

# Heating catalogue 2012

elco





## OUR INNOVATIVE SOUL

Being a specialist in burners conception and manufacturing, ELCO is nowadays one of the leaders in the combustion technology. By linking a strong innovative ability to a developing will, ELCO conceives performing, reliable burners that respect the environment as well as corresponding services, in order to establish a lasting relationship with its customers.

**1928** the company ELCO has been founded by Emil Looser in Vilters - Switzerland

**1952** the company Klöckner has been founded in Reutlingen - Germany

**1964** ELCO was established in France

**1990** the company ELCO Energiesysteme GmbH has been founded

**1988** the company Klöckner Wärmetechnik GmbH has been founded

**2002** the ELCO brand was incorporated into the MTS group

**2008** ELCO installs the MDE System and the Elcogram for quick setting and user-friendly communication on all small and medium capacity burners

**2010** beginning of the 2...10 MW Program  
Market introduction of VECTRON 3 and of the innovative gas burners NEXTRON 6 and 7

**2011** 2...10 MW Program extension of the range  
Market introduction of NEXTRON 6 and 7 dual fuel versions and NEXTRON 8 and 9 gas versions  
Market introduction of VECTRON 2 and 4

**2012** 2...10 MW Program extension of the range  
Market introduction of NEXTRON 6 to 9 dual fuel and light oil versions  
Market introduction of VECTRON 5 and 6  
Market introduction of VECTRON 2 to 6 electronic gas versions (Modulo)



## Variatron

To further improve the performances of its heating or industry systems, ELCO is able to apply inverter-controlled regulation of the fan speed over the whole range of modulating burners.

The **Variatron®** operates in phase with the air damper both with the **GEM®** System and with the **AGP®** System, which guarantees a combustion with minimum air excess by continuously monitoring all operating conditions. It can be integrated inside the burner or externally mounted for mono- or duoblock burners.

Application of the **Variatron®** to ELCO burners results in:

- electrical consumption savings of the order of 50-60%;
- turndown ratio of up to 1:10, resulting in perfect adaptation to system requirements and improvement in average seasonal efficiency, in particular with condensing or low-temperature boilers or specific processes;
- silent start-up and average overall noise reduction between 2 dB (at max power) and 12 dB (at min power).



## IME

ELCO developed innovative combustion heads with two main priorities:

- power range identical to the corresponding standard burners;
- simplicity of manufacture, commissioning and maintenance.

The result is a "staged" combustion head, in which the gas is injected at different levels.

In the initial phase, combustion occurs with a large amount of air excess, and therefore low energy density. The flame therefore has time to cool down through radiation and for partial recirculation of exhaust gases, before the second phase, in which the remainder of the gas flow is injected further in the flame. With the adoption of the **IME®** (Multi-stage Injection) up to 6 MW, ELCO guarantees nitrogen oxide emissions less than 80 mg/kWh for natural gas combustion, measured according to the EN 676.



## AGP

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

- perfect stability of the air-gas mixture;
- a constantly high CO<sub>2</sub> content over the whole burner power range;
- precise control of air excess, which is important for high-efficiency operation, in particular for condensing generators.

The **AGP®** measures:

- the gas pressure downstream of the gas train;
- the air pressure behind the flame holder;
- the furnace backpressure.

Any variations in the three pressures are immediately and simultaneously recorded by the system which automatically restores the correct gas/combustion air ratio.

**AGP®** maintains a constant gas/combustion air ratio even in the presence of:

- positive or negative variations in the gas pressure;
- variations in air flow due to changes in the electrical supply voltage or fouling of the ventilation system;
- variations in the furnace and flue draft pressure on start-up and during load changes.



## GEM

The **GEM®** System electronic mix management System) is the most recently applied technology to all electronic models of ELCO range. It controls the position of one or more activators simultaneously. The servomotors of the air flow and oil components are controlled by a microprocessor which contains set points defined for each load curve. An additional advantage of the **GEM®** (electronic mix management system) is that it provides specific information on all the commands and states of the overall system: these can be accessed directly or by remote control.

The digital programming is user-friendly, it is carried out through the display of the **MDE2®** System or through a PC by using a simple procedure facilitated by easy instructions in a clear language that uses pictograms universally known.



## RHP

The **RHP®** System (Recirculation with High Performance) is a powerful and quiet ventilation system, which exploits the principle of a re-injection. Part of the air, under pressure, is sucked in again by the turbine, significantly increasing the ability of the burner to overcome the back pressure of the generator at start-up.

This allows ELCO burners to adapt to all types of generator and also results in:

- rapid stabilization of the flame and combustion on start-up;
- elimination of vibration;
- reduction of pollutant emissions, in compliance with the applicable European standards;
- very low noise levels (insulated air passage).

In addition, the patented design of the air damper provides optimal regulation of the airflow even at low power settings.



## MDE

A microprocessor-based electronic system which records and stores all the operating data. This system improves burner management through better technical support by providing all the information necessary for analysis of operation and any faults which have occurred in the past.

The stored data can be displayed on a display fitted to the burner, using the special **elcoscope®** reader or via a PC using the PC interface software.

It is possible to obtain different types of operating data:

- instantaneous operating values (operating phase, supply voltage, ionization current, etc.);
- statistical information (duration of operation, number of start-ups, number and type of shutdowns);
- detailed information on the last two shutdowns;
- technical details of the apparatus.

All this information is indicated in clear text.

This diagnostic information is particularly useful in resolving cases of sporadic shut-downs which cannot be reproduced in the presence of the support engineer.



## MDE2

The new **MDE2®** technology is the evolution of the **MDE®** technology. **MDE2®** with integrated display, not only supplies and permanently shows all the information available with **MDE®** technology, but also supplies further information about fuel consumption, fuel availability into the tank and periodic service to be carried out. In the gas versions, the new **MDE2®** technology automatically carries out a check of the gas leakage control at each burner start-up. The safety level in the whole installation is improved. In the industrial applications, the **MDE2®** control boxes adopt the **Quick Start®** technology that improve the burner performances by keeping the working temperature constant and by increasing significantly the security of the installation. The burner carries out the preventilation phase only at the first start-up, for the next start-ups, the flame will appear immediately when heat is required again by the system. Besides, to satisfy all industrial exigencies, the following parameters of the **MDE2®** can be activated:

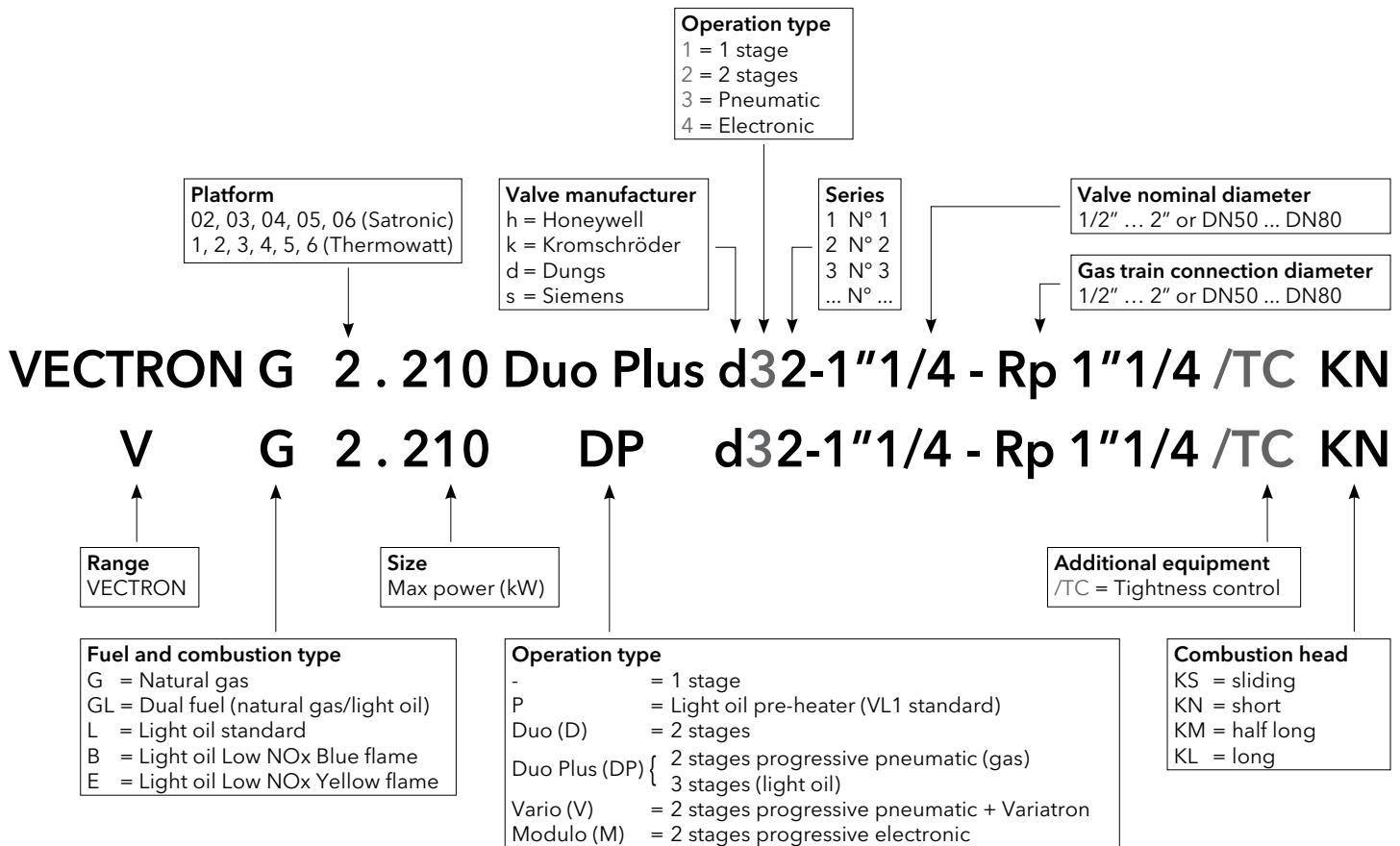
- permanent ventilation;
- **Quick Start®** System;
- value of the air damper opening for permanent ventilation;  
...or adjusted:
- adjustable time of the postventilation phase;
- adjustable time of the preventilation phase;
- control of the gas valves leakage;
- control of the regulation by a signal 0...10 V.



## RTC

The functional design of the housing, coupled with the innovative technology of the combustion heads, creates the **RTC®** (Retained Head Adjustment), offering several advantages:

- full access to all components, by simply removing the cover;
- easy and rapid maintenance;
- complete removal of the combustion head and access to its internal components with a single operation, without removing the burner from the boiler or disconnecting the gas train;
- optimum combustion head settings, which are not affected during servicing
- rapid cleaning of the mechanical components, thanks to their clear layout;
- reduced servicing times through the use of standard nuts, bolts, screws and pipe fittings, which can be adjusted using only a few tools.



**One stage Low NOx**

		0	50	100	150	200	250 kW	
VG1.40	14,5 ... 40		40					p. 12
VG1.55	35 ... 55		55					p. 12
VG1.85	45 ... 85		85					p. 12
VG2.140	80 ... 140		140					p. 14
VG2.200	130 ... 200		200					p. 14

**Two stages Low NOx**

		0	100	200	300	400	500 kW	
VG01.85 D	45 ... 85		85					p. 16
VG2.120 D	40 ... 120		120					p. 18
VG2.160 D	60 ... 160		160					p. 18
VG2.210 D	80 ... 210		210					p. 18
VG3.290 D*	95 ... 290		290					p. 20
VG3.360 D*	120 ... 360		360					p. 20
VG4.460 D*	150 ... 460		460					p. 22

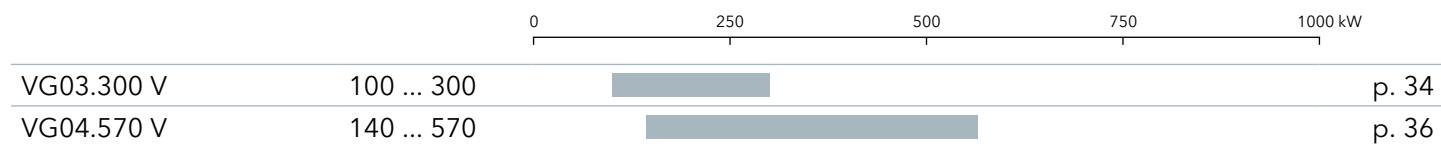
\*: version with tightness control on request

**Two stage progressive pneumatic Low NOx**

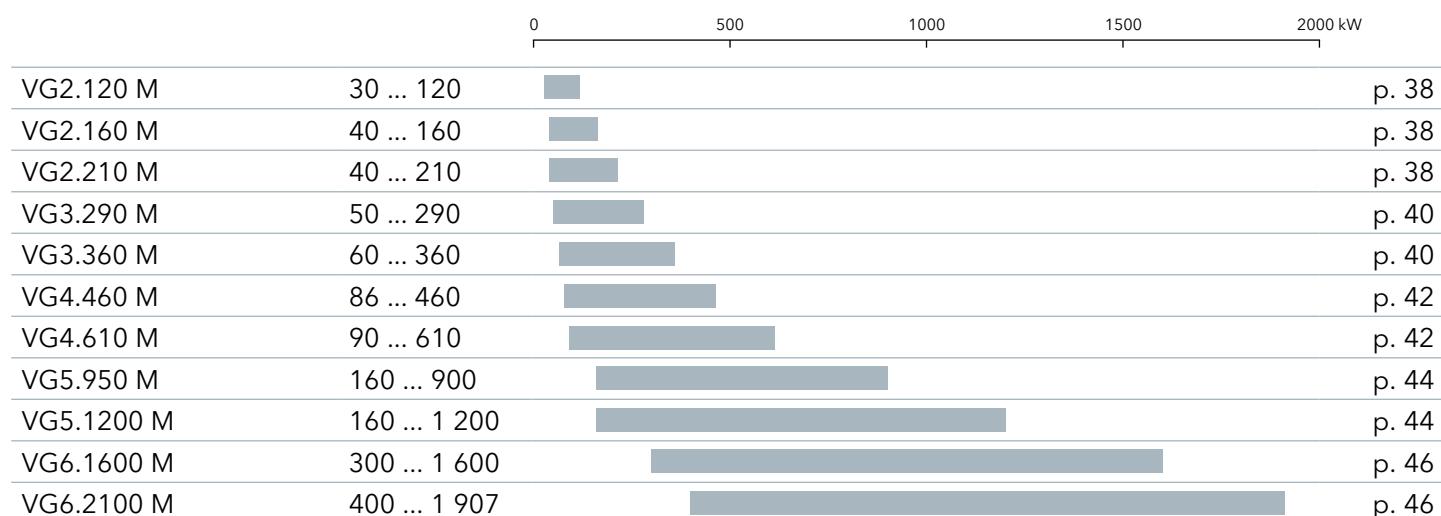
		0	500	1000	1500	2000 kW	
VG2.120 DP	40 ... 120		120				p. 24
VG2.160 DP	60 ... 160		160				p. 24
VG2.210 DP	80 ... 210		210				p. 24
VG3.290 DP*	70 ... 290		290				p. 26
VG3.360 DP*	80 ... 360		360				p. 26
VG4.460 DP*	100 ... 460		460				p. 28
VG4.610 DP*	130 ... 610		610				p. 28
VG5.950 DP*	170 ... 950		950				p. 30
VG5.1200 DP*	250 ... 1 160		1 160				p. 30
VG6.1600 DP	300 ... 1 600		1 600				p. 32
VG6.2100 DP	400 ... 1 907		1 907				p. 32

\*: version with tightness control on request

**Two stage progressive pneumatic Low NOx + fan speed control**



#### **Two stage progressive electronic Low NOx**



**One stage in gas and in oil**

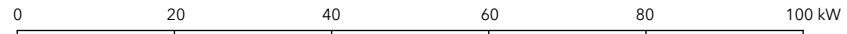
VGL2.120	35 ... 120		p. 48
VGL2.210	100 ... 190		p. 48

**Two stages in gas and in oil**

VGL04.350 D	95 ... 350		p. 50
VGL04.440 D	130 ... 440		p. 50

**Two stage progressive pneumatic in gas / three stages in oil**

VGL05.700 DP	200 ... 700		p. 52
VGL05.1000 DP	240 ... 1 000		p. 52
VGL06.1600 DP	300 ... 1 600		p. 54
VGL06.2100 DP	480 ... 2 050		p. 54

**One stage Low NOx Blue flame**

VB1.20	11 ... 20		p. 56
VB1.24	14 ... 24		p. 56
VB1.28	20 ... 28		p. 56
VB1.30	22 ... 30		p. 56
VB1.35	25 ... 35		p. 56
VB1.47	38 ... 47		p. 56
VBL02.60	45 ... 60		p. 58
VBL02.65	49 ... 65		p. 58
VBL02.74	56 ... 74		p. 58

**One stage Low NOx Yellow flame**

VE1.34	16 ... 34		p. 60
VE1.50	28 ... 50		p. 60
VE1.75	44 ... 75		p. 60

**One stage with pre-heater**

VL1.40 P	18 ... 40		p. 62
VL1.55 P	30 ... 55		p. 62

**One stage standard**

VL1.42	20 ... 42		p. 62
VL1.55	30 ... 55		p. 62
VL1.95	45 ... 95		p. 62
VL2.140	80 ... 140		p. 64
VL2.200	130 ... 200		p. 64

**Two stages Low NOx Blue flame**

VBL02.86 D	63 ... 86		p. 66
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**Two stages standard**

VL2.120 D	60 ... 120		p. 68
VL2.160 D	80 ... 160		p. 68
VL2.210 D	100 ... 210		p. 68
VL3.290 D	130 ... 290		p. 70
VL3.360 D	170 ... 360		p. 70
VL4.460 D	180 ... 460		p. 72
VL4.610 D	195 ... 610		p. 72
VL5.950 D	260 ... 950		p. 74
VL5.1200 D	400 ... 1 186		p. 74

**Three stages standard**

VL04.540 DP	166 ... 540		p. 76
VL6.1600 DP	320 ... 1 600		p. 78
VL6.2100 DP	400 ... 2 080		p. 78

**Options**

p. 80

**Gas trains**

p. 82

**Pressure losses**

p. 84

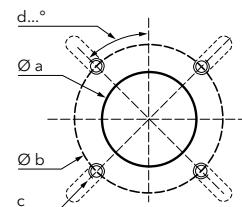
## Description

- One stage Low NOx class 3 forced draught burner.
- Fuels: natural gas, net calorific value 8,83 ... 10,53 kWh/m<sup>3</sup>, LPG, net calorific value 25,89 kWh/m<sup>3</sup>.
- Maximum heat power: 40, 55 and 85 kW.
- Adjustable combustion head length with sliding flange.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Complete electrical equipment in the body of the burner with MDE2 System and display.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 21.
- Maximum working temperature 50°C.
- In compliance with the EN 676 standards and European Guidelines such as:
 

- gas appliances	2009/142/EC
- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

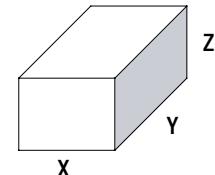
Model	Øa (mm)	b (mm)	c	d
VG 1.40/55	85-104	150-170	M8	45°
VG 1.85	95-104	150-170	M8	45°



## Packaging

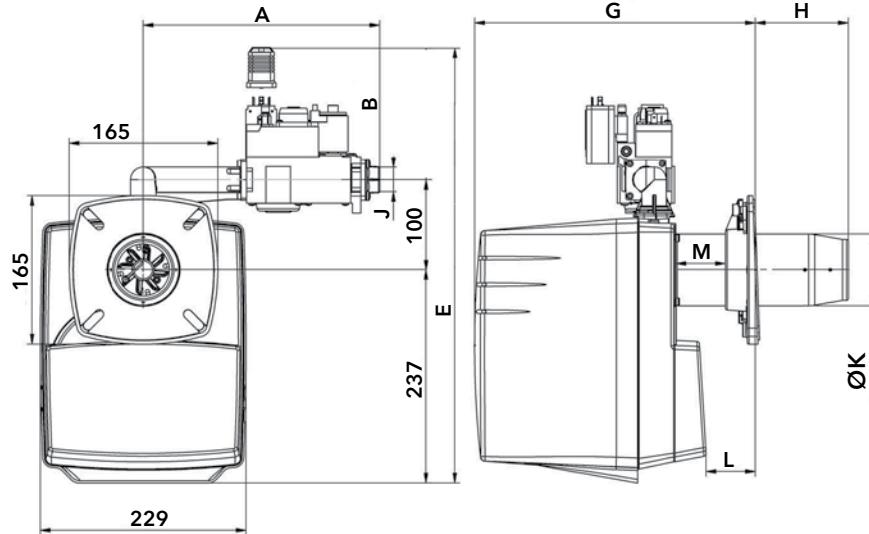
The burner is delivered in its package complete with:

- gas train;
- boiler fixing accessories;
- directions for use including electrical diagram, exploded view and spare parts list.



Component	Dimensions (mm)			Gross weight (kg)	
	X	Y	Z		
Complete burner CB	VG 1.40	300	260	640	11
	VG 1.55	300	260	640	11
	VG 1.85	300	260	640	11

## Dimensions (mm)



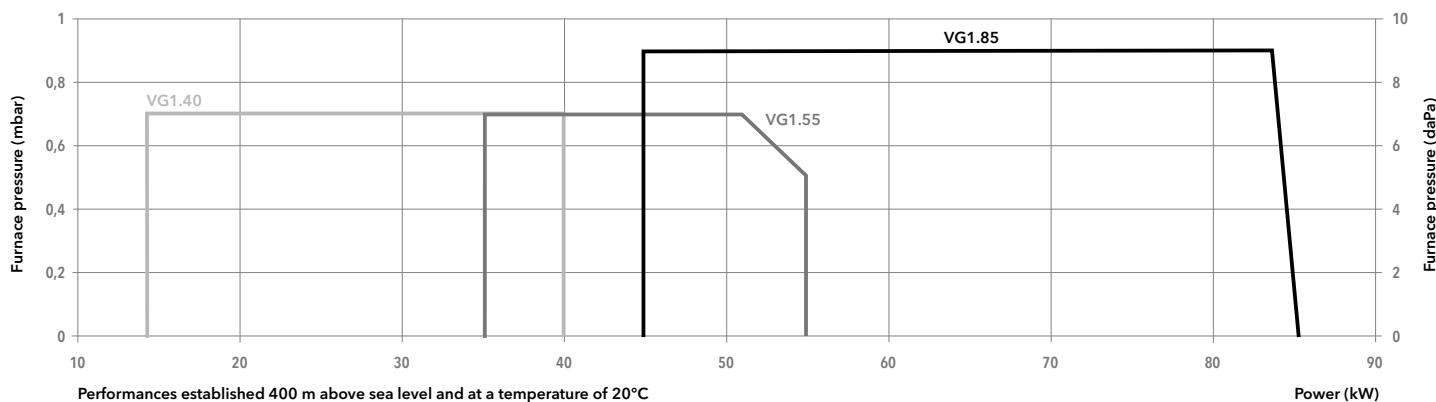
	A	B	E	G		H		J	Ø K	L		M
				min	max	min	max			min	max	
h3/8"-Rp1/2"	263	120	484	297	337	70	110	Rp1/2"	80	21	61	48
d3/4"-Rp3/4"	282	140	477	300	355	70	138	Rp3/4"	90	15	83	52

# Gas VECTRON G 1

**Range: VG 1.40, VG 1.55, VG 1.85**  
**14,5 ... 85 kW**  
**1 stage**  
**Low NOx**



## Working fields



## Characteristics and equipment

Model	VG 1.40	VG 1.55	VG 1.85
Operation range	14,5 - 40 kW	35 - 55 kW	45 - 85 kW
Gas pressure	20 - 50 mbar		20 - 300 mbar
Control box / flame detection	TCG 141.00 / ionization		
Fan motor		230 V - 50 Hz - 85 W	
Electrical consumption	120 W		195 W
Acoustic level (LpA)	55 dB(A)		60,5 dB(A)
CE certificate	1312 BT 5225		1312 BT 5252
Head lenght	KN	KL	KN
Complete burner code	h3/8"-Rp1/2" d3/4"-Rp3/4"	3 832 635	3 832 636
	-	-	-
			3 832 637
			-

## Options

Front boiler flange CP1	13 018 495
External air inlet connector RG9 (Ø 50 mm)	13 011 996
External air inlet connector RG4 (Ø 50 mm, adjustable)	13 004 320

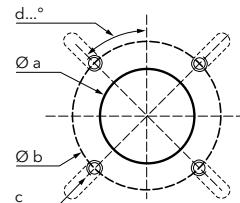
## Description

- One stage Low NOx class 3 forced draught burner.
- Fuels: natural gas, net calorific value 8,83 ... 10,53 kWh/m<sup>3</sup>, LPG, net calorific value 25,89 kWh/m<sup>3</sup>.
- Maximum heat power: 140 and 200 kW.
- Adjustable combustion head length with sliding flange.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Complete electrical equipment in the body of the burner.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 21.
- Maximum working temperature 50°C.
- In compliance with the EN 676 standards and European Guidelines such as:
 

- gas appliances	2009/142/EC
- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

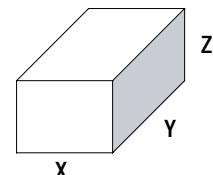
<b>Øa (mm)</b>	<b>b (mm)</b>	<b>c</b>	<b>d</b>
120-135	150-184	M8	45°



## Packaging

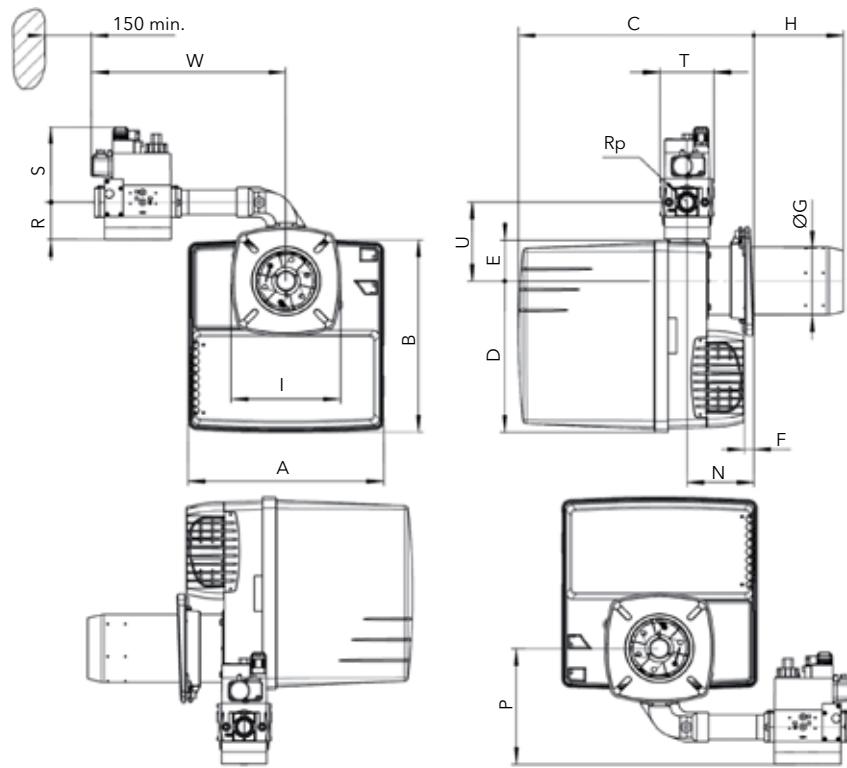
The burner is delivered in its package complete with:

- gas train;
- boiler fixing accessories;
- directions for use including electrical diagram, exploded view and spare parts list.



<b>Component</b>	<b>Dimensions (mm)</b>			<b>Gross weight (kg)</b>	
	<b>X</b>	<b>Y</b>	<b>Z</b>		
<b>Complete burner CB</b>	VG 2.140	400	400	760	25
	VG 2.200	400	400	760	25

## Dimensions (mm)



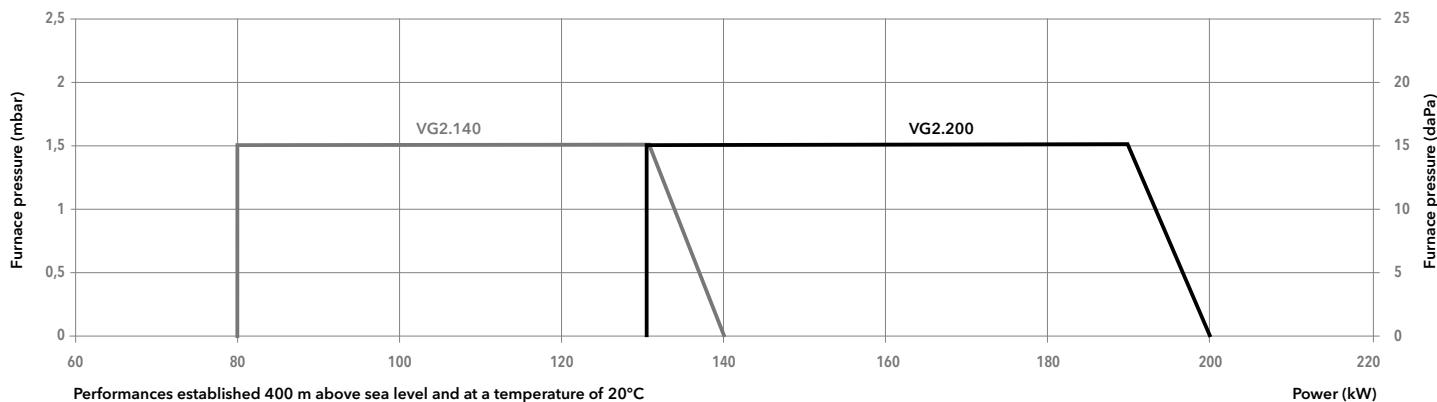
	<b>A</b>	<b>B</b>	<b>C</b>		<b>D</b>	<b>E</b>	<b>F</b>	<b>Ø G</b>	<b>H</b>		<b>I</b>	<b>N</b>	<b>P</b>	<b>Rp</b>	<b>R</b>	<b>S</b>	<b>T</b>	<b>U</b>	<b>W</b>
VG2.140	d3/4"-Rp3/4"	331	325	KN 398...518	KL 398...638	256	69	15 min	100	KN 30...150	KL 30...270	185 x 185 min	113	115	3/4"	46	140	120	330
VG2.200								115										133	
VG2.200	d1"1/4-Rp1"1/4							115										360	

## Gas VECTRON G 2

**Range: VG 2.140, VG 2.200**  
**80 ... 200 kW**  
**1 stage**  
**Low NOx**



### Working fields



### Characteristics and equipment

Model	VG 2.140		VG 2.200	
Operation range	80 - 140 kW			130 - 200 kW
Gas pressure	20 - 300 mbar			
Control box / flame detection	TCG1... / ionization			
Fan motor	230 V - 50 Hz - 160 W			230 V - 50 Hz - 130 W
Electrical consumption	160 W			250 W
Acoustic level (LpA)	62 dB(A)			65 dB(A)
CE certificate	1312 CM 5594			1312 BQ 4069
Head lenght	KN	KL	KN	KL
Complete burner code	d1"1/4-Rp1"1/4 d3/4"-Rp3/4"	- 3 833 554	- 3 833 555	3 833 571 3 833 563
				3 833 572 3 833 564

### Options

Front boiler flange CP2	13 018 496
External air inlet connector RG10 (Ø 100 mm)	13 018 822

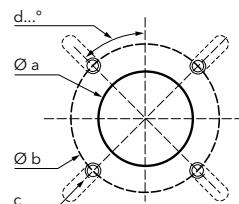
## Description

- Two stages Low NOx class 3 forced draught burner.
- Fuels: natural gas, net calorific value 8,83 ... 10,53 kWh/m<sup>3</sup>, LPG, net calorific value 25,89 kWh/m<sup>3</sup>.
- Maximum heat power VG 01.85 Duo: 85 kW.
- Minimum / maximum power ratio: 1/2.
- Adjustable combustion head length with sliding flange.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Closing of the air flap on burner shut-down.
- Gas train factory assembled and tested for tightness and electrical security.
- Complete electrical equipment in the body of the burner with control panel.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 21.
- Maximum working temperature 50°C.
- In compliance with the EN 676 standards and European Guidelines such as:
 

- gas appliances	2009/142/EC
- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

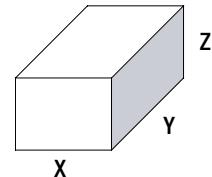
Øa (mm)	b (mm)	c	d
95-104	150-170	M8	45°



## Packaging

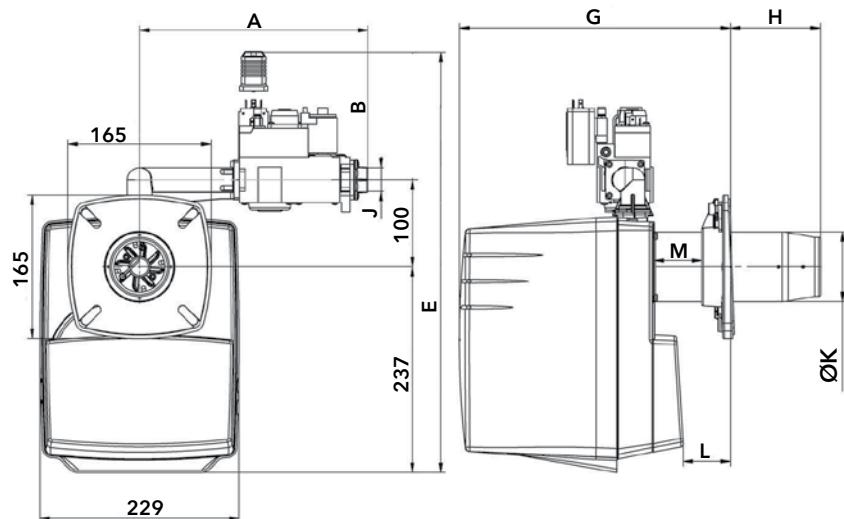
The burner is delivered in its package complete with:

- gas train;
- boiler fixing accessories;
- directions for use including electrical diagram, exploded view and spare parts list.



Component	Dimensions (mm)			Gross weight (kg)	
	X	Y	Z		
Complete burner CB	VG 01.85 D	300	260	640	14

## Dimensions (mm)



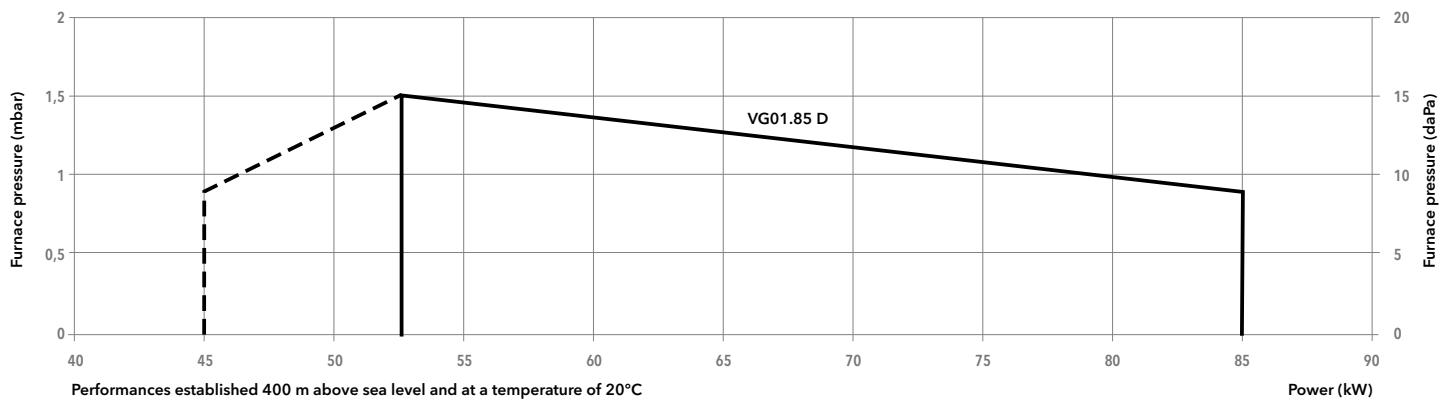
A	B	E	L	ØK	H	G	J
290	210	535	min 15 / max 83	90	min 70 / max 138	min 300 / max 355	Rp3/4"

## Gas VECTRON G 01.85 Duo

**Range: VG 01.85 D**  
**45 ... 85 kW**  
**2 stages**  
**Low NOx**



### Working fields



### Characteristics and equipment

Model	VG 01.85 D	
Operation range	(45) 52,5 - 85 kW	
Gas pressure	20 - 300 mbar	
Control box / flame detection	SG 513 / ionization	
Fan motor	230 V - 50 Hz - 85 W	
Electrical consumption	185 W	
Acoustic level (LpA)	60,5 dB(A)	
CE certificate	1312 BN 3749	
Head lenght	KN	KL
Complete burner code	d3/4"-Rp3/4"	-

### Options

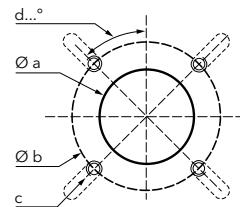
Wieland plug (4 + 7 pins)	13 016 496
Front boiler flange CP1	13 018 495
External air inlet connector RG9 (Ø 50 mm)	13 011 996
External air inlet connector RG4 (Ø 50 mm, adjustable)	13 004 320

## Description

- Two stages Low NOx class 3 forced draught burner.
  - Fuels: natural gas, net calorific value 8,83 ... 10,53 kWh/m<sup>3</sup>, LPG, net calorific value 25,89 kWh/m<sup>3</sup>.
  - Maximum heat power: 120, 160 and 210 kW.
  - Minimum/maximum power ratio: 1/2.
  - Adjustable combustion head length with sliding flange.
  - Cubic type architecture:
    - optimal accessibility;
    - maximum compactness, minimum weight;
    - simplified maintenance;
    - limited number of tools and components;
    - preserved burner head adjustments.
  - Quiet ventilation and reduced electrical consumption.
  - Closing of the air flap on burner shut-down.
  - Gas train factory assembled and tested for tightness and electrical security.
  - Complete electrical equipment in the body of the burner with MDE2 System and display.
  - Single-phase electrical power supply 230 V - 50 Hz.
  - Protection level IP 21.
  - Maximum working temperature 50°C.
- In compliance with the EN 676 standards and European Guidelines such as:
- |                  |             |
|------------------|-------------|
| - Gas appliances | 2009/142/EC |
| - EMC            | 2004/108/EC |
| - Low voltage    | 2006/95/EC  |
| - Efficiency     | 92/42/EEC   |

## Connecting flange

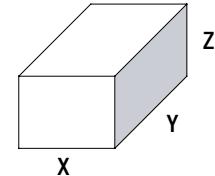
Øa (mm)	b (mm)	c	d
120-135	150-184	M8	45°



## Packaging

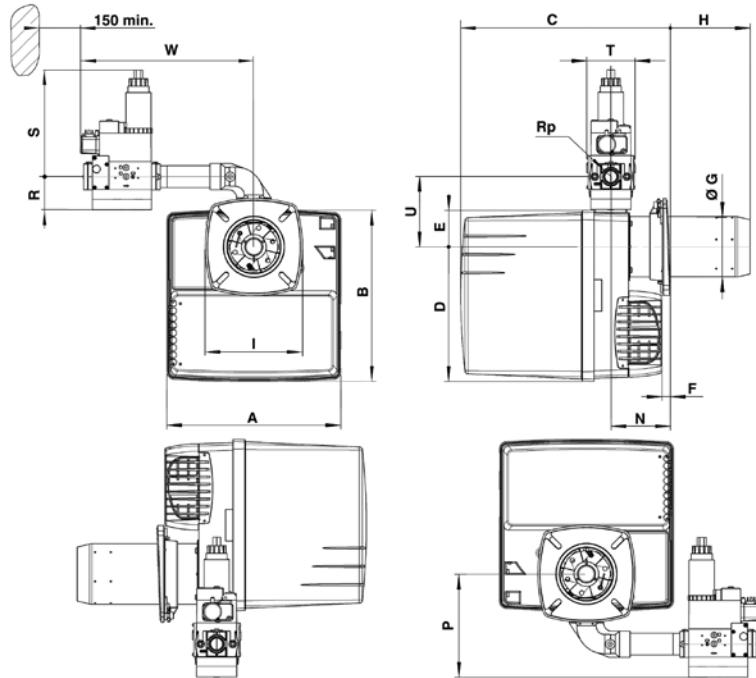
The burner is delivered in its package complete with:

- gas train;
- boiler fixing accessories;
- directions for use including electrical diagram, exploded view and spare parts list.



Component	Dimensions (mm)			Gross weight (kg)
	X	Y	Z	
Complete burner CB	VG 2.120 D	400	400	760
	VG 2.160 D	400	400	760
	VG 2.210 D	400	400	760

## Dimensions (mm)



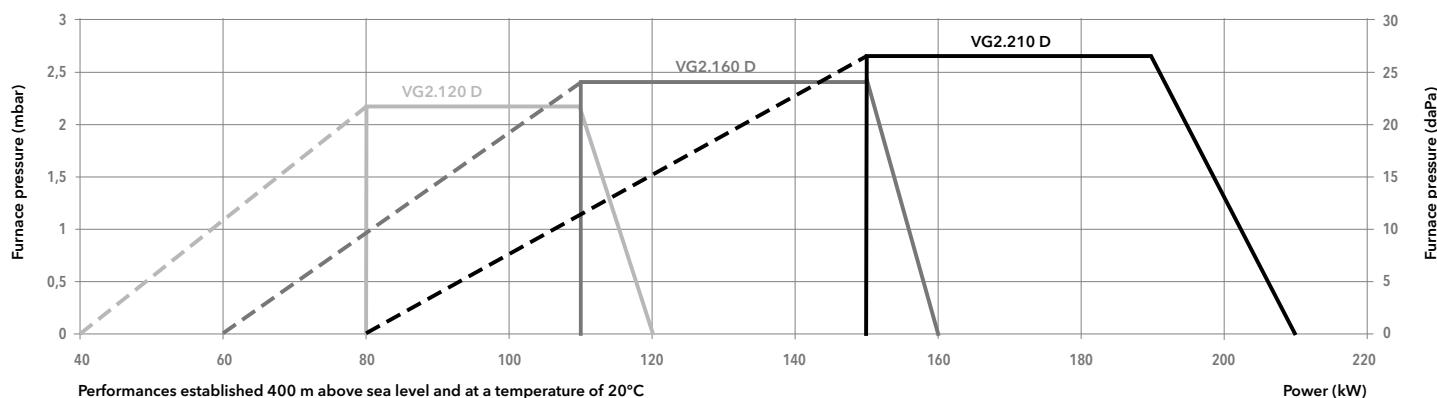
	A	B	C		D	E	F	Ø G	H		I	N	P	Rp	R	S	T	U	W
d1"1/4-Rp1"1/4	331	326	KN	KL	256	69	15 min	115	KN	KL	185	113	55	1"1/4	55	260	145	64	360
d3/4"-Rp3/4"			398...518	398...638					30...150	30...270	x 185	min	115	3/4"	46	210	120		330

# Gas VECTRON G 2 Duo

**Range: VG 2.120 D, VG 2.160 D, VG 2.210 D**  
**40 ... 210 kW**  
**2 stages**  
**Low NOx**



## Working fields



## Characteristics and equipment

Model	VG 2.120 D	VG 2.160 D	VG 2.210 D				
Operation range	(40) 80 - 120 kW	(60) 110 - 160 kW	(80) 150 - 210 kW				
Gas pressure		20 - 300 mbar					
Control box / flame detection		TCG2... / ionization					
Fan motor	230 V - 50 Hz - 160 W		230 V - 50 Hz - 130 W				
Electrical consumption	185 W	280 W	290 W				
Acoustic level (LpA)	62 dB(A)	64 dB(A)	65,2 dB(A)				
CE certificate		1312 BQ 4069					
Head lenght	KN	KL	KN				
Complete burner code	d1"1/4-Rp1"1/4 d3/4"-Rp3/4"	3 833 330	3 833 321	3 833 331	3 833 322	3 833 333	3 833 334

## Options

Front boiler flange CP2	13 018 496
External air inlet connector RG10 ( $\varnothing$ 100 mm)	13 018 822

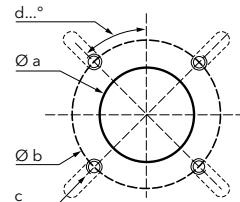
## Description

- Two stages Low NOx class 3 forced draught burner.
- Fuels: natural gas, net calorific value 8,83 ... 10,53 kWh/m<sup>3</sup>, LPG, net calorific value 25,89 kWh/m<sup>3</sup>.
- Maximum heat power: 290 and 360 kW.
- Minimum/maximum power ratio: 1/2.
- Two combustion head lengths.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Closing of the air flap on burner shut-down.
- Gas train factory assembled and tested for tightness and electrical security.
- Complete electrical equipment in the body of the burner with MDE2 System and display.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 41.
- Maximum working temperature 50°C.
- In compliance with the EN 676 standards and European Guidelines such as:
 

- gas appliances	2009/142/EC
- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

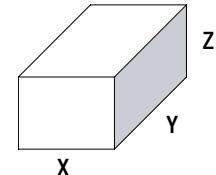
Øa (mm)	b (mm)	c	d
155-190	175-220	M10	45°



## Packaging

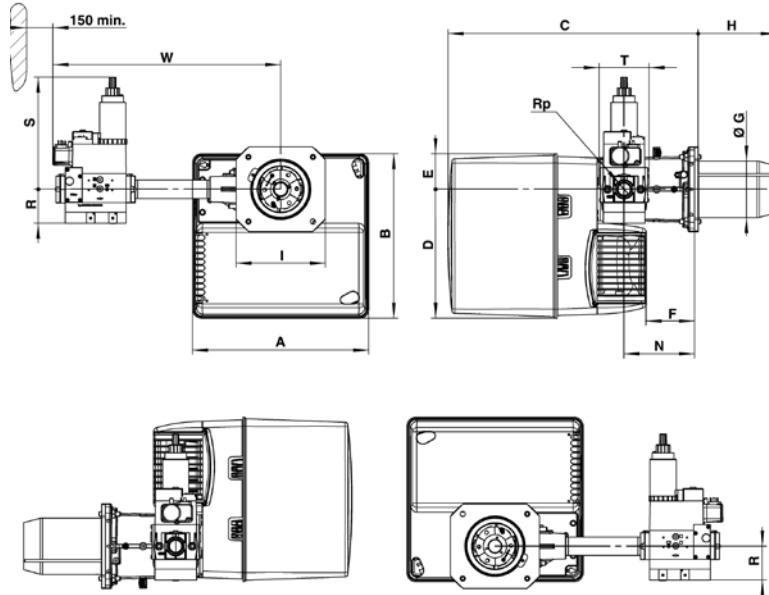
The burner is delivered complete in three packages containing:

- burner body with: boiler fixing accessories, technical data including electrical diagram, exploded view and spare parts list, instruction manual;
- combustion head;
- gas train.



