	
VG3.290 M	d3/4"-Rp1"1/4 /TC	406	379	576	297	82	120	130	KN 180	KL 320	195 x 205	170	1"1/4	60	173	146	577
VG3.360 M	d1"1/2"-Rp1"1/2 /TC												1"1/2	80	185	160	638

VG4 M

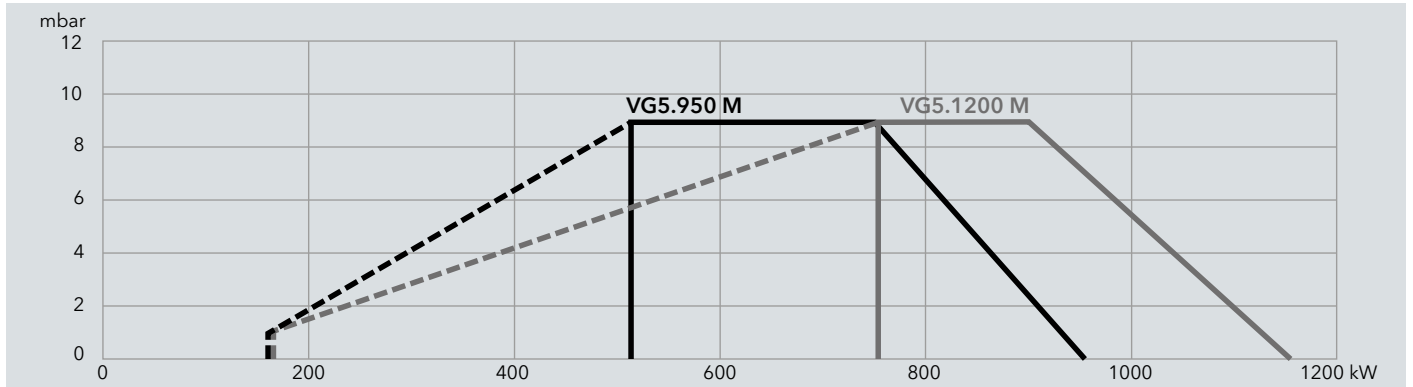


Model	Gas train	A	B	C	D	E	F	ØG	H	I	N	Rp	R	S	T	W	
VG4.460 M	d3/4"-Rp1"1/4 /TC	465	475	640	377	97	149	150	KN 220	KL 360	245	195	1"1/4	60	173	146	587
VG4.610 M	d1"1/2"-Rp1"1/2 /TC												1"1/2	80	185	160	649

