

HIGH POWER CONDENSING GAS BOILERS



GENUS PREMIUM EVO HP

With the widest range of ever, Ariston redesigns and improves the product offer for high-power, wall-hung condensing boilers, in order to be close more and more to the end user and installer needs:

- wider range of available models: from 45 kW up to 150 kW
- improved flexibility: “back to back” cascade installation and “line” cascade installation
- higher maximum number of boilers to be installed in cascade: up to 8
- optimized control of boilers thanks to the newest cascade manager
- full integration capability with solar systems

These are the main value propositions of the new high-power range.



ALL THE POWER WITH A SIMPLE TOUCH

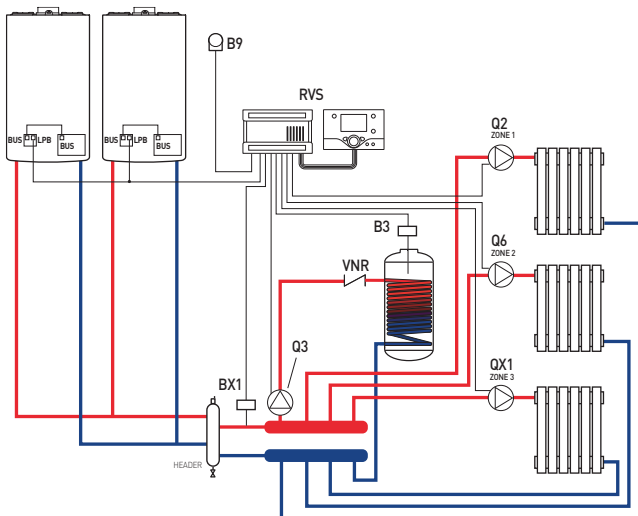
Homes of large size, residential and public buildings, and commercial-industrial structures can take advantage of all the benefits of a central heating system that can be created with the new Ariston high-power boilers.

The new range allows :

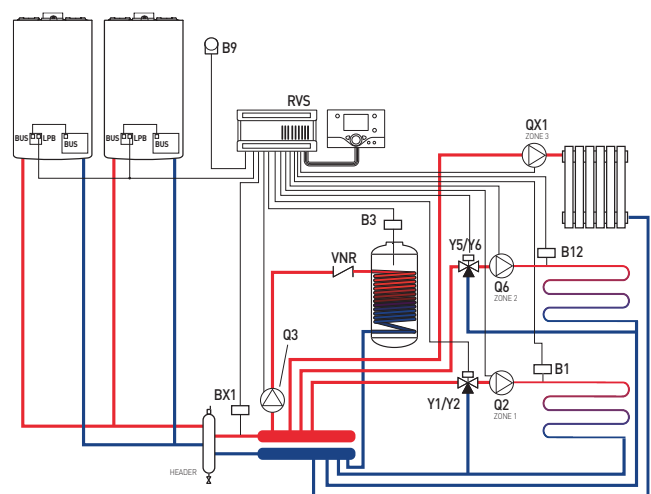
- space savings thanks to “back to back” and “line” installation
- higher performances thanks to new electronic control
- energy savings thanks to the condensing technology

CONFIGURATION SAMPLES

Cascade installation with management of three direct zones and DHW tank



Cascade installation with management of one direct zone, 2 low temperature zones and DHW tank





A COMPLETE OFFER FOR ALL THE NEEDS UP TO 1200 KW

Ariston offers high-power boilers that can be installed either individually or in cascade (line and back-to-back installation). For both configurations, it's available a wide range of accessories: installation kits, hydraulic kits, exhaust systems, thermoregulation accessories, cascade managers. In order to simplify the choice, Ariston gives the possibility of creating orders for packages, that identify all the different cascade configurations (from 90 kW up to 1200 kW).

COMPLETE ACCESSORY PACKETS

SELF-STANDING SUPPORT FOR SINGLE AND CASCADE INSTALLATION

FLUE PIPE SYSTEMS FOR SINGLE AND CASCADE INSTALLATION

PRE-SIZED AND INSULATED COLLECTORS AND HEADERS

INTEGRATION CAPABILITY WITH SOLAR SYSTEMS AND DIRECT MANAGEMENT FROM THE BOILER (SINGLE INSTALLATION)