Component	Dimensions (mm)			Gross weight (kg)
	X	Y	Z	
Burner body BB	VG 3.290 D	440	400	520
	VG 3.360 D	440	400	520
Combustion head CH	KN	650	210	260
	KL	780	210	260
Gas train GT	d1"1/2-Rp2"	600	400	240
	d1"1/4-Rp1"1/4	440	320	240
	d3/4"-Rp3/4"	440	320	240

## Dimensions (mm)



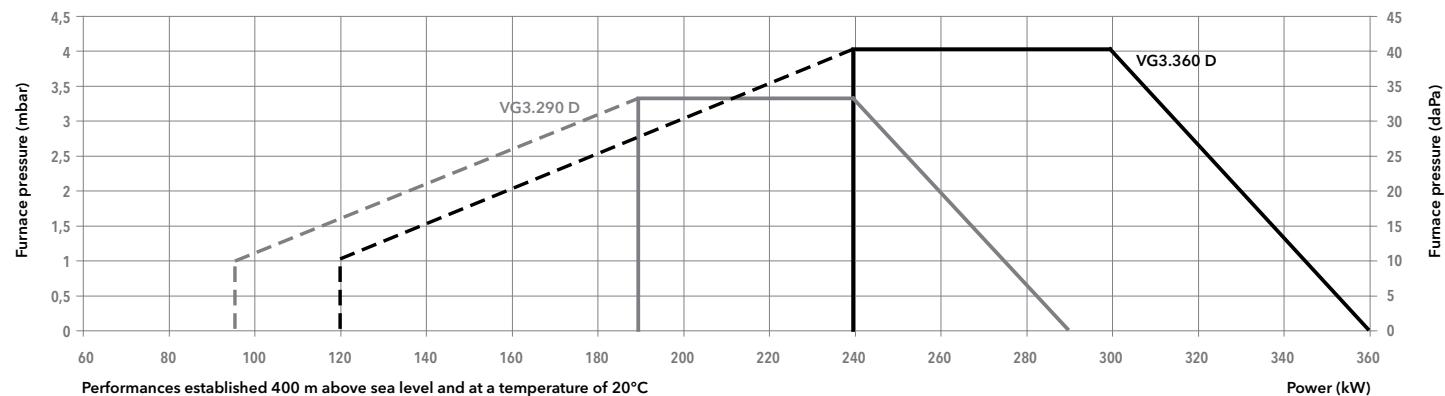
	A	B	C	D	E	F	Ø G	H	I	N	Rp	R	S	T	W	
d1"1/2-Rp2"											2"	80	330	100	603	
d1"1/4-Rp1"1/4	406	379	576	297	82	120	130	KN 180	KL 320	195 x 205	170	1"1/4	55	260	145	
d3/4"-Rp3/4"												3/4"	46	210	120	479

# Gas VECTRON G 3 Duo

**Range: VG 3.290 D, VG 3.360 D**  
**95 ... 360 kW**  
**2 stages**  
**Low NOx**



## Working fields



## Characteristics and equipment

Model	VG 3.290 D		VG 3.360 D	
Operation range	(95) 190 - 290 kW			(120) 240 - 360 kW
Gas pressure	20 - 300 mbar			
Control box / flame detection	TCG2... / ionization			
Fan motor	230 V - 50 Hz - 250 W			230 V - 50 Hz - 300 W
Electrical consumption	420 W			480 W
Acoustic level (LpA)	67 dB(A)			69 dB(A)
CE certificate	1312 BV 5208			
Head lenght	KN	KL	KN	KL
Complete burner code	d1"1/2-Rp2" d1"1/4-Rp1"1/4 d3/4"-Rp3/4"	3 833 056 3 833 058	3 833 057 3 833 059	3 833 187 3 833 052 3 833 054
				3 833 188 3 833 053 3 833 055

Version with tightness control on request.

## Options

Front boiler flange CP31	3 833 151
External air inlet connector RG11 (Ø 160 mm)	3 833 152

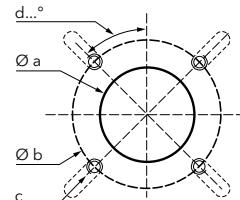
## Description

- Two stages Low NOx class 3 forced draught burner.
- Fuels: natural gas, net calorific value 8,83 ... 10,53 kWh/m<sup>3</sup>, LPG, net calorific value 25,89 kWh/m<sup>3</sup>.
- Maximum heat power: 460 kW.
- Minimum / maximum power ratio: 1/2.
- Two combustion head lengths.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Closing of the air flap on burner shut-down.
- Gas train factory assembled and tested for tightness and electrical security.
- Complete electrical equipment in the body of the burner with MDE2 System and display.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 21.
- Maximum working temperature 50°C.
- In compliance with the EN 676 standards and European Guidelines such as:
 

- gas appliances	2009/142/EC
- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

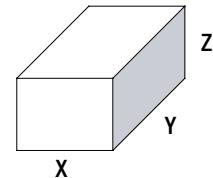
$\varnothing a$ (mm)	b (mm)	c	d
190-240	200-270	M10	45°



## Packaging

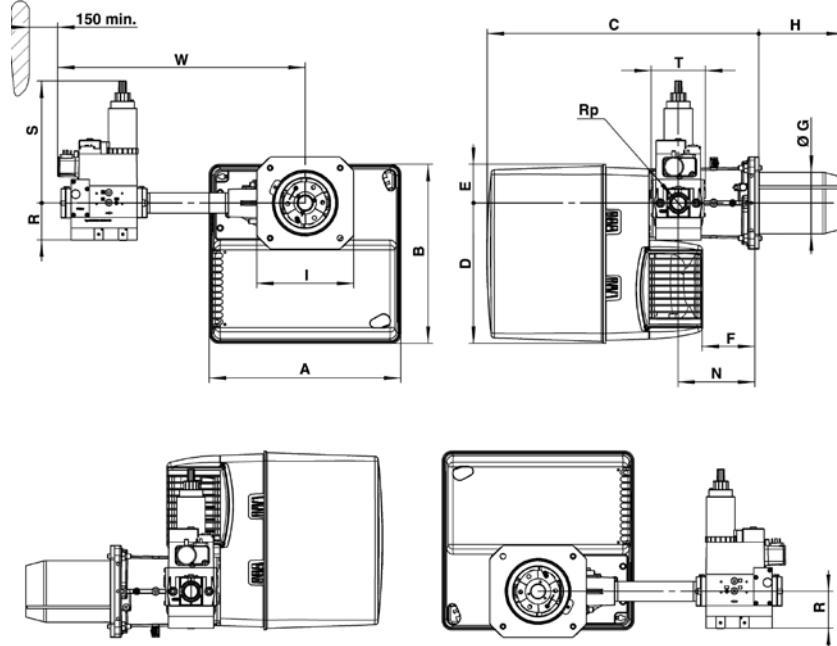
The burner is delivered complete in three packages containing:

- burner body with: boiler fixing accessories, technical data including electrical diagram, exploded view and spare parts list, instruction manual;
- combustion head;
- gas train.



Component	Dimensions (mm)			Gross weight (kg)	
	X	Y	Z		
Burner body BB	VG 4.460 D	490	490	590	28,7
Combustion head CH	KN	750	260	295	8,9
	KL	895	260	295	10,1
Gas train GT	d1"1/2-Rp2"	600	400	240	14
	d1"1/4-Rp1"1/4	440	320	240	10
	d3/4"-Rp3/4"	440	320	240	7

## Dimensions (mm)



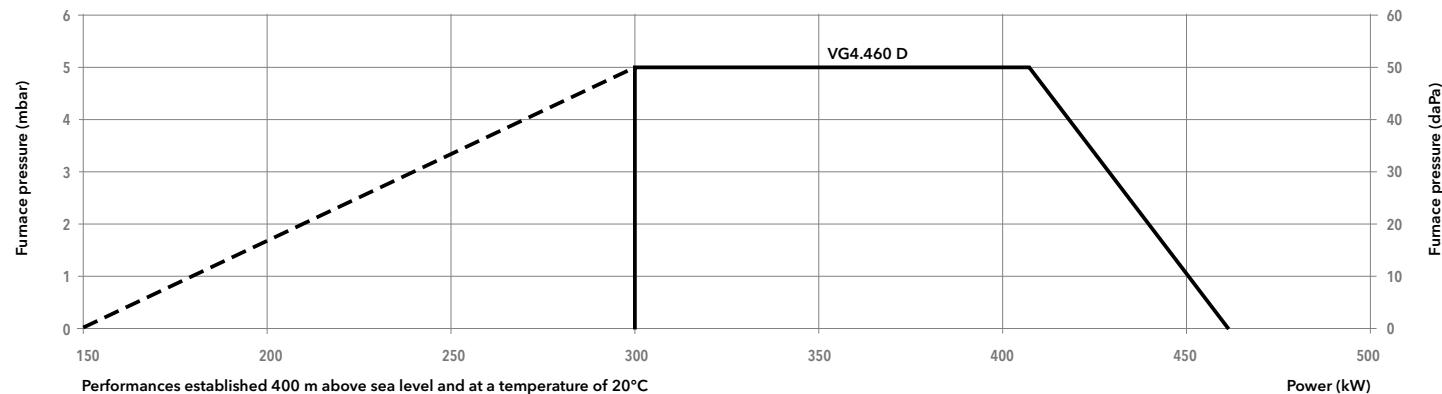
	A	B	C	D	E	F	$\varnothing G$	H	I	N	Rp	R	S	T	W
d1"1/2-Rp2"	465	475	640	377	97	149	150	KN 220 360	245 x 245	195	2"	80	330	100	613
d1"1/4-Rp1"1/4		475	640	377	97	149	150				1"1/4	55	260	145	536
d3/4"-Rp3/4"		475	640	377	97	149	150				3/4"	46	210	120	489

# Gas VECTRON G 4 Duo

**Range: VG 4.460 D**  
**150 ... 460 kW**  
**2 stages**  
**Low NOx**



## Working fields



## Characteristics and equipment

Model	VG 4.460 D		
Operation range	(150) 300 - 460 kW		
Gas pressure	20 - 300 mbar		
Control box / flame detection	TCG2... / ionization		
Fan motor	230 V - 50 Hz - 420 W		
Electrical consumption	595 W		
Acoustic level (LpA)	70 dB(A)		
CE certificate	1312 CL 5412		
Head lenght	KN	KL	
Complete burner code	d1"1/2-Rp2" d1"1/4-Rp1"1/4 d3/4"-Rp3/4"	3 833 399 3 833 401 3 833 403	3 833 400 3 833 402 3 833 404

Version with tightness control on request.

## Options

Front boiler flange CP4	13 018 499
External air inlet connector RG12 ( $\varnothing$ 200 mm)	3 833 429

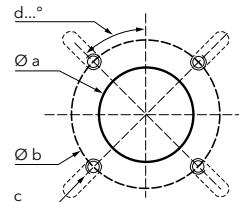
## Description

- Two stage progressive pneumatic Low NOx class 3 forced draught burner.
- Fuels: natural gas, net calorific value 8,83 ... 10,53 kWh/m<sup>3</sup>, LPG, net calorific value 25,89 kWh/m<sup>3</sup>.
- Maximum heat power: 120, 160 and 210 kW.
- Minimum/maximum power ratio: 1/3.
- Adjustable combustion head length with sliding flange.
- Air/gas ratio with pneumatic control technology.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Closing of the air flap on burner shut-down.
- Gas train factory assembled and tested for tightness and electrical security.
- Complete electrical equipment in the body of the burner with MDE2 System and display.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 21.
- Maximum working temperature 50°C.
- In compliance with the EN 676 standards and European Guidelines such as:
 

- gas appliances	2009/142/EC
- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

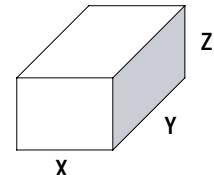
Øa (mm)	b (mm)	c	d
120-135	150-184	M8	45°



## Packaging

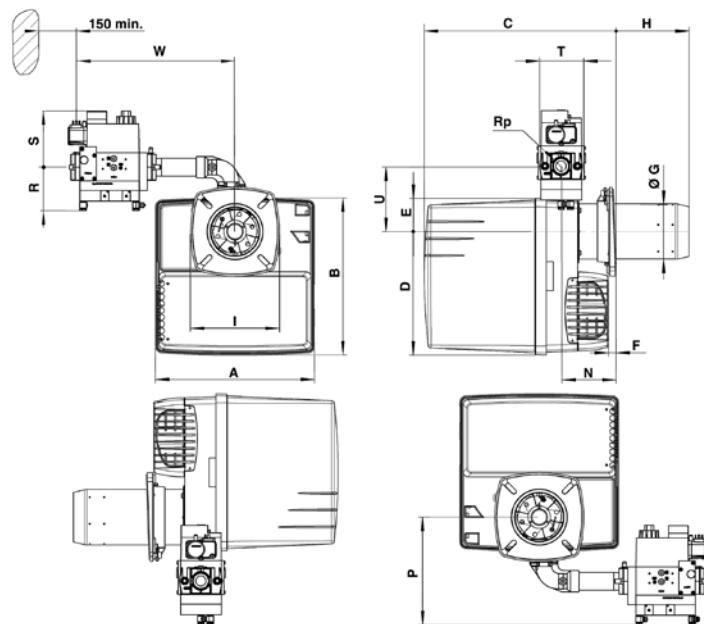
The burner is delivered in its package complete with:

- gas train;
- boiler fixing accessories;
- directions for use including electrical diagram, exploded view and spare parts list.



Component	Dimensions (mm)			Gross weight (kg)	
	X	Y	Z		
Complete burner CB	VG 2.120 DP	400	400	760	21
	VG 2.160 DP	400	400	760	21
	VG 2.210 DP	400	400	760	21

## Dimensions (mm)



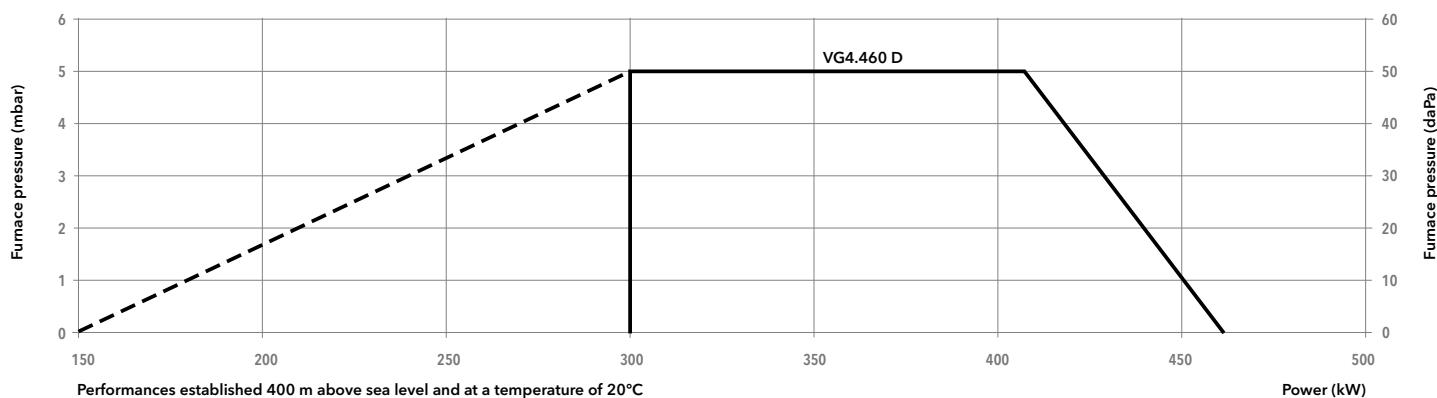
	A	B	C	D	E	F	ØG	H	I	N	P	Rp	R	S	T	U	W		
d1"1/4-Rp1"1/4											55	1"1/4	80	175	145		380		
d332-3/4"-Rp3/4"	331	326	KN 398...518	KL 398...638	256	69	15 min	115	KN 30...150	KL 30...270	185 x 185	113 min	115	3/4"	70	160	120	64	345
d333-3/4"-Rp3/4"											115	3/4"	70	160	120		345		

# Gas VECTRON G 2 Duo Plus

**Range: VG 2.120 DP, VG 2.160 DP, VG 2.210 DP**  
**40 ... 210 kW**  
**2 stage progressive pneumatic**  
**Low NOx**



## Working fields



## Characteristics and equipment

Model	VG 2.120 DP	VG 2.160 DP	VG 2.210 DP				
Operation range	(40) 80 - 120 kW	(60) 110 - 160 kW	(80) 150 - 210 kW				
Gas pressure		20 - 300 mbar					
Control box / flame detection		TCG5... / ionization					
Fan motor	230 V - 50 Hz - 160 W		230 V - 50 Hz - 130 W				
Electrical consumption	195 W		260 W				
Acoustic level (LpA)	62 dB(A)	64 dB(A)	65,2 dB(A)				
CE certificate		1312 BQ 4069					
Head lenght	KN	KL	KN				
Complete burner code	d1"1/4-Rp1"1/4 d332-3/4"-Rp3/4" d333-3/4"-Rp3/4"	3 833 475 3 833 336	3 833 476 3 833 337	3 833 477 3 833 338	3 833 478 3 833 339	3 833 335 3 833 479 3 833 340	3 833 324 3 833 480 3 833 341

## Options

Front boiler flange CP2	13 018 496
External air inlet connector RG10 ( $\varnothing$ 100 mm)	13 018 822

## Description

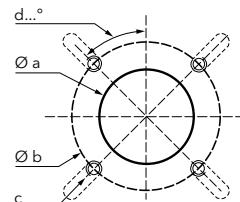
- Two stage progressive pneumatic Low NOx class 3 forced draught burner.
- Fuels: natural gas, net calorific value 8,83 ... 10,53 kWh/m<sup>3</sup>, LPG, net calorific value 25,89 kWh/m<sup>3</sup>.
- Maximum heat power: 290 and 360 kW.
- Minimum/maximum power ratio: 1/3.
- Air gas ratio with pneumatic control technology (AGP System).
- Two combustion head lengths.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Closing of the air flap on burner shut-down.
- Gas train factory assembled and tested for tightness and electrical security.
- Complete electrical equipment in the body of the burner with MDE2 System and display.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 41.
- Maximum working temperature 50°C.

In compliance with the EN 676 standards and European Guidelines such as:

- gas appliances	2009/142/EC
- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

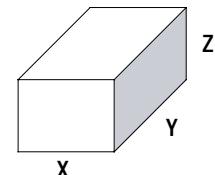
Øa (mm)	b (mm)	c	d
155-190	175-220	M10	45°



## Packaging

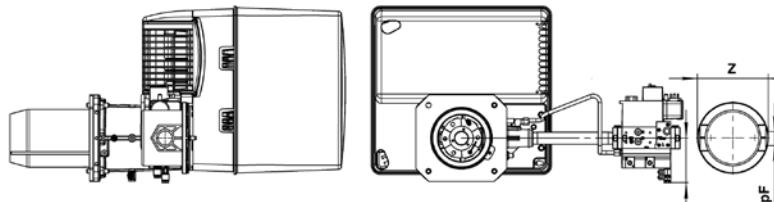
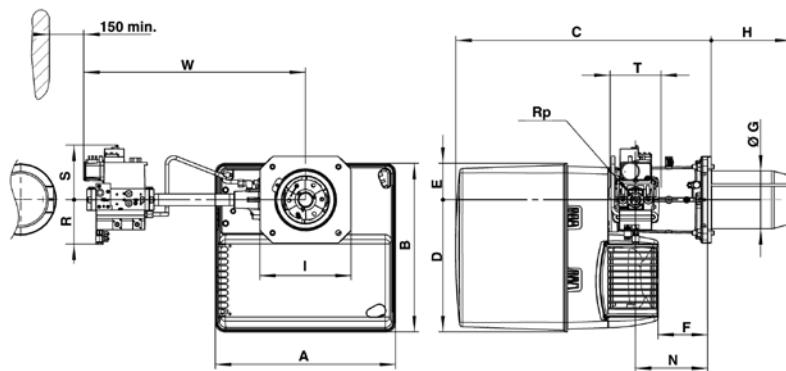
The burner is delivered complete in three packages containing:

- burner body with: boiler fixing accessories, technical data including electrical diagram, exploded view and spare parts list, instruction manual;
- combustion head;
- gas train.



Component	Dimensions (mm)			Gross weight (kg)	
	X	Y	Z		
<b>Burner body BB</b>	VG 3.290 DP	440	400	520	21
	VG 3.360 DP	440	400	520	22
<b>Combustion head CH</b>	KN	650	210	260	6
	KL	780	210	260	7
<b>Gas train GT</b>	d1"1/2-Rp2"	670	550	380	12
	d1"1/4-Rp1"1/4	600	400	240	11
	d3/4"-Rp1"	600	400	240	7

## Dimensions (mm)



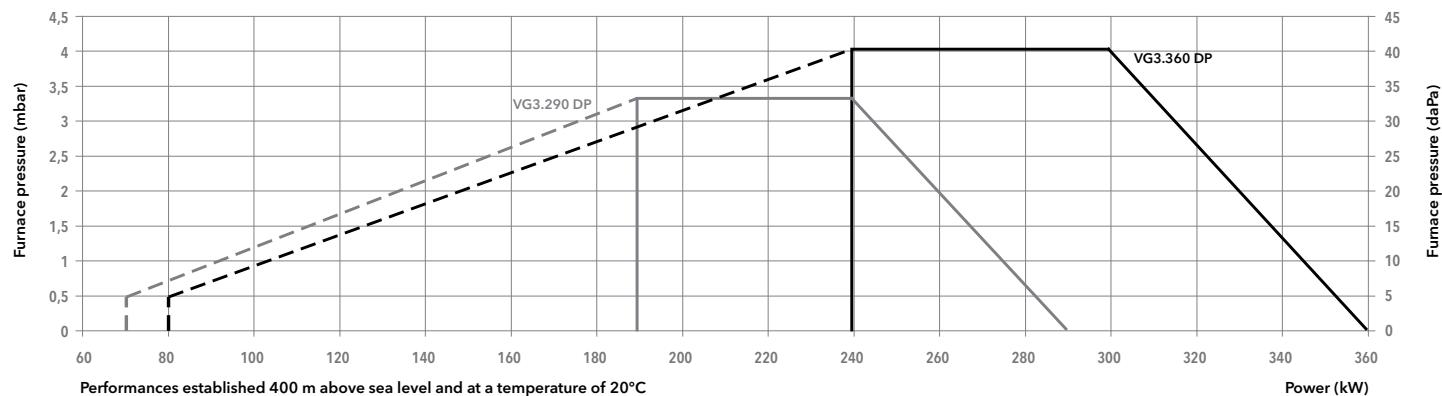
	A	B	C	D	E	F	Ø G	H	I	N	Rp	R	S	T	W	RpF	Z
d1"1/2-Rp2"											2"	100	185	100	603	-	-
d1"1/4-Rp1"1/4	406	379	576	297	82	120	130	KN 180	KL 320	195 x 205	170	80	175	145	526	-	-
d3/4"-Rp1"											1"1/4	70	160	120	479	1"	160

## Gas VECTRON G 3 Duo Plus

**Range: VG 3.290 DP, VG 3.360 DP**  
**70 ... 360 kW**  
**2 stages progressive pneumatic**  
**Low NOx**



### Working fields



### Characteristics and equipment

Model	VG 3.290 DP		VG 3.360 DP	
Operation range	(70) 190 - 290 kW			(80) 240 - 360 kW
Gas pressure	20 - 300 mbar			
Control box / flame detection	TCG5... / ionization			
Fan motor	230 V - 50 Hz - 250 W			230 V - 50 Hz - 300 W
Electrical consumption	375 W			480 W
Acoustic level (LpA)	67 dB(A)			69 dB(A)
CE certificate	1312 BV 5208			
Head lenght	KN	KL	KN	KL
Complete burner code	d1"1/2-Rp2" d1"1/4-Rp1"1/4 d3/4"-Rp1"	3 833 064 3 833 066	3 833 065 3 833 067	3 833 189 3 833 060 3 833 062
				3 833 190 3 833 061 3 833 063

Version with tightness control on request.

### Options

Front boiler flange CP31	3 833 151
External air inlet connector RG11 (Ø 160 mm)	3 833 152

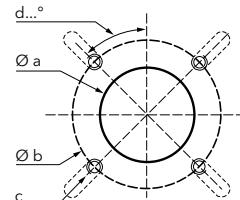
## Description

- Two stage progressive pneumatic Low NOx class 3 forced draught burner.
- Fuels: natural gas, net calorific value 8,83 ... 10,53 kWh/m<sup>3</sup>, LPG, net calorific value 25,89 kWh/m<sup>3</sup>.
- Maximum heat power: 460 and 610 kW.
- Minimum/maximum power ratio: 1/3.
- Air/gas ratio with pneumatic control technology.
- Two combustion head lengths.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Closing of the air flap on burner shut-down.
- Gas train factory assembled and tested for tightness and electrical security.
- Complete electrical equipment in the body of the burner with MDE2 System and display.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 21.
- Maximum working temperature 50°C.
- In compliance with the EN 676 standards and European Guidelines such as:
 

- gas appliances	2009/142/EC
- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

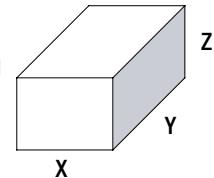
Øa (mm)	b (mm)	c	d
190-240	200-270	M10	45°



## Packaging

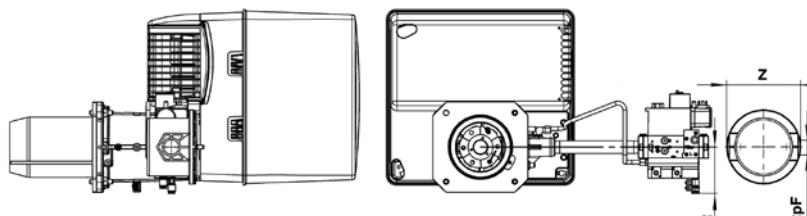
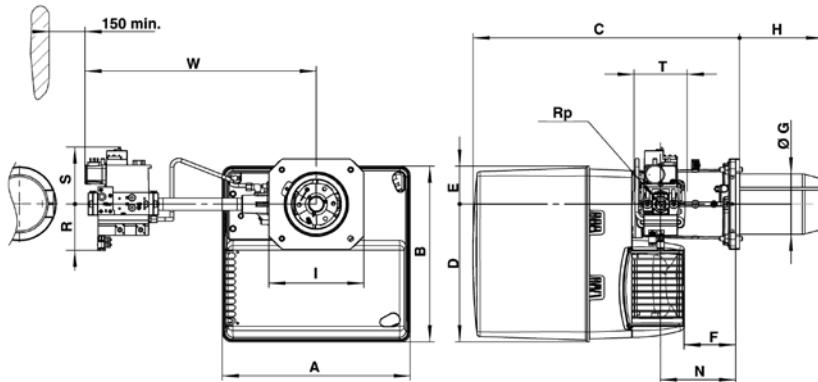
The burner is delivered complete in three packages containing:

- burner body with: boiler fixing accessories, technical data including electrical diagram, exploded view and spare parts list, instruction manual;
- combustion head;
- gas train.



Component	Dimensions (mm)			Gross weight (kg)	
	X	Y	Z		
Burner body BB	VG 4.460 DP	490	490	590	28,6
	VG 4.610 DP	490	490	590	32,7
Combustion head CH	KN	750	260	295	8,9
	KL	895	260	295	10,1
Gas train GT	d1"1/2-Rp2"	670	550	380	12
	d1"1/4-Rp1"1/4	600	400	240	11
	d3/4"-Rp1"	600	400	240	7

## Dimensions (mm)



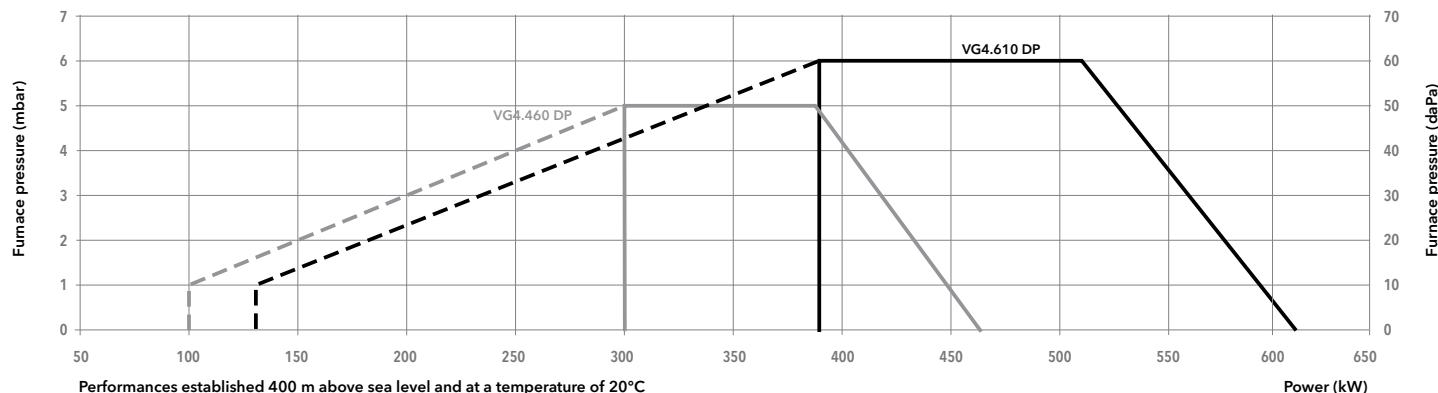
	A	B	C	D	E	F	ØG	H	I	N	Rp	R	S	T	W	RpF	Z	
d1"1/2-Rp2"	465	475	640	377	97	149	150	KN 220	KL 360	245 x 245	195	2"	100	185	100	613	-	-
d1"1/4-Rp1"1/4												1"1/4	80	175	145	536	-	-
d3/4"-Rp1"												1"	70	160	120	489	1"	160

# Gas VECTRON G 4 Duo Plus

**Range: VG 4.460 DP, VG 4.610 DP**  
**100 ... 610 kW**  
**2 stage progressive pneumatic**  
**Low NOx**



## Working fields



## Characteristics and equipment

Model	VG 4.460 DP		VG 4.610 DP		
Operation range	(100) 300 - 460 kW			(130) 390 - 610 kW	
Gas pressure	20 - 300 mbar				
Control box / flame detection	TCG5... / ionization				
Fan motor	230 V - 50 Hz - 420 W			230 V - 50 Hz - 750 W	
Electrical consumption	68 + 522 W			68 + 720 W	
Acoustic level (LpA)	70 dB(A)			71 dB(A)	
CE certificate	1312 CL 5412			1312 CL 5412	
Head lenght	KN	KL	KN	KL	
Complete burner code	d1"1/2-Rp2" d1"1/4-Rp1"1/4 d3/4"-Rp1"	3 833 423 3 833 411 3 833 413	3 833 424 3 833 412 3 833 414	3 833 415 3 833 417 3 833 419	3 833 416 3 833 418 3 833 420

Version with tightness control on request.

## Options

Front boiler flange CP4	13 018 499
External air inlet connector RG12 ( $\varnothing$ 200 mm)	3 833 429

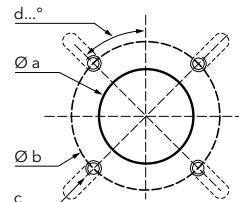
## Description

- Two stage progressive pneumatic Low NOx class 3 forced draught burner.
- Fuels: natural gas, net calorific value 8,83 ... 10,53 kWh/m<sup>3</sup>, LPG, net calorific value 25,89 kWh/m<sup>3</sup>.
- Maximum heat power: 950 and 1 160 kW.
- Minimum/maximum power ratio: 1/3.
- Air/gas ratio controlled by the pneumatic AGP System.
- Three combustion head lengths.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Closing of the air flap on burner shut-down.
- Gas train factory assembled and tested for tightness and electrical security.
- Complete electrical equipment in the body of the burner with MDE2 System and display.
- Three-phase electrical power supply.
- Protection level IP 21.
- Maximum working temperature 50°C.
- In compliance with the EN 676 standards and European Guidelines such as:
 

- gas appliances	2009/142/EC
- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

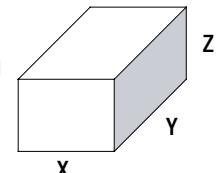
$\varnothing a$ (mm)	b (mm)	c	d
195	220-260	M10	45°



## Packaging

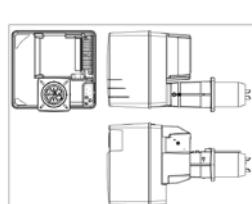
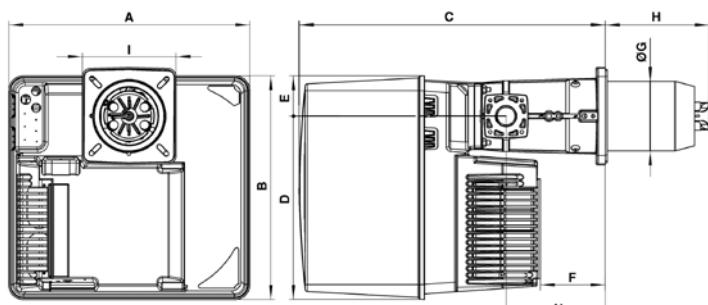
The burner is delivered complete in three packages containing:

- burner body with: boiler fixing accessories, technical data including electrical diagram, exploded view and spare parts list, instruction manual;
- combustion head;
- gas train.



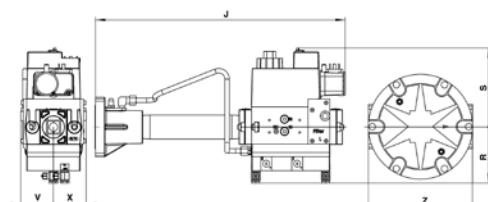
Component	Dimensions (mm)			Gross weight (kg)	
	X	Y	Z		
<b>Burner body BB</b>	VG 5.950 DP	800	600	850	53,4
	VG 5.1200 DP	800	600	850	54,6
<b>Combustion head CH</b>	KN	780	265	280	12,3
	KL	1 010	265	280	14,4
	KM	1 010	265	280	13,4
<b>Gas train GT</b>	s65-DN65	790	600	500	29
	s2"-Rp2"	790	600	500	17,2
	d1"1/2-Rp2"	670	550	380	12
	d1"1/4-Rp2"	600	400	240	12
	d3/4"-Rp1"	600	400	240	7

## Dimensions (mm)



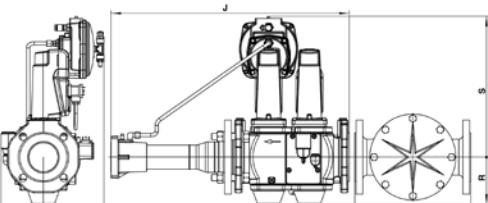
A	B	C	D	E	F	$\varnothing G$	H	I	K	N
581	549	752	450	99	164	170	KN 215	KM 325	KL 435	230 x 238

with 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

with gas train "s":



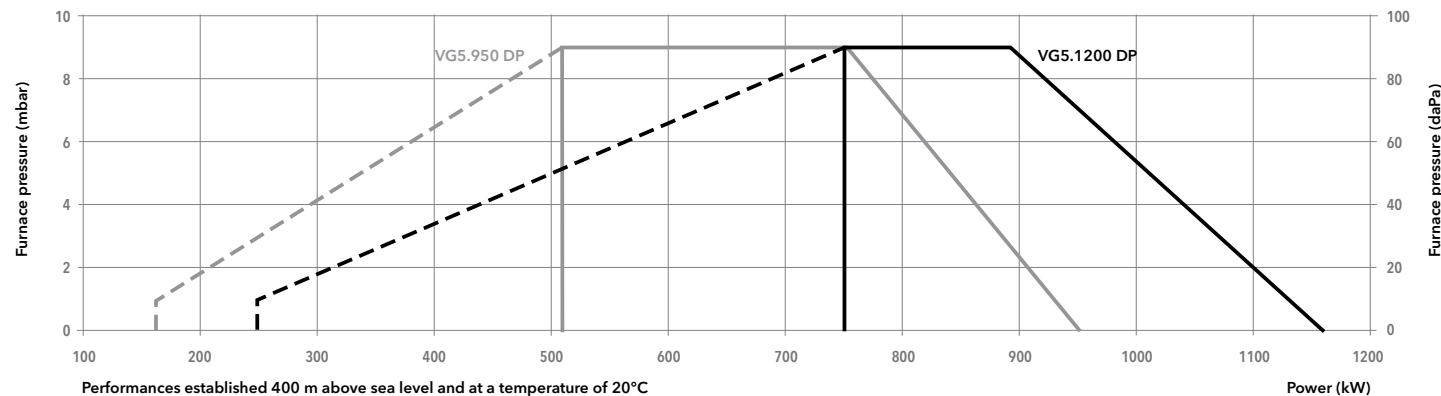
Model	J	R	S	V	X	Z
s65-DN65	600	135	360	110	150	320
s2"-Rp2"	612	103	330	110	150	186

# Gas VECTRON G 5 Duo Plus

**Range: VG 5.950 DP, VG 5.1200 DP**  
**170 ... 1 160 kW**  
**2 stage progressive pneumatic**  
**Low NOx**



## Working fields



## Characteristics and equipment

Model	VG 5.950 DP			VG 5.1200 DP		
Operation range	(170) 510 - 950 kW			(250) 750 - 1 160 kW		
Gas pressure	20 - 300 mbar					
Control box / flame detection	TCG 5.. / ionization					
Fan motor	230/400 V - 50 Hz - 1,5 kW					
Electrical consumption	65 + 1 884 W			67 + 2 052 W		
Acoustic level (LpA)	77 dB(A)					
CE certificate	1312 CM 5579					
Head lenght	KN	KL	KM	KN	KL	KM
Complete burner code	s65-DN65 s2"-Rp2" d1"1/2-Rp2" d1"1/4-Rp2" d3/4"-Rp1"	3 833 595 3 833 585 3 833 579 3 833 583	3 833 596 3 833 586 3 833 580 3 833 584	3 833 621 3 833 623 3 833 625 3 833 627	3 833 603 3 833 597 3 833 589 -	3 833 604 3 833 598 3 833 590 3 833 582

Version with tightness control on request.

## Options

Front boiler flange CP4	13 018 499
External air inlet connector RG3 (Ø 250 mm)	13 001 567
Digital power regulation R 40 (hot water, immersion probe)	13 007 765
Digital power regulation R 40 (hot water, strap-on probe)	13 007 766
Digital power regulation RJ 3016 (hot water, immersion probe)	3 833 950
Digital power regulation RJ 3016 (hot water, strap-on probe)	3 833 951

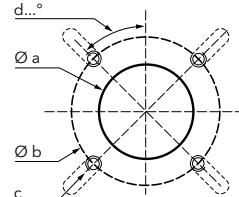
## Description

- Two stage progressive pneumatic Low NOx class 3 forced draught burner.
- Fuels: natural gas, net calorific value 8,83 ... 10,53 kWh/m<sup>3</sup>.
- Maximum heat power: 1 600 and 1 907 kW.
- Minimum/maximum power ratio: 1/3.
- Air/gas ratio controlled by the pneumatic AGP System.
- Three combustion head lengths.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Closing of the air flap on burner shut-down.
- Gas train factory assembled and tested for tightness and electrical security.
- Complete electrical equipment in the body of the burner with MDE2 System and display.
- Three-phase electrical power supply.
- Protection level IP 21.
- Maximum working temperature 50°C.
- In compliance with the EN 676 standards and European Guidelines such as:
 

- gas appliances	2009/142/EC
- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

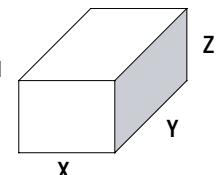
<b>Øa (mm)</b>	<b>b (mm)</b>	<b>c</b>	<b>d</b>
250	300-400	M12	45°



## Packaging

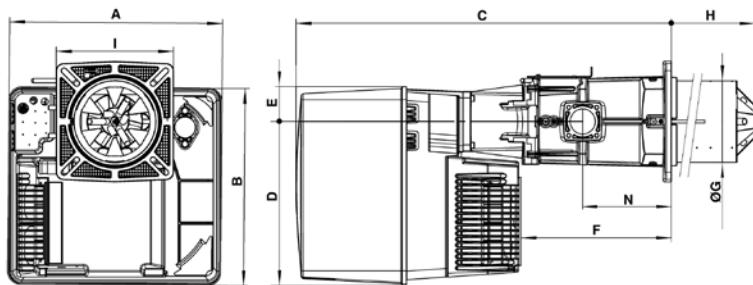
The burner is delivered complete in three packages containing:

- burner body with: boiler fixing accessories, technical data including electrical diagram, exploded view and spare parts list, instruction manual;
- combustion head;
- gas train.