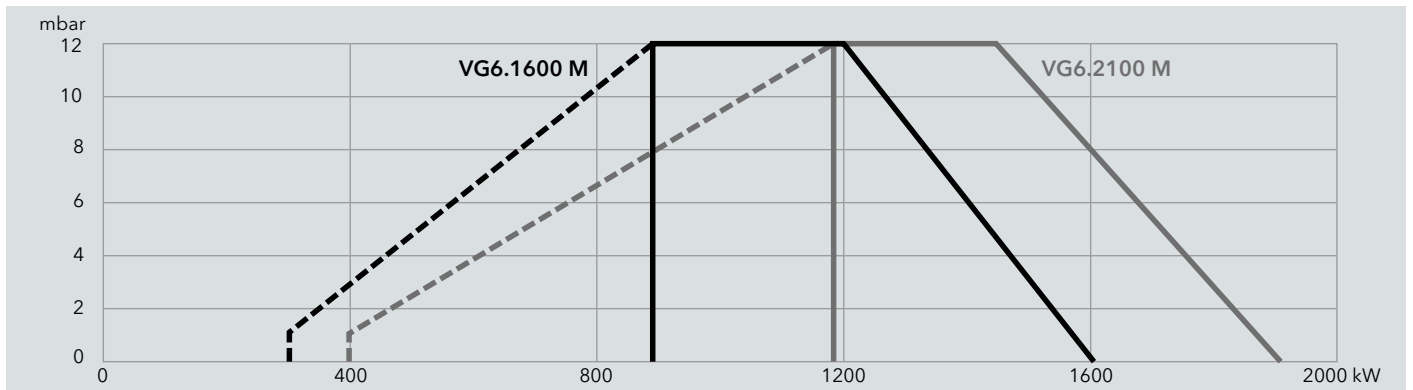
TECHNICAL DATA | GAS RANGE

VG5 / VG6 M and VG5 / VG6 M R

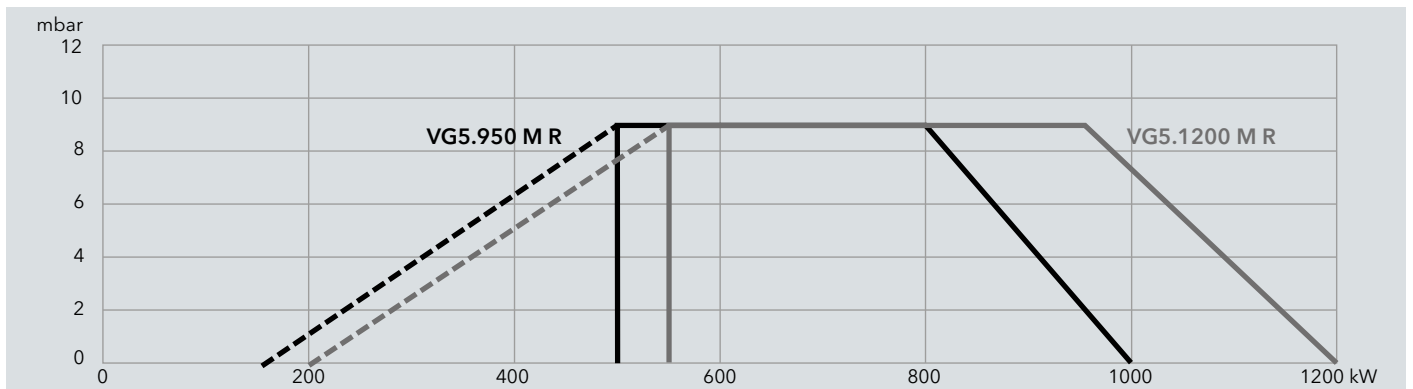
VG5 M



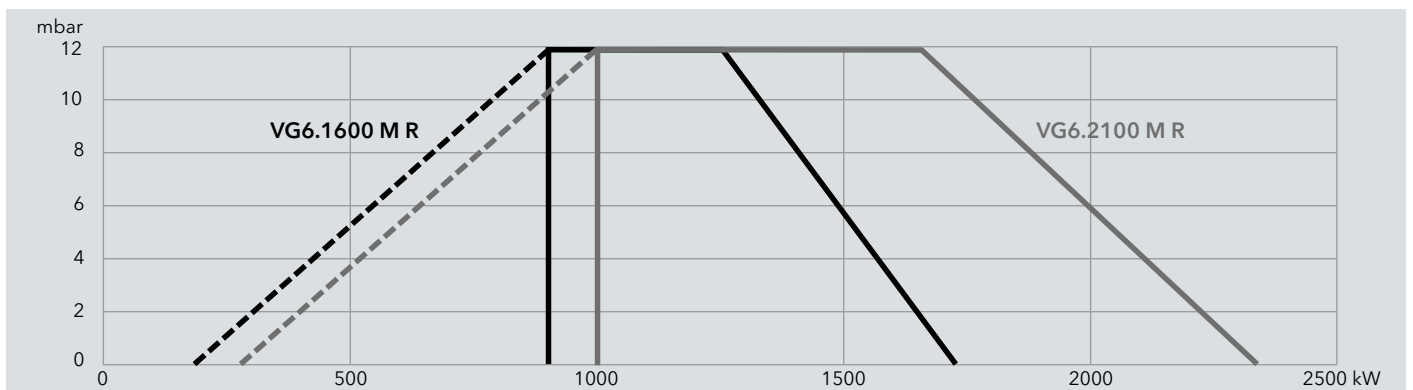
VG6 M



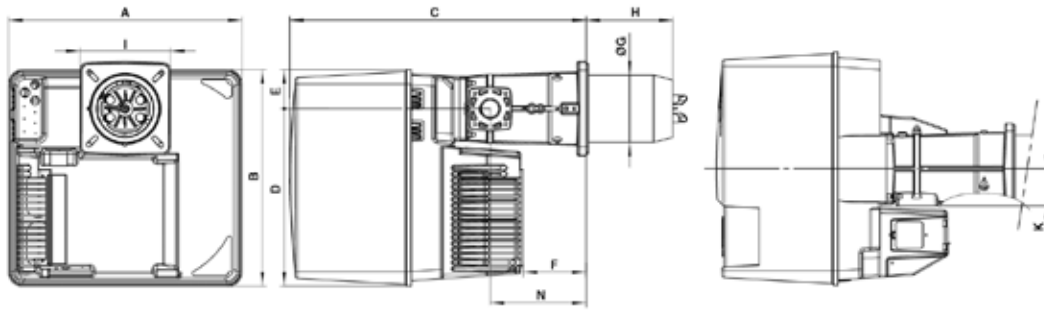
VG5 M R



VG6 M R

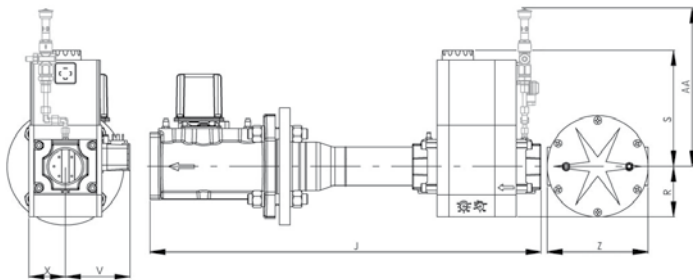


VG5 M
VG5 M R



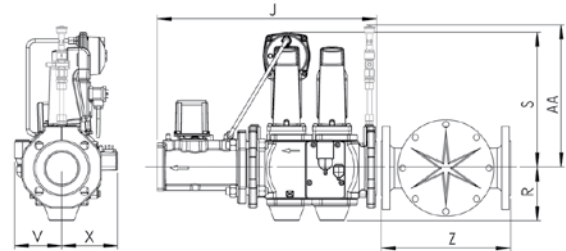
Model	A	B	C	D	E	F	Ø G	H	I	K	N		
VG5.950 M VG5.1200 M	581	549	752	450	99	164	170	KN 215	KM 325	KL 435	230 x 238	89	244

Gas train "d":