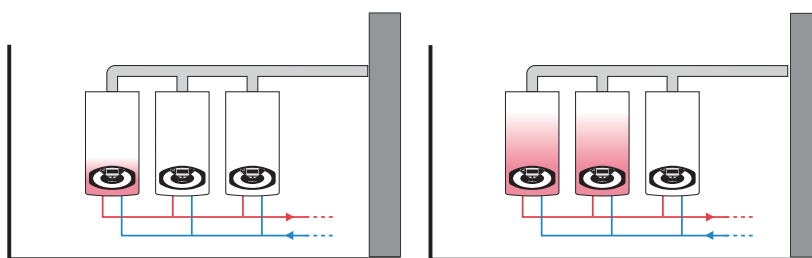
KIT FOR THE INTEGRATION WITH AN EXTERNAL TANK FOR THE PRODUCTION OF DHW

COMPLETE CONTROL

The cascade installation can be managed from a single control unit. The cascade manager allows the adjustment of up to 6 boilers (line installation), of up to 8 boilers (back to back installation), and of two mixed zones.

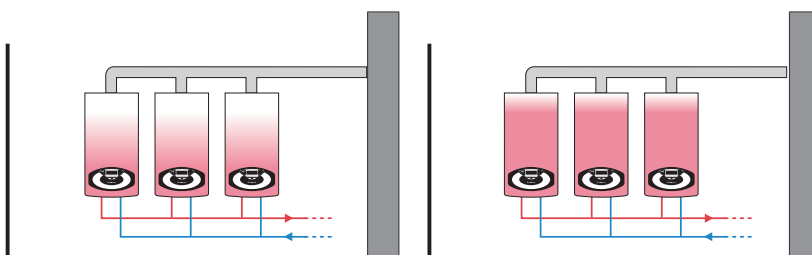
The management of the boilers in cascade, besides the rotation (to obtain the same operation time for the different boilers), also allows the division of the power supplied on more generators so that the ratio power/exchange surface allows to exploit at maximum the condensing heat exchanger technology.

Example of thermic central management made up of three 150 kW boilers



30 kW need - Minimum power

200 kW need - Reduced power



300 kW need - Reduced power

450 kW need - Maximum power

GENUS PREMIUM EVO HP 45-65

Wall-Hung, high power, only heating condensing boiler



ENERGY EFFICIENCY

- With its condensing technology, Genus Premium Evo HP forgives you the **35% energy saving**, on your gas bill.
- Even **more energy saving** is guaranteed thanks to the two-speed pump;
- The “AUTO function” in addition with the Sensys, the system interface, avoids temperature fluctuations, and by consequence the **reduced consumption** is assured.

DESIGN AND TECHNOLOGY

- Genus Premium Evo HP offers **the best enjoyable design** of its category, thanks to the accurate study of the lines, and of the external shape;
- The Wide Dot Matrix Backlit LCD display, with scrolling icons, allows a **very easy navigation, a full control of all the parameters**, working conditions, and the auto-diagnostic error code's;
- Genus Premium Evo HP gives a **full system capability**: thanks to bus bridgenet communication protocol and the Sensys, the system interface, you can easily manage all the components of your system;
- The new range of HP boilers is designed for the **cascade installation**, both in line and back to back to back one;

class A
★★★★ efficiency
+35% savings
class NOx 5
designed for
solar integration



**up to 6 boilers in line installation,
and up to 8 boilers
in back to back installation**



COMFORT

- The compatibility with modulating thermoregulation accessories, and the «AUTO function» avoid temperature fluctuations and peaks, forgiving a **constant temperature for the maximum thermic comfort**;
- The boiler can be easily connected with a three way-valve, and a tank probe in order to allow the **production of domestic hot water**, thanks to the connection with an external tank;

QUALITY

- Genus Premium Evo HP is made up with the best material available: the stainless steel used for the primary heat exchanger guarantee **high reliability and very long lifecycle**;
- The addition of heating return filter guarantees **boiler protection from water impurities accumulation**;
- The use of anti-seizing systems **prevent freezing and scale accumulation**, protecting not only the wall-hung boiler, but even your whole system;
- The included low pressure sensor **protects the boilers against low water pressure conditions**;