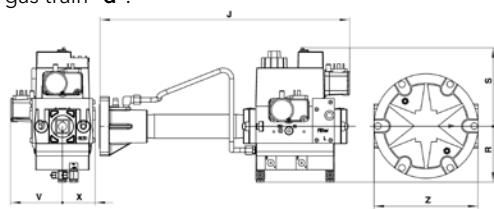


<b>Component</b>	<b>Dimensions (mm)</b>			<b>Gross weight (kg)</b>	
	<b>X</b>	<b>Y</b>	<b>Z</b>		
<b>Burner body BB</b>	VG 6.1600 DP	800	600	850	67,8
	VG 6.2100 DP	800	600	850	69,2
<b>Combustion head CH</b>	KN	1 000	380	420	26,7
	KL	1 100	380	430	29,4
	KM	1 100	380	430	28
<b>Gas train GT</b>	s80-DN80/TC	790	600	500	39
	s65-DN65/TC	790	600	500	29,4
	s2"-Rp2"/TC	790	600	500	16,5
	d1"1/2-Rp2"/TC	670	550	380	14,3
	d1"1/4-Rp2"/TC	670	550	380	13

## Dimensions (mm)

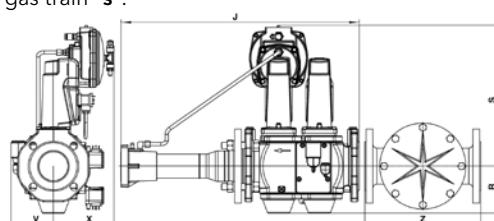


with gas train "d":

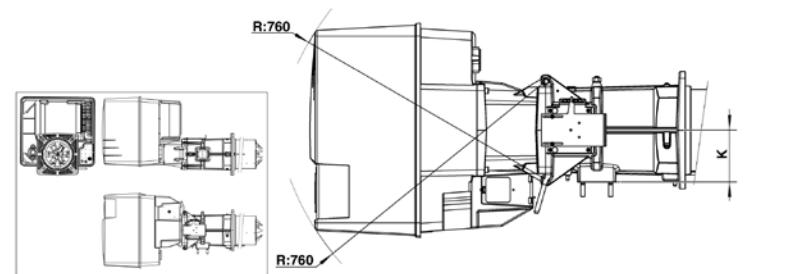


<b>Model</b>	<b>J</b>	<b>R</b>	<b>S</b>	<b>V</b>	<b>X</b>	<b>Z</b>
d1"1/2-Rp2"/TC	540	123	190	95	55	-
d1"1/4-Rp1"1/4/TC	450	100	141	95	58	186

with gas train "s":



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



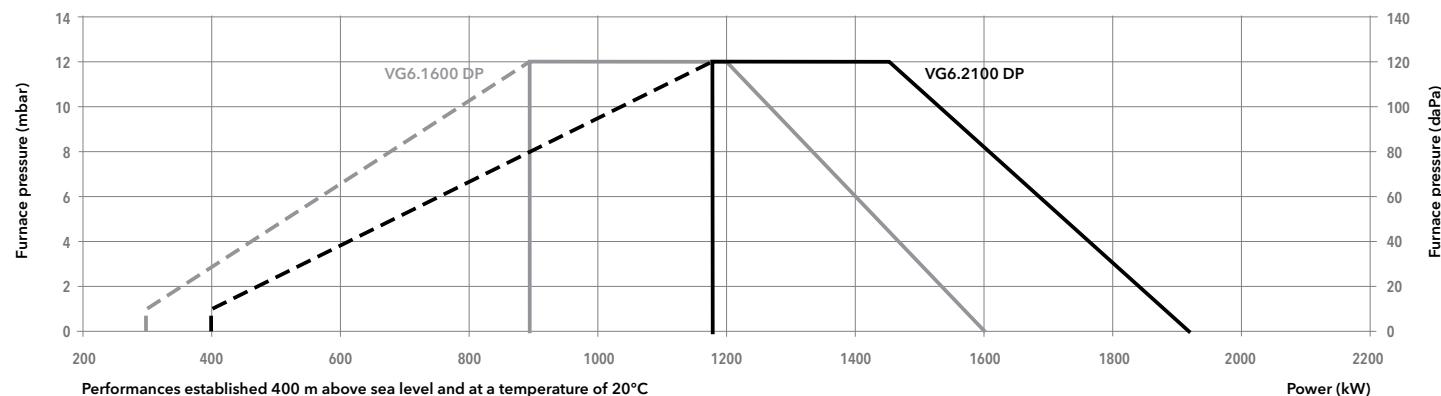
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>ØG</b>	<b>H</b>			<b>I</b>	<b>K</b>	<b>N</b>
592	553	1050	456	97	421	227	KN 360	KM 460	KL 560	326 x 335	144	247

# Gas VECTRON G 6 Duo Plus

**Range: VG 6.1600 DP, VG 6.2100 DP**  
**300 ... 1 907 kW**  
**2 stage progressive pneumatic**  
**Low NOx**



## Working fields



## Characteristics and equipment

Model	VG 6.1600 DP / TC			VG 6.2100 DP / TC			
Operation range	(300) 890 - 1 600 kW			(400) 1 180 - 1 907 kW			
Gas pressure	20 - 300 mbar						
Control box / flame detection	TCG 5.. / ionization						
Fan motor	230/400 V - 50 Hz - 2,2 kW			230/400 V - 50 Hz - 2,7 kW			
Electrical consumption	76 + 2 325 W			74 + 2 622 W			
Acoustic level (LpA)	77,2 dB(A)			79 dB(A)			
CE certificate	1312 CN 5685						
Head lenght	KN	KL	KM	KN	KL	KM	
Complete burner code	s80-DN80/TC s65-DN65/TC s2"-Rp2"/TC d1"1/2-Rp2"/TC d1"1/4-Rp2"/TC	3 833 745 3 833 748 3 833 751 3 833 754	3 833 746 3 833 749 3 833 752 3 833 755	3 833 747 3 833 750 3 833 753 3 833 756	3 833 757 3 833 760 3 833 763 3 833 766 3 833 769	3 833 758 3 833 761 3 833 764 3 833 767 3 833 770	3 833 759 3 833 762 3 833 765 3 833 768 3 833 771

## Options

Front boiler flange CP51	13 008 019
External air inlet connector RG3 (Ø 250 mm)	13 001 567
Digital power regulation R 40 (hot water, immersion probe)	13 007 765
Digital power regulation R 40 (hot water, strap-on probe)	13 007 766
Digital power regulation RJ 3016 (hot water, immersion probe)	3 833 950
Digital power regulation RJ 3016 (hot water, strap-on probe)	3 833 951

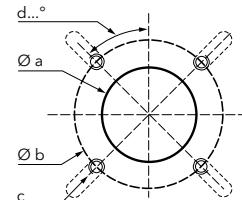
## Description

- Two stage progressive pneumatic Low NOx class 3 forced draught burner with fan speed control.
- Fuels: natural gas, net calorific value 8,83 ... 10,53 kWh/m<sup>3</sup>, LPG, net calorific value 25,89 kWh/m<sup>3</sup>.
- Maximum heat power: 300 kW.
- Minimum/maximum power ratio: 1/3.
- Air/gas ratio with pneumatic control technology.
- Two combustion head lengths.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Closing of the air flap on burner shut-down.
- Gas train factory assembled and tested for tightness and electrical security.
- Complete electrical equipment in the body of the burner.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 21.
- Maximum working temperature 50°C.
- In compliance with the EN 676 standards and European Guidelines such as:
 

- gas appliances	2009/142/EC
- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

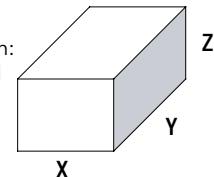
Øa (mm)	b (mm)	c	d
130-140	172-184	M8	45°



## Packaging

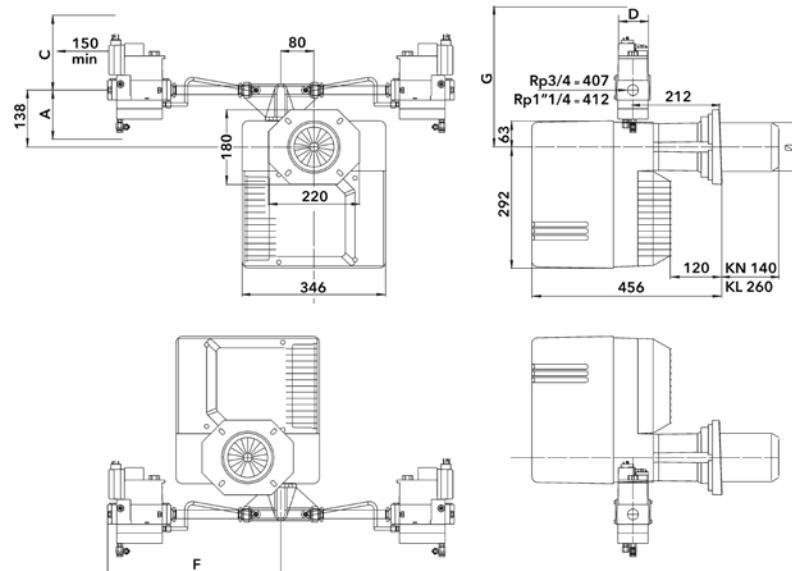
The burner is delivered in two packages complete with:

- burner body with: boiler fixing accessories, technical data including electrical diagram, exploded view and spare parts list, instruction manual;
- gas train.



Component	Dimensions (mm)			Gross weight (kg)	
	X	Y	Z		
Burner body BB	VG 03.300 V	400	400	830	23
Gas train GT	d1"1/4-Rp1"1/4	600	400	240	7
	d3/4"-Rp3/4"	600	400	240	6

## Dimensions (mm)

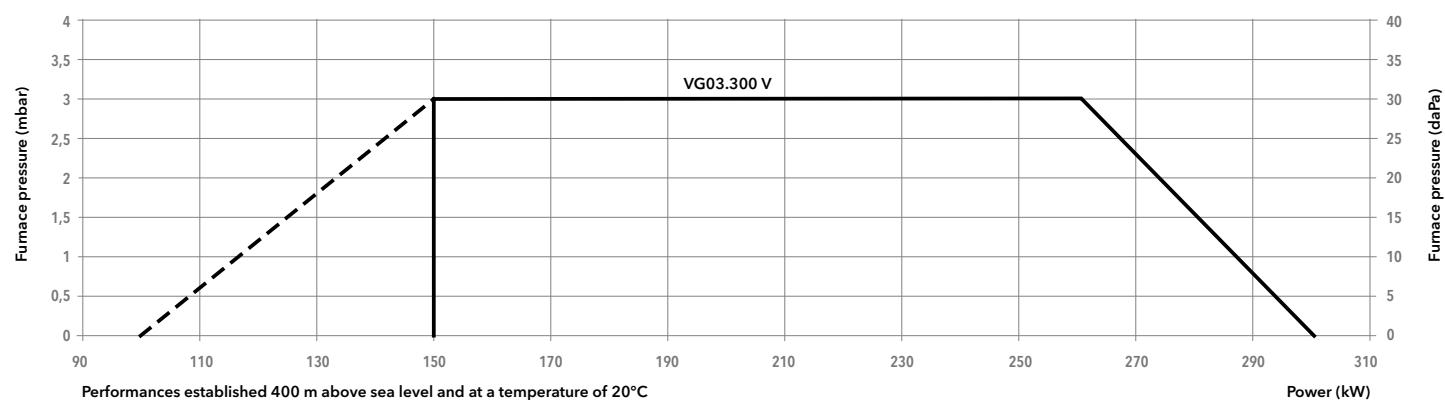


	A	C	D	F	G	Ø
d1"1/4-Rp1"1/4	100	169	96	452	320	124
d3/4"-Rp3/4"	102	180	73	419	317	



**Range: VG 03.300 V**  
**100 ... 300 kW**  
**2 stage progressive pneumatic**  
**Low NOx + fan speed control**

## Working fields



## Characteristics and equipment

Model	VG 03.300 V		
Operation range	(100) 150 - 300 kW		
Gas pressure	20 - 300 mbar		
Control box / flame detection	SG 513 / ionization		
Fan motor	230 V - 50 Hz - 250 W		
Electrical consumption	125 - 400 W		
Acoustic level (LpA)	72 dB(A)		
CE certificate	1312 AU 2752		
Head lenght	KN	KL	
Complete burner code	d1 1/4-Rp1 1/4 d3/4"-Rp3/4"	13 020 312 13 021 964	13 020 313 13 021 965

## Options

Wieland plug (4 + 7 pins)	13 016 496
Front boiler flange CP2	13 018 496
External air inlet connector RG1 ( $\varnothing$ 125 mm)	13 005 571

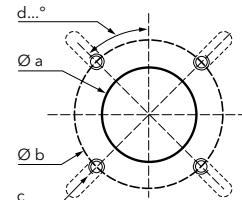
## Description

- Two stage progressive pneumatic Low NOx class 3 forced draught burner with fan speed control.
- Fuels: natural gas, net calorific value 8,83 ... 10,53 kWh/m<sup>3</sup>, LPG, net calorific value 25,89 kWh/m<sup>3</sup>.
- Maximum heat power: 570 kW.
- Minimum/maximum power ratio: 1/3.
- Air/gas ratio with pneumatic control technology.
- Two combustion head lengths.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Closing of the air flap on burner shut-down.
- Gas train factory assembled and tested for tightness and electrical security.
- Complete electrical equipment in the body of the burner.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 21.
- Maximum working temperature 50°C.
- In compliance with the EN 676 standards and European Guidelines such as:
 

- gas appliances	2009/142/EC
- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

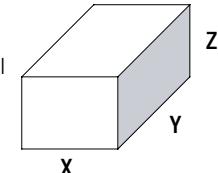
$\varnothing a$ (mm)	b (mm)	c	d
155	180-270	M10	45°



## Packaging

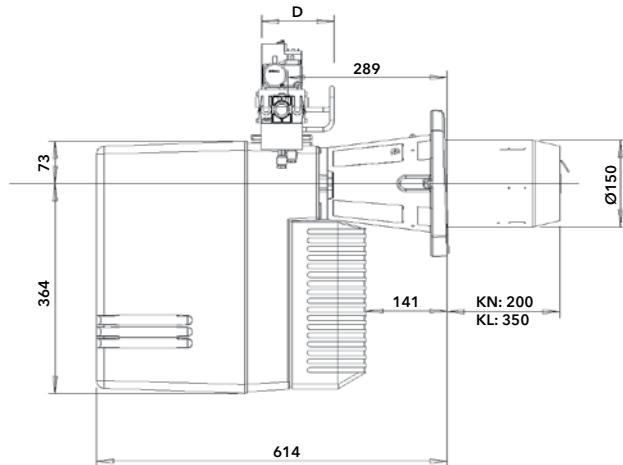
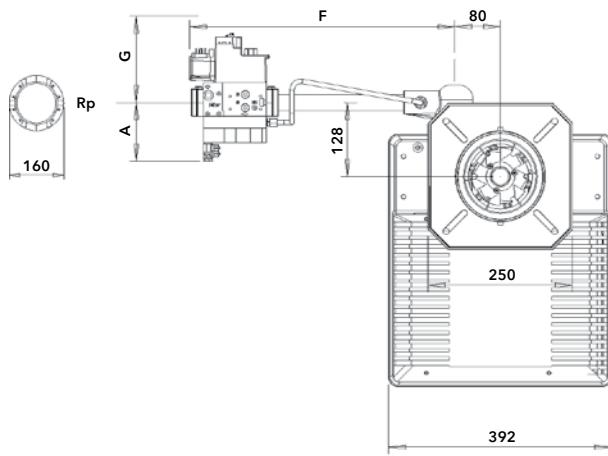
The burner is delivered complete in three packages containing:

- burner body with: boiler fixing accessories, technical data including electrical diagram, exploded view and spare parts list, instruction manual;
- combustion head;
- gas train.



Component	Dimensions (mm)			Gross weight (kg)	
	X	Y	Z		
Burner body BB	VG 04.570 V	510	420	540	27
Combustion head CH	KN	760	280	470	9
	KL	910	280	470	11
Gas train GT	d1"1/2-Rp1"1/2	655	340	525	12
	d1"1/4-Rp1"1/4	600	400	240	13
	d3/4"-Rp1"	600	400	240	13

## Dimensions (mm)

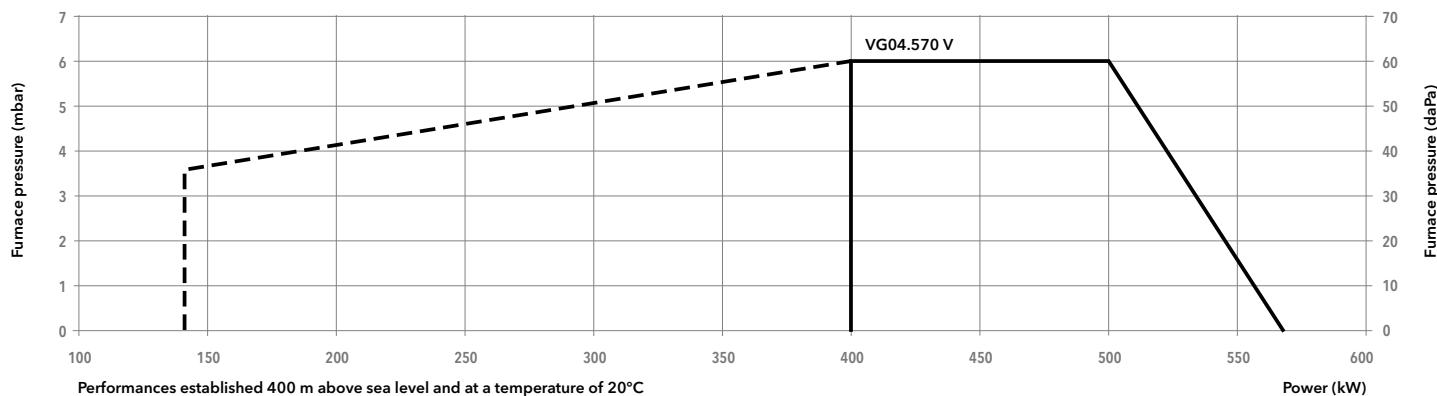


	A	B	D	F	G
d1"1/2-Rp1"1/2	125	500	145	580	220
d1"1/4-Rp1"1/4	100	420	145	500	170
d3/4"-Rp1"	105	390	125	470	150

**Range: VG 04.570 V**  
**140 ... 570 kW**  
**2 stage progressive pneumatic**  
**Low NOx + fan speed control**



## Working fields



## Characteristics and equipment

Model	VG 04.570 V		
Operation range	(140) 400 - 570 kW		
Gas pressure	20 - 300 mbar		
Control box / flame detection	SG 513 / ionization		
Fan motor	230 V - 50 Hz - 750 W		
Electrical consumption	940 W		
Acoustic level (LpA)	73,9 dB(A)		
CE certificate	1312 BP 3682		
Head lenght	KN	KL	
Complete burner code	d1"1/2-Rp1"1/2 d1"1/4-Rp1"1/4 d3/4"-Rp1"	3 833 247 3 833 249 3 833 251	3 833 248 3 833 250 3 833 252

## Options

Wieland plug (4 + 7 pins)	13 016 496
Front boiler flange CP3	13 018 497
External air inlet connector RG2 ( $\varnothing$ 160 mm)	13 002 031

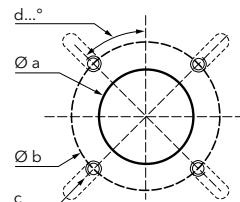
## Description

- Two stage progressive electronic Low NOx class 3 forced draught burner.
- Fuels: natural gas, net calorific value 8,83 ... 10,53 kWh/m<sup>3</sup>, LPG, net calorific value 25,89 kWh/m<sup>3</sup>.
- Maximum heat power: 120, 160 and 210 kW.
- Minimum/maximum power ratio: 1/4 (1/5 for VG2.210 M).
- Air/gas ratio with electronic control technology.
- Adjustable combustion head length with sliding flange.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Closing of the air flap on burner shut-down.
- Gas train factory assembled and tested for tightness and electrical security.
- Complete electrical equipment in the body of the burner with MDE2 System and display.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 21.
- Maximum working temperature 50°C.
- In compliance with the EN 676 standards and European Guidelines such as:
 

- gas appliances	2009/142/EC
- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

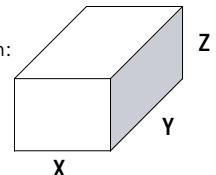
$\text{Ø}a$ (mm)	b (mm)	c	d
120-135	150-184	M8	45°



## Packaging

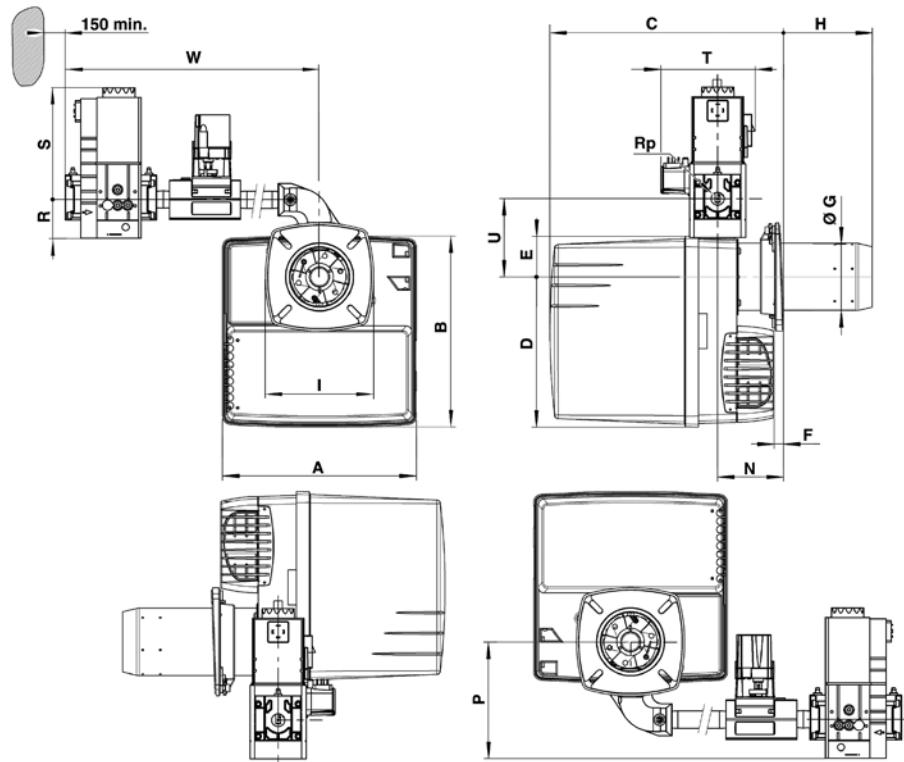
The burner is delivered in two packages complete with:

- burner body with: boiler fixing accessories, technical data including electrical diagram, exploded view and spare parts list, instruction manual;
- gas train.



Component	Dimensions (mm)			Gross weight (kg)	
	X	Y	Z		
Burner body BB	VG 2.120 M	400	440	520	21
	VG 2.160 M	400	440	520	21
	VG 2.210 M	400	440	520	21
Gas train GT	d3/4"-Rp3/4"/TC	540	670	380	12

## Dimensions (mm)



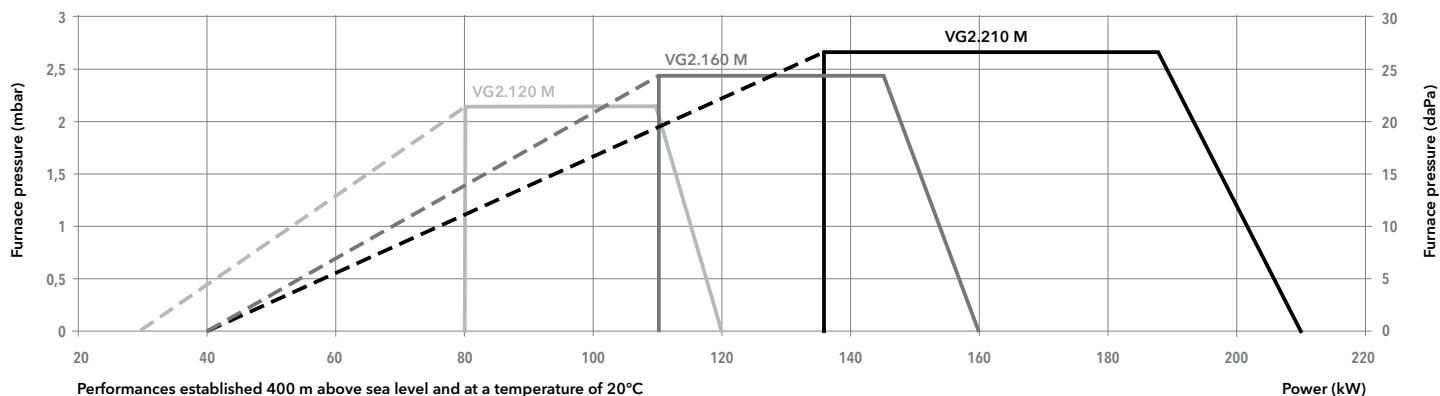
A	B	C	D	E	F	$\text{Ø}G$	H	I	N	P	Rp	R	S	T	U	W		
331	325	KN 398...518	KL 398...638	256	69	15 min.	115	KN 30...150	KL 30...270	185 <sub>x</sub> 185	30...150	193	3/4"	60	173	146	133	455

## Gas VECTRON G 2 Modulo

**Range: VG 2.120 M, VG 2.160 M, VG 2.210 M**  
**30 ... 210 kW**  
**2 stage progressive electronic**  
**Low NOx**



### Working fields



### Characteristics and equipment

Model	VG 2.120 M /TC	VG 2.160 M /TC	VG 2.210 M /TC
Operation range	(30) 80 - 120 kW	(40) 110 - 160 kW	(40) 136 - 210 kW
Gas pressure		20 - 300 mbar	
Control box / flame detection		LGC 9... / ionization	
Fan motor	230 V - 50 Hz - 160 W		230 V - 50 Hz - 130 W
Electrical consumption	185 W	280 W	290 W
Acoustic level (LpA)	62 dB(A)	64 dB(A)	65 dB(A)
CE certificate		1312 BQ 4069	
Head lenght	KN	KL	KN
Complete burner code d3/4"-Rp3/4"/TC	3 833 520	3 833 523	3 833 521
			3 833 524
			3 833 522
			3 833 525

### Options

Front boiler flange CP2	13 018 496
External air inlet connector RG10 ( $\varnothing$ 100 mm)	13 018 822

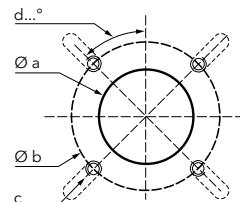
## Description

- Two stage progressive electronic Low NOx class 3 forced draught burner.
- Fuels: natural gas, net calorific value 8,83 ... 10,53 kWh/m<sup>3</sup>, LPG, net calorific value 25,89 kWh/m<sup>3</sup>.
- Maximum heat power: 290 and 360 kW.
- Minimum/maximum power ratio: 1/4.
- Air/gas ratio with electronic control technology.
- Adjustable combustion head length with sliding flange.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Closing of the air flap on burner shut-down.
- Gas train factory assembled and tested for tightness and electrical security.
- Complete electrical equipment in the body of the burner with MDE2 System and display.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 41.
- Maximum working temperature 50°C.
- In compliance with the EN 676 standards and European Guidelines such as:
 

- gas appliances	2009/142/EC
- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

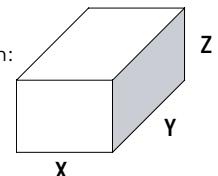
$\varnothing a$ (mm)	b (mm)	c	d
155-190	175-220	M10	45°



## Packaging

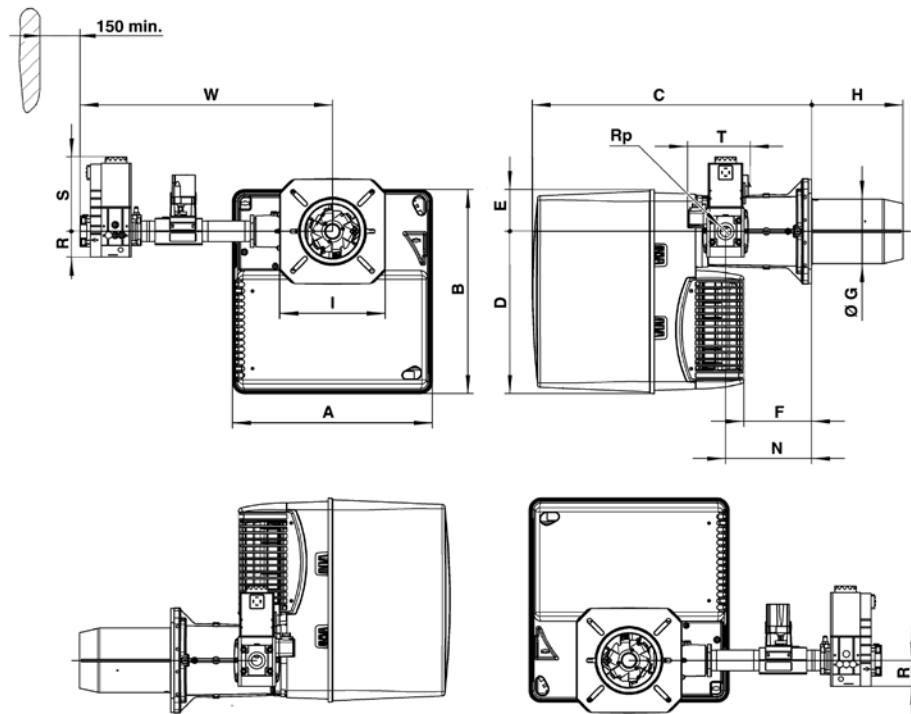
The burner is delivered in two packages complete with:

- burner body with: boiler fixing accessories, technical data including electrical diagram, exploded view and spare parts list, instruction manual;
- gas train.



Component	Dimensions (mm)			Gross weight (kg)
	X	Y	Z	
Burner body BB	VG 3.290 M	440	400	520
	VG 3.360 M	440	400	520
Combustion head CH	KN	650	210	260
	KL	780	210	260
Gas train GT	d1"1/2-Rp1"1/2/TC	670	540	380
	d3/4"-Rp1"1/4/TC	670	540	380

## Dimensions (mm)



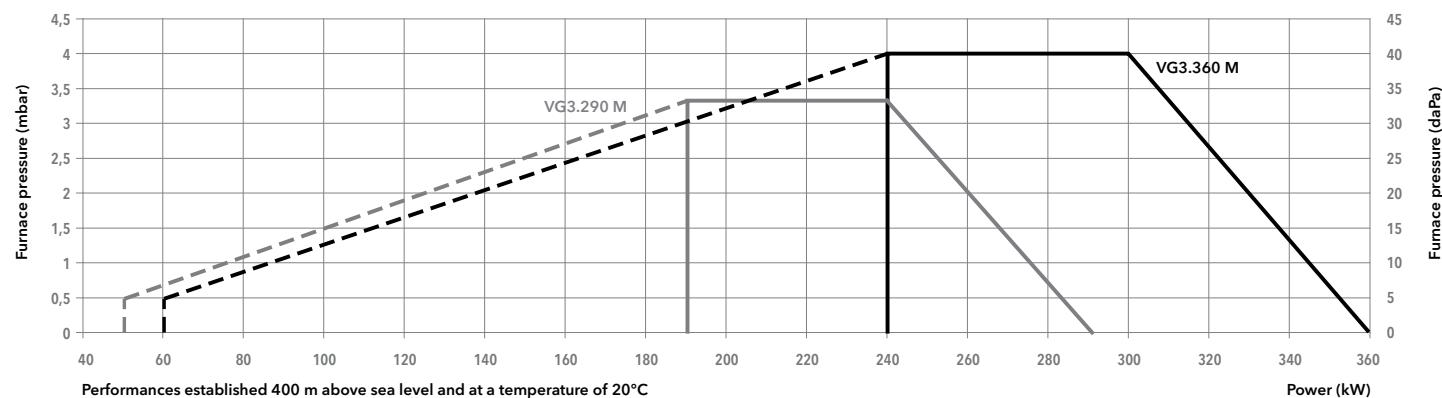
	A	B	C	D	E	F	$\varnothing G$	H	I	N	Rp	R	S	T	W	
d1"1/2-Rp1"1/2/TC	406	379	576	297	82	120	130	180	320	195 x 205	170	1"1/2	80	185	160	638
d3/4"-Rp1"1/4/TC												1"1/4	60	173	146	577

## Gas VECTRON G 3 Modulo

**Range: VG 3.290 M, VG 3.360 M**  
**50 ... 360 kW**  
**2 stage progressive electronic**  
**Low NOx**



### Working fields



### Characteristics and equipment

Model	VG 3.290 M /TC		VG 3.360 M /TC	
Operation range	(50) 190 - 290 kW		(60) 240 - 360 kW	
Gas pressure	20 - 300 mbar			
Control box / flame detection	BT3... / ionization			
Fan motor	230 V - 50 Hz - 250 W		230 V - 50 Hz - 300 W	
Electrical consumption	375 W		455 W	
Acoustic level (LpA)	67 dB(A)		69 dB(A)	
CE certificate	0085 CN 0192			
Head lenght	KN	KL	KN	KL
Complete burner code	d1"1/2-Rp1"1/2/TC d3/4"-Rp1"1/4/TC	3 833 648	3 833 649	3 833 652 3 833 650 3 833 651

### Options

Front boiler flange CP31	3 833 151
External air inlet connector RG11 (Ø 160 mm)	3 833 152

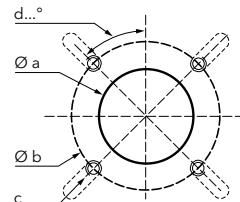
## Description

- Two stage progressive electronic Low NOx class 3 forced draught burner.
- Fuels: natural gas, net calorific value 8,83 ... 10,53 kWh/m<sup>3</sup>, LPG, net calorific value 25,89 kWh/m<sup>3</sup>.
- Maximum heat power: 460 and 610 kW.
- Minimum/maximum power ratio: 1/4.
- Air/gas ratio with electronic control technology.
- Two combustion head lengths.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Closing of the air flap on burner shut-down.
- Gas train factory assembled and tested for tightness and electrical security.
- Complete electrical equipment in the body of the burner with MDE2 System and display.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 41.
- Maximum working temperature 50°C.
- In compliance with the EN 676 standards and European Guidelines such as:
 

- gas appliances	2009/142/EC
- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

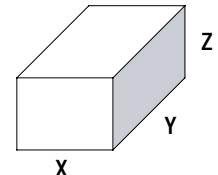
$\varnothing a$ (mm)	b (mm)	c	d
190-240	200-270	M10	45°



## Packaging

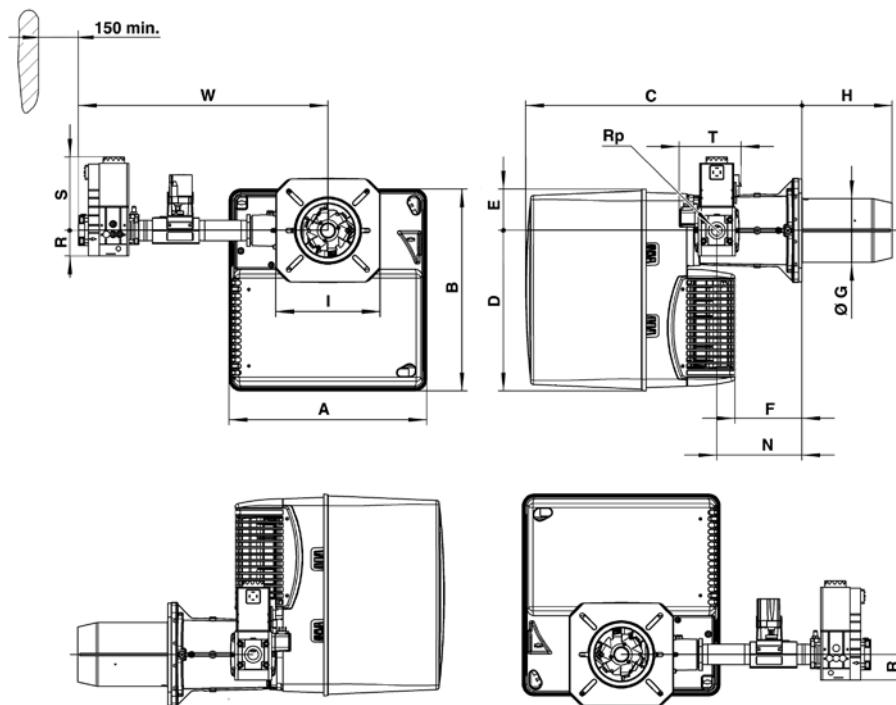
The burner is delivered complete in three packages containing:

- burner body with: boiler fixing accessories, technical data including electrical diagram, exploded view and spare parts list, instruction manual;
- combustion head;
- gas train.



Component	Dimensions (mm)			Gross weight (kg)	
	X	Y	Z		
<b>Burner body BB</b>	VG 4.460 M	490	490	590	28,6
	VG 4.610 M	490	490	590	32,7
<b>Combustion head CH</b>	KN	750	260	295	8,9
	KL	895	260	295	10,1
<b>Gas train GT</b>	d1"1/2-Rp1"1/2/TC	670	540	380	12
	d3/4"-Rp1"1/4/TC	670	540	380	12

## Dimensions (mm)



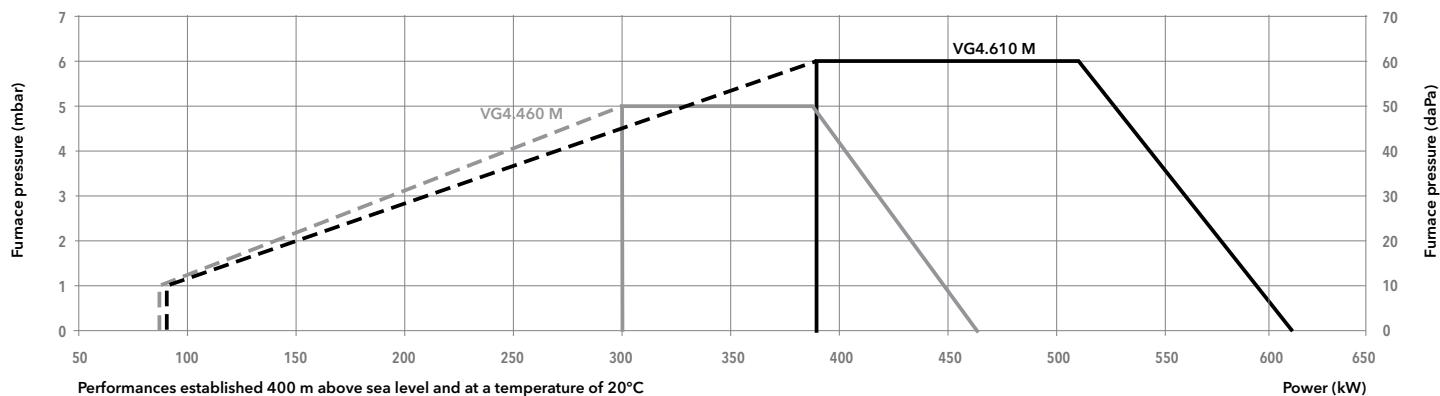
	A	B	C	D	E	F	$\varnothing G$	H	I	N	Rp	R	S	T	W
d1"1/2-Rp1"1/2/TC	465	475	640	377	97	149	150	220	360	245 x 245	1"1/2	80	185	160	649
d3/4"-Rp1"1/4/TC										195	1"1/4	60	173	146	587

## Gas VECTRON G 4 Modulo

**Range: VG 4.460 M, VG 4.610 M**  
**86 ... 610 kW**  
**2 stage progressive electronic**  
**Low NOx**



### Working fields



### Characteristics and equipment

Model	VG 4.460 M /TC		VG 4.610 M /TC		
Operation range	(86) 300 - 460			(90) 390 - 610 kW	
Gas pressure	20 - 300 mbar				
Control box / flame detection	BT3... / ionization				
Fan motor	230 V - 50 Hz - 420 W			230 V - 50 Hz - 750 W	
Electrical consumption	510 W			760 W	
Acoustic level (LpA)	70 dB(A)			71 dB(A)	
CE certificate	0085 CN 0192				
Head lenght	KN	KL	KN	KL	
Complete burner code	d1"1/2-Rp1"1/2/TC d3/4"-Rp1"1/4/TC	3 833 782 3 833 780	3 833 783 3 833 781	3 833 786 3 833 784	3 833 787 3 833 785

### Options

Front boiler flange CP4	13 018 499
External air inlet connector RG12 (Ø 200 mm)	3 833 429

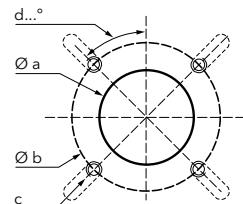
## Description

- Two stage progressive electronic Low NOx class 3 forced draught burner.
- Fuels: natural gas, net calorific value 8,83 ... 10,53 kWh/m<sup>3</sup>, LPG, net calorific value 25,89 kWh/m<sup>3</sup>.
- Maximum heat power: 900 and 1 200 kW.
- Minimum/maximum power ratio: 1/4.
- Air/gas ratio with electronic control technology.
- Three combustion head lengths.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Closing of the air flap on burner shut-down.
- Gas train factory assembled and tested for tightness and electrical security.
- Complete electrical equipment in the body of the burner with MDE2 System and display.
- Three-phase electrical power supply.
- Protection level IP 21.
- Maximum working temperature 50°C.
- In compliance with the EN 676 standards and European Guidelines such as:
 

- gas appliances	2009/142/EC
- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

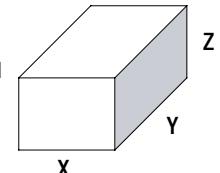
Øa (mm)	b (mm)	c	d
195	220-260	M10	45°



## Packaging

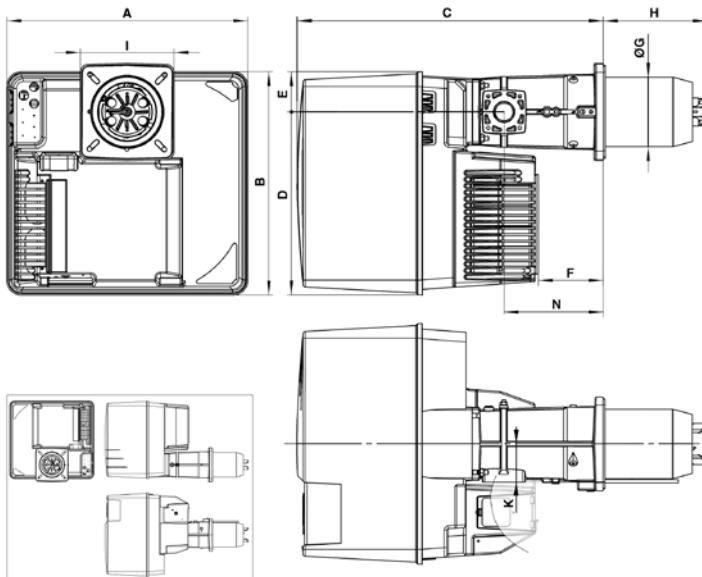
The burner is delivered complete in three packages containing:

- burner body with: boiler fixing accessories, technical data including electrical diagram, exploded view and spare parts list, instruction manual;
- combustion head;
- gas train.