Model	J	R	S	V	X	Z	AA*
d65-DN65 /TC	490	183	245	110	98	290	385
d2"-Rp2" /TC	700	96	330	125	81	-	385
d1"1/2-Rp2" /TC	622	80	185	102	57	-	320
d3/4"-Rp1"1/4 /TC	460	60	173	88	58	-	320

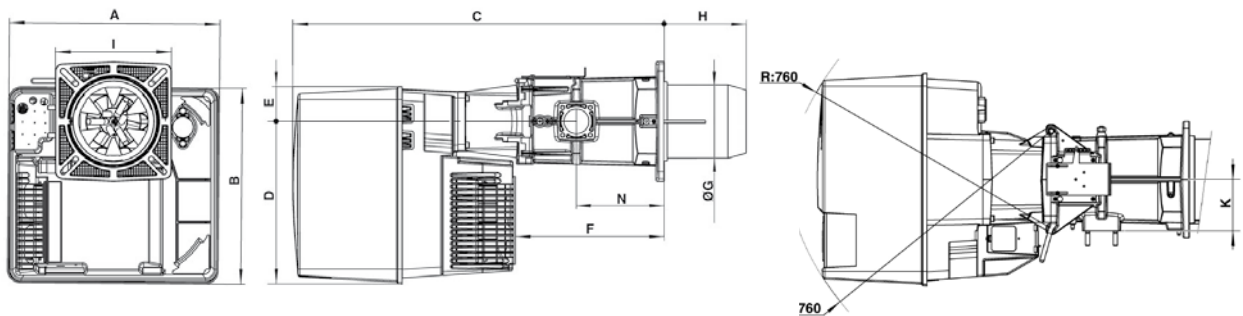
Gas train "s":



Model	J	R	S	V	X	Z	AA*
s65-DN65 /TC	490	118	300	106	126	290	365

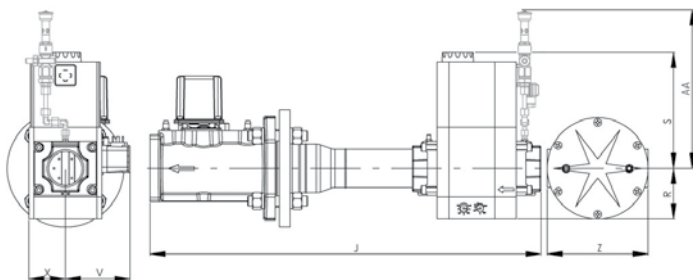
*: for PED configuration

VG6 M
VG6 M R



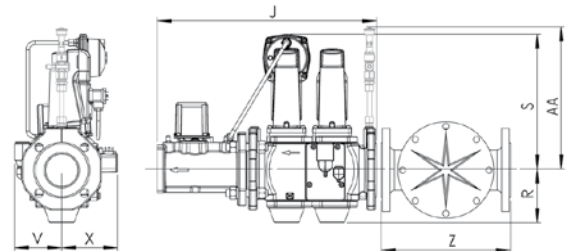
Model	A	B	C	D	E	F	Ø G	H	I	K	N		
VG6.1600 M VG6.2100 M	592	553	1050	456	97	421	227	KN 360	KM 460	KL 560	326 x 335	144	247
VG6.1600 M R VG6.2100 M R	592	553	1050	456	97	421	227	KN 270	KM 370	KL 470	326 x 335	144	247

Gas train "d":



Model	J	R	S	V	X	Z	AA*
d65-DN65 /TC	490	183	245	110	98	290	385
d2"-Rp2" /TC	700	96	330	125	81	-	385
d1"1/2-Rp2" /TC	622	80	185	102	57	-	320

Gas train "s":



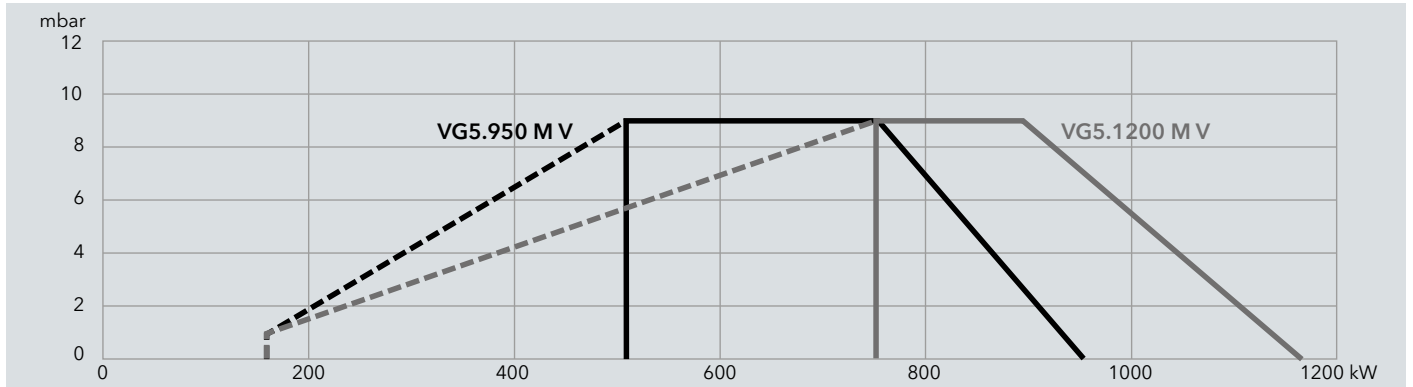
Model	J	R	S	V	X	Z	AA*
s65-DN65 /TC	490	118	300	106	126	290	365