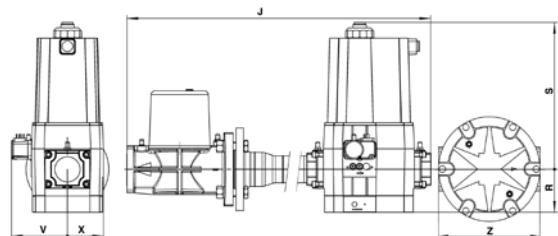
Component	Dimensions (mm)			Gross weight (kg)	
	X	Y	Z		
Burner body BB	VG 5.950 M	800	600	850	56
	VG 5.1200 M	800	600	850	56
Combustion head CH	KN	780	265	280	12,3
	KL	1 010	265	280	14,4
	KM	1 010	265	280	13,4
Gas train GT	d65-DN65/TC	670	550	380	33
	d2"-Rp2"/TC	670	550	380	22
	d1"1/2-Rp2"/TC	670	550	380	21
	d3/4"-Rp1"1/4/TC	670	550	380	12

## Dimensions (mm)



A	B	C	D	E	F	ØG	H		I	K	N
581	549	752	450	99	164	170	KN 215	KM 325	KL 435	230 x 238	89 244

with gas train "d":



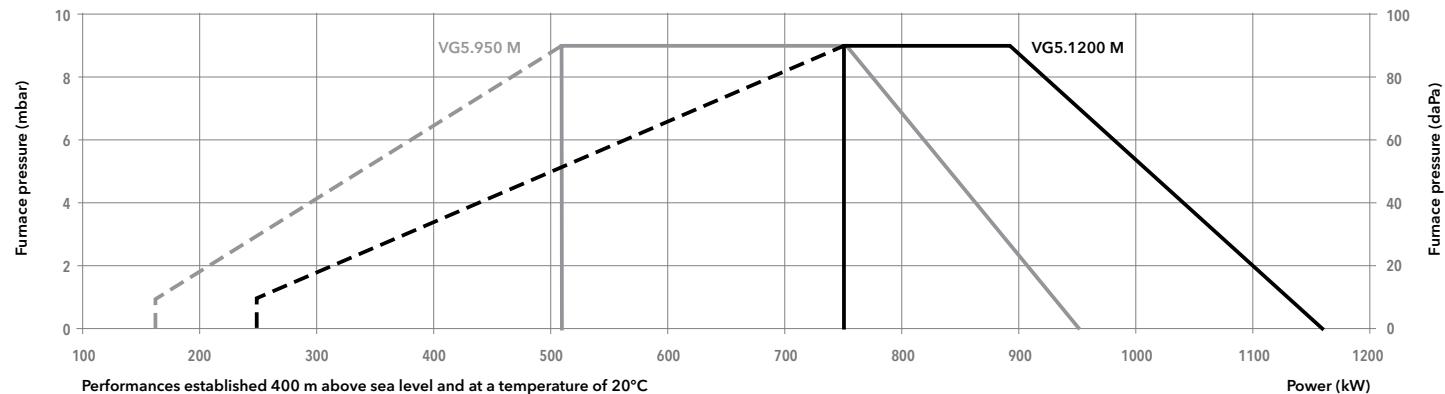
Model	J	R	S	V	X	Z
d65-DN65/TC	820	183	245	110	98	320
d2"-Rp2"/TC	740	96	330	125	81	-
d1"1/2-Rp2"/TC	662	80	185	102	57	-
d3/4"-Rp1"1/4/TC	662	80	185	102	57	-

# Gas VECTRON G 5 Modulo

**Range: VG 5.950 M, VG 5.1200 M**  
**160 ... 1 200 kW**  
**2 stage progressive electronic**  
**Low NOx**



## Working fields



## Characteristics and equipment

Model	VG 5.950 M /TC			VG 5.1200 M /TC			
Operation range	(160) 510 - 900 kW			(160) 750 - 1 200 kW			
Gas pressure	20 - 300 mbar						
Control box / flame detection	BT3... / ionization						
Fan motor	230/400 V - 50 Hz - 1,5 kW			230/400 V - 50 Hz - 1,5 kW			
Electrical consumption	1 750 W			1 750 W			
Acoustic level (LpA)	77 dB(A)			77 dB(A)			
CE certificate	0085 CN 0192						
Head lenght	KN	KL	KM	KN	KL	KM	
Complete burner code	d65-DN65/TC d2"-Rp2"/TC d1 1/2-Rp2"/TC d3/4"-Rp1 1/4/TC	3 833 996 3 833 803 3 833 800 3 834 099	3 833 997 3 833 804 3 833 801 3 834 100	3 833 998 3 833 805 3 833 802 3 834 101	3 834 002 3 834 809 3 833 806 3 834 102	3 834 003 3 834 810 3 834 807 3 834 103	3 834 004 3 834 811 3 834 808 3 834 104

## Options

Front boiler flange CP4	13 018 499
External air inlet connector RG3 (Ø 250 mm)	13 001 567
Digital power regulation R 40 (hot water, immersion probe)	13 007 765
Digital power regulation R 40 (hot water, strap-on probe)	13 007 766
Digital power regulation RJ 3016 (hot water, immersion probe)	3 833 950
Digital power regulation RJ 3016 (hot water, strap-on probe)	3 833 951

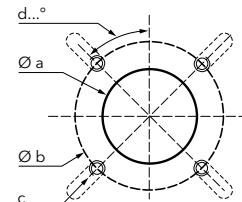
## Description

- Two stage progressive electronic Low NOx class 3 forced draught burner.
- Fuels: natural gas, net calorific value 8,83 ... 10,53 kWh/m<sup>3</sup>, LPG, net calorific value 25,89 kWh/m<sup>3</sup>.
- Maximum heat power: 1 600 and 1 907 kW.
- Minimum/maximum power ratio: 1/4.
- Air/gas ratio with electronic control technology.
- Three combustion head lengths.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Closing of the air flap on burner shut-down.
- Gas train factory assembled and tested for tightness and electrical security.
- Complete electrical equipment in the body of the burner with MDE2 System and display.
- Three-phase electrical power supply.
- Protection level IP 21.
- Maximum working temperature 50°C.
- In compliance with the EN 676 standards and European Guidelines such as:
 

- gas appliances	2009/142/EC
- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

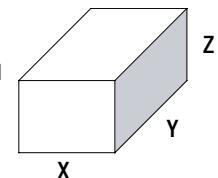
$\varnothing a$ (mm)	b (mm)	c	d
250	300-400	M12	45°



## Packaging

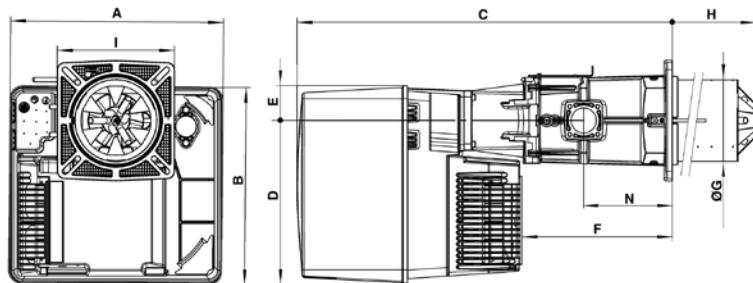
The burner is delivered complete in three packages containing:

- burner body with: boiler fixing accessories, technical data including electrical diagram, exploded view and spare parts list, instruction manual;
- combustion head;
- gas train.

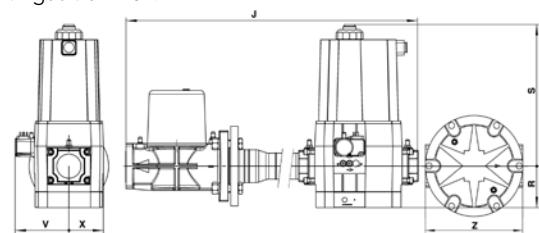


Component	Dimensions (mm)			Gross weight (kg)	
	X	Y	Z		
<b>Burner body</b> BB	VG 6.1600 M	800	600	850	56
	VG 6.2100 M	800	600	850	56
<b>Combustion head</b> CH	KN	1 000	380	420	26,7
	KL	1 100	380	430	29,4
	KM	1 100	380	430	28
<b>Gas train</b> GT	s65-DN65/TC	790	600	500	29,4
	d65-DN65/TC	670	550	380	33
	d2"-Rp2"/TC	670	550	380	22
	d1"1/2-Rp2"/TC	670	550	380	21

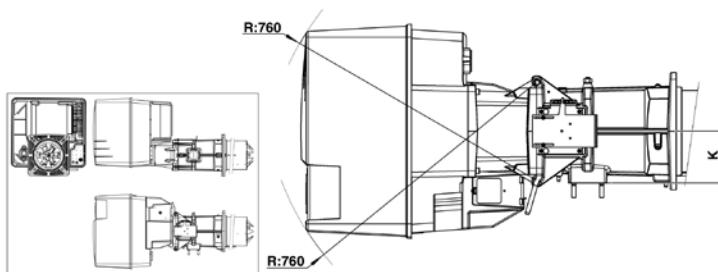
## Dimensions (mm)



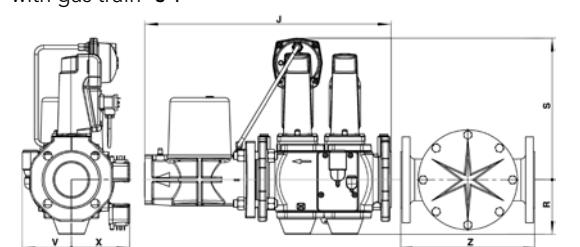
with gas train "d":



Model	J	R	S	V	X	Z
d65-DN65/TC	820	183	245	110	98	320
d2"-Rp2"/TC	740	96	330	125	81	-
d1"1/2-Rp2"/TC	662	80	185	102	57	-



with gas train "s":



A	B	C	D	E	F	$\varnothing G$	H	I	K	N
592	553	1050	456	97	421	227	KN 360	KM 460	KL 560	326 x 335

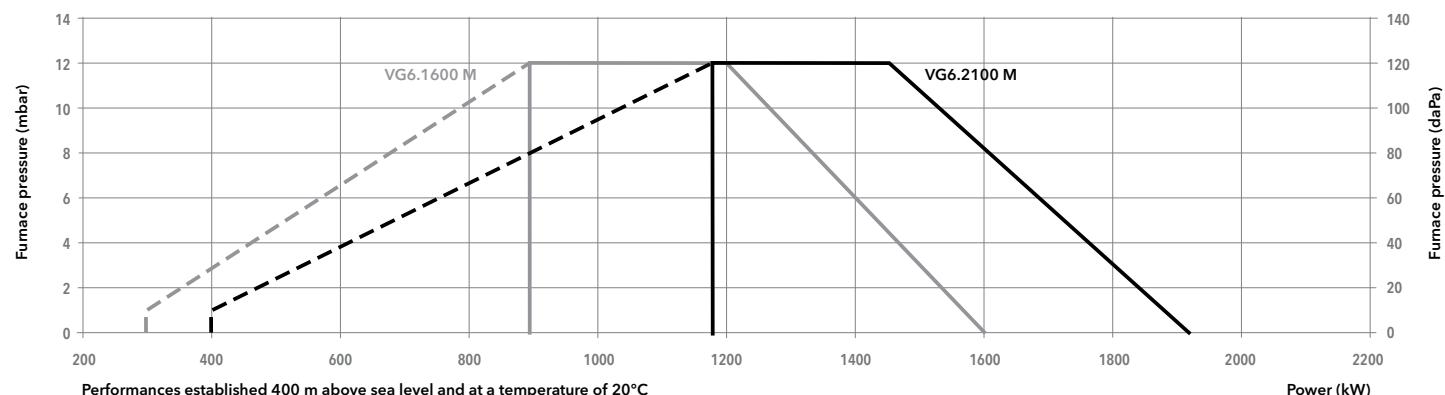
Model	J	R	S	V	X	Z
s65-DN65/TC	530	118	300	106	126	320

# Gas VECTRON G 6 Modulo

**Range: VG 6.1600 M, VG 6.2100 M**  
**300 ... 1 907 kW**  
**2 stages progressive electronic**  
**Low NOx**



## Working fields



## Characteristics and equipment

Model	VG 6.1600 M /TC			VG 6.2100 M /TC			
Operation range	(300) 890 - 1 600 kW			(400) 1 180 - 1 907 kW			
Gas pressure	20 - 300 mbar						
Control box / flame detection	BT3... / ionization						
Fan motor	230/400 V - 50 Hz - 2,2 kW			230/400 V - 50 Hz - 2,7 kW			
Electrical consumption	2 600 W			3 400 W			
Acoustic level (LpA)	77,2 dB(A)			79 dB(A)			
CE certificate	0085 CN 0192						
Head lenght	KN	KL	KM	KN	KL	KM	
Complete burner code	s65-DN65/TC d65-DN65/TC d2"-Rp2"/TC d1"1/2-Rp2"/TC	3 833 938 3 833 836 3 833 833 3 833 830	3 833 939 3 833 837 3 833 834 3 833 831	3 833 940 3 833 838 3 833 835 3 833 832	3 833 934 3 833 845 3 833 842 3 833 839	3 833 933 3 833 846 3 833 843 3 833 840	3 833 930 3 833 847 3 833 844 3 833 841

## Options

Front boiler flange CP51	13 008 019
External air inlet connector RG3 (Ø 250 mm)	13 001 567
Digital power regulation R 40 (hot water, immersion probe)	13 007 765
Digital power regulation R 40 (hot water, strap-on probe)	13 007 766
Digital power regulation RJ 3016 (hot water, immersion probe)	3 833 950
Digital power regulation RJ 3016 (hot water, strap-on probe)	3 833 951

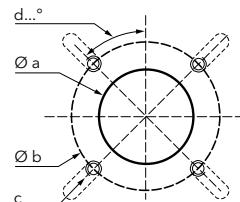
## Description

- One stage dual fuel forced draught burner.
- Fuels: natural gas, net calorific value 8,83 ... 10,53 kWh/m<sup>3</sup>, light oil, viscosity 6 mm<sup>2</sup>/s at 20°C, low calorific value 11,86 kWh/kg.
- Maximum heat power: 120 and 190 kW.
- Adjustable combustion head length with sliding flange.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Gas train factory assembled and tested for tightness and electrical security.
- Complete electrical equipment in the body of the burner.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 21.
- Maximum working temperature 50°C.
- In compliance with the EN 676 and EN 267 standards and European Guidelines such as:
 

- gas appliances	2009/142/EC
- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

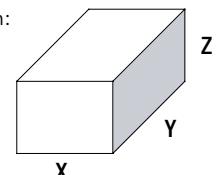
Øa (mm)	b (mm)	c	d
130-140	172-184	M8	45°



## Packaging

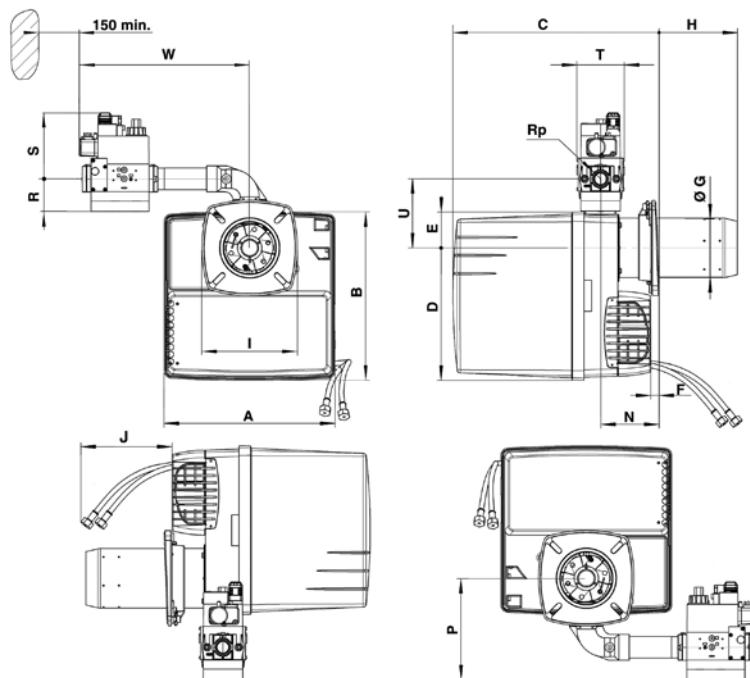
The burner is delivered in its package complete with:

- gas train and filter;
- hoses and nozzle;
- boiler fixing accessories;
- directions for use including electrical diagram, exploded view and spare parts list.



Component	Dimensions (mm)			Gross weight (kg)	
	X	Y	Z		
Complete burner CB	VGL 2.120	400	400	770	23
	VGL 2.210	400	400	770	24

## Dimensions (mm)



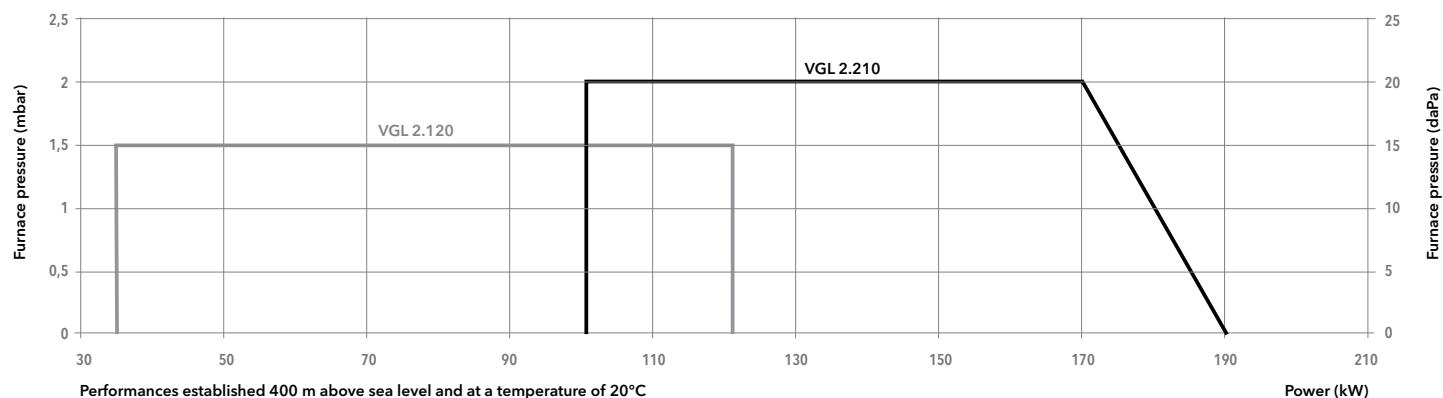
A	B	C	D	E	F	Ø G	H	I	J	N	P	Rp	R	S	T	U	W
331	325	KL 398...638	256	69	15 min	115	KL 30...270	185 x 185	700	113 min	115	3/4"	46	140	120	133	330

## Dual fuel VECTRON GL 2

**Range: VGL 2.120, VGL 2.210**  
**35 ... 190 kW**  
**1 stage**  
**Standard**



### Working fields



### Characteristics and equipment

Model	VGL 2.120	VGL 2.210
Operation range	35 - 120 kW	100 - 190 kW
Gas pressure	20 - 300 mbar	
Control box / flame detection	TCG 1... / IRD 1020	
Fan motor	230 V - 50 Hz - 160 W	230 V - 50 Hz - 130 W
Nozzle	1,85 gal/h 45°S	2,75 gal/h 45°B
Electrical consumption	186 W	246 W
Acoustic level (LpA)	62 dB(A)	65,2 dB(A)
CE certificate	1312 BU 5219	
Head lenght	KN	KL
Complete burner code	d3/4"-Rp3/4"	3 833 494
		-
		3 833 495

### Options

Front boiler flange CP2	13 018 496
External air inlet connector RG10 (Ø 100 mm)	13 018 848

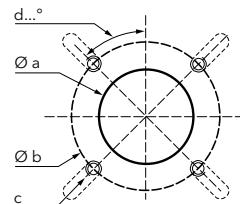
## Description

- Two stages dual fuel forced draught burner.
- Fuels: natural gas, net calorific value 8,83 ... 10,53 kWh/m<sup>3</sup>, light oil, viscosity 6 mm<sup>2</sup>/s at 20°C, low calorific value 11,86 kWh/kg.
- Maximum heat power: 350 and 440 kW.
- Two combustion head lengths.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Gas train factory assembled and tested for tightness and electrical security.
- Complete electrical equipment in the body of the burner.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 21.
- Maximum working temperature 50°C.
- In compliance with the EN 676 and EN 267 standards and European Guidelines such as:
 

- gas appliances	2009/142/EC
- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

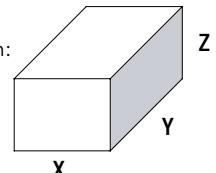
$\varnothing a$ (mm)	b (mm)	c	d
140	165-220	M10	45°



## Packaging

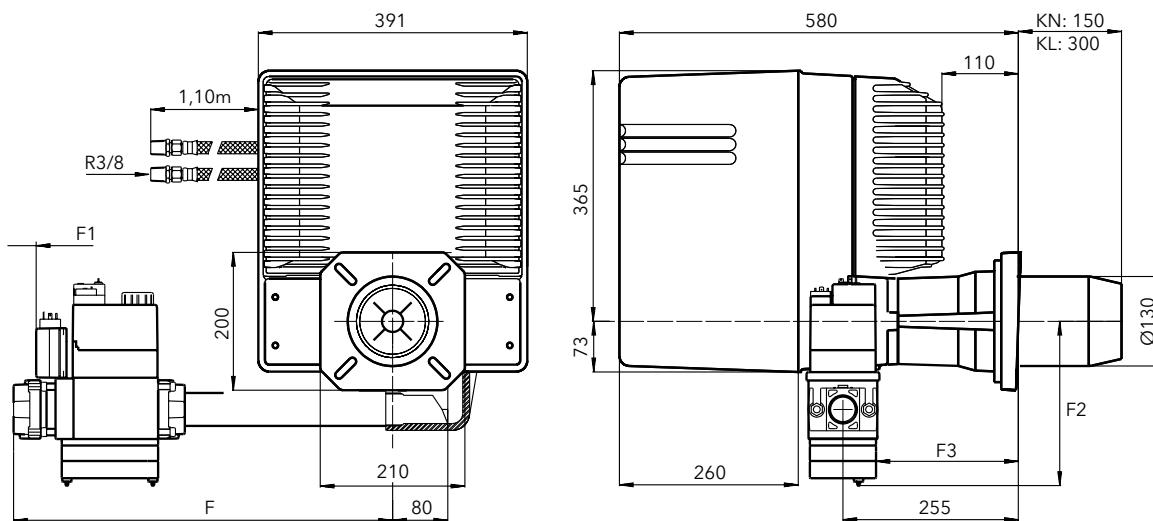
The burner is delivered in two packages complete with:

- burner body with: boiler fixing accessories, technical data including electrical diagram, exploded view and spare parts list, instruction manual;
- gas train.



Component	Dimensions (mm)			Gross weight (kg)	
	X	Y	Z		
Burner body BB	VGL 04.350 D	1 010	460	550	44
	VGL 04.440 D	1 010	460	570	46
Gas train GT	d1"1/4-Rp1"1/4	440	320	250	9
	d3/4"-Rp3/4"	440	350	250	5

## Dimensions (mm)

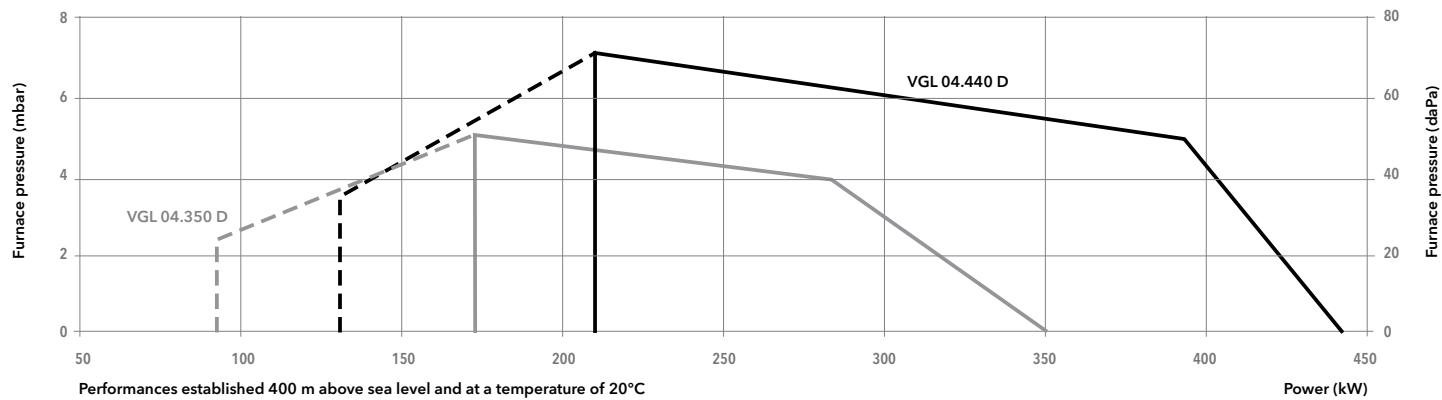


	F	F + F1 min	F2	F3
d3/4"-Rp3/4"	385	535	220	210
d1"1/4-Rp1"1/4	410	560	230	200

**Range: VGL 04.350 D, VGL 04.440 D**  
**95 ... 440 kW**  
**2 stages**  
**Standard**



## Working fields



## Characteristics and equipment

Model	VGL 04.350 D		VGL 04.440 D	
Operation range	(95) 170 - 350 kW			(130) 210 - 440 kW
Gas pressure	20 - 300 mbar			
Control box / flame detection	LGB 22 / QRA 2			
Fan motor	230 V - 50 Hz - 480 W			
Nozzle	3,75 gal/h 45°B		3,00 gal/h 45°B / 3,75 gal/h 45°B	
Electrical consumption	650 W		1 000 W	
Acoustic level (LpA)	71,6 dB(A)		71,9 dB(A)	
CE certificate	49 AQ 0985		49 AQ 0986	
Head lenght	KN	KL	KN	KL
Complete burner code	d1"1/4-Rp1"1/4 d3/4"-Rp3/4"	3 833 225 3 833 223	3 833 226 3 833 224	3 833 229 3 833 227
				3 833 230 3 833 228

## Options

Wieland plug (4 + 7 pins)	13 016 496
Front boiler flange CP4	13 018 499
External air inlet connector RG2 ( $\varnothing$ 160 mm)	13 002 031

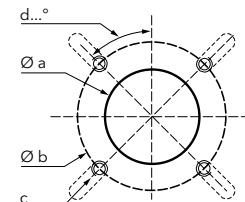
## Description

- Two stage progressive pneumatic dual fuel forced draught burner.
- Fuels: natural gas, net calorific value 8,83 ... 10,53 kWh/m<sup>3</sup>, light oil, viscosity 6 mm<sup>2</sup>/s at 20°C, low calorific value 11,86 kWh/kg.
- Maximum heat power: 700 and 1 000 kW.
- Minimum/maximum power ratio: 1/3.
- Air/gas ratio with pneumatic control technology in gas, three stages in oil.
- Three combustion head lengths.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - separated motor-pump;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Closing of the air flap on burner shut-down.
- Gas train factory assembled and tested for tightness and electrical security.
- Complete electrical equipment in the body of the burner.
- Three-phase electrical power supply.
- Protection level IP 54.
- Maximum working temperature 50°C.
- In compliance with the EN 676 and EN 267 standards and European Guidelines such as:
 

- gas appliances	2009/142/EC
- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

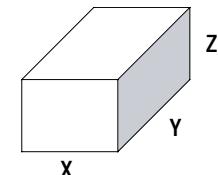
Øa (mm)	b (mm)	c	d
172-195	220-260	M10	45°



## Packaging

The burner is delivered complete in three packages containing:

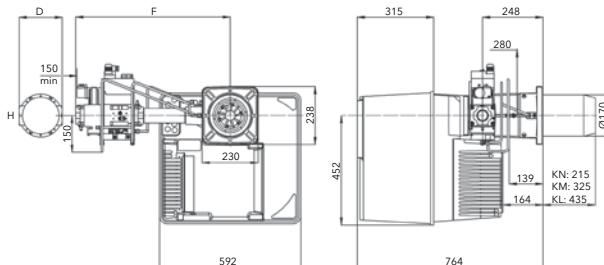
- burner body with: boiler fixing accessories, technical data including electrical diagram, exploded view and spare parts list, instruction manual;
- combustion head;
- gas train.



Component	Dimensions (mm)			Gross weight (kg)	
	X	Y	Z		
Burner body BB	VGL 05.700 DP	800	600	850	70
	VGL 05.1000 DP	800	600	850	67
Combustion head CH	KN	780	265	280	13
	KL	1 010	265	280	16
	KM	1 010	270	280	15
Gas train GT	s65-DN65	790	600	500	30
	s2"-Rp2"	790	600	500	18
	d1"1/2-Rp2"	670	550	380	14
	d1"1/4-Rp2"	600	400	240	11
	d3/4"-Rp1"	590	410	240	8

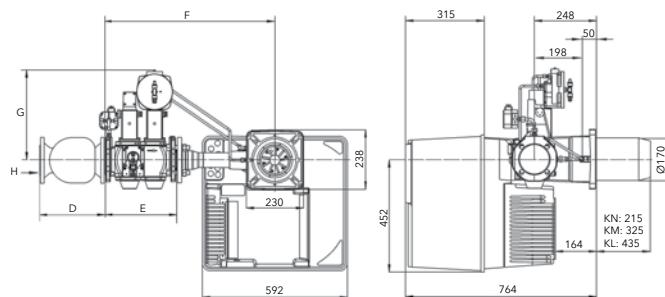
## Dimensions (mm)

with gas train "d":



D	F	H	Rp
120	516	3/4"	1"
177	540	1"1/4	2"
-	635	1"1/2	2"

with gas train "s":



D	E	F	G	H
186	292	734	344	2"
290	292	740	365	DN65

## Dual fuel VECTRON GL 05 Duo Plus

**Range: VGL 05.700 DP, VGL 05.1000 DP**

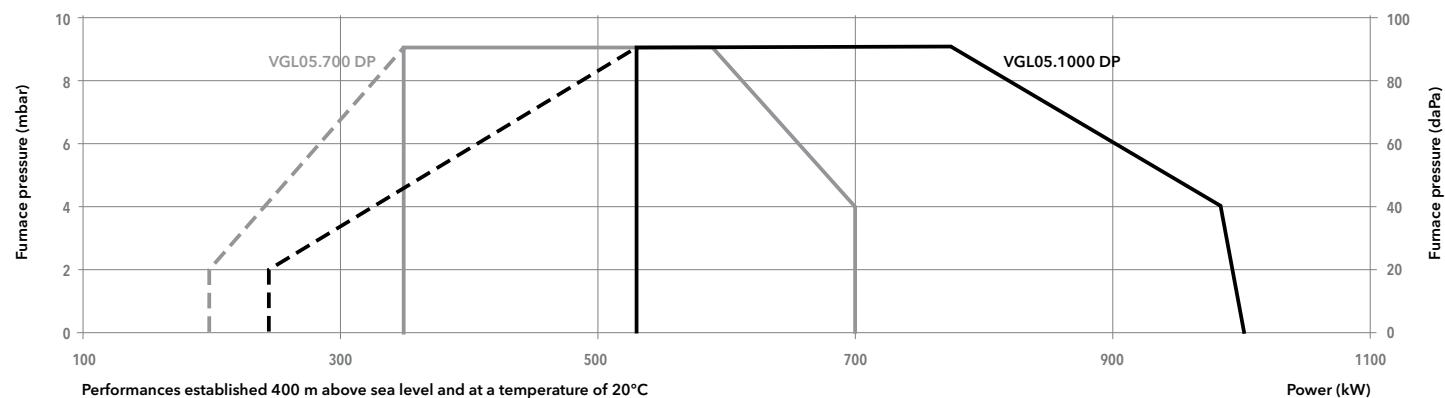
**200 ... 1 000 kW**

**2 stages progressive pneumatic in gas (Low NOx)**

**3 stages in oil**



### Working fields



### Characteristics and equipment

Model	VGL 05.700 DP			VGL 05.1000 DP			
Operation range	(200) 350 - 700 kW			(240) 530 - 1 000 kW			
Gas pressure	20 - 300 mbar						
Control box / flame detection	LFL 1.333 / QRA 2						
Fan motor	230/400 V - 50 Hz - 1,1 kW			230/400 V - 50 Hz - 1,5 kW			
Nozzle	4,5 gal/h 45°B / 5 gal/h 45°B			5 gal/h 45°B / 8,5 gal/h 45°B			
Electrical consumption	2 000 W			2 200 W			
Acoustic level (LpA)	75,4 dB(A)			77,6 dB(A)			
CE certificate	1312 AQ 924			1312 AQ 925			
Head lenght	KN	KL	KM	KN	KL	KM	
Complete burner code	s65-DN65 s2"-Rp2" d1"1/2-Rp2" d1"1/4-Rp2" d3/4"-Rp1"	3 832 980 13 004 136 13 001 930 13 014 772	3 832 981 13 004 137 13 001 931 13 014 773	3 832 982 13 004 138 13 001 932 13 014 774	3 832 983 3 832 986 13 004 869 13 001 936	3 832 984 3 832 987 13 004 870 13 001 937	3 832 985 3 832 988 13 004 871 13 001 938

### Options

Front boiler flange CP4	13 018 499
External air inlet connector RG3 (Ø 250 mm)	13 001 567
Digital power regulation R 40 (hot water, immersion probe)	13 007 765
Digital power regulation R 40 (hot water, strap-on probe)	13 007 766

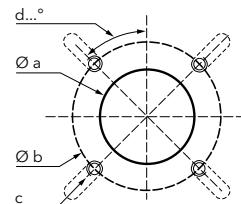
## Description

- Two stage progressive pneumatic dual fuel forced draught burner.
- Fuels: natural gas, net calorific value 8,83 ... 10,53 kWh/m<sup>3</sup>, light oil, viscosity 6 mm<sup>2</sup>/s at 20°C, low calorific value 11,86 kWh/kg.
- Maximum heat power: 1 600 and 2 050 kW.
- Minimum/maximum power ratio: 1/3.
- Air/gas ratio with pneumatic control technology in gas, three stages in oil.
- Three combustion head lengths.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - separated motor-pump;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Closing of the air flap on burner shut-down.
- Gas train factory assembled and tested for tightness and electrical security.
- Complete electrical equipment in the body of the burner.
- Three-phase electrical power supply.
- Protection level IP 54.
- Maximum working temperature 50°C.
- In compliance with the EN 676 and EN 267 standards and European Guidelines such as:
 

- gas appliances	2009/142/EC
- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

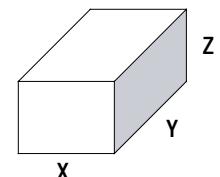
Øa (mm)	b (mm)	c	d
250	300-400	M12	45°



## Packaging

The burner is delivered complete in three packages containing:

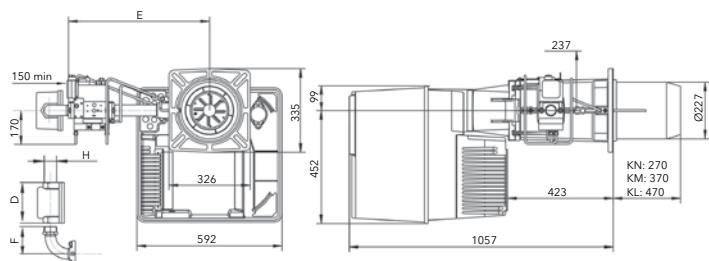
- burner body with: boiler fixing accessories, technical data including electrical diagram, exploded view and spare parts list, instruction manual;
- combustion head;
- gas train.



Component	Dimensions (mm)			Gross weight (kg)	
	X	Y	Z		
<b>Burner body BB</b>	VGL 06.1600 DP	800	600	850	85
	VGL 06.2100 DP	800	600	850	85
<b>Combustion head CH</b>	KN	800	380	420	28
	KL	800	380	420	31
	KM	800	380	420	31
<b>Gas train GT</b>	s80-DN80	790	600	500	39
	s65-DN65	790	600	500	31
	s2"-Rp2"	790	600	500	20
	d1"1/2-Rp2"	670	550	380	14
	d1"1/4-Rp2"	670	550	380	14

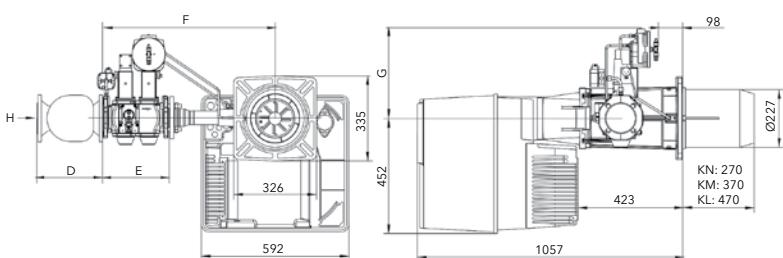
## Dimensions (mm)

with gas train "d":



D	E	F	Rp	H
-	590	107	1"1/2	-
160	690	-	1"1/4	2"

with gas train "s":



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

## Dual fuel VECTRON GL 06 Duo Plus

**Range: VGL 06.1600 DP, VGL 06.2100 DP**

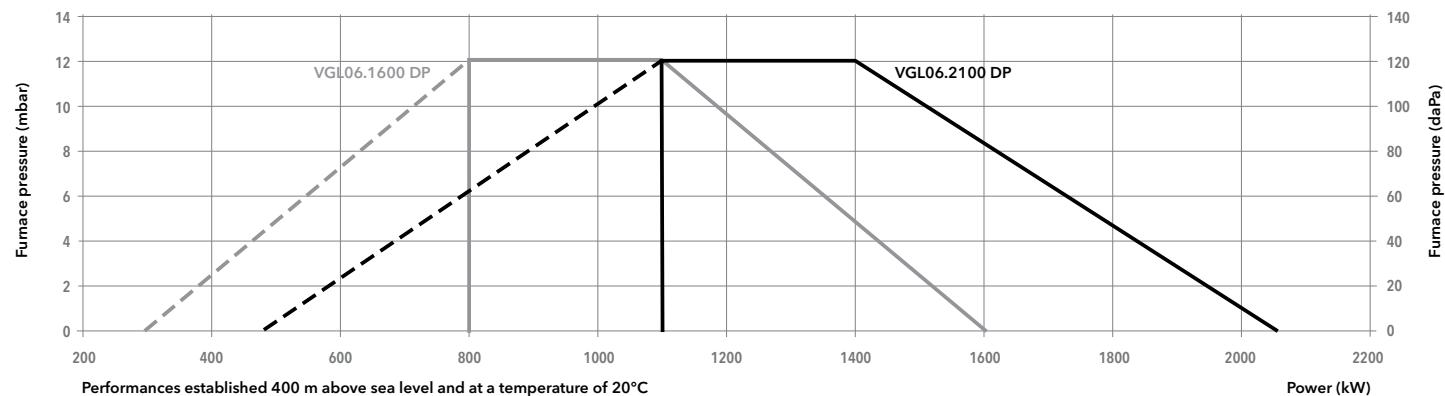
**300 ... 2 050 kW**

**2 stages progressive pneumatic in gas (Low NOx)**

**3 stages in oil**



### Working fields



### Characteristics and equipment

Model	VGL 06.1600 DP			VGL 06.2100 DP			
Operation range	(300) 800 - 1 600 kW			(480) 1 100 - 2 050 kW			
Gas pressure	20 - 300 mbar						
Control box / flame detection	LFL 1.333 / QRA 2						
Fan motor	230/400 V - 50 Hz - 2,2 kW			230/400 V - 50 Hz - 2,7 kW			
Nozzle	8,50 gal/h 60°B / 2 x 7,50 gal/h 60°B			13,50 gal/h 60°B / 2 x 11,00 gal/h 60°B			
Electrical consumption	2 840 - 3 380 W						
Acoustic level (LpA)	78,8 dB(A)			80 dB(A)			
CE certificate	1312 BM 3427			1312 BM 3428			
Head lenght	KN	KL	KM	KN	KL	KM	
Complete burner code	s80-DN80 s65-DN65 s2"-Rp2" d1"1/2-Rp2" d1"1/4-Rp2"	3 832 995 13 014 890 13 016 827 13 007 340 13 015 105	3 832 996 13 014 891 13 016 828 13 007 341 13 015 106	3 832 997 13 014 892 13 016 829 13 007 342 13 015 107	3 832 998 13 016 833 13 016 830 13 007 343 13 015 108	3 832 999 13 016 834 13 016 831 13 007 344 13 015 109	3 832 000 13 016 835 13 016 832 13 007 345 13 015 110

### Options

Front boiler flange CP51	13 008 019
External air inlet connector RG3 (Ø 250 mm)	13 001 567
Digital power regulation R 40 (hot water, immersion probe)	13 007 765
Digital power regulation R 40 (hot water, strap-on probe)	13 007 766

**Description**

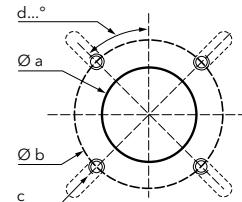
- One stage class 3 Low NOx (blue flame) forced draught burner.
- Fuel: light oil, viscosity 6 mm<sup>2</sup>/s by 20°C, net calorific value 11,86 kWh/kg.
- Maximum heat power: 20, 24, 28, 30, 35 and 47 kW.
- Adjustable combustion head length with sliding flange.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Complete electrical equipment in the body of the burner.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 21.
- Maximum working temperature 50°C.

• In compliance with the EN 267 norm and European Guidelines such as:

- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

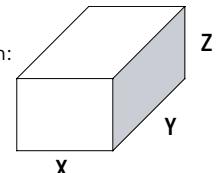
**Connecting flange**

Øa (mm)	b (mm)	c	d
85-104	150-170	M8	45°

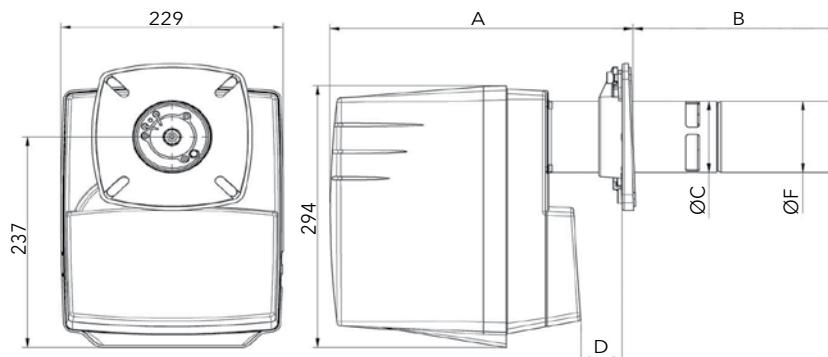
**Packaging**

The burner is delivered in its package complete with:

- hoses and nozzle;
- boiler fixing accessories;
- directions for use including electrical diagram, exploded view and spare parts list.



Component	Dimensions (mm)			Gross weight (kg)	
	X	Y	Z		
Complete burner CB	VB 1.20	300	260	650	12
	VB 1.24	300	260	650	12
	VB 1.28	300	260	650	12
	VB 1.30	300	260	650	12
	VB 1.35	300	260	650	12
	VB 1.47	300	260	650	12

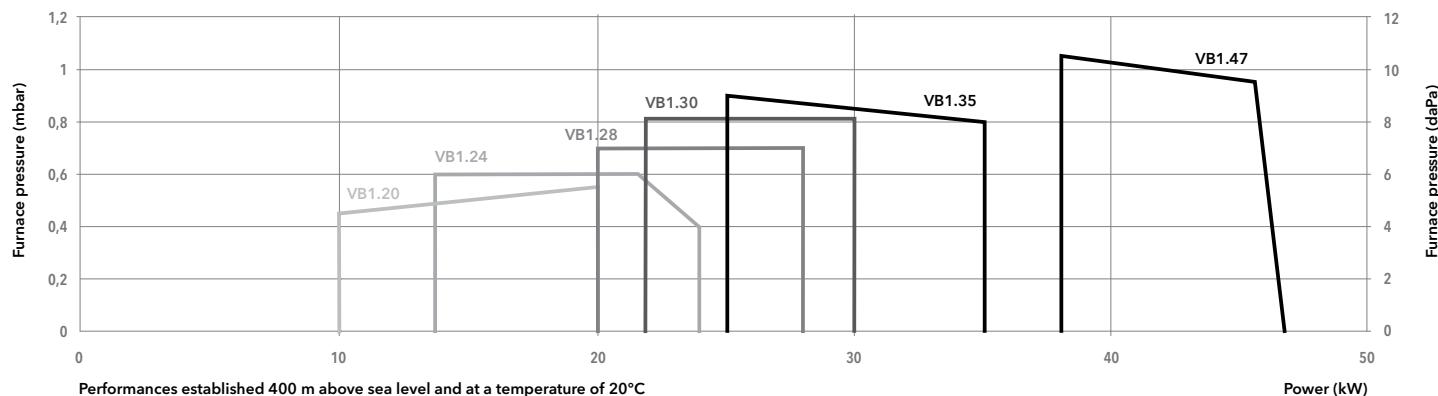
**Dimensions (mm)**

	A	B	Ø C	D	Ø F
VB 1.20					80
VB 1.24					80
VB 1.28	min 269 / max 284	min 234 / max 249			100
VB 1.30		min 244 / max 259			100
VB 1.35		min 294 / max 309			120
VB 1.47	min 297 / max 312	min 294 / max 309			120

**Range: VB 1.20, VB 1.24, VB 1.28, VB 1.30, VB 1.35, VB 1.47**  
**11 ... 47 kW**  
**1 stage**  
**Low NOx Blue flame**



## Working fields



## Characteristics and equipment

Model	VB 1.20	VB 1.24	VB 1.28	VB 1.30	VB 1.35	VB 1.47
Operation range	11 - 20 kW	14 - 24 kW	20 - 28 kW	22 - 30 kW	25 - 35 kW	38 - 47 kW
Fuel flow	0,9 - 1,7 kg/h	1,2 - 2,0 kg/h	1,7 - 2,4 kg/h	1,9 - 2,5 kg/h	2,1 - 3,0 kg/h	3,2 - 4,0 kg/h
Nozzle	0,40 gal/h 60°S	0,45 gal/h 60°S	0,50 gal/h 80°S	0,55 gal/h 80°S	0,60 gal/h 80°S	0,75 gal/h 80°S
Control box / flame detection			TCH 141.03 / IRD 1010			
Fan motor			230 V - 50 Hz - 110 W			
Electrical consumption			207 W			330 W
Flexible hoses			Rp 3/8" / M14 x 1,5 - 1 000 mm			
Acoustic level (LpA)			59 dB(A)			
Head lenght	KN	KL	KN	KL	KN	KL
Complete burner code	3 832 624	-	3 832 625	-	3 832 626	-
					3 832 627	-
					3 832 628	-
					3 833 013	-

## Options

Front boiler flange CP1	13 018 495
External air inlet connector RG9 (Ø 50 mm)	13 011 996
External air inlet connector RG4 (Ø 50 mm, adjustable)	13 004 320

**Description**

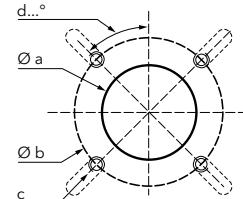
- One stage class 3 Low NOx (blue flame) forced draught burner.
- Fuel: light oil, viscosity 6 mm<sup>2</sup>/s by 20°C, net calorific value 11,86 kWh/kg.
- Maximum heat power: 60, 65 and 74 kW.
- Adjustable combustion head length with sliding flange.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Complete electrical equipment in the body of the burner.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 21.
- Maximum working temperature 50°C.

- In compliance with the EN 267 norm and European Guidelines such as:

- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

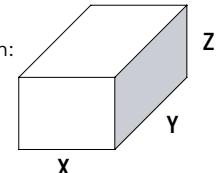
**Connecting flange**

Øa (mm)	b (mm)	c	d
125-135	150-170	M8	45°

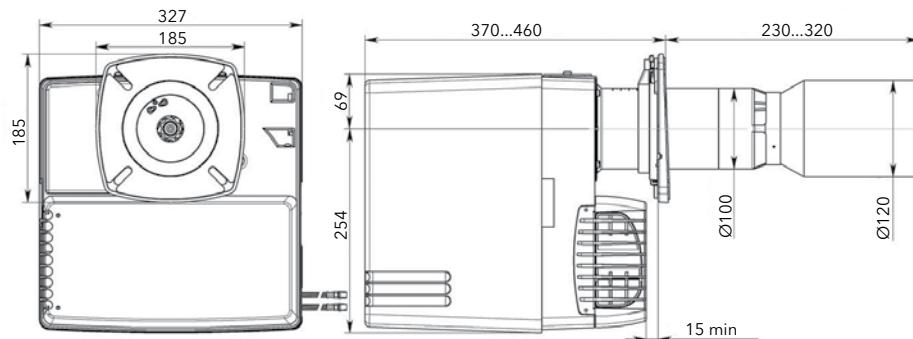
**Packaging**

The burner is delivered in its package complete with:

- hoses and nozzle;
- boiler fixing accessories;
- directions for use including electrical diagram, exploded view and spare parts list.



Component	Dimensions (mm)			Gross weight (kg)	
	X	Y	Z		
Complete burner CB	VBL 02.60	300	260	640	11
	VBL 02.65	300	260	640	11
	VBL 02.74	300	260	640	11

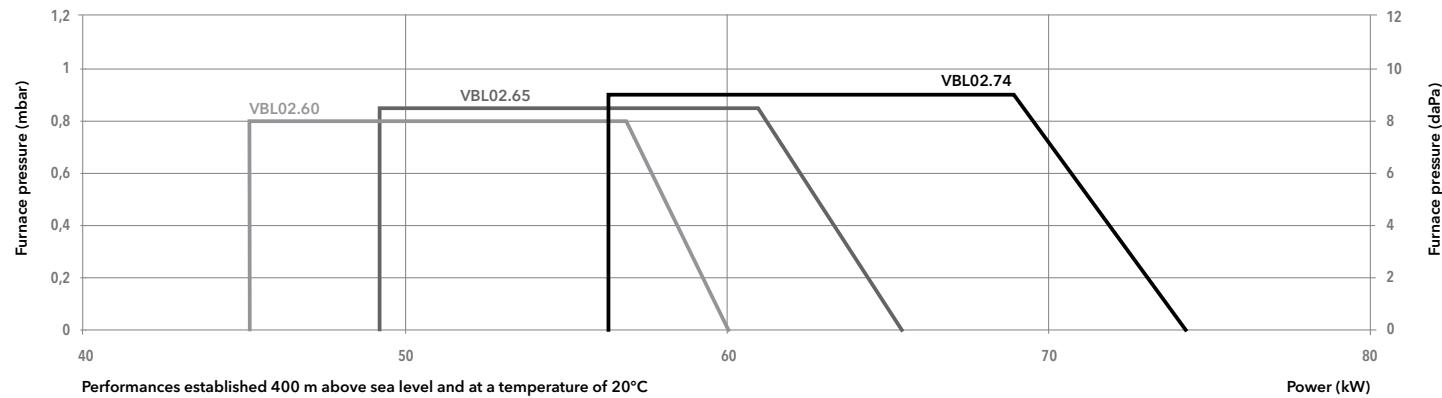
**Dimensions (mm)**

## Light oil VECTRON Blue L 02

**Range: VBL 02.60, VBL 02.65, VBL 02.74**  
**45 ... 74 kW**  
**1 stage**  
**Low NOx Blue flame**



### Working fields



### Characteristics and equipment

Model	VBL 02.60	VBL 02.65	VBL 02.74
Operation range	45 - 60 kW	49 - 65 kW	56 - 74 kW
Fuel flow	3,8 - 4,8 kg/h	4,1 - 5,5 kg/h	4,7 - 6,2 kg/h
Nozzle	1,00 gal/h 80°S	1,10 gal/h 80°S	1,25 gal/h 80°S
Control box / flame detection		SH 143 / ionization	
Fan motor		230 V - 50 Hz - 130 W	
Electrical consumption		365 W	
Flexible hoses		Rp 3/8" / M14 x 1,5 - 1 000 mm	
Acoustic level (LpA)		67 dB(A)	
Head lenght	KN	KL	KN
Complete burner code	13 020 325	-	13 022 788
			KL
			13 022 789
			-

### Options

Wieland plug (7 pins)	13 016 494
Front boiler flange CP2	13 018 496
External air inlet connector RG10 ( $\varnothing$ 100 mm)	13 018 822

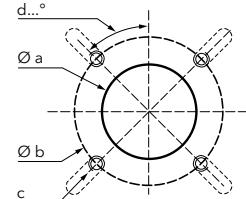
## Description

- One stage class 3 Low NOx (yellow flame) forced draught burner.
- Fuel: light oil, viscosity 6 mm<sup>2</sup>/s by 20°C, net calorific value 11,86 kWh/kg.
- Maximum heat power: 34, 50 and 75 kW.
- Adjustable combustion head length with sliding flange.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Complete electrical equipment in the body of the burner.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 21.
- Maximum working temperature 50°C.
- In compliance with the EN 267 norm and European Guidelines such as:
 

- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

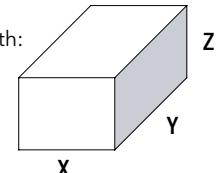
Øa (mm)	b (mm)	c	d
95-104	150-170	M8	45°



## Packaging

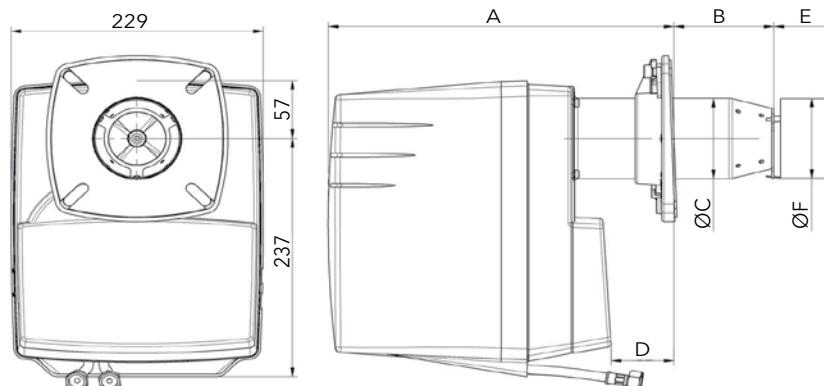
The burner is delivered in its package complete with:

- hoses and nozzle;
- boiler fixing accessories;
- directions for use including electrical diagram, exploded view and spare parts list.



Component	Dimensions (mm)			Gross weight (kg)
	X	Y	Z	
Complete burner CB	VE 1.34	300	260	650
	VE 1.50	300	260	650
	VE 1.75	300	260	650
				11
				11
				12

## Dimensions (mm)

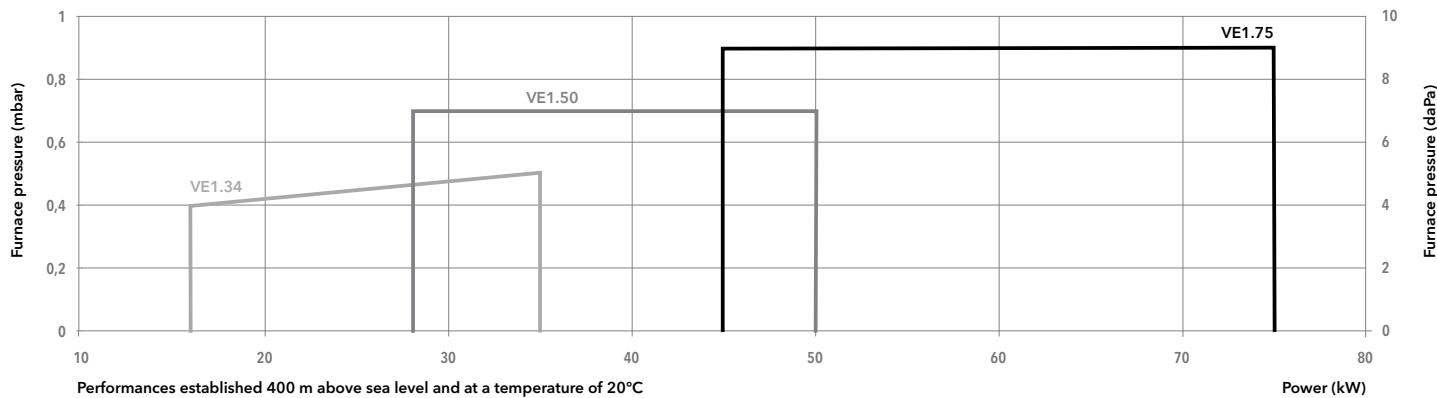


	A	B	Ø C	D	E	Ø F
VE 1.34	264 ... 329	70 ... 135	80	12 ... 77	63	79
VE 1.50	264 ... 344	70 ... 150	90	12 ... 92	56	84
VE 1.75	297 ... 357	70 ... 138	90	15 ... 83	56	84

**Range: VE 1.34, VE 1.50, VE 1.75**  
**16 ... 75 kW**  
**1 stage**  
**Low NOx Yellow flame**



## Working fields



## Characteristics and equipment

Model	VE 1.34	VE 1.50	VE 1.75
Operation range	16 - 34 kW	28 - 50 kW	44 - 75 kW
Fuel flow	1,3 - 2,8 kg/h	2,4 - 4,2 kg/h	3,7 - 6,3 kg/h
Nozzle	0,45 gal/h 45°S	0,75 gal/h 45°S	1,10 gal/h 45°H
Control box / flame detection	TCH 141.03 / MZ 770 S		TCH 141.00 / MZ 770 S
Fan motor		230 V - 50 Hz - 110 W	
Electrical consumption	244 W		233 W
Flexible hoses	Rp 3/8" / M14 x 1,5 - 1 000 mm		
Acoustic level (LpA)		56 dB(A)	
Head lenght	KN	KL	KN
Complete burner code	3 832 630	-	3 832 632
			KL
			3 832 634
			-

## Options

Front boiler flange CP1	13 018 495
External air inlet connector RG9 (Ø 50 mm)	13 011 996
External air inlet connector RG4 (Ø 50 mm, adjustable)	13 004 320

## Description

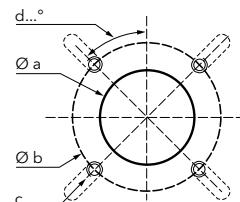
- One stage forced draught burner.
- Fuel: light oil, viscosity 6 mm<sup>2</sup>/s by 20°C, net calorific value 11,86 kWh/kg.
- Maximum heat power: 40, 42, 55 and 95 kW.
- Adjustable combustion head length with sliding flange.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Complete electrical equipment in the body of the burner.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 21.
- Maximum working temperature 50°C.

- In compliance with the EN 267 norm and European Guidelines such as:

- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

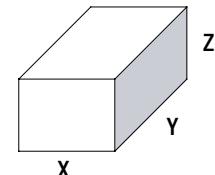
Model	Øa (mm)	b (mm)	c	d
VL 1.40/55	85-104	150-170	M8	45°
VL 1.95	95-104	150-170	M8	45°



## Packaging

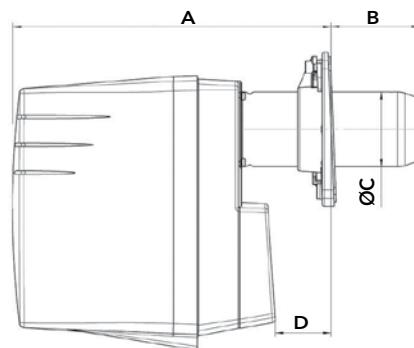
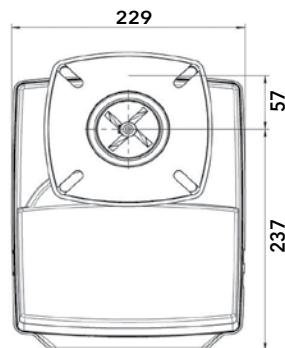
The burner is delivered in its package complete with:

- hoses and nozzle;
- boiler fixing accessories;
- directions for use including electrical diagram, exploded view and spare parts list.



Component	Dimensions (mm)			Gross weight (kg)
	X	Y	Z	
Complete burner CB	VL 1.40 P	300	260	650
	VL 1.42	300	260	650
	VL 1.55 / 1.55 P	300	260	650
	VL 1.95	300	260	650

## Dimensions (mm)



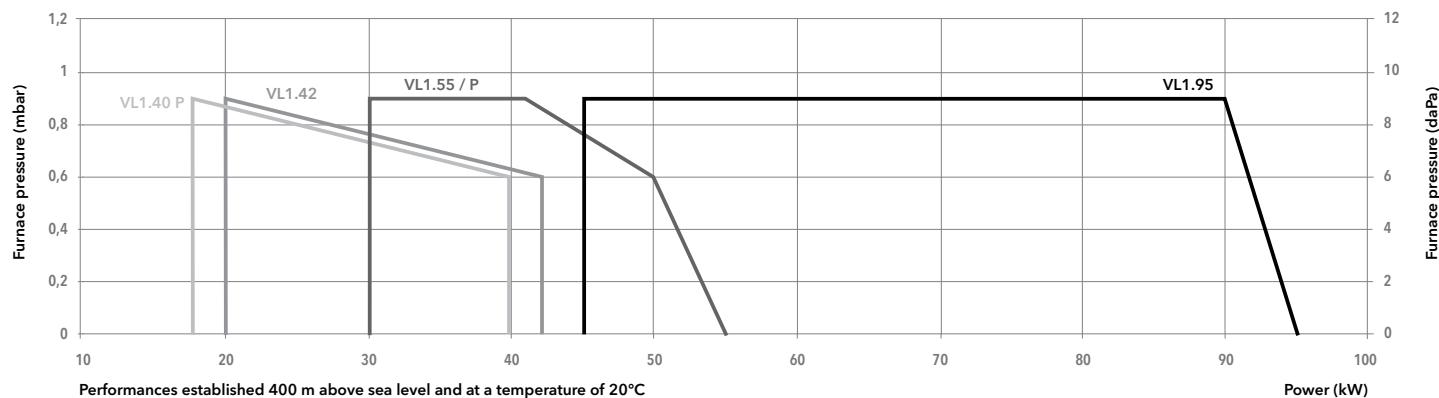
	A	B	Ø C	D
VL 1.40 P				
VL 1.42	min 270 / max 310	min 70 / max 120	80	min 21 / max 71
VL 1.55 / 1.55 P				
VL 1.95	min 297 / max 357	min 70 / max 138	90	min 15 / max 83

# Light oil VECTRON L 1

**Range: VL 1.40 P, VL 1.55 P, VL 1.42, VL 1.55, VL 1.95  
18 ... 95 kW  
1 stage  
Standard**



## Working fields



## Characteristics and equipment

Model	VL 1.40 P	VL 1.55 P	VL 1.42	VL 1.55	VL 1.95
Operation range	18 - 40 kW (pre-heater)	30 - 55 kW (pre-heater)	20 - 42 kW	30 - 55 kW	45 - 95 kW
Fuel flow	1,5 - 3,3 kg/h	2,5 - 4,6 kg/h	1,7 - 3,5 kg/h	2,5 - 4,6 kg/h	3,8 - 8 kg/h
Nozzle	0,50 gal/h 60°S	1,00 gal/h 45°S	0,60 gal/h 60°S	1,00 gal/h 45°S	1,25 gal/h 45°S
Control box / flame detection	TCH 141.03 / MZ 770 S			TCH 141.00 / MZ 770 S	
Fan motor			230 V - 50 Hz - 110 W		
Electrical consumption	244 W	244 W	195 W	195 W	233 W
Flexible hoses			Rp 3/8" / M14 x 1,5 - 1 000 mm		
Acoustic level (LpA)			55 dB(A)		60,5 dB(A)
Head lenght	KN	KL	KN	KL	KN
Complete burner code	3 832 615	-	3 833 026	-	3 832 616
				-	3 832 617
				-	3 832 618
					-

## Options

Front boiler flange CP1	13 018 495
External air inlet connector RG9 (Ø 50 mm)	13 011 996
External air inlet connector RG4 (Ø 50 mm, adjustable)	13 004 320

## Description

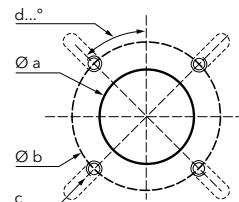
- One stage forced draught burner.
- Fuel: light oil, viscosity 6 mm<sup>2</sup>/s by 20°C, net calorific value 11,86 kWh/kg.
- Maximum heat power: 140 and 200 kW.
- Adjustable combustion head length with sliding flange.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Complete electrical equipment in the body of the burner.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 21.
- Maximum working temperature 50°C.

- In compliance with the EN 267 norm and European Guidelines such as:

- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

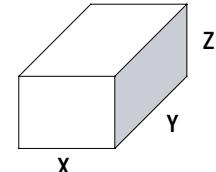
Øa (mm)	b (mm)	c	d
120-135	150-184	M8	45°



## Packaging

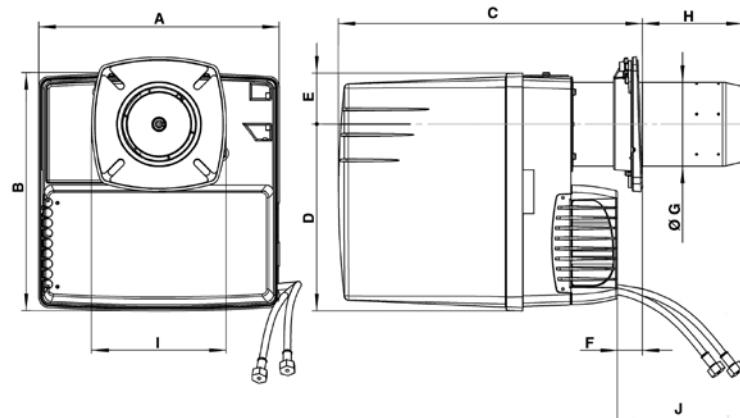
The burner is delivered in its package complete with:

- hoses and nozzle;
- boiler fixing accessories;
- directions for use including electrical diagram, exploded view and spare parts list.



Component	Dimensions (mm)			Gross weight (kg)
	X	Y	Z	
Complete burner CB	VL 2.140	400	400	760
	VL 2.200	400	400	760

## Dimensions (mm)



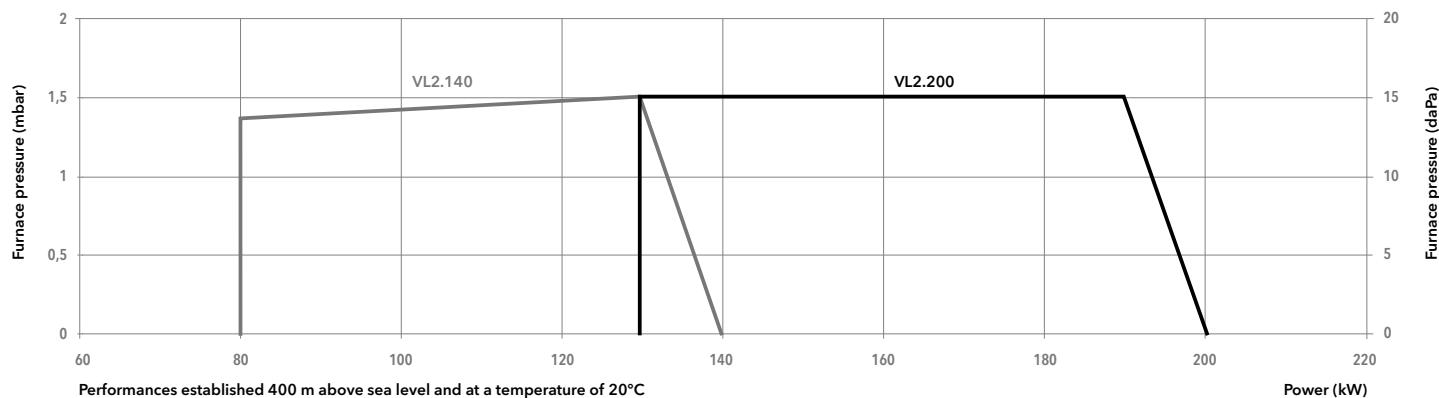
	A	B	C		D	E	F	ØG	H		I	J
VL2.140	331	325	KN 398...518	KL 398...638	256	69	15 min	100	KN 30...150	KL 30...270	185 x 185	1200
								115				

## Light oil VECTRON L 2

**Range: VL 2.140, VL 2.200**  
**80 ... 200 kW**  
**1 stage**  
**Standard**



### Working fields



### Characteristics and equipment

Model	VL 2.140		VL 2.200	
Operation range	80 - 140 kW		130 - 200 kW	
Fuel flow	6,7 - 11,8 kg/h		11 - 16,9 kg/h	
Nozzle	2,25 gal/h 45°S		3,50 gal/h 45°S	
Control box / flame detection	TCH1... / MZ 770 S			
Fan motor	230 V - 50 Hz - 160 W		230 V - 50 Hz - 130 W	
Electrical consumption	274 W		290 W	
Flexible hoses	Rp 3/8" / DN6 x 1,5 - 1 500 mm			
Acoustic level (LpA)	62 dB(A)		65 dB(A)	
Head lenght	KN	KL	KN	KL
Complete burner code	3 833 536	3 833 537	3 833 540	3 833 541

### Options

Front boiler flange CP2	13 018 496
External air inlet connector RG10 (Ø 100 mm)	13 018 822

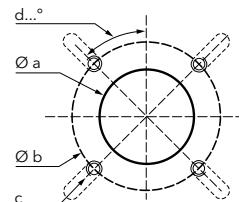
## Description

- Two stages class 3 Low NOx (blue flame) forced draught burner.
- Fuel: light oil, viscosity 6 mm<sup>2</sup>/s by 20°C, net calorific value 11,86 kWh/kg.
- Maximum heat power: 86 kW.
- Adjustable combustion head length with sliding flange.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Closing of the air flap on burner shut-down.
- Complete electrical equipment in the body of the burner.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 21.
- Maximum working temperature 50°C.
- In compliance with the EN 267 norm and European Guidelines such as:
 

- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

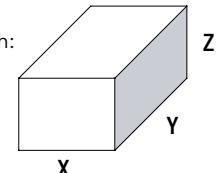
Øa (mm)	b (mm)	c	d
125-135	150-170	M8	45°



## Packaging

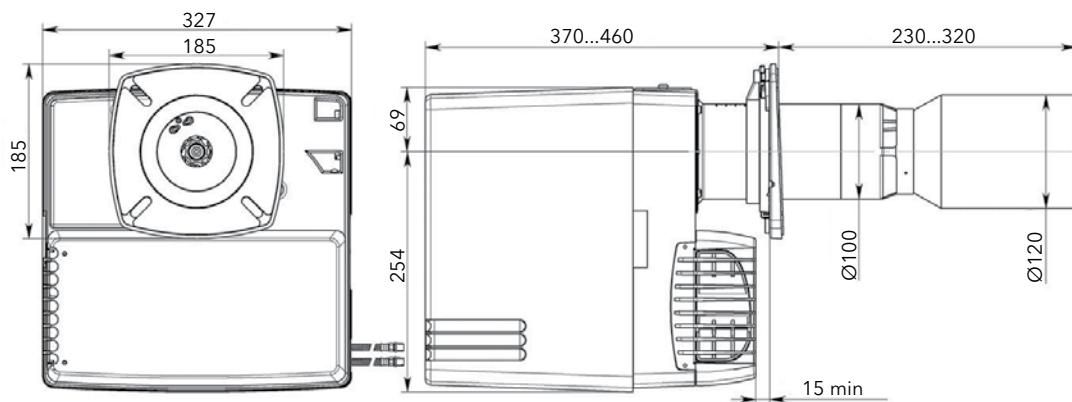
The burner is delivered in its package complete with:

- hoses and nozzle;
- boiler fixing accessories;
- directions for use including electrical diagram, exploded view and spare parts list.



Component	Dimensions (mm)			Gross weight (kg)
	X	Y	Z	
Complete burner CB	VBL 02.86 D	400	400	760
				18

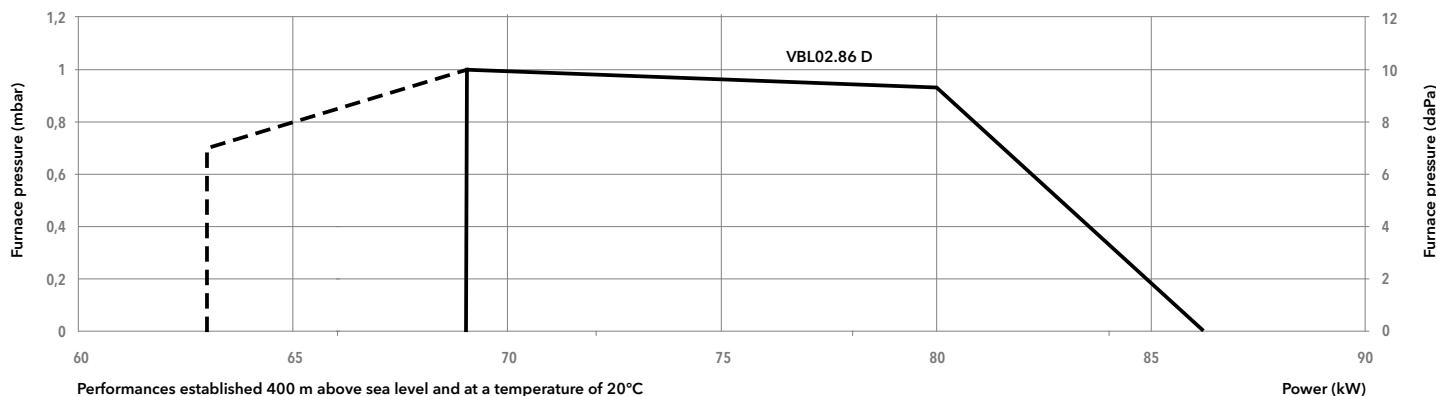
## Dimensions (mm)



**Range: VBL 02.86 D**  
**63 ... 86 kW**  
**2 stages**  
**Low NOx Blue flame**



## Working fields



## Characteristics and equipment

Model	VBL 02.86 D	
Operation range	(63) 69 - 86 kW	
Fuel flow	5,3 - 7,3 kg/h	
Nozzles	1,35 gal/h 80°S	
Control box / flame detection	SH 213 / ionization	
Fan motor	230 V - 50 Hz - 130 W	
Electrical consumption	285 W	
Flexible hoses	Rp 3/8" / M14 x 1,5 - 1 000 mm	
Acoustic level (LpA)	67 dB(A)	
Head lenght	KN	KL
Complete burner code	13 022 790	-

## Options

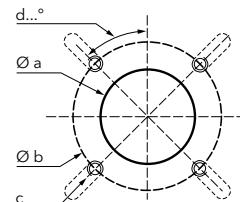
Wieland plug (4 + 7 pins)	13 016 496
Front boiler flange CP1	13 018 496
External air inlet connector RG10 ( $\varnothing$ 100 mm)	13 018 822

**Description**

- Two stages forced draught burner.
  - Fuel: light oil, viscosity 6 mm<sup>2</sup>/s by 20°C, net calorific value 11,86 kWh/kg.
  - Maximum heat power: 120, 160 and 210 kW.
  - 1st/2nd stage ratio: 0,7/1 with one nozzle and two pressures.
  - Adjustable combustion head length with sliding flange.
  - Cubic type architecture:
    - optimal accessibility;
    - maximum compactness, minimum weight;
    - simplified maintenance;
    - limited number of tools and components;
    - preserved burner head adjustments.
  - Quiet ventilation and reduced electrical consumption.
  - Closing of the air flap on burner shut-down.
  - Complete electrical equipment in the body of the burner with MDE2 System and display.
  - Single-phase electrical power supply 230 V - 50 Hz.
  - Protection level IP 21.
  - Maximum working temperature 50°C.
- In compliance with the EN 267 norm and European Guidelines such as:
- |               |             |
|---------------|-------------|
| - EMC         | 2004/108/EC |
| - low voltage | 2006/95/EC  |
| - efficiency  | 92/42/EEC   |

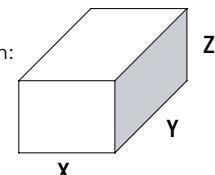
**Connecting flange**

Øa (mm)	b (mm)	c	d
120-135	150-184	M8	45°

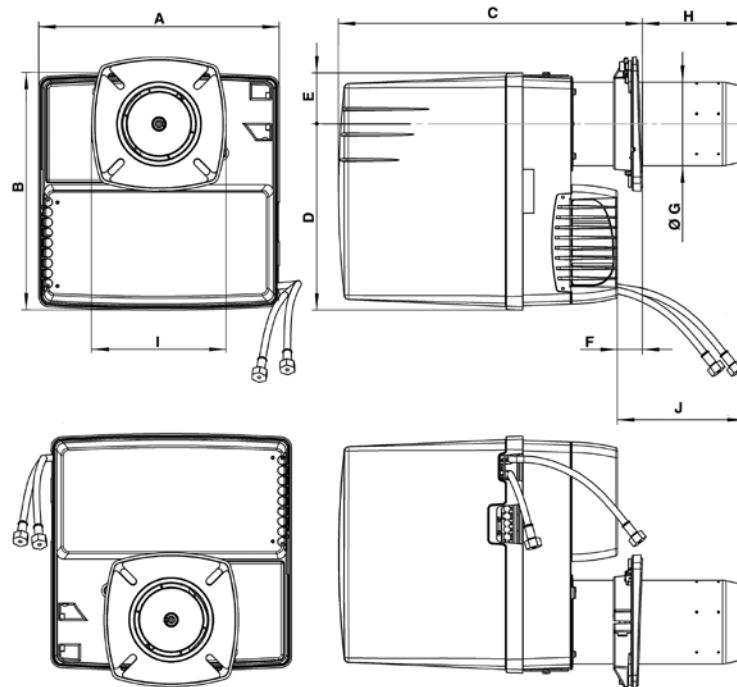
**Packaging**

The burner is delivered in its package complete with:

- hoses and nozzle;
- boiler fixing accessories;
- directions for use including electrical diagram, exploded view and spare parts list.



Component	Dimensions (mm)			Gross weight (kg)	
	X	Y	Z		
Complete burner CB	VL 2.120 D	400	400	770	18
	VL 2.160 D	400	400	770	18
	VL 2.210 D	400	400	770	19

**Dimensions (mm)**

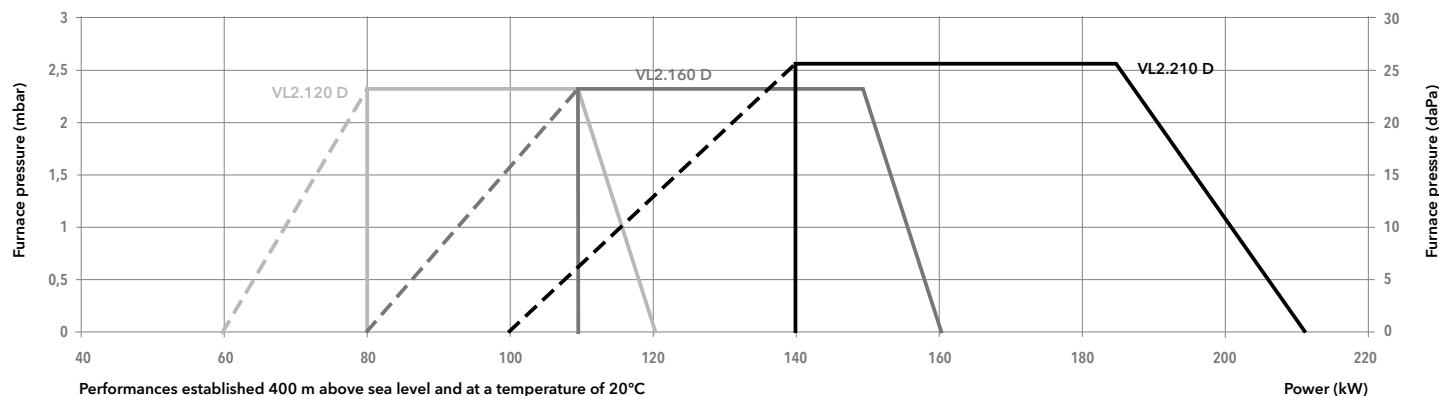
A	B	C	D	E	F	Ø G	H	I	J
331	326	KN 398...518	KL 398...638	256	69	15 min.	115	KN 30...150	KL 30...270

## Light oil VECTRON L 2 Duo

**Range: VL 2.120 D, VL 2.160 D, VL 2.210 D**  
**60 ... 210 kW**  
**2 stages**  
**Standard**



### Working fields



### Characteristics and equipment

Model	VL 2.120 D		VL 2.160 D		VL 2.210 D	
Operation range	(60) 80 - 120 kW		(80) 110 - 160 kW		(100) 140 - 210 kW	
Fuel flow	4,6 - 10,0 kg/h		6,1 - 13,5 kg/h		8,4 - 17,7 kg/h	
Nozzles	1,50 gal/h 45°S		2,25 gal/h 45°S		2,75 gal/h 45°S	
Control box / flame detection	TCH 2... / MZ 770 S					
Fan motor	230 V - 50 Hz - 160 W		230 V - 50 Hz - 130 W			
Electrical consumption	216 W		290 W		345 W	
Flexible hoses	Rp 3/8" / M14 x 1,5 - 1 500 mm					
Acoustic level (LpA)	62 dB(A)		64 dB(A)		65 dB(A)	
Head lenght	KN	KL	KN	KL	KN	KL
Complete burner code	3 833 344	3 833 345	3 833 346	3 833 347	3 833 348	3 833 349

### Options

Front boiler flange CP2	13 018 496
External air inlet connector RG10 (Ø 100 mm)	13 018 822

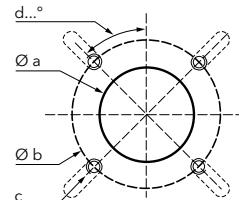
## Description

- Two stages forced draft burner.
- Fuel: light oil, viscosity 6 mm<sup>2</sup>/s by 20°C, net calorific value 11,86 kWh/kg.
- Maximum heat power: 240 and 300 kW.
- 1st/2nd stage ratio: 0,7/1 with one nozzle and two pressures.
- Two combustion head lengths.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Closing of the air damper on burner shut-down.
- Complete electrical equipment in the body of the burner with MDE2 System and display.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 41.
- Maximum working temperature 50°C.
- In compliance with the EN 267 norm and European Guidelines such as:
 

- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

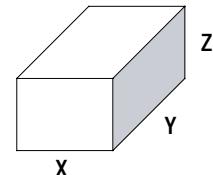
Øa (mm)	b (mm)	c	d
155-190	175-220	M10	45°



## Packaging

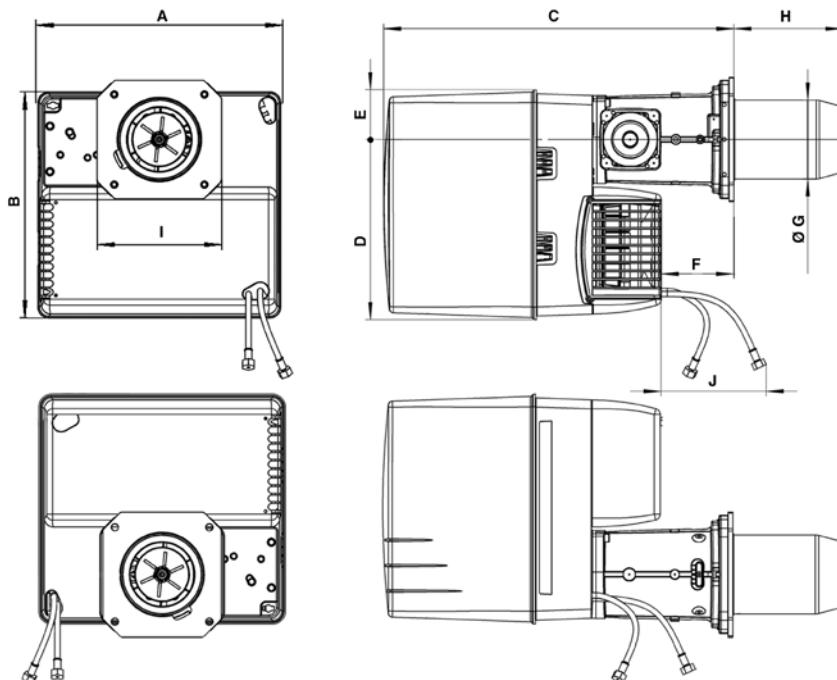
The burner is delivered complete in two packages containing:

- burner body with: boiler fixing accessories, hoses and nozzle technical data including electrical diagram, exploded view and spare parts list, Instruction manual
- combustion head.



Component	Dimensions (mm)			Gross weight (kg)
	X	Y	Z	
Burner body BB	VL 3.290 D	440	400	520
	VL 3.360 D	440	400	520
Combustion head CH	KN	650	210	260
	KL	780	210	260

## Dimensions (mm)



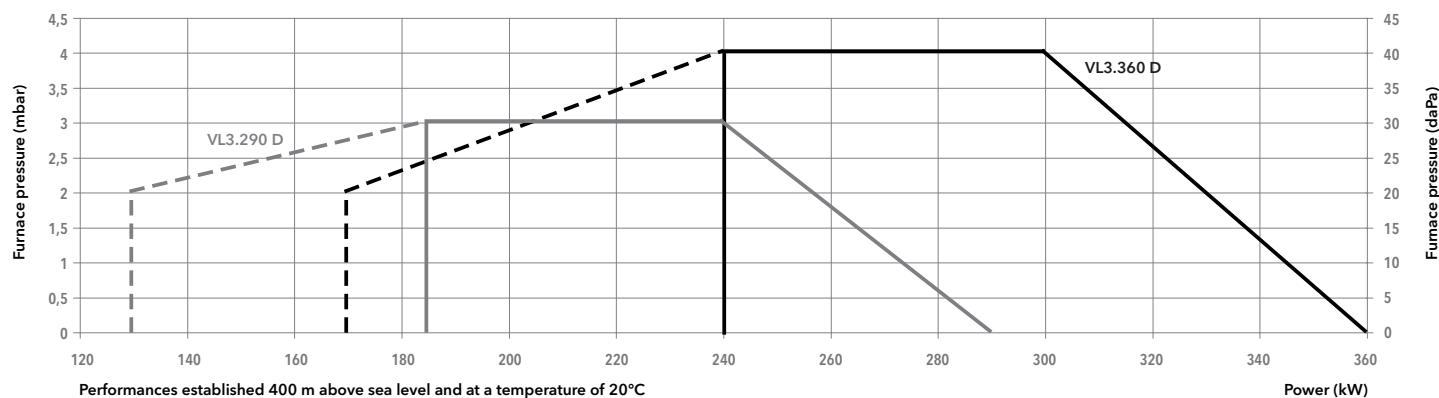
A	B	C	D	E	F	Ø G	H	I	J
406	379	576	297	82	120	130	KN 180	KL 320	195 x 205

## Light oil VECTRON L 3 Duo

**Range: VL 3.290 D, VL 3.360 D**  
**130 ... 360 kW**  
**2 stages**  
**Standard**



### Working fields



### Characteristics and equipment

Model	VL 3.290 D		VL 3.360 D	
Operation range	(130) 185 - 290 kW		(170) 240 - 360 kW	
Fuel flow	15,6 - 24,4 kg/h		20,2 - 30,3 kg/h	
Nozzles	3,75 gal/h 60°B		4,50 gal/h 60°B	
Control box / flame detection	TCH2... / MZ 770 S			
Fan motor	230 V - 50 Hz - 250 W		230 V - 50 Hz - 300 W	
Electrical consumption	445 W		540 W	
Flexible hoses	Rp 3/8" / DN6 x 1 500 mm			
Acoustic level (LpA)	67 dB(A)		69 dB(A)	
Head lenght	KN	KL	KN	KL
Complete burner code	3 833 072	3 833 073	3 833 070	3 833 071

### Options

Front boiler flange CP31	3 833 151
External air inlet connector RG11 (Ø 160 mm)	3 833 152

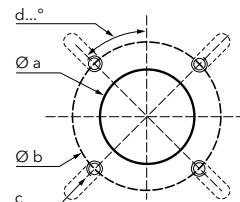
## Description

- Two stages forced draught burner.
- Fuel: light oil, viscosity 6 mm<sup>2</sup>/s by 20°C, net calorific value 11,86 kWh/kg.
- Maximum heat power: 460 and 610 kW.
- 1st/2nd stage ratio: 0,5/1 with two nozzles.
- Two combustion head lengths.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Closing of the air flap on burner shut-down.
- Complete electrical equipment in the body of the burner with MDE2 System and display.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 41.
- Maximum working temperature 50°C.
- In compliance with the EN 267 norm and European Guidelines such as:
 

- EMC	2004/108/EC
- low voltage	2006/95/EC
- efficiency	92/42/EEC

## Connecting flange

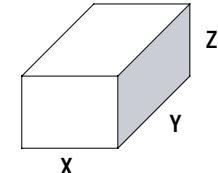
Øa (mm)	b (mm)	c	d
190-240	200-270	M10	45°



## Packaging

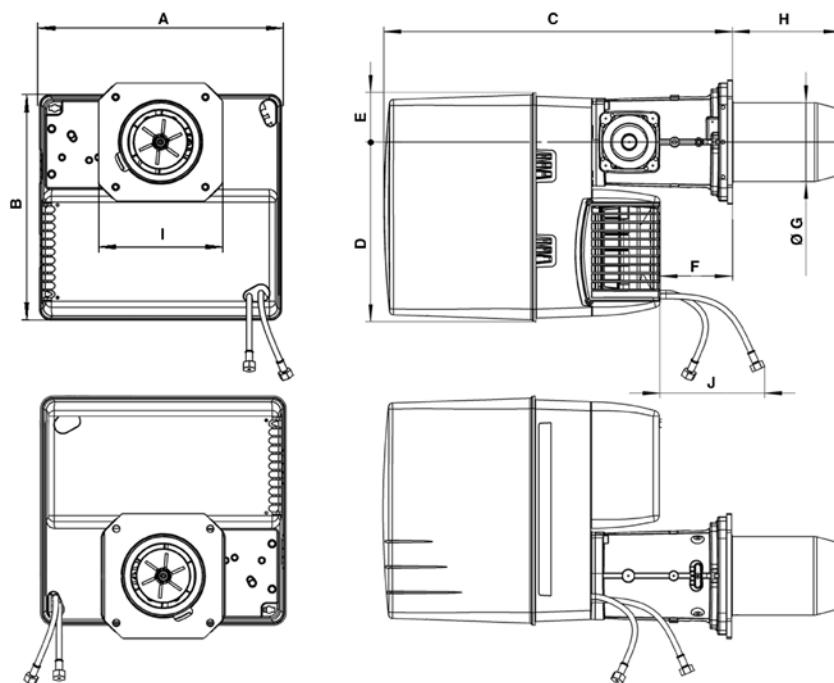
The burner is delivered complete in two packages containing:

- burner body with: boiler fixing accessories, hoses and nozzle technical data including electrical diagram, exploded view and spare parts list, Instruction manual
- combustion head.