*: for PED configuration

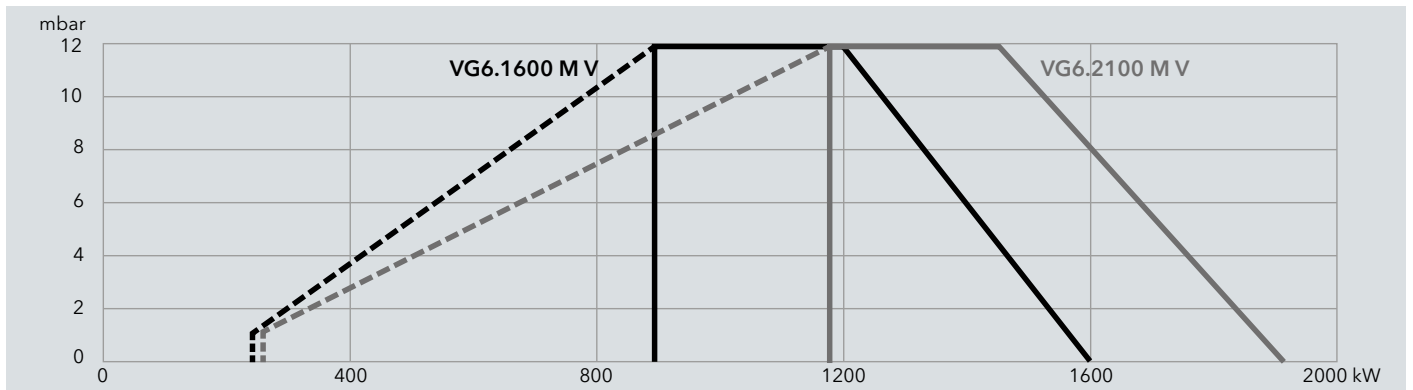
TECHNICAL DATA | GAS RANGE

VG5 M V, VG6 M V

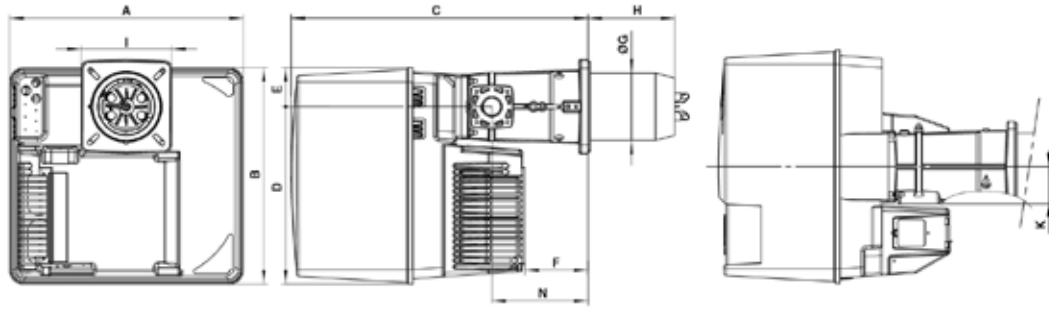
VG5 M V



VG6 M V

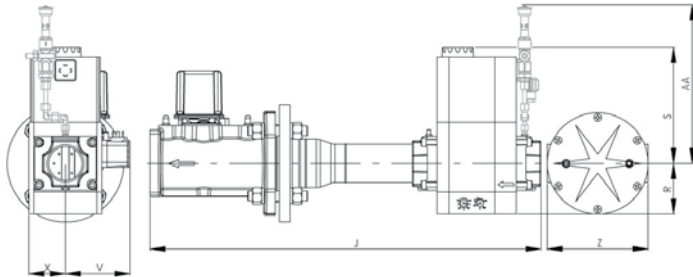


VG5 M V



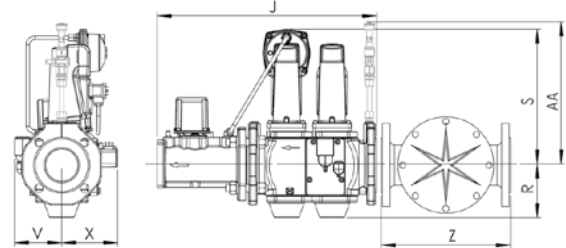
Model	A	B	C	D	E	F	Ø G	H	I	K	N		
VG5.950 M V VG5.1200 M V	581	549	752	450	99	164	170	KN 215	KM 325	KL 435	230 x 238	89	244

Gas train "d":



Model	J	R	S	V	X	Z	AA*
d65-DN65 /TC	490	183	245	110	98	290	385
d2"-Rp2" /TC	700	96	330	125	81	-	385
d1"1/2-Rp2" /TC	622	80	185	102	57	-	320
d3/4"-Rp1"1/4 /TC	460	60	173	88	58	-	320

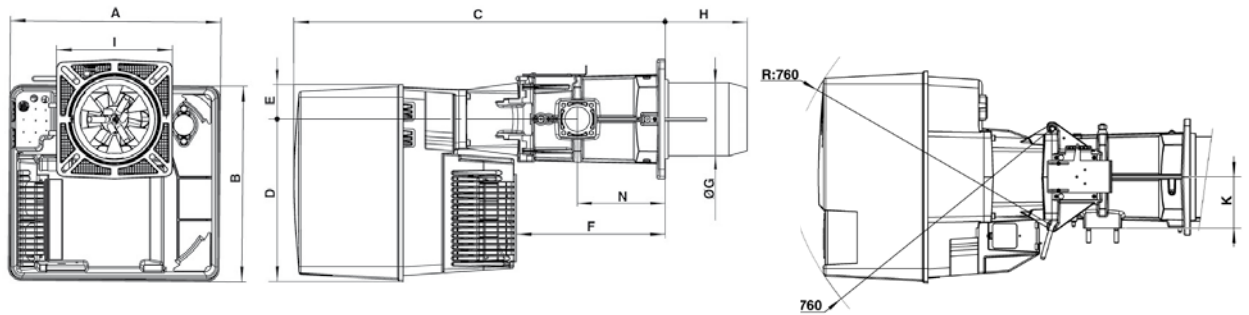
Gas train "s":



Model	J	R	S	V	X	Z	AA*
s65-DN65 /TC	490	118	300	106	126	290	365

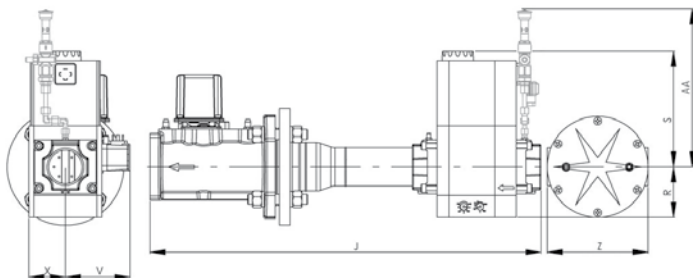
*: for PED configuration

VG6 M V



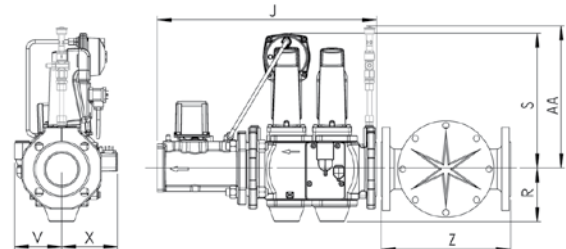
Model	A	B	C	D	E	F	Ø G	H	I	K	N		
VG6.1600 M V VG6.2100 M V	592	553	1050	456	97	421	227	KN 360	KM 460	KL 560	326 x 335	144	247

Gas train "d":



Model	J	R	S	V	X	Z	AA*
d65-DN65 /TC	490	183	245	110	98	290	385
d2"-Rp2" /TC	700	96	330	125	81	-	385
d1"1/2-Rp2" /TC	622	80	185	102	57	-	320

Gas train "s":



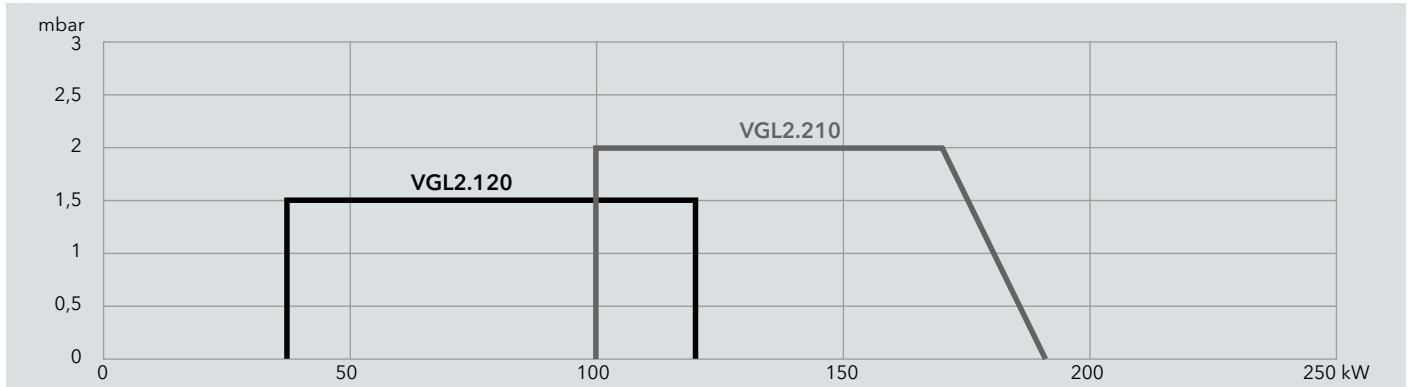
Model	J	R	S	V	X	Z	AA*
s65-DN65 /TC	490	118	300	106	126	290	365