Component	Dimensions (mm)			Gross weight (kg)
	X	Y	Z	
Burner body BB	VL 4.460 D	490	490	590
	VL 4.610 D	490	490	34,2
Combustion head CH	KN	750	260	8,5
	KL	895	260	9,7

## Dimensions (mm)



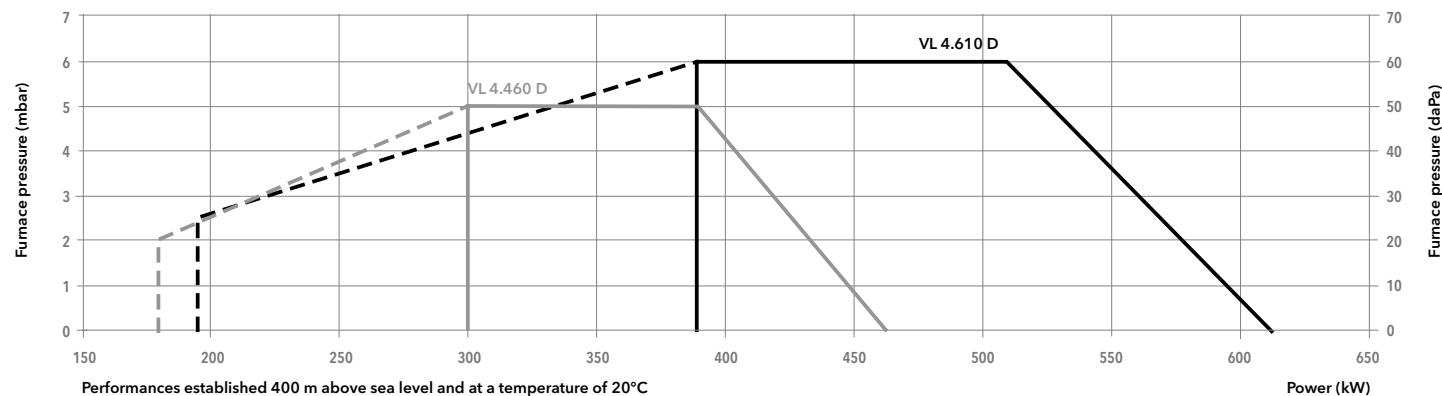
A	B	C	D	E	F	Ø G	H	I	J
465	475	640	377	97	149	150	KN 220	KL 360	245 x 245

## Light oil VECTRON L 4 Duo

**Range: VL 4.460 D, VL 4.610 D**  
**180 ... 610 kW**  
**2 stages**  
**Standard**



### Working fields



### Characteristics and equipment

Model	VL 4.460 D		VL 4.610 D	
Operation range	(180) 300 - 460 kW		(195) 390 - 610 kW	
Fuel flow	(15,2) 25,3 - 38,8 kg/h		(16,4) 32,9 - 51,4 kg/h	
Nozzles	5,00 gal/h 60°S / 3,5 gal/h 60°S		6,50 gal/h 60°S / 3,00 gal/h 60°S	
Control box / flame detection	TCH2... / MZ 770 S			
Fan motor	230 V - 50 Hz - 420 W		230 V - 50 Hz - 750 W	
Electrical consumption	545 W		830 W	
Flexible hoses	Rp 3/8" / DN6 x 1 500 mm			
Acoustic level (LpA)	70 dB(A)		71 dB(A)	
Head lenght	KN	KL	KN	KL
Complete burner code	3 833 395	3 833 396	3 833 397	3 833 398

### Options

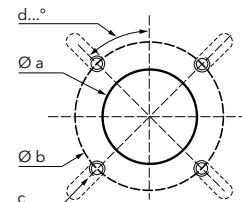
Front boiler flange CP4	13 018 499
External air inlet connector RG12 (Ø 200 mm)	3 833 429

## Description

- Two stages forced draught burner.
- Fuel: light oil, viscosity 6 mm<sup>2</sup>/s by 20°C, net calorific value 11,86 kWh/kg.
- Maximum heat power: 950 and 1 186 kW.
- 1st/2nd stage ratio: 0,5/1 with two nozzles.
- Three combustion head lengths.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - separated motor-pump;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Closing of the air flap on burner shut-down.
- Complete electrical equipment in the body of the burner with MDE2 System and display.
- Three phase electrical power supply.
- Protection level IP 21.
- Maximum working temperature 50°C.
- In compliance with the EN 267 norm and European Guidelines such as:
  - EMC 2004/108/EC
  - low voltage 2006/95/EC
  - efficiency 92/42/EEC

## Connecting flange

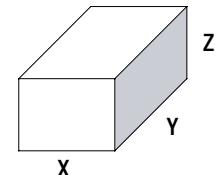
Øa (mm)	b (mm)	c	d
195	220-260	M10	45°



## Packaging

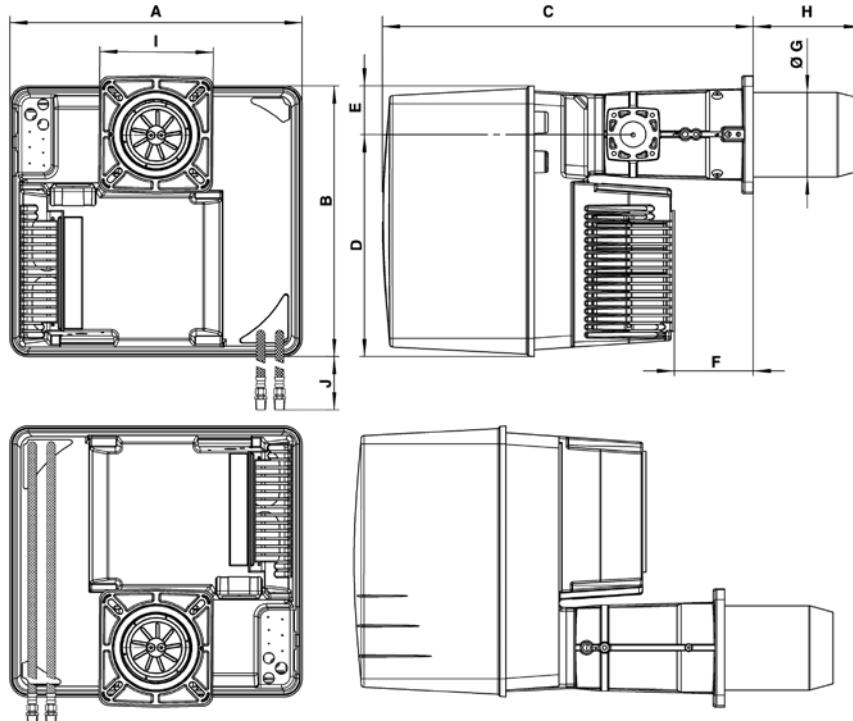
The burner is delivered complete in two packages containing:

- burner body with: boiler fixing accessories, hoses and nozzle technical data including electrical diagram, exploded view and spare parts list, Instruction manual
- combustion head.



Component	Dimensions (mm)			Gross weight (kg)	
	X	Y	Z		
Burner body BB	VL 5.950 D	800	600	850	58,8
	VL 5.1200 D	800	600	850	58,6
Combustion head CH	5.950 KN	780	265	280	10
	5.950 KL	1 010	265	280	13,5
	5.950 KM	1 010	265	280	12,5
	5.1200 KN	780	265	280	10,1
	5.1200 KL	1 010	265	280	13,5
	5.1200 KM	1 010	265	280	12

## Dimensions (mm)



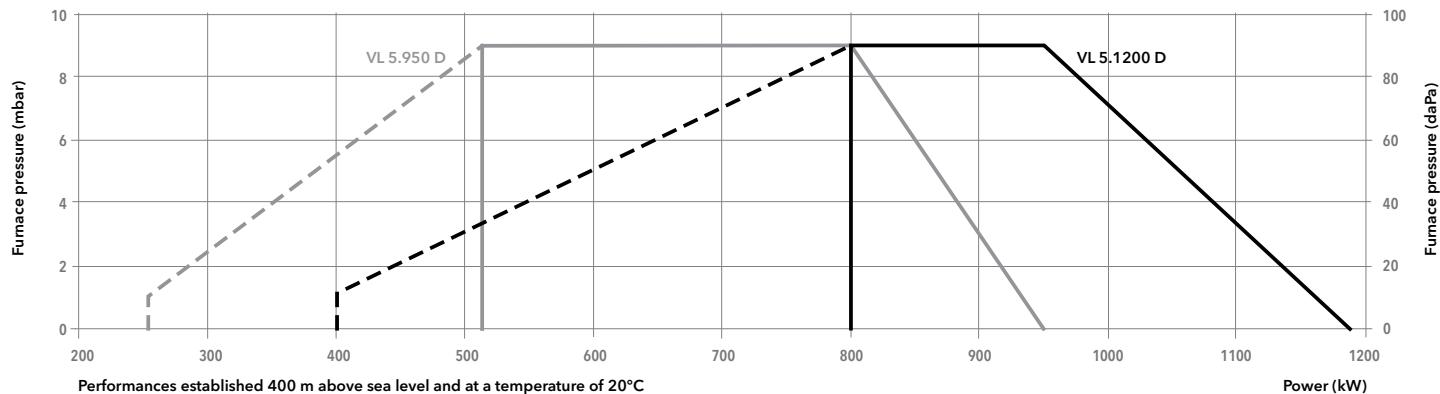
A	B	C	D	E	F	ØG	H	I	J
581	549	752	450	99	164	170	KN 215	KM 325	KL 435

## Light oil VECTRON L 5 Duo

**Range: VL 5.950 D, VL 5.1200 D**  
**260 ... 1 186 kW**  
**2 stages**  
**Standard**



### Working fields



### Characteristics and equipment

Model	VL 5.950 D			VL 5.1200 D		
Operation range	(260) 510 - 950 kW			(400) 800 - 1 186 kW		
Fuel flow	(21,9) 43 - 80,1 kg/h			(33,7) 67,5 - 100 kg/h		
Nozzles	7,50 gal/h / 6,50 gal/h			8,50 gal/h / 7,50 gal/h		
Control box / flame detection	TCH2... / MZ 770 S					
Fan motor	230 V - 50 Hz - 1,5 kW					
Electrical consumption	160 + 1 700 W			155 + 1 940 W		
Flexible hoses	Rp 3/8" / M16 x 1,5 - 1 500 mm					
Acoustic level (LpA)	70 dB(A)			71 dB(A)		
Head lenght	KN	KL	KM	KN	KL	KM
Complete burner code	3 833 501	3 833 504	3 833 613	3 833 502	3 833 503	3 833 614

### Options

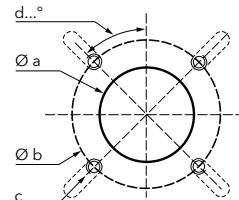
Front boiler flange CP4	13 018 499
External air inlet connector RG3 (Ø 250 mm)	13 001 567

## Description

- Three stages forced draught burner.
- Fuel: light oil, viscosity 6 mm<sup>2</sup>/s by 20°C, net calorific value 11,86 kWh/kg.
- Maximum heat power: 540 kW.
- 1st/3rd stage ratio: 0,33/1 with two nozzles and two pressures.
- Two combustion head lengths.
- Cubic type architecture:
  - optimal accessibility;
  - maximum compactness, minimum weight;
  - simplified maintenance;
  - limited number of tools and components;
  - preserved burner head adjustments.
- Quiet ventilation and reduced electrical consumption.
- Closing of the air flap on burner shut-down.
- Complete electrical equipment in the body of the burner.
- Single-phase electrical power supply 230 V - 50 Hz.
- Protection level IP 21.
- Maximum working temperature 50°C.
- In compliance with the EN 267 norm and European Guidelines such as:
  - EMC 2004/108/EC
  - low voltage 2006/95/EC
  - efficiency 92/42/EEC

## Connecting flange

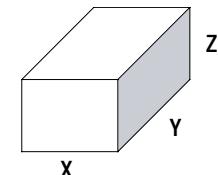
Øa (mm)	b (mm)	c	d
155	180-270	M10	45°



## Packaging

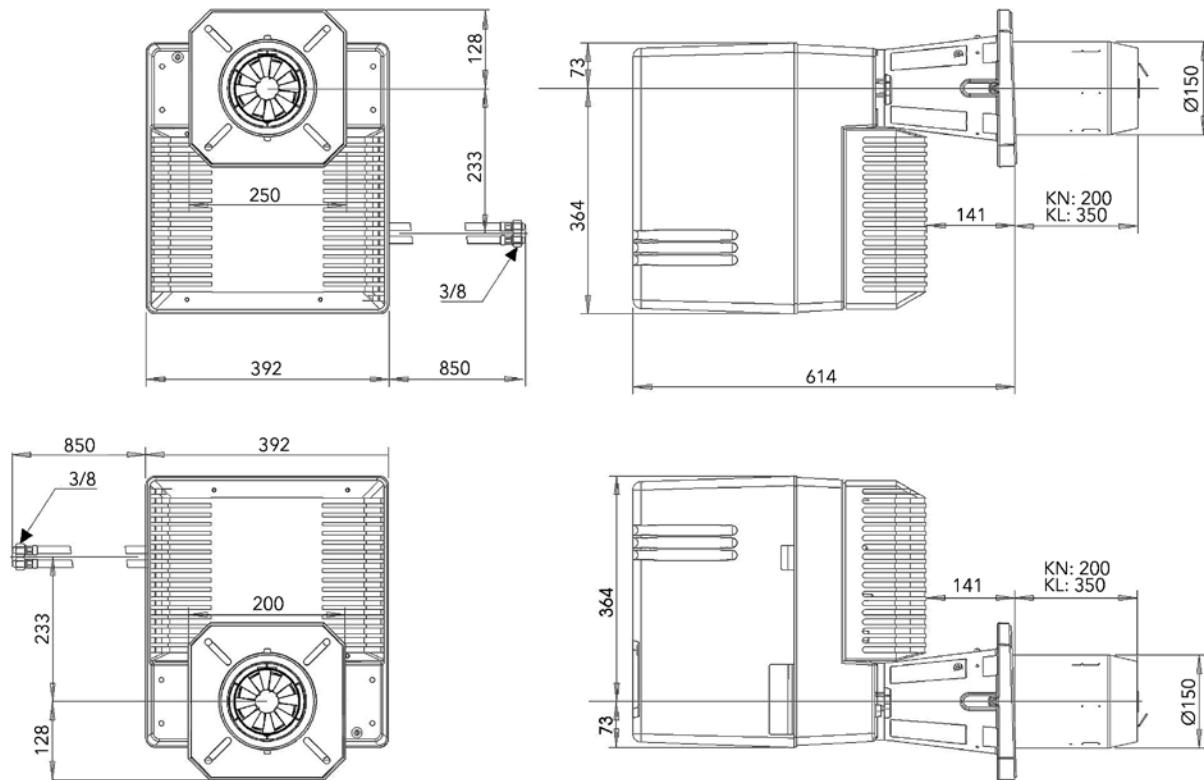
The burner is delivered complete in two packages containing:

- burner body with: boiler fixing accessories, hoses and nozzle technical data including electrical diagram, exploded view and spare parts list, Instruction manual
- combustion head.



Component	Dimensions (mm)			Gross weight (kg)	
	X	Y	Z		
<b>Burner body BB</b>	VL 04.540 DP	510	420	540	29
<b>Combustion head CH</b>	KN	760	280	470	9
	KL	910	280	470	11

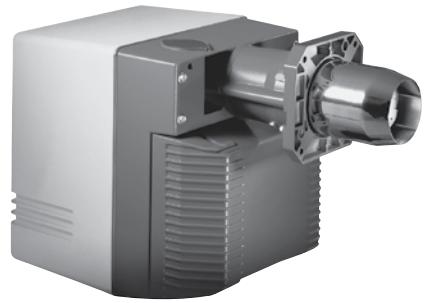
## Dimensions (mm)



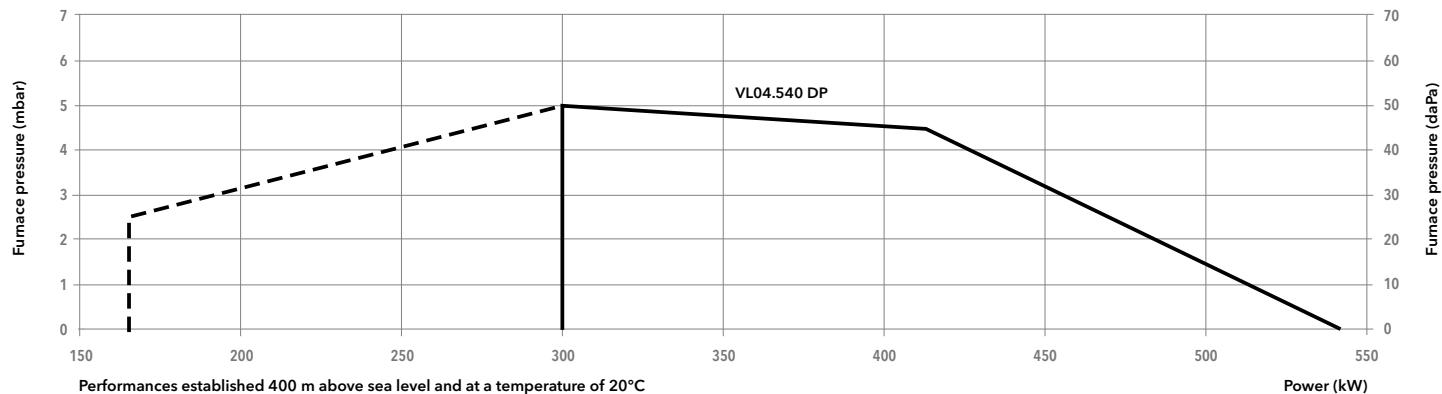
## Light oil VECTRON L 04 Duo Plus

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**Range: VL 04.540 DP**  
**210 ... 540 kW**  
**3 stages**  
**Standard**



### Working fields



### Characteristics and equipment

Model	VL 04.540 DP	
Operation range	(166) 300 - 540 kW	
Fuel flow	14 - 45,5 kg/h	
Nozzles	2 x 3,75 gal/h 45°B	
Control box / flame detection	MPA 22 / MZ 770 S	
Fan motor	230 V - 50 Hz - 480 kW	
Electrical consumption	650 W	
Flexible hoses	Rp 3/8" / M14 x 1,5 - 1 150 mm	
Acoustic level (LpA)	71,2 dB(A)	
Head lenght	KN	KL
Complete burner code	3 833 085	3 833 086

### Options

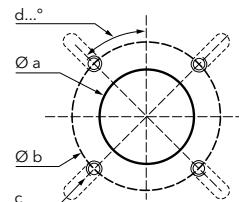
Wieland plug (4 + 7 pins)	13 016 496
Front boiler flange CP3	13 018 497
External air inlet connector RG2 (Ø 160 mm)	13 002 031

## Description

- Three stages forced draft burner.
  - Fuel: light oil, viscosity 6 mm<sup>2</sup>/s by 20°C, net calorific value 11,86 kWh/kg.
  - Maximum heat power: 1 600 and 2 080 kW.
  - 1st/3rd stage ratio: 0,33/1 with three nozzles.
  - Three combustion head lengths.
  - Cubic type architecture:
    - optimal accessibility;
    - maximum compactness, minimum weight;
    - simplified maintenance;
    - limited number of tools and components;
    - separated motor-pump;
    - preserved burner head adjustments.
  - Quiet ventilation and reduced electrical consumption.
  - Closing of the air flap on burner shut-down.
  - Complete electrical equipment in the body of the burner with MDE2 System and display.
  - Three-phase electrical power supply.
  - Protection level IP 21.
  - Maximum working temperature 50°C.
- In compliance with the EN 267 norm and European Guidelines such as:
- |               |             |
|---------------|-------------|
| - EMC         | 2004/108/EC |
| - low voltage | 2006/95/EC  |
| - efficiency  | 92/42/EEC   |

## Connecting flange

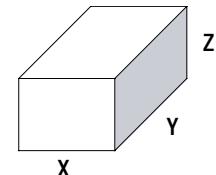
<b>Øa (mm)</b>	<b>b (mm)</b>	<b>c</b>	<b>d</b>
250	300-400	M12	45°



## Packaging

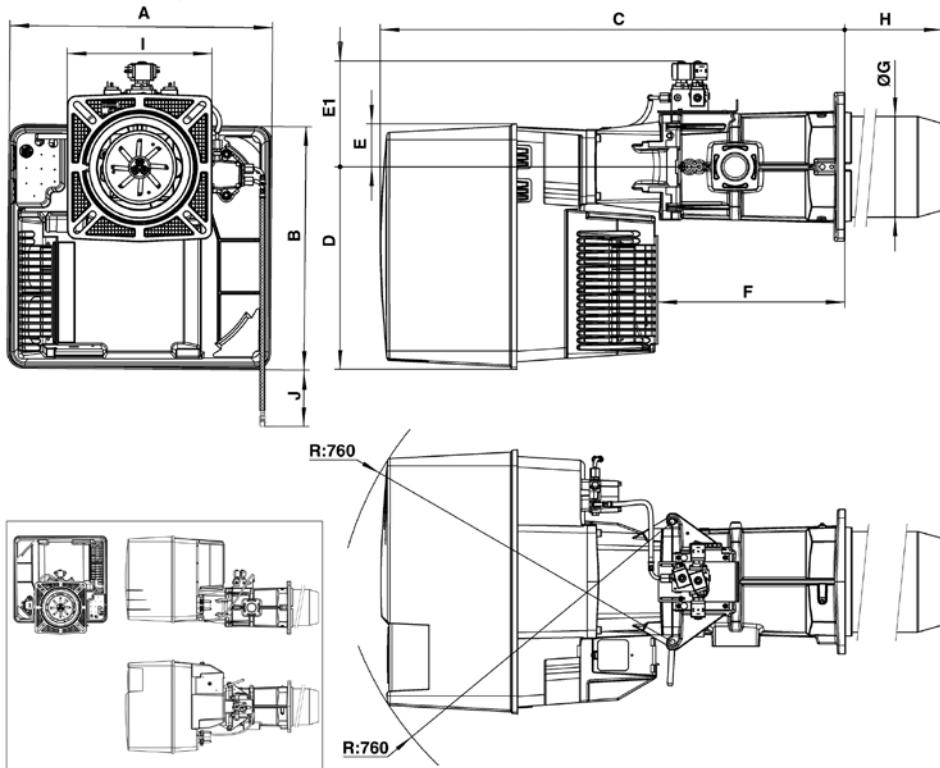
The burner is delivered complete in two packages containing:

- burner body with: boiler fixing accessories, hoses and nozzle technical data including electrical diagram, exploded view and spare parts list, Instruction manual
- combustion head.



<b>Component</b>	<b>Dimensions (mm)</b>			<b>Gross weight (kg)</b>	
	<b>X</b>	<b>Y</b>	<b>Z</b>		
<b>Burner body BB</b>	VL 6.1600 DP	800	600	850	79,4
	VL 6.2100 DP	800	600	850	79,6
<b>Combustion head CH</b>	6.1600 KN	800	380	420	42
	6.1600 KL	1 000	420	380	29,8
	6.1600 KM	1 000	420	380	28,3
	6.2100 KN	800	380	420	24
	6.2100 KL	1 000	380	420	42
	6.2100 KM	1 000	380	420	42

## Dimensions (mm)



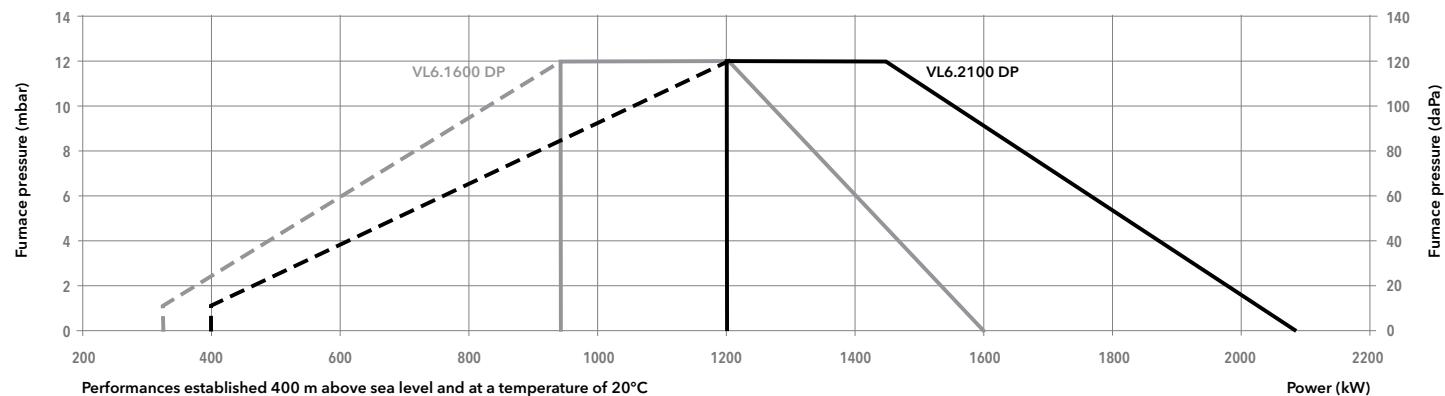
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>E1</b>	<b>F</b>	<b>ØG</b>	<b>H</b>			<b>I</b>
592	553	1050	456	97	239	421	227	KN 270	KM 370	KL 470	326 x 335

# Light oil VECTRON L 6 Duo Plus

**Range: VL 6.1600 DP, VL 6.2100 DP**  
**320 ... 2 080 kW**  
**3 stages**  
**Standard**



## Working fields



## Characteristics and equipment

Model	VL 6.1600 DP			VL 6.2100 DP		
Operation range	(320) 950 - 1 600 kW			(400) 1 200 - 2 080 kW		
Fuel flow	(27) 80,1 - 124,9 kg/h			(33,7) 101,2 - 177 kg/h		
Nozzles	3 x 6,50 gal/h			3 x 8,50 gal/h		
Control box / flame detection	TCH3... / MZ 770 S					
Fan motor	230/400 V - 50 Hz - 2,2 kW			230/400 V - 50 Hz - 2,7 kW		
Electrical consumption	352 + 2 240 W			380 + 2 840 W		
Flexible hoses	Rp 1/2" / M16 x 1,5 - 1 500 mm					
Acoustic level (LpA)	78,1 dB(A)			79,3 dB(A)		
Head lenght	KN	KL	KM	KN	KL	KM
Complete burner code	3 833 694	3 833 695	3 833 696	3 833 697	3 833 698	3 833 699

## Options

Front boiler flange CP51	13 008 019
External air inlet connector RG3 (Ø 250 mm)	13 001 567

External air inlet connection kit		
Designation	Burner	Code
RG4 (Ø 50 mm, adjustable)	from VB1.20 to V1.55	13 004 320
RG9 (Ø 50 mm)	from VB1.20 to VB1.95	13 011 996
RG10 (Ø 100 mm)	V2	13 018 822
RG1 (Ø 125 mm)	V03	13 005 571
RG11 (Ø 160 mm)	V3	3 833 152
RG2 (Ø 160 mm)	V04	13 002 031
RG12 (Ø 200 mm)	V4	3 833 429
RG3 (Ø 250 mm)	V05, V5, V06, V6	13 001 567

Load controller RJ316 - Kit with probe		
Designation	Burner	Code
ZEP13 (water - immersion probe)	V2	3 833 446
ZEA13 (water - strap-on probe)	V2	3 833 447
CEP130 (water - immersion probe)	V2	3 833 979
CEA130 (water - strap-on probe)	V2	3 833 980
VEP13 (water - immersion probe)	V3	3 833 548
VEA13 (water - strap-on probe)	V3	3 833 549
YEP13 (water - immersion probe)	V4	3 833 448
YEA13 (water - strap-on probe)	V4	3 833 449
AEP130 (water - immersion probe)	V5 and V6	3 833 982
AEA130 (water - strap-on probe)	V5 and V6	3 833 983
MIF001 Load controller	V3 to V6	ZCS 000296

Permanent ventilation		
Designation	Burner	Code
For oil and gas burners one stage	V1	on request
For oil and gas burners two stages and progressive	V2 to V4	on request
Kit for oil burners	VL05 and VL06	on request

Load controller RJ308 - Kit with probe		
Designation	Burner	Code
BEP13 (water - immersion probe)	V5 and V6	3 834 035
BEA13 (water - strap-on probe)	V5 and V6	3 834 036

Post-ventilation		
Designation	Burner	Code
For oil and gas burners one stage	V1	on request
For oil and gas burners two stages and progressive	V2 to V4	on request
Kit for dual fuel burners	VGL04	13 018 501
Kit for gas burners	VG04.570 V	13 018 124

Load controller RWF50 - Kit with probe		
Designation	Burner	Code
GEP130 (water - immersion probe)	V2	3 834 039
GEA130 (water - strap-on probe)	V2	3 834 040
IEP130 (water - immersion probe)	V3	3 834 043
IEA130 (water - strap-on probe)	V3	3 834 044
LEP130 (water - immersion probe)	V4	3 834 047
LEA130 (water - strap-on probe)	V4	3 834 048
MEP130 (water - immersion probe)	V5 and V6	3 834 049
MEA130 (water - strap-on probe)	V5 and V6	3 834 050

Load controller R40 (RWF40) and separate probes		
Designation	Burner	Code
R40 loose - PID 3 points (RWF40 010 A 97 C)	V2 to V06, V6	13 007 570
Kit R40 (load controller + wiring)	V2 to V06, V6	13 006 476
Hot water / air probe Pt100 (-200°C...400°C - L=160 mm)	V2 to V06, V6	65 300 274
Steam probe QBE2002 P1 (0 ... 1 bar)	V2 to V06, V6	13 017 690
Steam probe QBE2002 P10 (0 ... 10 bar)	V2 to V06, V6	13 016 838
Steam probe QBE2002 P16 (0 ... 16 bar)	V2 to V06, V6	13 015 195
Steam probe QBE for other pressure range	V2 to V06, V6	on request
QAC22 (external probe)	V2 to V06, V6	13 018 513

Valve tightness control		
Designation	Burner	Code
VPS 504*	VGL2 to VGL06	13 001 778
Connection pipe for VPS installation on gas train 13 020 944	VGL06	13 015 138

\* for VGL06, VPS is included in the complete burner

External valve connection kit		
Designation	Burner	Code
Connector for safety solenoid valve	V1 to V4	13 010 959

MDE2 System		
Designation	Burner	Code
PC Interface Kit communication PC (cable with USB connection and CD Rom)	V1 to V6	3 833 018

Sound proofing box - noise reduction 15 ... 20 dB(A)		
Designation	Burner	Code
CI20	V2 gas and oil	13 021 659
CI21	V3 gas and oil	14 000 401
CI22	V4 gas and oil	13 019 309
CI23	V05, V5	13 019 310
CI24	V06, V6	13 019 311

Front boiler flange		
Designation	Burner	Code
CP1	V1	13 018 495
CP2	V02 and V2	13 018 496
CP31	V3	3 833 151
CP3	VGL04	13 018 497
CP4	V4 and V05	13 018 499
CP51	V06	13 008 019

Sound proofing box - noise reduction 20 ... 30 dB(A)		
Designation	Burner	Code
CI31	V3 gas and oil	65 300 729
CI32	V4 gas and oil	13 019 313
CI33	V05, V5	13 019 314
CI34	V06, V6	13 019 315

Gas filter		
Designation	Burner	Code
Rp3/4"	V1 to V05, V5	13 014 712
Rp1"	V02, V2 to V06, V6	13 010 092
Rp1"1/2	V02, V2 to V06, V6	13 011 723
Rp2"	V3 to V06, V6	13 009 700
DN65 (PN16)	V05, V5, V06, V6	13 009 703
DN80 (PN16)	V06, V6	13 013 787

Potentiometer - wound, 50 mA maximum		
Designation	Burner	Code
Single ASZ12.703	V05 and V06	13 018 502
Single ASZ12.703 + cover	V05 and V06	13 002 293
Double ASZ22.703	V05 and V06	13 018 503
Double ASZ22.703 + cover	V05 and V06	13 002 294

Antivibration coupling - Compensator		
Designation	Burner	Code
Rp1" threaded connection	V1 to V06, V6	13 023 376
Rp1"1/2 threaded connection	V02, V2 to V06, V6	13 018 369
Rp2" threaded connection	V3 to V06, V6	13 019 852
DN50 flanged connection	V3 to V06, V6	12 001 014
DN65 flanged connection	V05 and V06, V6	12 001 015
DN80 flanged connection	V06, V6	12 001 016

Max gas pressure switch		
Designation	Burner	Code
Kit max gas pressure switch 2,5 ... 50 mbar	V02 to V06, V2 to V6	3 833 903

Ball valve		
Designation	Burner	Code
Rp1/2" threaded connection	V1	13 018 514
Rp3/4" threaded connection	V1 to V05, V5	65 300 663
Rp1" threaded connection	V1 to V06, V6	13 018 515
Rp1"1/2 threaded connection	V02, V2 to V06, V6	13 018 516
Rp2" threaded connection	V3 to V06, V6	13 018 517
DN65 flanged connection	V05 and V06, V6	13 018 518
DN80 flanged connection	V06, V6	13 018 519

Gas and air manometer with push button		
Designation	Burner	Code
0 ... 60 mbar	V1 to V06, V6	13 002 181
0 ... 100 mbar	V1 to V06, V6	13 018 509
0 ... 400 mbar	V1 to V06, V6	13 018 510

Kit Variatron		
Designation	Burner	Code
Kit 1,5TT	V5	3 833 859
Kit 3,0TT	V6	3 833 860
MIF002 Variatron	V3 to V6	ZCS 000297

Type	Burner range output	Natural gas pressure range for max power	Gas train	Valve	Filter
Gas burner	kW	mbar			

## One stage Low NOx

VG1.40	14,5 - 40	20 ... 50	h3/8"-Rp1/2"	VR4625	Integrated
VG1.55	35 - 55	20 ... 50	h3/8"-Rp1/2"	VR4625	Integrated
VG1.85	45 - 85	20 ... 300	d3/4"-Rp3/4"	MB-DLE 407	Integrated
VG2.140	80 - 140	20 ... 300	d3/4"-Rp3/4"	MB-DLE 407	Integrated
VG2.200	130 - 200	20 ... 300	d3/4"-Rp3/4"	MB-DLE 407	Integrated
	130 - 200	20 ... 300	d1"1/4-Rp1"1/4	MB-DLE 412	Integrated

## Two stages Low NOx

VG01.85 D	(45) 52,5 - 90	20 ... 300	d3/4"-Rp3/4"	MB-ZRDLE 407	Integrated
VG2.120 D	(40) 80 - 120	20 ... 300	d3/4"-Rp3/4"	MB-ZRDLE 407	Integrated
VG2.160 D	(60) 110 - 160	20 ... 300	d3/4"-Rp3/4"	MB-ZRDLE 407	Integrated
VG2.210 D	(80) 150 - 210	20 ... 100	d1"1/4-Rp1"1/4	MB-ZRDLE 412	Integrated
	(80) 150 - 210	100 ... 300	d3/4"-Rp3/4"	MB-ZRDLE 407	Integrated
	(80) 140 - 180	20 ... 100	d1"1/4-Rp1"1/4		
VG3.290 D	(95) 190 - 290	20 ... 60	d1"1/4-Rp1"1/4	MB-ZRDLE 412	Integrated
		60 ... 300	d3/4"-Rp3/4"	MB-ZRDLE 407	Integrated
VG3.360 D	(120) 240 - 360	20 ... 30	d1"1/2-Rp2"	MB-ZRDLE 420	Integrated
		20 ... 60	d1"1/4-Rp1"1/4	MB-ZRDLE 412	Integrated
		60 ... 300	d3/4"-Rp3/4"	MB-ZRDLE 407	Integrated
		100 ... 300	d1"1/4-Rp1"1/4	MB-ZRDLE 412	Integrated
VG4.460 D	(150) 300 - 460	20 ... 50	d1"1/2-Rp2"	MB-ZRDLE 420	Integrated
		20 ... 100	d1"1/4-Rp1"1/4	MB-ZRDLE 412	Integrated
		100 ... 300	d3/4"-Rp3/4"	MB-ZRDLE 407	Integrated

Type	Burner range output	Natural gas pressure range for max power	Gas train	Valve	Filter
Gas burner	kW	mbar			

## Two stage progressive pneumatic Low NOx

VG2.120 DP	(40) 80 - 120	20 ... 300	d333-3/4"-Rp3/4"	MB-VEF 407	Integrated
		20 ... 100	d332-3/4"-Rp3/4"	MB-VEF 407	Integrated
VG2.160 DP	(60) 110 - 160	20 ... 300	d333-3/4"-Rp3/4"	MB-VEF 407	Integrated
		20 ... 100	d332-3/4"-Rp3/4"	MB-VEF 407	Integrated
VG2.210 DP	(80) 150 - 210	20 ... 40	d1"1/4-Rp1"1/4	MB-VEF 412	Integrated
		40 ... 100	d332-3/4"-Rp3/4"	MB-VEF 407	Integrated
	(80) 150 - 180	100 ... 300	d333-3/4"-Rp3/4"	MB-VEF 407	Integrated

VG3.290 DP	(70) 190 - 290	20 ... 60	d1"1/4-Rp1"1/4	MB-VEF 412	Integrated
		60 ... 300	d3/4"-Rp1"	MB-VEF 407	External 1"
VG3.360 DP	(80) 240 - 360	20 ... 60	d1"1/2-Rp2"	MB-VEF 420	Pocket Filter
		20 ... 30	d1"1/4-Rp1"1/4	MB-VEF 412	Integrated
VG4.460 DP	(100) 300 - 460	20 ... 100	d1"1/2-Rp2"	MB-VEF 420	Pocket Filter
		100 ... 300	d3/4"-Rp1"	MB-VEF 407	Integrated
VG4.610 DP	(130) 390 - 610	20 ... 40	d1"1/2-Rp2"	MB-VEF 420	Pocket Filter
		40 ... 60	d1"1/4-Rp1"1/4	MB-VEF 412	Integrated
		60 ... 300	d3/4"-Rp1"	MB-VEF 407	Integrated

VG5.950 DP	(170) 510 - 950	20 ... 40	s2"-Rp2"	VGD 20-5011	External 2"	
		40 ... 50	d1"1/2-Rp2"	MB-VEF 420	Pocket Filter	
VG5.1200 DP	(250) 750 - 1160	50 ... 100	d1"1/4-Rp2"	MB-VEF 412	External 1"1/2	
		100 ... 300	d3/4"-Rp1"	MB-VEF 407	External 1"	
		20 ... 35	s65-DN65	VGD 40-065	External DN65	
		35 ... 40	s2"-Rp2"	VGD 20-5011	External 2"	
		40 ... 50	d1"1/2-Rp2"	MB-VEF 420	Pocket Filter	
		50 ... 100	d1"1/4-Rp2"	MB-VEF 412	External 1"1/2	
		100 ... 300	d3/4"-Rp1"	MB-VEF 407	External 1"	

VG6.1600 DP	(300) 890 - 1600	30 ... 40	s80-DN80 /TC	VGD 40-080	External DN80	
		40 ... 50	s65-DN65 /TC	VGD 40-065	External DN65	
VG6.2100 DP	(400) 1180 - 1907	50 ... 70	s2"-Rp2" /TC	VGD 20-5011	External 2"	
		70 ... 100	d1"1/2-Rp2" /TC	MB-VEF 420	Pocket Filter	
		100 ... 300	d1"1/4-Rp2" /TC	MB-VEF 412	External 2"	
		40 ... 50	s80-DN80 /TC	VGD 40-080	External DN80	
		50 ... 60	s65-DN65 /TC	VGD 40-065	External DN65	
		60 ... 70	s2"-Rp2" /TC	VGD 20-5011	External 2"	
		70 ... 100	d1"1/2-Rp2" /TC	MB-VEF 420	Pocket Filter	
		100 ... 300	d1"1/4-Rp2" /TC	MB-VEF 412	External 2"	

Type	Burner range output	Natural gas pressure range for max power	Gas train	Valve	Filter
Gas burner	kW	mbar			

**Two stage progressive pneumatic Low NOx + fan speed control**

VG03.300 V	(100) 150 - 300	20 ... 60	d1"1/4-Rp1"1/4	MB-VEF 412	Integrated
		60 ... 300	d3/4"-Rp3/4"	MB-VEF 407	Integrated

VG04.570 V	(140) 400 - 570	20 ... 40	d1"1/2-Rp1"1/2	MB-VEF 420	Pocket Filter
		40 ... 60	d1"1/4-Rp1"1/4	MB-VEF 412	Integrated
		60 ... 300	d3/4"-Rp1"	MB-VEF 407	External 1"

**Two stage progressive electronic Low NOx**

VG2.120 M	(30) 80 - 120	20 ... 300	d3/4"-Rp3/4" /TC	MBC300	Integrated
VG2.160 M	(40) 110 - 160	20 ... 300	d3/4"-Rp3/4" /TC	MBC300	Integrated
VG2.210 M	(40) 136 - 210	20 ... 300	d3/4"-Rp3/4" /TC	MBC300	Integrated

VG3.290 M	(50) 190 - 290	20 ... 300	d3/4"-Rp1"1/4 /TC	MBC300	Integrated
VG3.360 M	(60) 240 - 360	20 ... 40	d1"1/2-Rp1"1/2 /TC	MBC700	Integrated
		40 ... 300	d3/4"-Rp1"1/4 /TC	MBC300	Integrated

VG4.460 M	(86) 300 - 460	20 ... 50	d1"1/2-Rp1"1/2 /TC	MBC700	Integrated
		50 ... 300	d3/4"-Rp1"1/4 /TC	MBC300	Integrated
VG4.610 M	(90) 390 - 610	20 ... 60	d1"1/2-Rp1"1/2 /TC	MBC700	Integrated
		60 ... 300	d3/4"-Rp1"1/4 /TC	MBC300	Integrated

VG5.950 M	(160) 510 - 900	20 ... 30	d65-DN65 /TC	MBC1900	External DN65
		30 ... 40	d2"-Rp2" /TC	MBC1200	Integrated
		40 ... 300	d1"1/2-Rp2" /TC	MBC700	Integrated
		300	d3/4"-Rp1"1/4 /TC	MBC300	Integrated
VG5.1200 M	(160) 750 - 1200	20 ... 25	d65-DN65 /TC	MBC1900	External DN65
		25 ... 30	d2"-Rp2" /TC	MBC1200	Integrated
		30 ... 300	d1"1/2-Rp2" /TC	MBC700	Integrated
		300	d3/4"-Rp1"1/4 /TC	MBC300	Integrated