*: for PED configuration

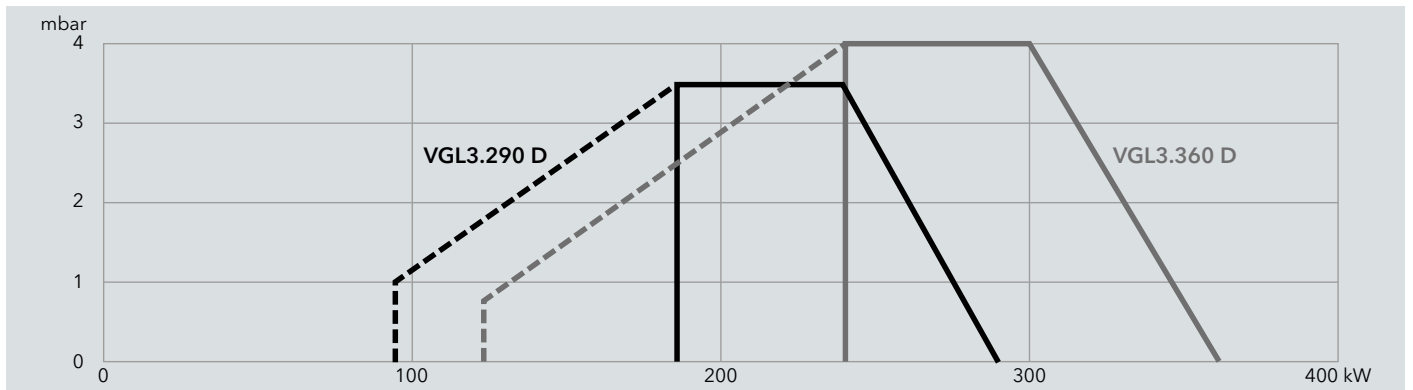
TECHNICAL DATA | DUAL FUEL RANGE

VGL2, VGL3 D, VGL4 DP

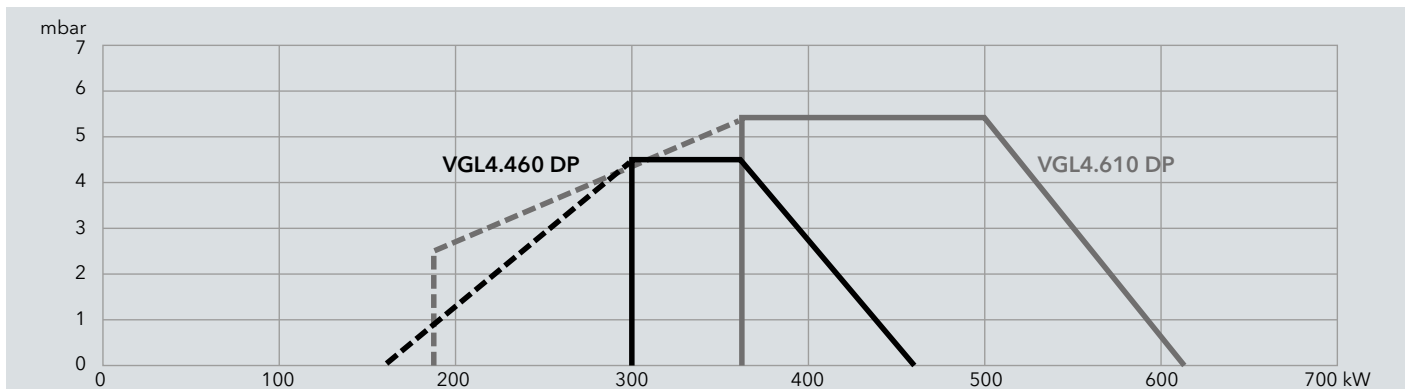
VGL2



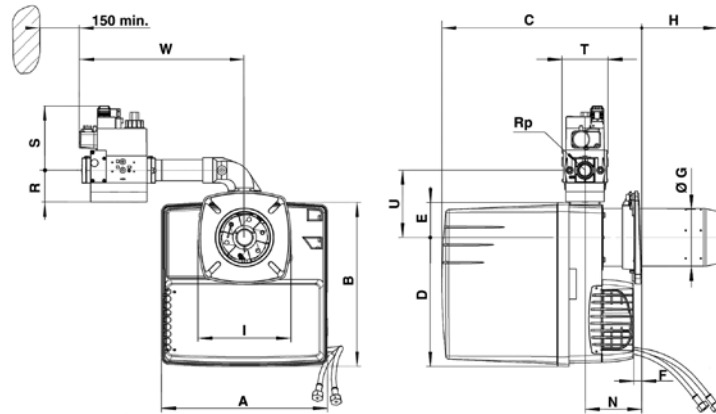
VGL3 D



VGL4 DP

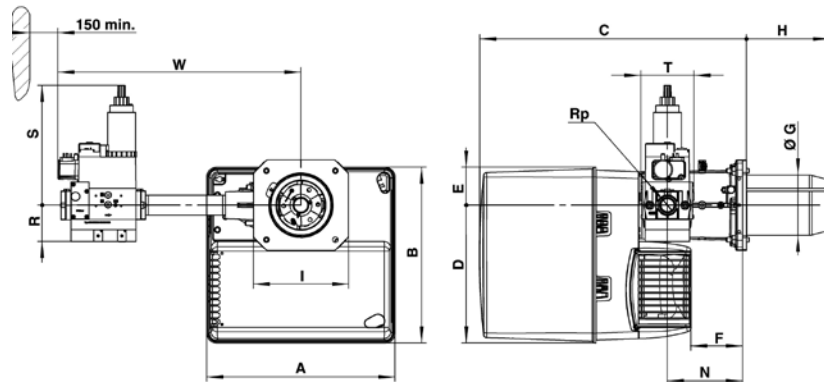


VGL2



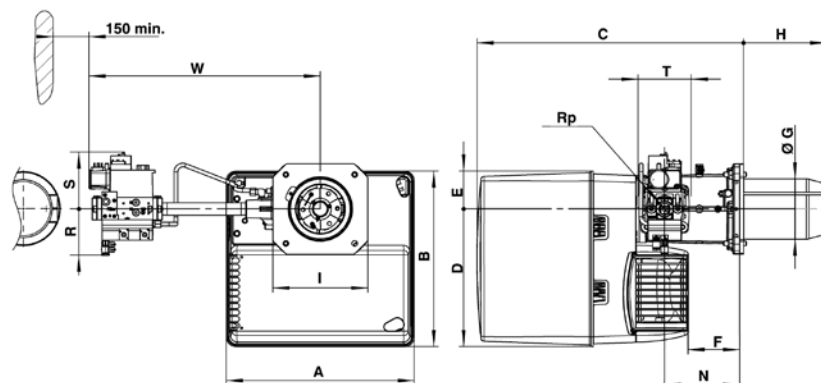
Model	A	B	C	D	E	F	Ø G	H	I	N	P	Rp	R	S	T	U	W
VGL2.120 VGL2.210	331	325	KL 398...638	256	69	15 min	115	KL 30...270	185 x 185	113 min	115	3/4"	46	140	120	133	330

VGL3 D



Model	Gas train	A	B	C	D	E	F	Ø G	H	I	N	Rp	R	S	T	W	