VG6.1600 M	(300) 890 - 1 600	20 ... 25	s65-DN65 /TC	VGD 40-065	External DN65
		20 ... 25	d65-DN65 /TC	MBC1900	External DN65
		25 ... 30	d2"-Rp2" /TC	MBC1200	Integrated
		30 ... 300	d1"1/2-Rp2" /TC	MBC700	Integrated
VG6.2100 M	(400) 1 180 - 1 907	20 ... 25	s65-DN65 /TC	VGD 40-065	External DN65
		20 ... 60	d65-DN65 /TC	MBC1900	External DN65
		60 ... 80	d2"-Rp2" /TC	MBC1200	Integrated
		80 ... 300	d1"1/2-Rp2" /TC	MBC700	Integrated

Type	Burner range output	Natural gas pressure range for max power	Gas train	Valve	Filter
Dual fuel burner	kW	mbar			

**One stage in gas and in light oil**

VGL2.120	35 - 120	20 ... 300	d3/4"-Rp3/4"	MB-DLE 407	Integrated
VGL2.210	100 - 190	20 ... 300	d3/4"-Rp3/4"	MB-DLE 407	Integrated

**Two stages in gas and in light oil**

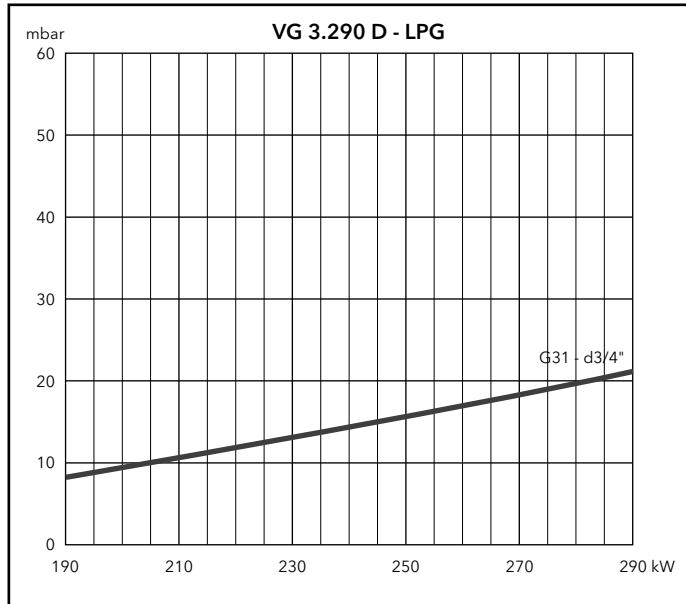
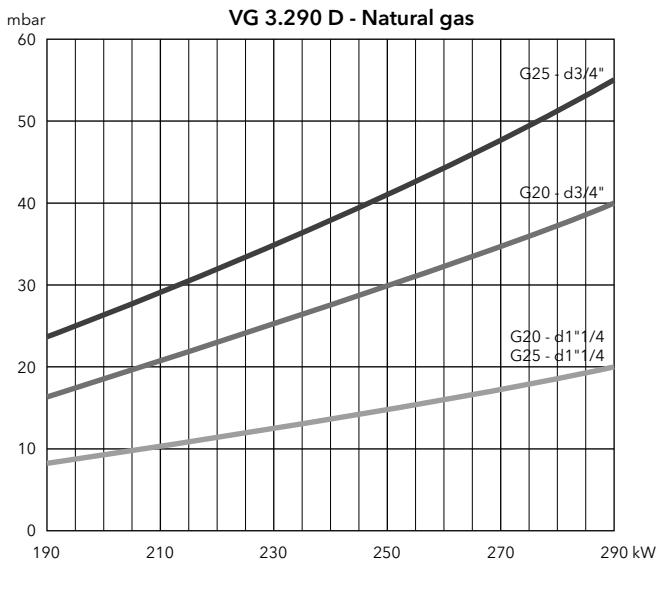
VGL04.350	(95) 170 - 350	20 ... 100	d1"1/4-Rp1"1/4	MB-ZRDLE 412	Integrated
		100 ... 300	d3/4"-Rp3/4"	MB-ZRDLE 407	Integrated
VGL04.440	(130) 210 - 440	20 ... 100	d1"1/4-Rp1"1/4	MB-ZRDLE 412	Integrated
		100 ... 300	d3/4"-Rp3/4"	MB-ZRDLE 407	Integrated

**Two stage progressive pneumatic in gas / three stages in light oil**

VGL05.700 DP	(200) 350 - 700	20 ... 40	s2"-Rp2"	VGD 20-5011	External 2"
		40 ... 50	d1"1/2-Rp2"	MB-VEF 420	Pocket Filter
		50 ... 100	d1"1/4-Rp2"	MB-VEF 412	External 1"1/2
		100 ... 300	d3/4"-Rp1"	MB-VEF 407	External 1"
VGL05.1000 DP	(240) 530 - 1 000	20 ... 35	s65-DN65	VGD 40-065	External DN65
		35 ... 40	s2"-Rp2"	VGD 20-5011	External 2"
		40 ... 50	d1"1/2-Rp2"	MB-VEF 420	Pocket Filter
		50 ... 100	d1"1/4-Rp2"	MB-VEF 412	External 1"1/2
VGL06.1600 DP	(300) 800 - 1 600	100 ... 300	d1"1/4-Rp2"	MB-VEF 412	External 2"
		40 ... 50	s80-DN80	VGD 40-080	External DN80
		50 ... 70	s65-DN65	VGD 40-065	External DN65
		70 ... 100	s2"-Rp2"	VGD 20-5011	External 2"
VGL06.2100 DP	(480) 1 100 - 2 050	100 ... 300	d1"1/2-Rp2"	MB-VEF 420	Pocket Filter
		40 ... 50	s80-DN80	VGD 40-080	External DN80
		50 ... 60	s65-DN65	VGD 40-065	External DN65
		60 ... 70	s2"-Rp2"	VGD 20-5011	External 2"
		70 ... 100	d1"1/2-Rp2"	MB-VEF 420	Pocket Filter
		100 ... 300	d1"1/4-Rp2"	MB-VEF 412	External 2"

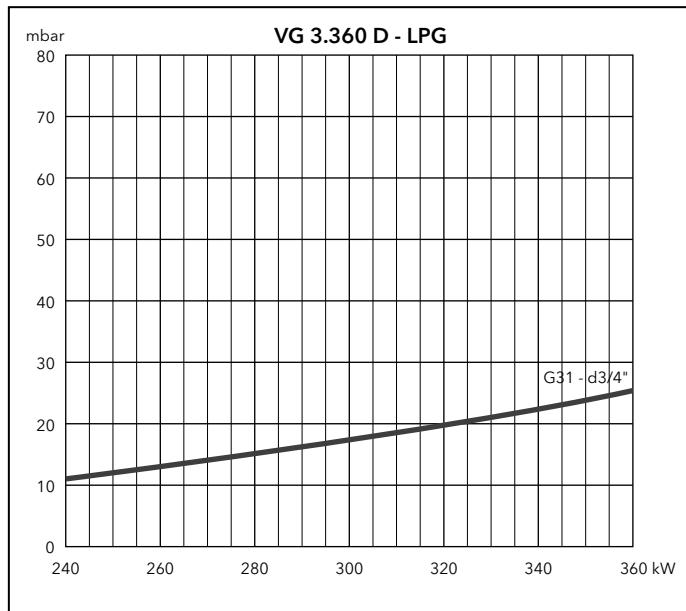
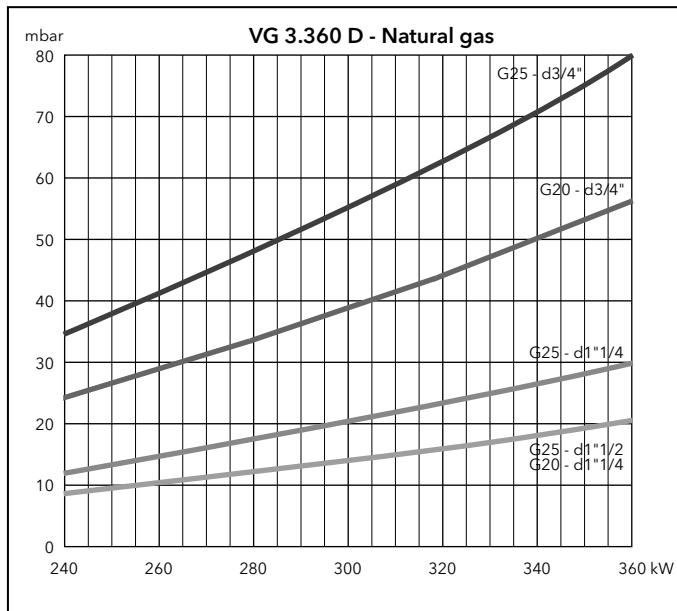
**VG 3.290 D**

Burner output (kW)	d3/4"-Rp3/4"	d1"1/4-Rp1"1/4	d3/4"-Rp3/4"	d1"1/4-Rp1"1/4	d3/4"-Rp3/4"
	Natural gas G20 Hi = 10,365 kWh/m <sup>3</sup>		Natural gas G25 Hi = 8,83 kWh/m <sup>3</sup>		LPG G31 Hi = 25,89 kWh/m <sup>3</sup>
	Pressure loss (mbar)				
190	17	9	23	9	9
210	21	10	29	10	11
230	25	13	34	13	13
250	30	15	41	15	16
270	34	17	47	17	18
290	40	20	55	20	21



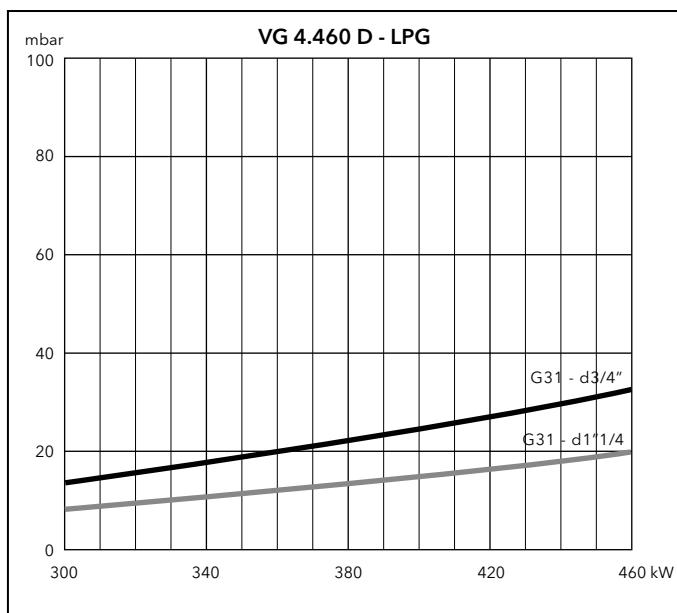
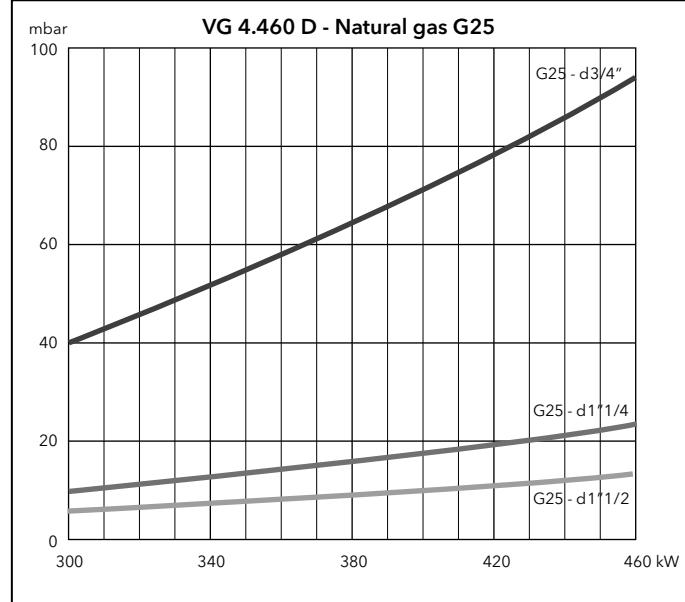
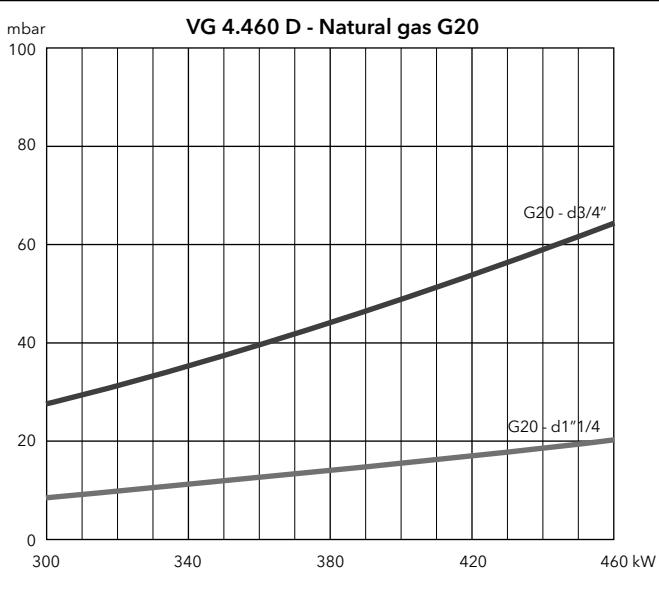
**VG 3.360 D**

Burner output (kW)	d3/4"-Rp3/4"	d1"1/4-Rp1"1/4	d3/4"-Rp3/4"	d1"1/4-Rp1"1/4	d1"1/2-Rp2"	d3/4"-Rp3/4"
	Natural gas G20 Hi = 10,365 kWh/m <sup>3</sup>		Natural gas G25 Hi = 8,83 kWh/m <sup>3</sup>		LPG G31 Hi = 25,89 kWh/m <sup>3</sup>	
	Pressure loss (mbar)					
240	25	9	35	13	9	11
280	34	12	48	18	12	15
320	45	16	63	24	16	20
360	57	20	79	30	20	25



**VG 4.460 D**

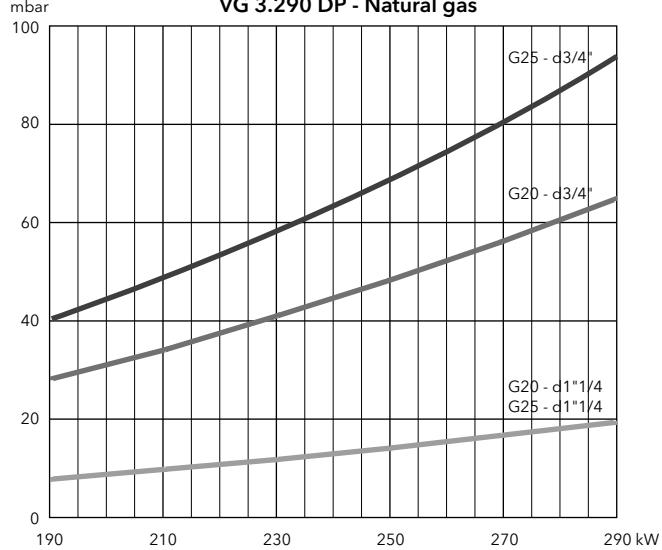
Burner output (kW)	d3/4"-Rp3/4"	d1"1/4-Rp1"1/4	d3/4"-Rp3/4"	d1"1/4-Rp1"1/4	d1"1/2-Rp2"	d3/4"-Rp3/4"	d1"1/4-Rp1"1/4
	Natural gas G20 Hi = 10,365 kWh/m <sup>3</sup>		Natural gas G25 Hi = 8,83 kWh/m <sup>3</sup>		LPG G31 Hi = 25,89 kWh/m <sup>3</sup>		
Pressure loss (mbar)							
250	19	6	28	7	4	10	6
300	27	9	40	10	6	14	8
350	37	12	54	13	8	19	11
400	48	15	71	17	10	25	15
460	64	20	94	23	13	32	20
500	76	24	111	27	16	38	23



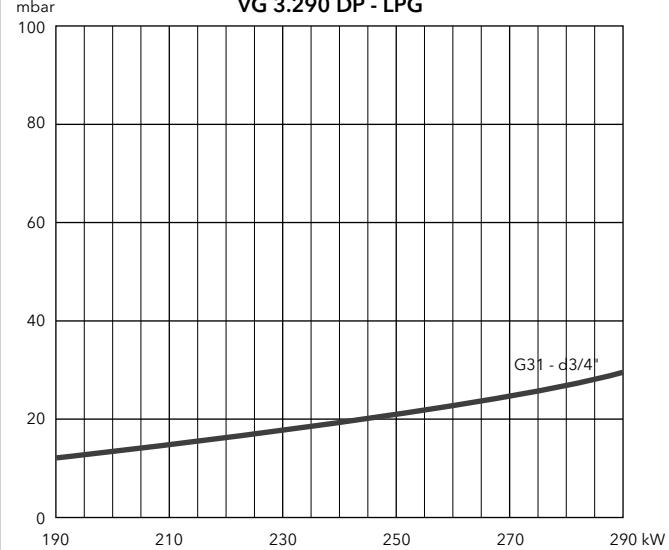
## VG 3.290 DP

Burner output (kW)	d3/4"-Rp1"	d1"1/4-Rp1"1/4	d3/4"-Rp1"	d1"1/4-Rp1"1/4	d3/4"-Rp1"
Natural gas G20 Hi = 10,365 kWh/m <sup>3</sup>		Natural gas G25 Hi = 8,83 kWh/m <sup>3</sup>		LPG G31 Hi = 25,89 kWh/m <sup>3</sup>	
Pressure loss (mbar)					
190	28	9	41	9	12
210	34	10	50	10	15
230	41	13	59	13	18
250	48	15	70	15	21
270	56	17	82	17	25
290	65	20	94	20	29

### VG 3.290 DP - Natural gas



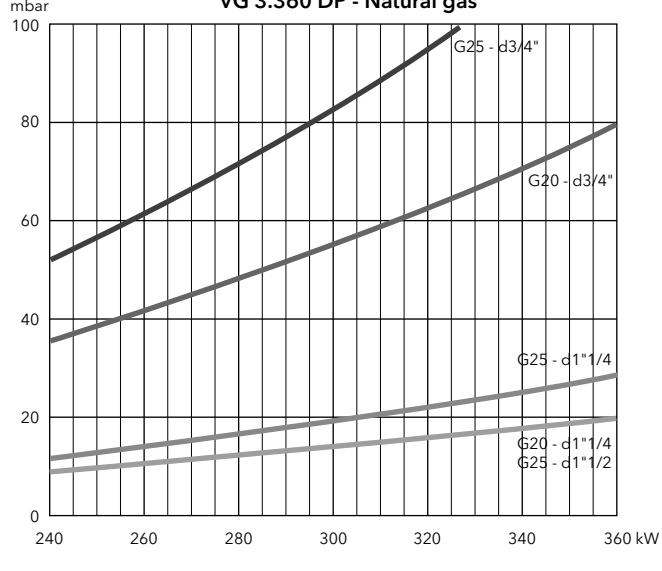
### VG 3.290 DP - LPG



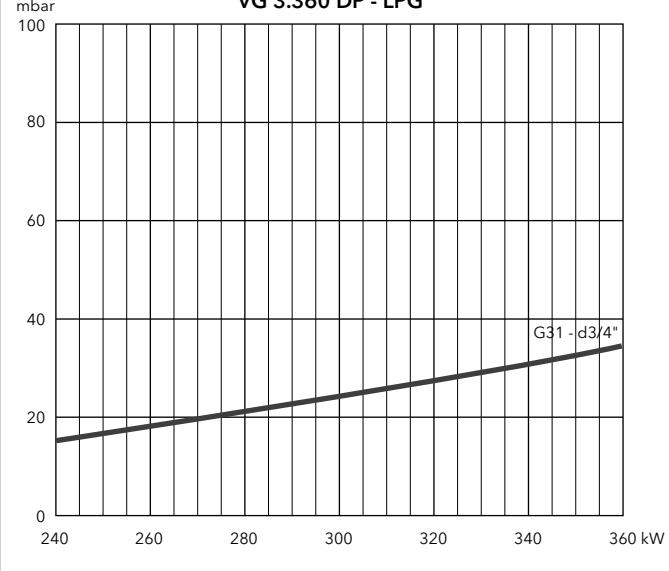
## VG 3.360 DP

Burner output (kW)	d3/4"-Rp1"	d1"1/4-Rp1"1/4	d3/4"-Rp1"	d1"1/4-Rp1"1/4	d1"1/2-Rp2"	d3/4"-Rp1"	
Natural gas G20 Hi = 10,365 kWh/m <sup>3</sup>		Natural gas G25 Hi = 8,83 kWh/m <sup>3</sup>		LPG G31 Hi = 25,89 kWh/m <sup>3</sup>			
Pressure loss (mbar)							
240	36	9	53	12	9	15	
280	49	12	73	17	12	21	
320	63	16	95	22	16	27	
360	80	20	120	28	20	35	

### VG 3.360 DP - Natural gas

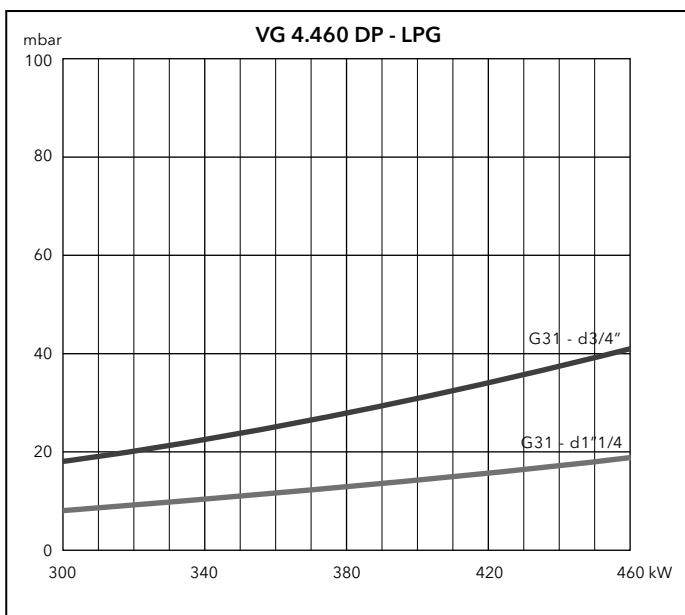
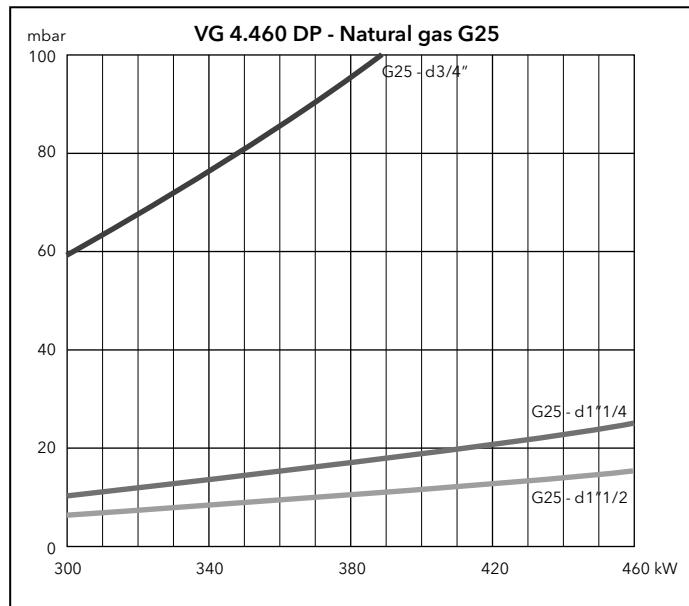
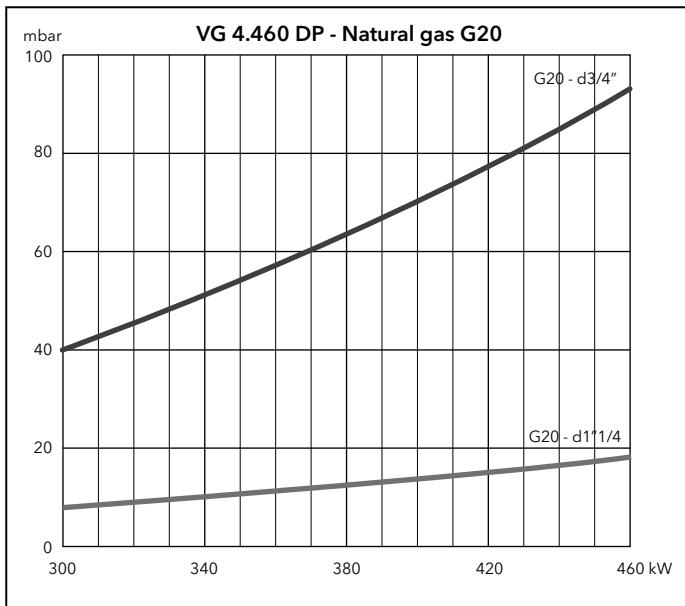


### VG 3.360 DP - LPG



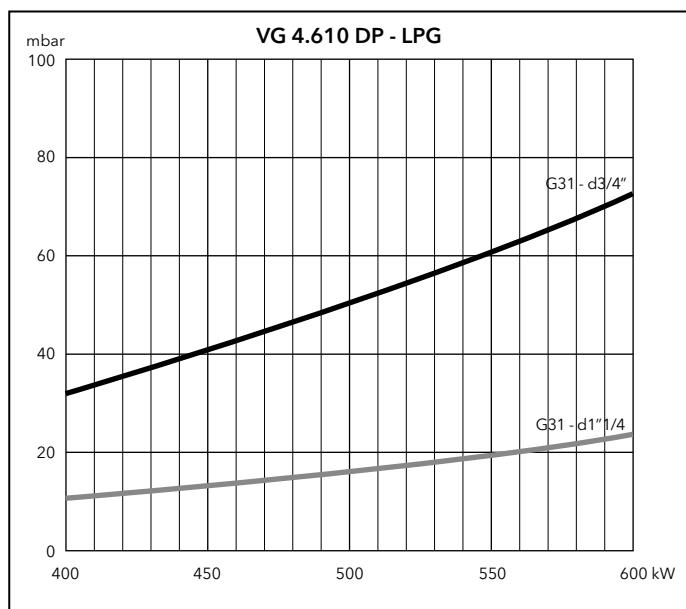
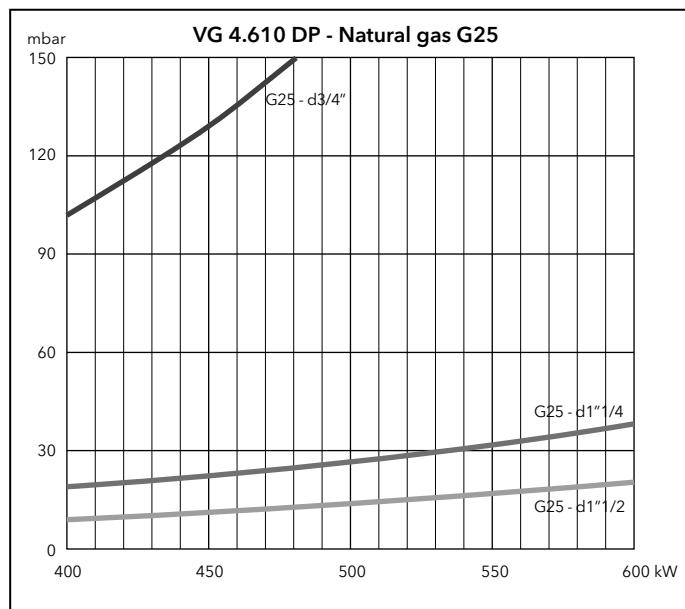
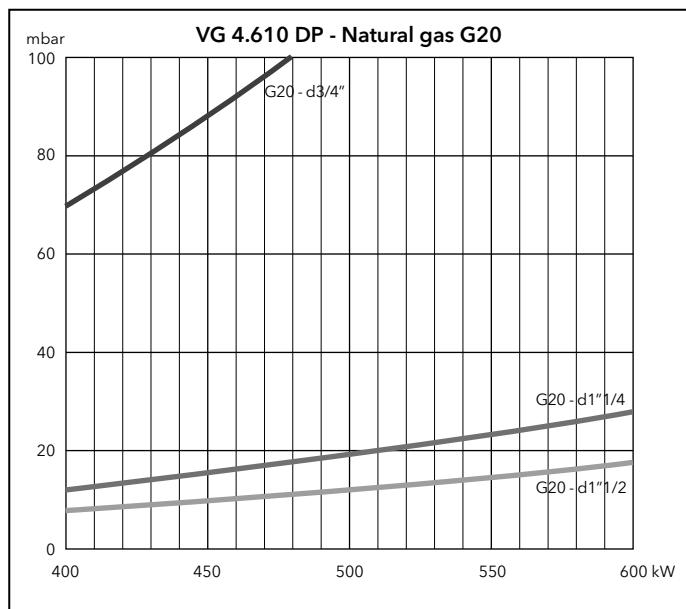
**VG 4.460 DP**

Burner output (kW)	d3/4"-Rp1"	d1"1/4-Rp1"1/4	d3/4"-Rp1"	d1"1/4-Rp1"1/4	d1"1/2-Rp2"	d3/4"-Rp1"	d1"1/4-Rp1"1/4
	Natural gas G20 Hi = 10,365 kWh/m <sup>3</sup>		Natural gas G25 Hi = 8,83 kWh/m <sup>3</sup>		LPG G31 Hi = 25,89 kWh/m <sup>3</sup>		
Pressure loss (mbar)							
300	40	8	59	11	6	18	8
350	54	10	81	15	9	24	11
400	70	14	106	19	12	31	14
450	89	17	134	24	15	40	18
510	114	22	172	31	19	51	23

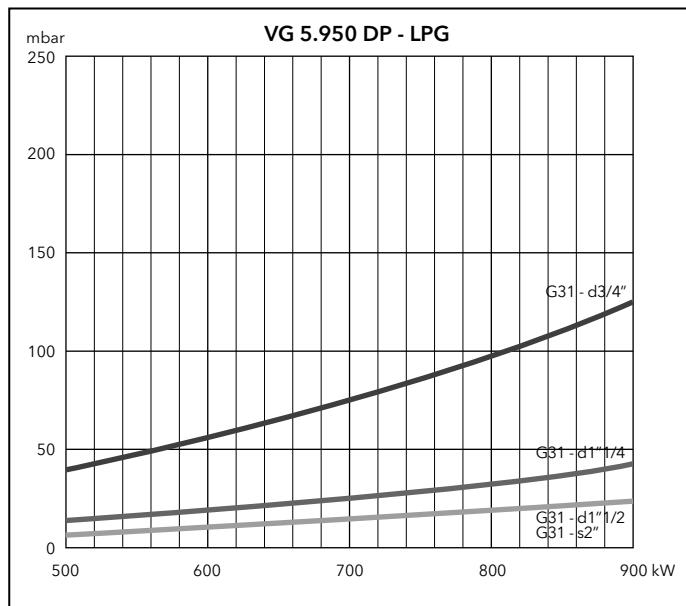
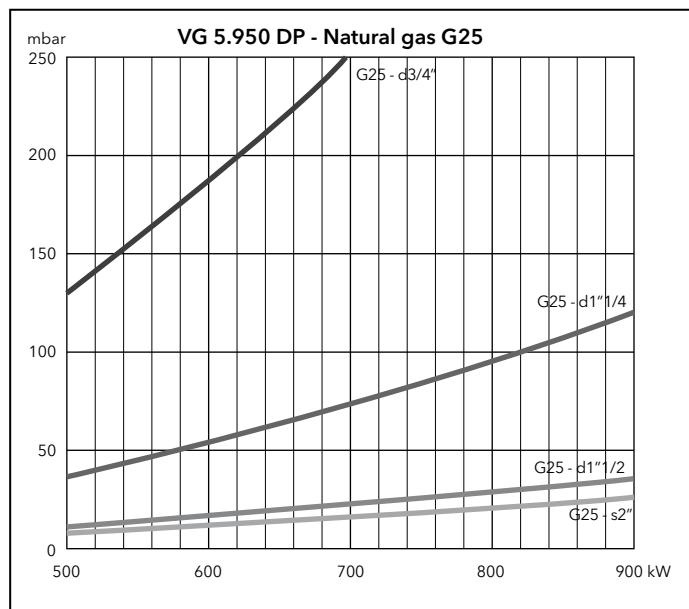
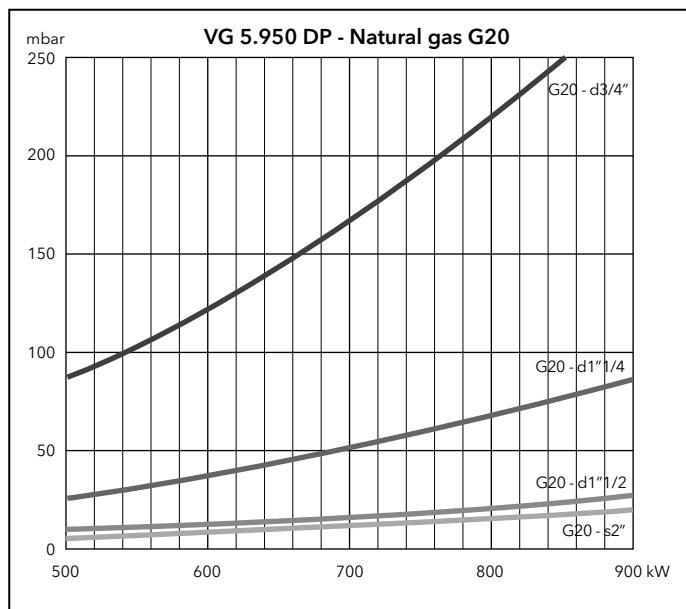


## VG 4.610 DP

Burner output (kW)	d3/4"-Rp1"	d1"1/4-Rp1"1/4	d1"1/2-Rp2"	d3/4"-Rp1"	d1"1/4-Rp1"1/4	d1"1/2-Rp2"	d3/4"-Rp1"	d1"1/4-Rp1"1/4
	Natural gas G20 Hi = 10,365 kWh/m <sup>3</sup>			Natural gas G25 Hi = 8,83 kWh/m <sup>3</sup>			LPG G31 Hi= 25,89 kWh/m <sup>3</sup>	
	Pressure loss (mbar)							
350	53	9	6	78	13	7	25	8
400	70	12	8	102	17	9	32	10
450	88	16	10	129	21	11	41	13
500	109	19	12	159	26	14	50	16
550	132	23	15	192	32	17	61	20
610	162	29	18	236	39	20	75	24

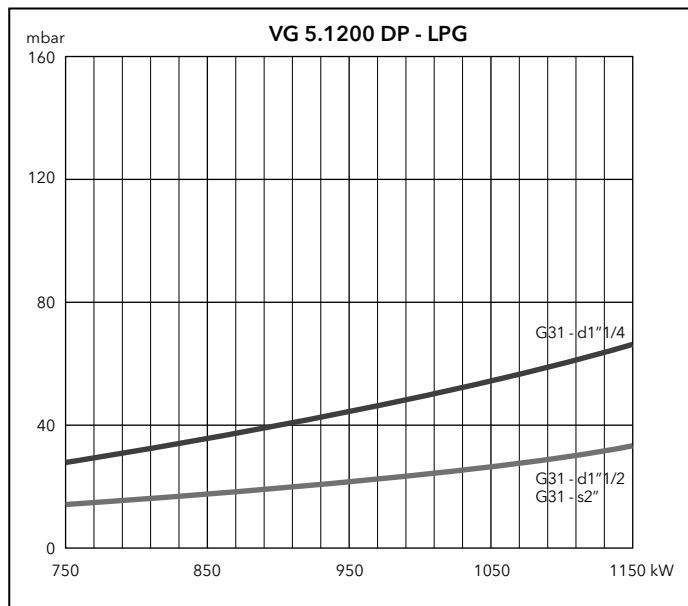
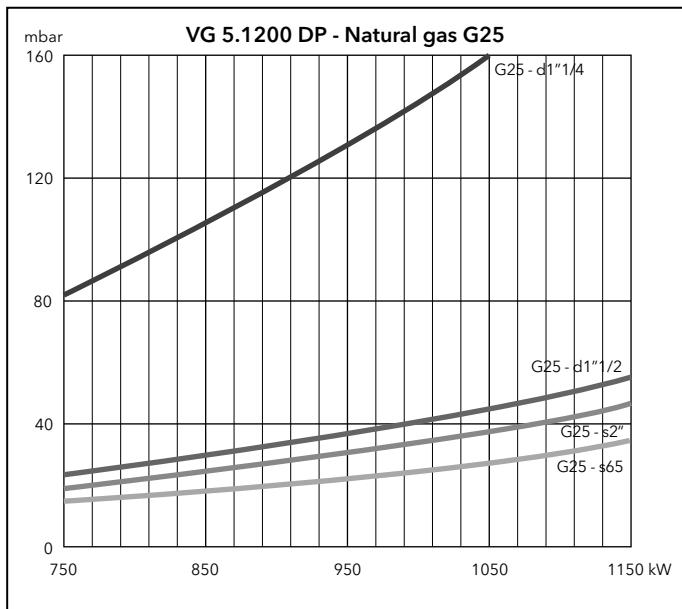
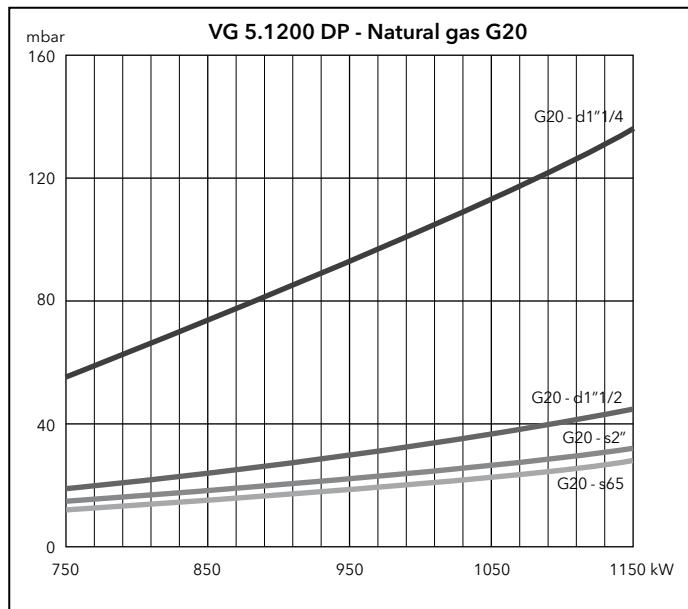


VG 5.950 DP												
Burner output (kW)	d3/4"-Rp1"	d1"1/4-Rp2"	d1"1/2-Rp2"	s2"-Rp2"	d3/4"-Rp1"	d1"1/4-Rp2"	d1"1/2-Rp2"	s2"-Rp2"	d3/4"-Rp1"	d1"1/4-Rp2"	d1"1/2-Rp2"	s2"-Rp2"
Natural gas G20 Hi = 10,365 kWh/m <sup>3</sup>				Natural gas G25 Hi = 8,83 kWh/m <sup>3</sup>				LPG G31 Hi= 25,89 kWh/m <sup>3</sup>				
Pressure loss (mbar)												
500	86	27	9	6	129	38	11	8	39	13	7	7
550	104	32	10	7	157	46	13	10	47	16	9	9
600	122	38	11	9	186	54	16	12	56	19	11	11
650	145	45	13	11	219	64	19	14	66	22	13	13
700	168	52	15	12	253	74	22	16	76	25	14	14
750	193	60	18	14	292	85	25	18	88	28	16	16
800	219	68	21	16	-	96	29	21	99	32	19	19
850	248	77	24	18	-	109	33	24	112	37	21	21
900	277	86	27	20	-	122	36	27	126	41	24	24



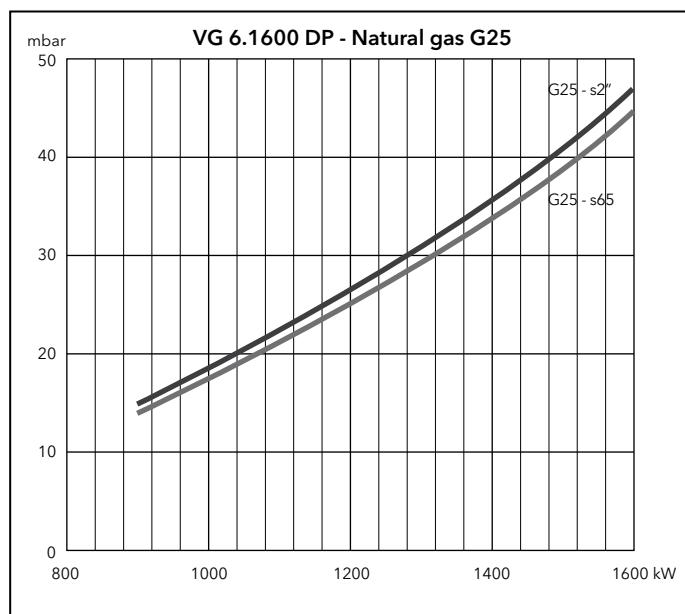
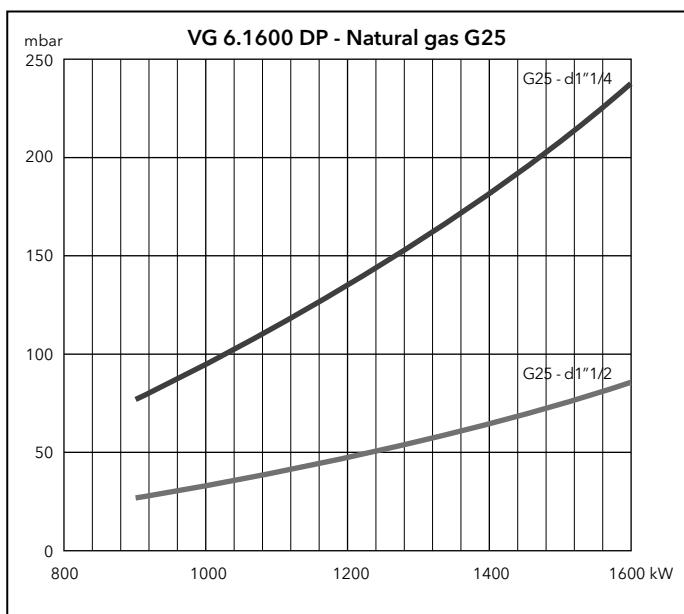
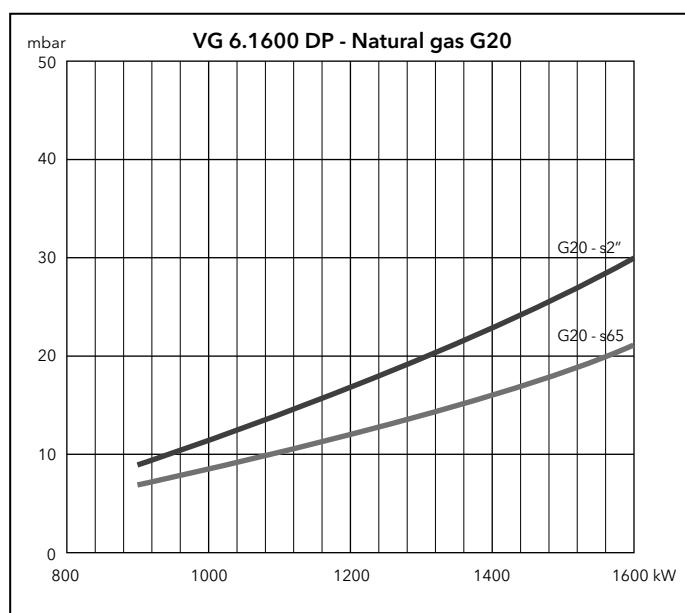
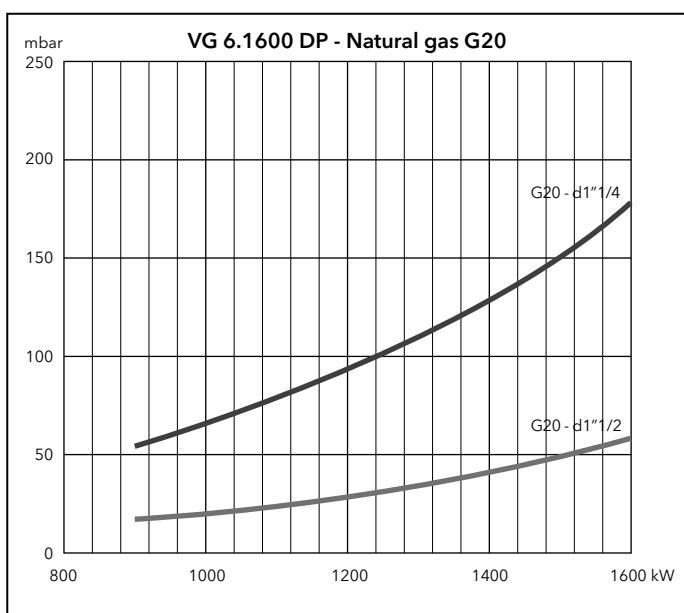
## VG 5.1200 DP