VGL3.290 D VGL3.360 D	d3/4"-Rp3/4"	406	379	576	297	82	120	130	KN 180	KL 320	195 x 205	170	3/4"	46	210	120	479
	d1"1/4-Rp1"1/4												1"1/4	55	260	145	526
	d1"1/2-Rp2"												2"	80	330	100	603

VGL4 DP

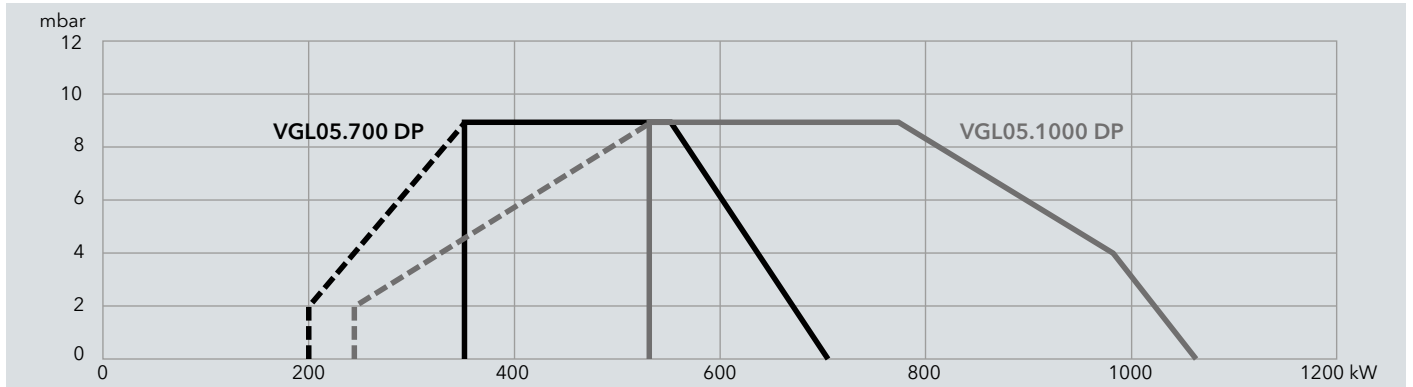


Model	Gas train	A	B	C	D	E	F	Ø G	H	I	N	Rp	R	S	T	W	RpF	Z	
VGL4.460 DP VGL4.610 DP	d3/4"-Rp1"	465	475	640	377	97	149	150	KN 220	KL 360	245 x 245	195	1"	70	160	120	489	1"	160
	d1"1/4-Rp1"1/4												1"1/4	80	175	145	536	-	-
	d1"1/2-Rp2"												2"	100	185	100	613	-	-

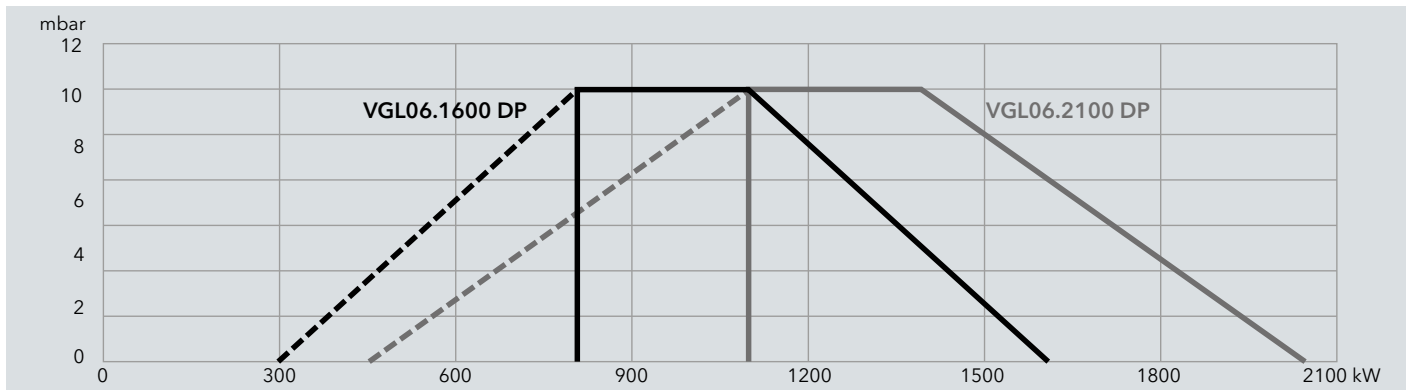
TECHNICAL DATA | DUAL FUEL RANGE

VGL05 DP, VGL06 DP

VGL05 DP

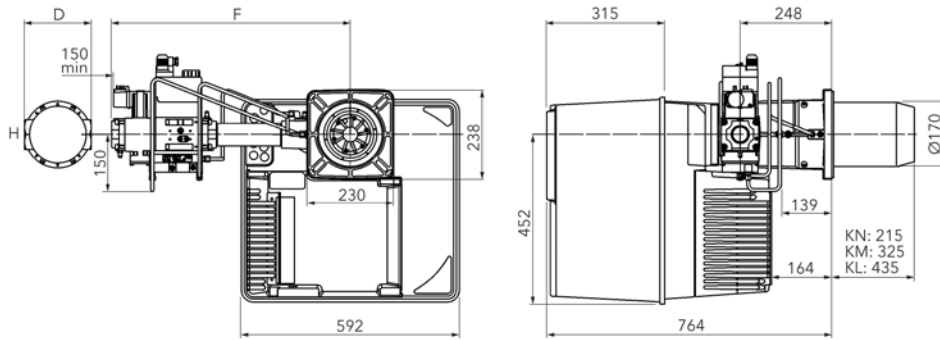


VGL06 DP



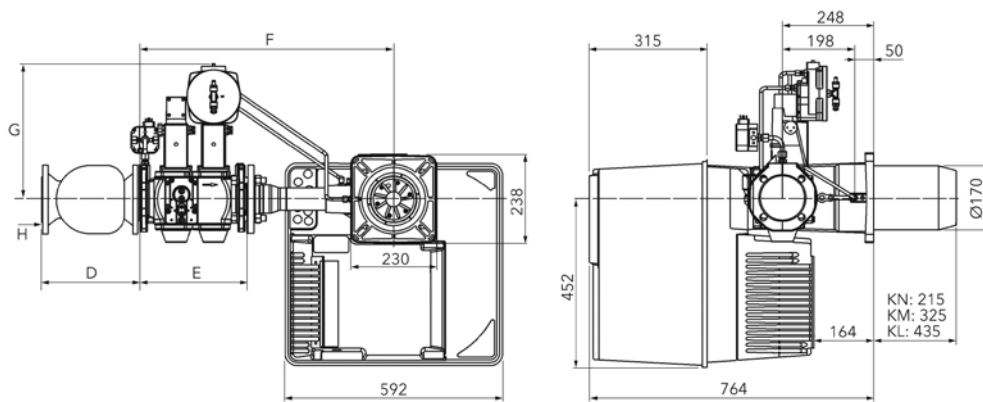
VGL05 DP

with gas train "d":



	D	F	H
MBVEF407	120	516	Rp3/4"
MBVEF412	177	540	Rp1"1/4
MBVEF420	-	635	-

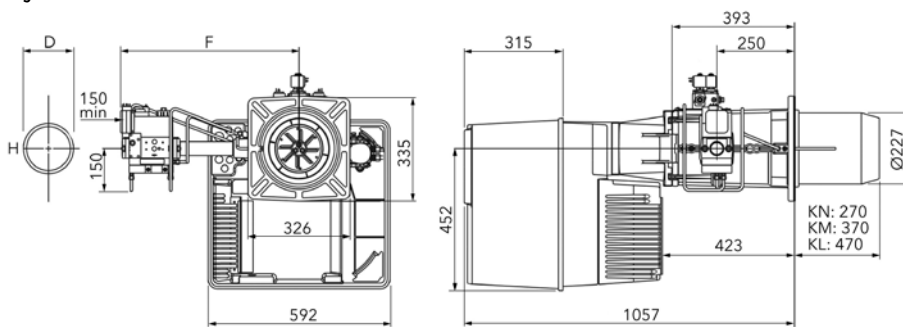
with gas train "s":



	D	E	F	G	H
VG20	186	292	734	344	Rp2"
VG40	290	292	740	365	DN65

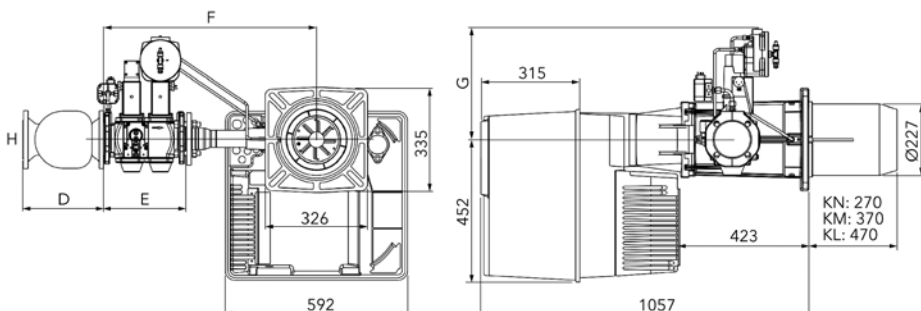
VGL06 DP

with gas train "d":



	D	E	H
MBVEF412	160	590	Rp2"
MBVEF420	-	690	Rp2"

with gas train "s":



	D	E	F	G	H
VG20	186	292	734	344	2"
VG40	290	292	740	365	DN65
VG40	320	312	746	375	DN80