Burner output (kW)	d1"1/4-Rp2"	d1"1/2-Rp2"	s2"-Rp2"	s65-Rp2"	d1"1/4-Rp2"	d1"1/2-Rp2"	s2"-Rp2"	s65-Rp2"	d1"1/4-Rp2"	d1"1/2-Rp2"	s2"-Rp2"
Natural gas G20 Hi = 10,365 kWh/m <sup>3</sup>				Natural gas G25 Hi = 8,83 kWh/m <sup>3</sup>				LPG G31 Hi = 25,89 kWh/m <sup>3</sup>			
Pressure loss (mbar)											
750	56	18	14	12	82	24	19	14	28	14	14
800	65	21	16	13	92	27	22	16	32	16	16
850	74	24	18	15	105	30	25	18	36	18	18
900	83	27	20	17	118	33	28	20	41	20	20
950	94	30	22	19	131	37	31	23	46	22	22
1000	103	33	25	21	145	42	34	26	51	24	25
1050	113	37	27	23	160	47	38	28	56	27	27
1100	124	40	30	25	175	51	42	31	61	30	30
1150	136	44	33	28	192	55	46	34	67	33	33



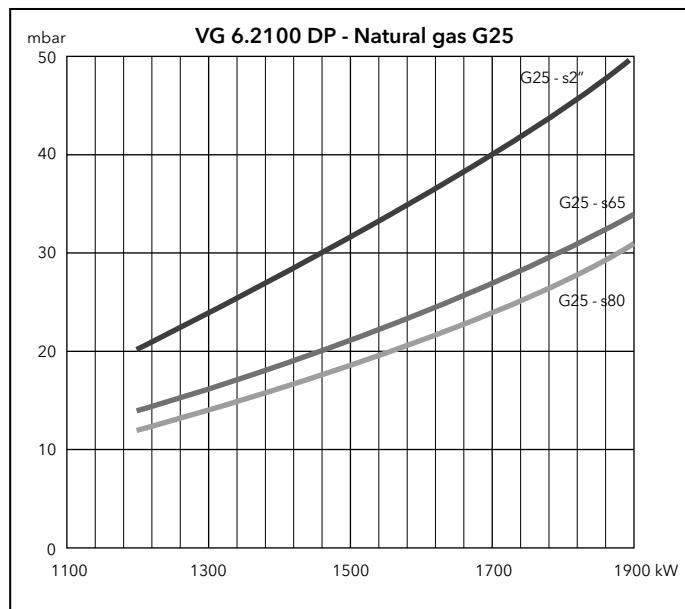
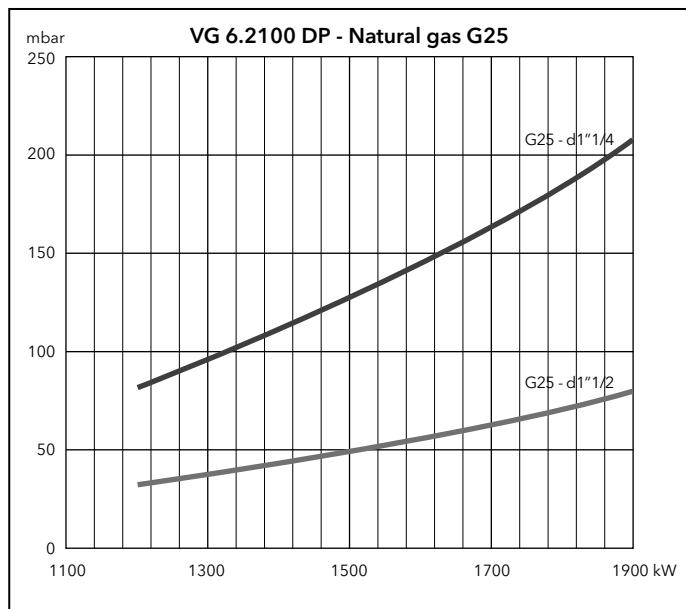
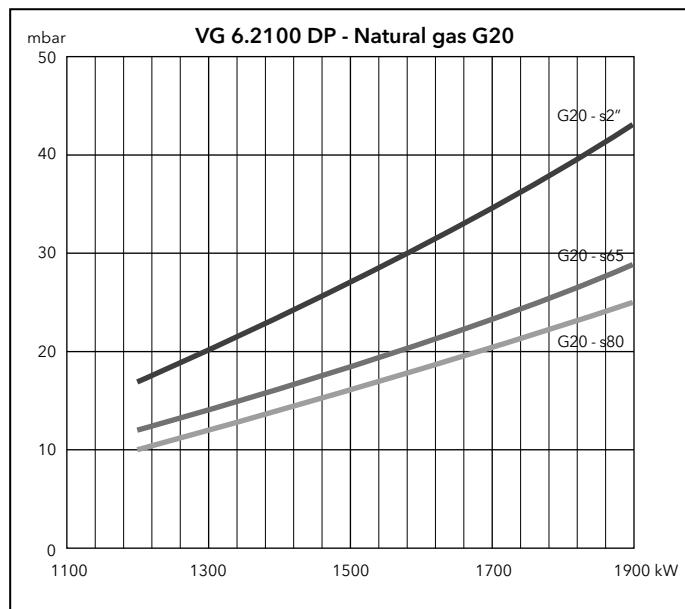
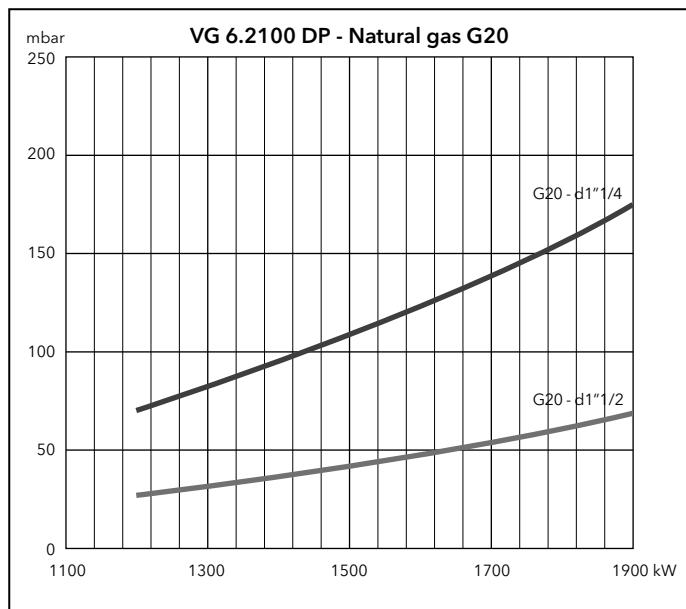
**VG 6.1600 DP**

Burner output (kW)	d1"1/4-Rp2"	d1"1/2-Rp2"	s2"-Rp2"	s65-DN65	d1"1/4-Rp2"	d1"1/2-Rp2"	s2"-Rp2"	s65-DN65
Natural gas G20 $H_i = 10,365 \text{ kWh/m}^3$							Natural gas G25 $H_i = 8,83 \text{ kWh/m}^3$	
Pressure loss (mbar)								
900	53	18	9	7	77	27	15	14
1000	66	23	12	8	93	33	18	17
1100	80	28	14	10	113	40	22	21
1200	95	33	17	12	136	48	26	25
1300	112	39	20	14	158	57	31	30
1400	129	45	23	16	182	66	36	34
1500	148	51	26	19	209	76	42	39
1600	168	58	30	21	238	86	47	45



## VG 6.2100 DP

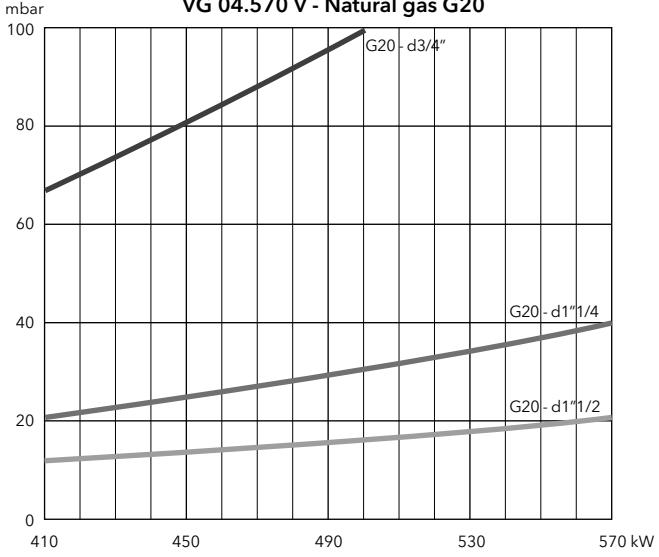
Burner output (kW)	d1"1/4-Rp2"	d1"1/2-Rp2"	s2"-Rp2"	s65-DN65	s80-DN80	d1"1/4-Rp2"	d1"1/2-Rp2"	s2"-Rp2"	s65-DN65	s80-DN80	
Natural gas G20 Hi = 10,365 kWh/m <sup>3</sup>						Natural gas G25 Hi = 8,83 kWh/m <sup>3</sup>					
Pressure loss (mbar)											
1200	70	28	17	12	10	81	32	20	14	12	
1300	82	32	20	14	12	95	38	24	16	14	
1400	95	37	24	16	14	110	44	28	19	16	
1500	109	43	27	18	16	128	50	32	21	19	
1600	124	49	31	21	18	144	57	36	24	21	
1700	140	55	35	24	21	163	64	40	27	24	
1800	157	61	39	26	23	183	71	45	30	27	
1900	175	69	43	29	25	204	79	50	34	31	



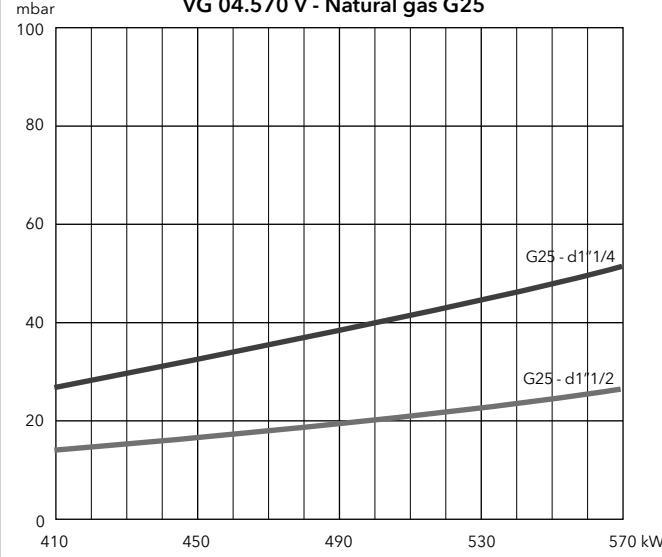
**VG 04.570 V**

Burner output (kW)	d3/4"-Rp1"	d1"1/4-Rp1"1/4	d1"1/2-Rp1"2"	d1"1/4-Rp1"1/4	d1"1/2-Rp1"2"	d3/4"-Rp1"	d1"1/4-Rp1"1/4
Natural gas G20 Hi = 10,365 kWh/m <sup>3</sup>				Natural gas G25 Hi = 8,83 kWh/m <sup>3</sup>			
Pressure loss (mbar)				LPG G31 Hi= 25,89 kWh/m <sup>3</sup>			
380	58	18	15	23	15	23	15
420	71	22	15	28	15	28	15
440	77	24	15	31	16	30	15
460	85	26	15	34	17	33	15
480	92	28	15	37	19	36	17
500	100	31	16	40	20	39	18
520	108	33	17	43	22	42	20
540	116	36	19	46	24	45	22
560	124	39	20	50	26	49	24
570	129	40	21	51	26	51	25

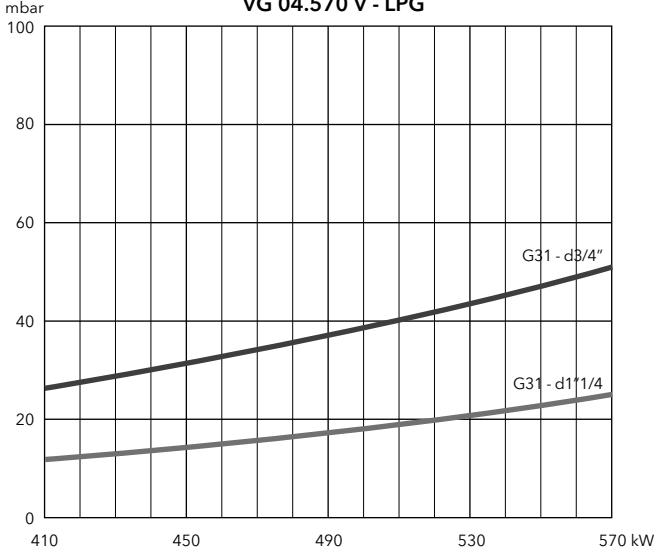
**VG 04.570 V - Natural gas G20**



**VG 04.570 V - Natural gas G25**

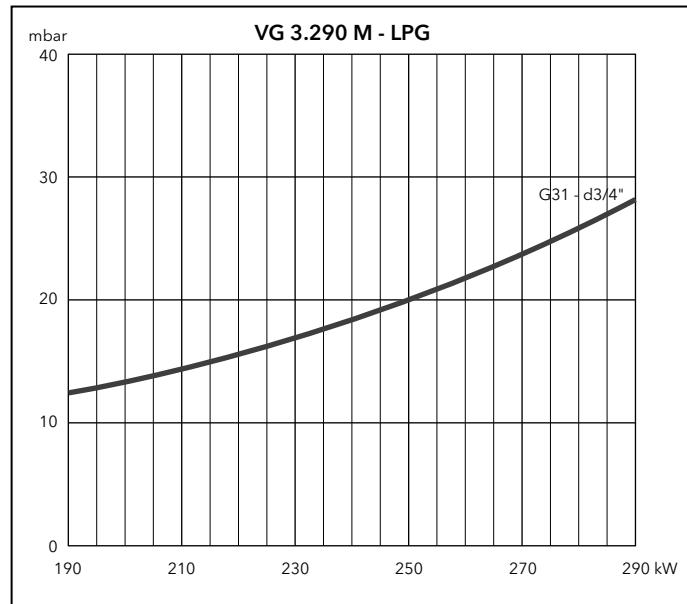
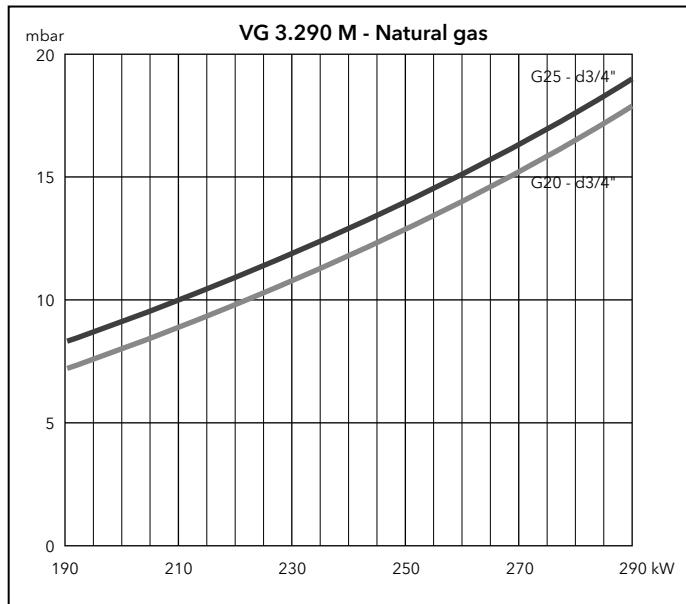


**VG 04.570 V - LPG**



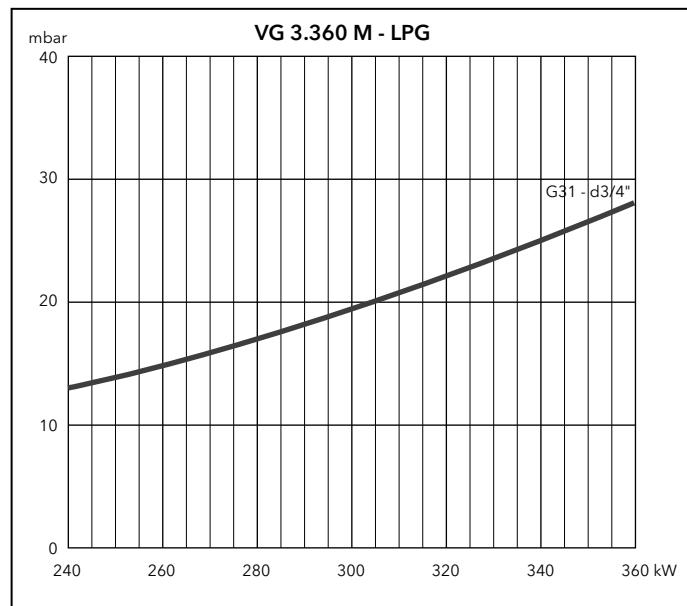
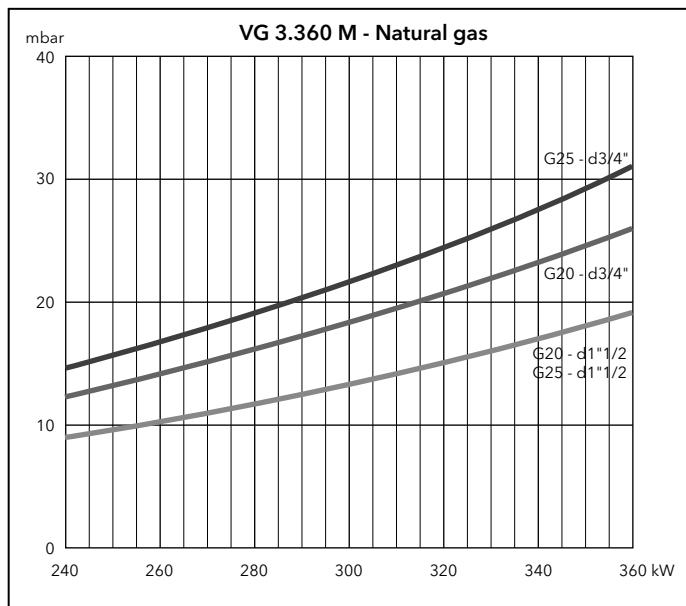
## VG 3.290 M

Burner output (kW)	d3/4"-Rp1"1/4	d3/4"-Rp1"1/4	d3/4"-Rp1"1/4
	Natural gas G20 Hi = 10,365 kWh/m³	Natural gas G25 Hi = 8,83 kWh/m³	LPG G31 Hi = 25,89 kWh/m³
	Pressure loss (mbar)		
190	8	8	12
210	9	10	15
230	11	12	18
250	13	14	21
270	15	17	24
290	18	19	28



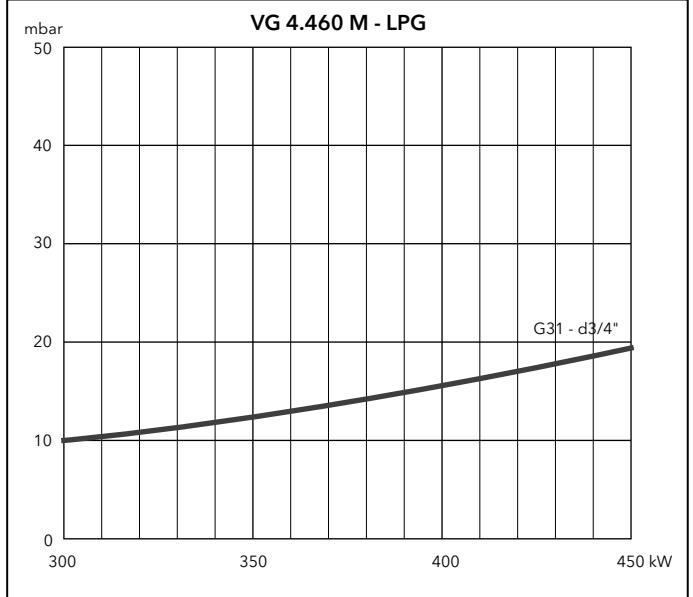
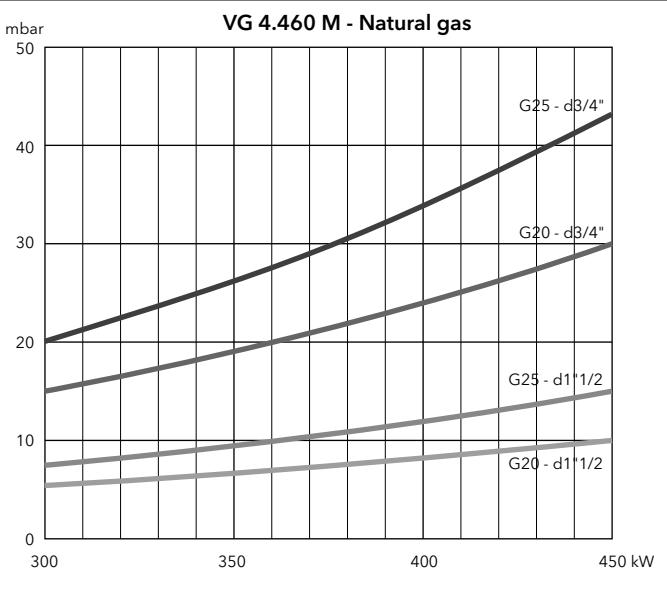
## VG 3.360 M

Burner output (kW)	d3/4"-Rp1"1/4	d1"1/2-Rp1"1/2	d3/4"-Rp1"1/4	d1"1/2-Rp1"1/2	d3/4"-Rp1"1/4
	Natural gas G20 Hi = 10,365 kWh/m³	Natural gas G25 Hi = 8,83 kWh/m³	Natural gas G20 Hi = 10,365 kWh/m³	Natural gas G25 Hi = 8,83 kWh/m³	LPG G31 Hi = 25,89 kWh/m³
	Pressure loss (mbar)				
240	12	9	14	9	13
280	16	12	19	12	17
320	21	15	24	15	22
360	26	19	31	19	28



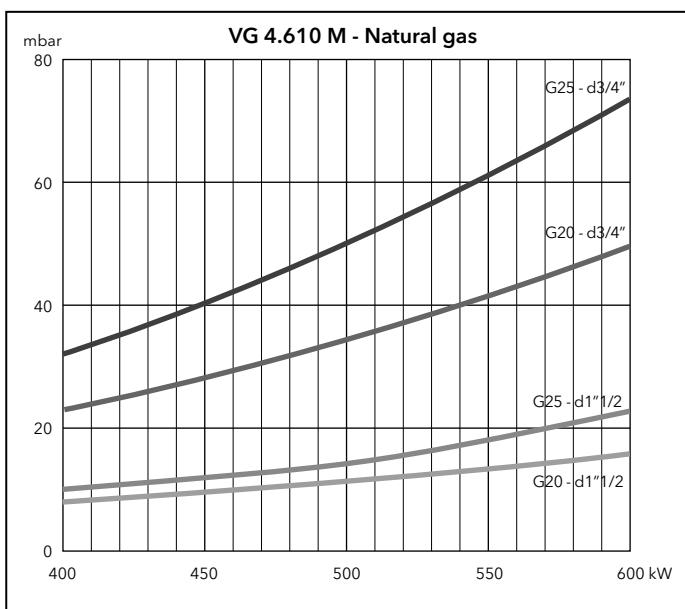
**VG 4.460 M**

Burner output (kW)	d3/4"-Rp1"1/4	d1"1/2-Rp1"1/2	d3/4"-Rp1"1/4	d1"1/2-Rp1"1/2	d3/4"-Rp1"1/4
	Natural gas G20 Hi = 10,365 kWh/m <sup>3</sup>		Natural gas G25 Hi = 8,83 kWh/m <sup>3</sup>		LPG G31 Hi = 25,89 kWh/m <sup>3</sup>
Pressure loss (mbar)					
300	15	6	20	8	10
350	19	7	27	10	13
400	24	8	34	12	16
450	30	10	43	15	20

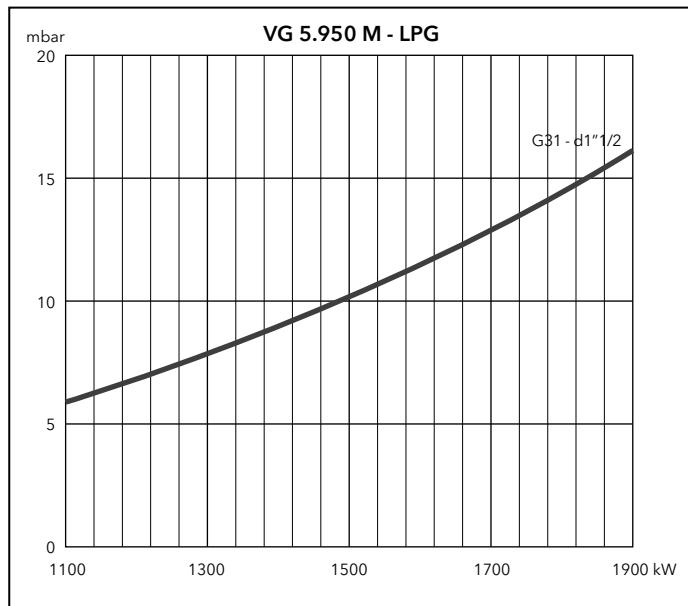
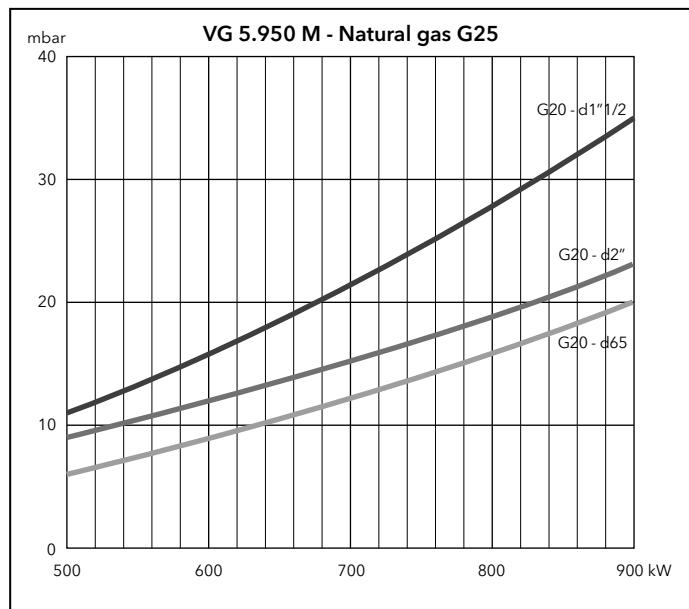
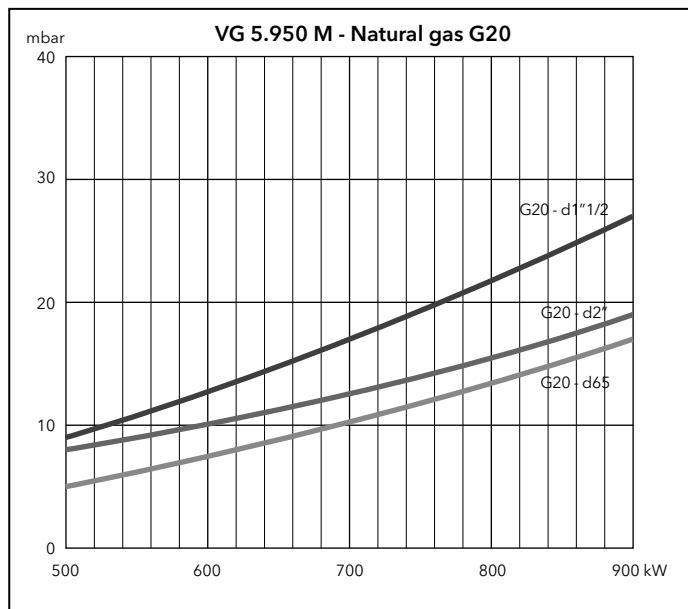


**VG 4.610 M**

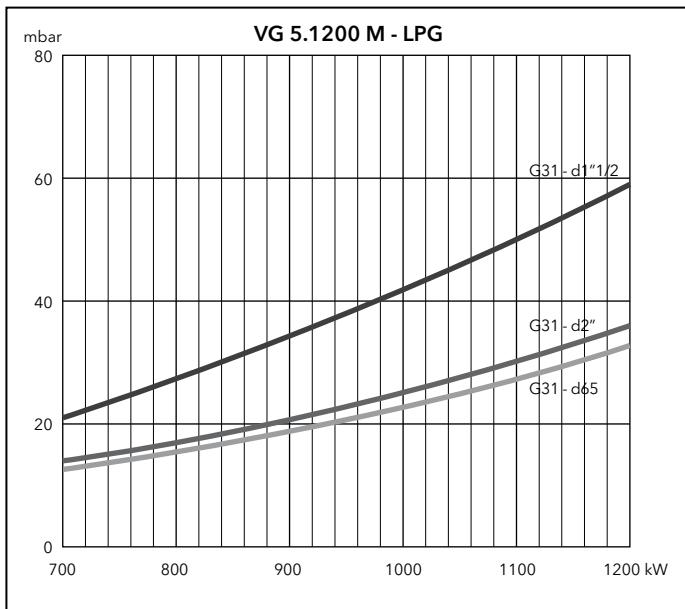
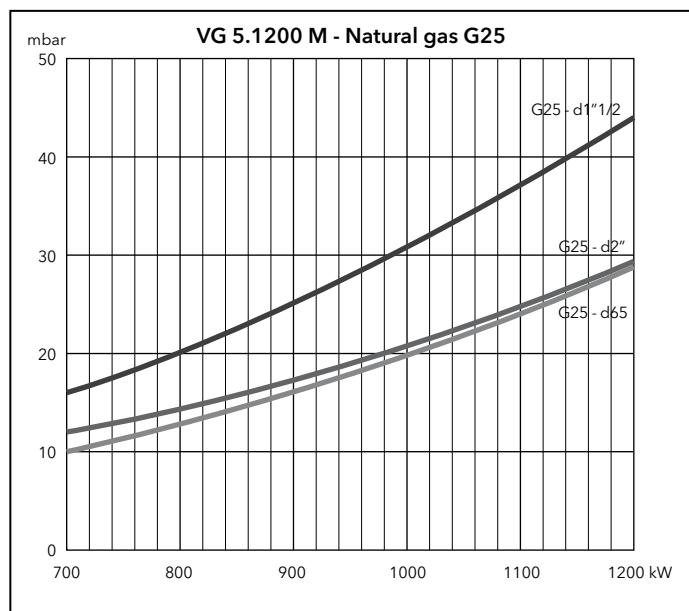
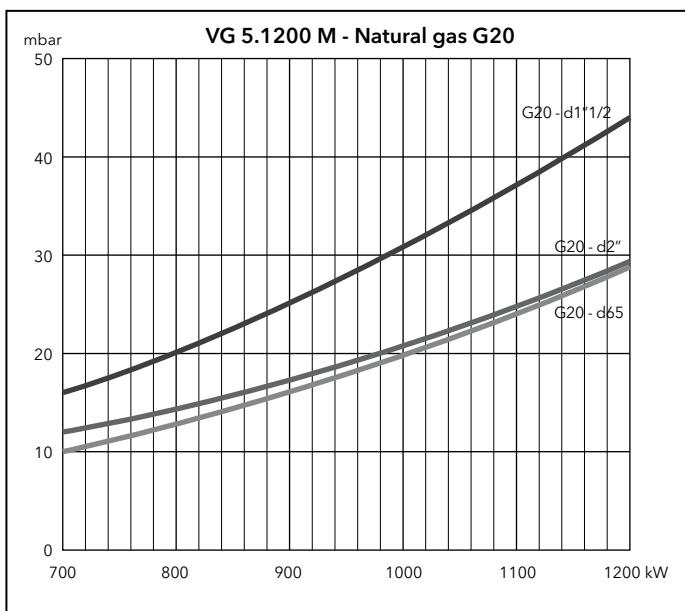
Burner output (kW)	d3/4"-Rp1"1/4	d1"1/2-Rp1"1/2	d3/4"-Rp1"1/4	d1"1/2-Rp1"1/2	d3/4"-Rp1"1/4
	Natural gas G20 Hi = 10,365 kWh/m <sup>3</sup>		Natural gas G25 Hi = 8,83 kWh/m <sup>3</sup>		LPG G31 Hi = 25,89 kWh/m <sup>3</sup>
Pressure loss (mbar)					
400	23	8	32	10	13
450	29	10	40	12	15
500	35	12	50	15	18
550	42	14	61	18	21
600	50	16	73	22	25



VG 5.950 M							
Burner output (kW)	d1"1/2-Rp2"	d2"-Rp2"	d65-DN65	d1"1/2-Rp2"	d2"-Rp2"	d65-DN65	d1"1/2-Rp2"
Natural gas G20 $Hi = 10,365 \text{ kWh/m}^3$				Natural gas G25 $Hi = 8,83 \text{ kWh/m}^3$			
Pressure loss (mbar)							
500	9	8	5	11	9	6	6
600	13	10	8	16	12	9	8
700	17	13	10	21	15	12	10
800	22	16	13	28	19	16	13
900	27	19	17	35	23	20	16

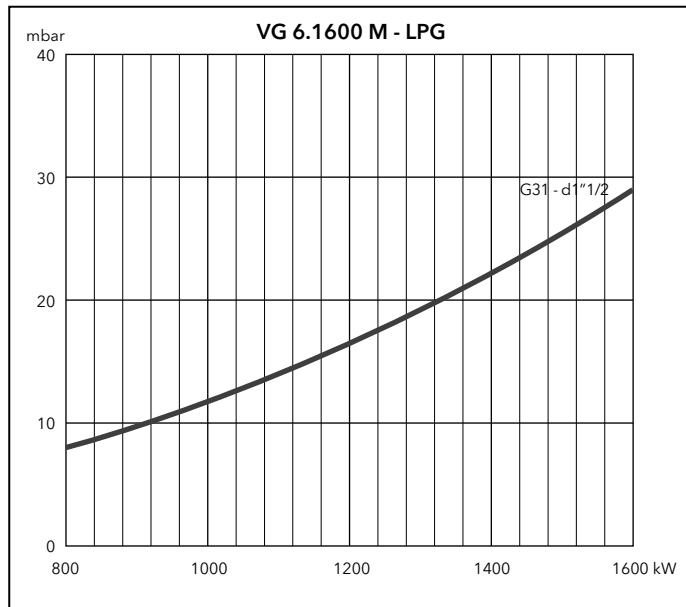
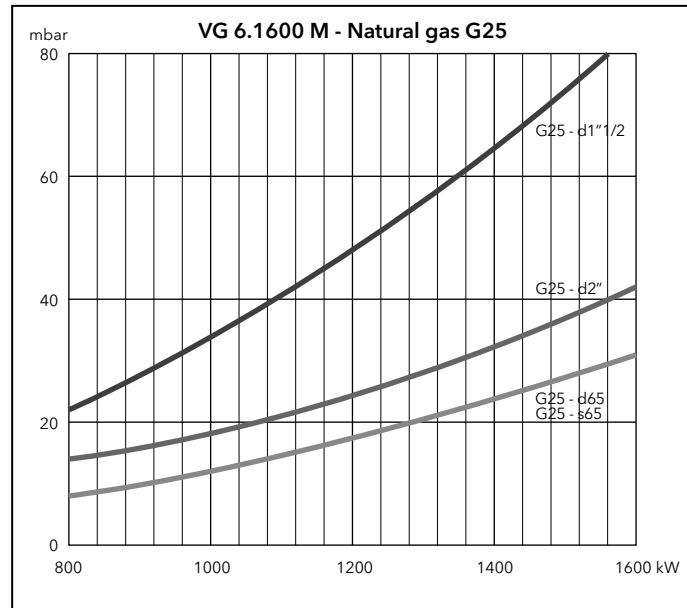
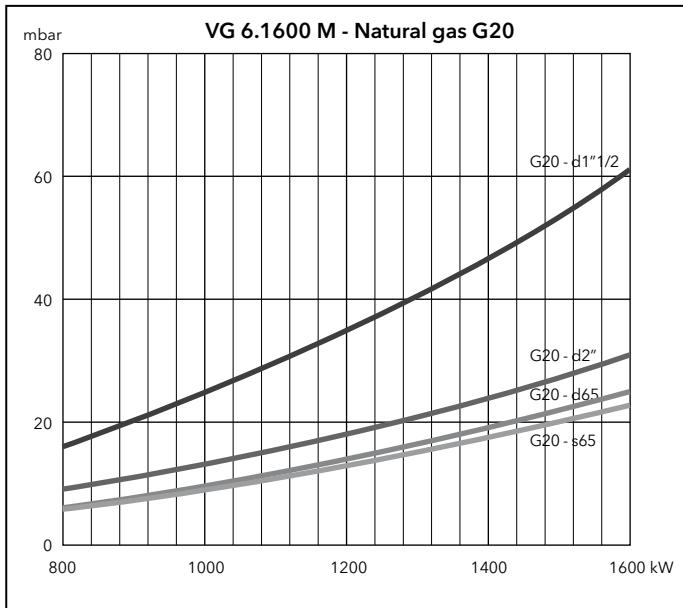


<b>VG 5.1200 M</b>									
Burner output (kW)	d1"1/2-Rp2"	d2"-Rp2"	d65-DN65	d1"1/2-Rp2"	d2"-Rp2"	d65-DN65	d1"1/2-Rp2"	d2"-Rp2"	d65-DN65
Natural gas G20 Hi = 10,365 kWh/m <sup>3</sup>				Natural gas G25 Hi = 8,83 kWh/m <sup>3</sup>				LPG G31 Hi = 25,89 kWh/m <sup>3</sup>	
Pressure loss (mbar)									
700	16	12	10	16	12	10	21	14	12
800	20	14	13	20	14	13	27	17	15
900	25	17	16	25	17	16	34	21	19
1000	31	21	20	31	21	20	42	25	23
1100	37	25	24	37	25	24	50	30	28
1200	44	29	29	44	29	29	59	36	33

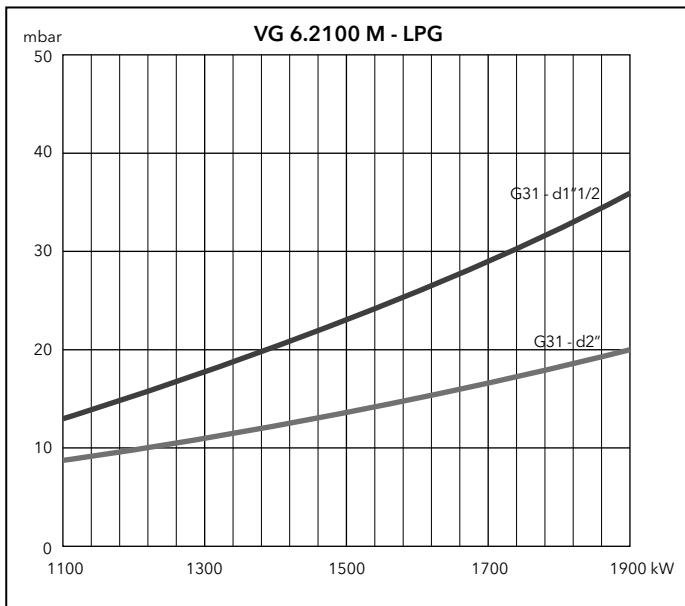
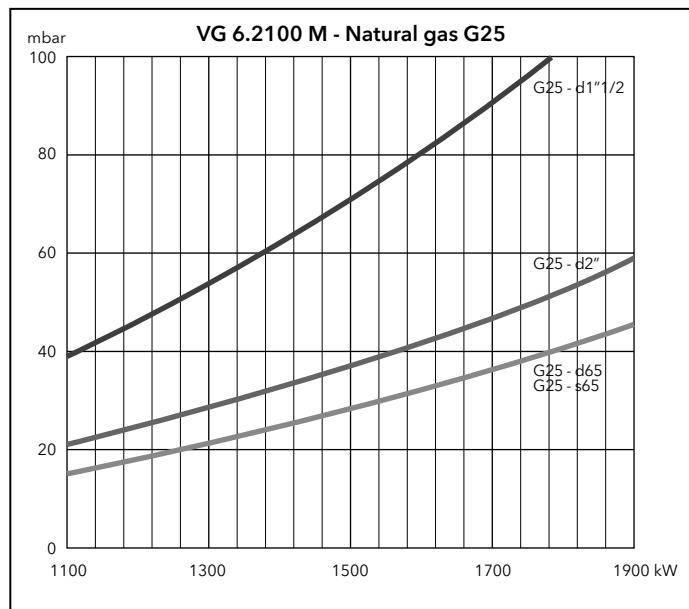
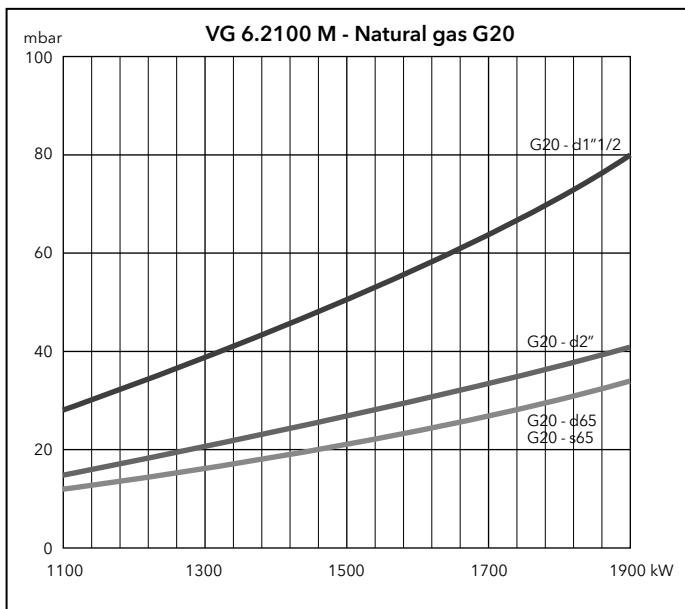


## VG 6.1600 M

Burner output (kW)	d1"1/2-Rp2"	d2"-Rp2"	d65-DN65	s65-DN65	d1"1/2-Rp2"	d2"-Rp2"	d65-DN65	s65-DN65	d1"1/2-Rp2"
Natural gas G20 Hi = 10,365 kWh/m <sup>3</sup>					Natural gas G25 Hi = 8,83 kWh/m <sup>3</sup>				
Pressure loss (mbar)									
800	16	9	6	6	22	14	8	8	8
900	25	13	10	9	34	18	12	12	12
1000	35	18	14	13	48	24	18	18	17
1100	47	24	19	18	64	32	24	24	22
1200	61	31	25	23	84	42	31	31	29



<b>VG 6.2100 M</b>										
Burner output (kW)	d1"1/2-Rp2"	d2"-Rp2"	d65-DN65	s65-DN65	d1"1/2-Rp2"	d2"-Rp2"	d65-DN65	s65-DN65	d1"1/2-Rp2"	d2"-Rp2"
	Natural gas G20 Hi = 10,365 kWh/m <sup>3</sup>				Natural gas G25 Hi = 8,83 kWh/m <sup>3</sup>				LPG G31 Hi = 25,89 kWh/m <sup>3</sup>	
	Pressure loss (mbar)									
1100	28	15	12	11	39	21	15	15	13	9
1300	39	21	16	16	54	29	21	22	18	11
1500	51	27	21	21	71	37	28	29	23	14
1700	64	34	27	27	91	47	36	37	29	17
1900	80	41	34	34	114	59	45	46	36	20







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