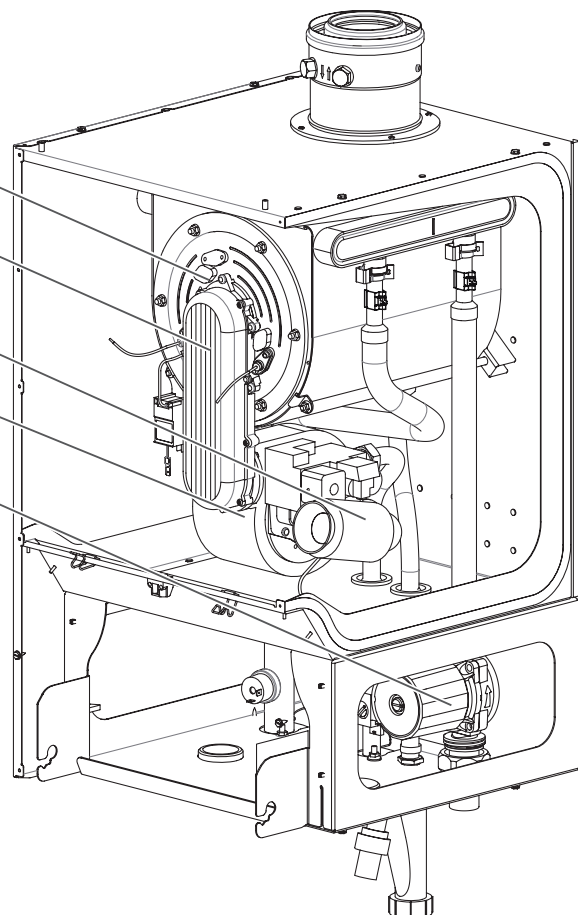
STAINLESS STEEL PRIMARY HEAT EXCHANGER WITH ISOTHERMAL CASING

TOTAL PREMIXING BURNER WITH LOW NOX EMISSIONS

NEW OPTIMIZED SILENCER FOR IMPROVED ACOUSTIC COMFORT

SELF ADJUSTING MODULATING FAN

TWO SPEED SELF- ADJUSTING PUMP



TECHNICAL DATA

45

65

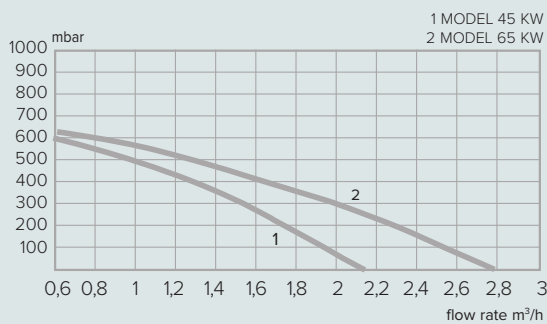
POWER SPECIFICATIONS

Max/min nominal calorific flow rate (Hi)	kW	41,0 / 12,2	58,0 / 17,4
Max/min nominal calorific flow rate (Hs)	kW	45,6 / 13,6	64,4 / 19,3
Max/min power output (80°C-60°C) (Central Heating)	kW	39,8 / 11,7	57,3 / 17,3
Max/min power output (50°C-30°C) (Central Heating)	kW	43,6 / 13,1	62,3 / 19,1
Max/min power output (40 °C - 30 °C)	kW	43,7 / 13,1	62,8 / 19,3
Combustion efficiency (of flue gas)	%	97,3	97,3
Nominal calorific flow rate efficiency (60/80°C) max/min	%	97,0 / 96,1	98,8 / 99,4
Nominal calorific flow rate efficiency (30/50°C) max/min	%	106,4 / 107,5	107,4 / 109,5
Nominal calorific flow rate efficiency (30/40 °C) max/min	%	106,5 / 107,7	108,2 / 110,0
Efficiency at 30% at 30°C	%	107,4	109,8
Efficiency at 30% at 47°C	%	104,8	105,3
Efficiency rating (dir. 92/42/EEC)	stars	****	****
Sedbuk Rating	band		
Loss when stopped (ΔT = 50°C)	%	0,24	0,24
Loss of burner gas when operating	%	2,8	2,8

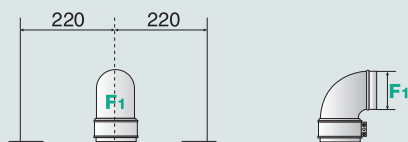
EMISSIONS

Available air pressure	Pa	130	150
NOx class (Less than 70 mg/kWh)	class	5	5
Flue gas temperature (G20) (80°C-60°C)	°C	67/63	68/61
CO2 content (G20) max/min	%	9,0 / 8,4	9,0 / 8,4
CO2 content (G31) max/min	%	9,8 / 9,2	9,8 / 9,2
CO content (0%O2) (80°C-60°C)	ppm	88	109
O2 content (G20)	%	4,8	4,8
Maximum flue gas flow (G20) (80°C-60°C)	m³/h	53	74
Excess air max load	%	27	27

Residual head

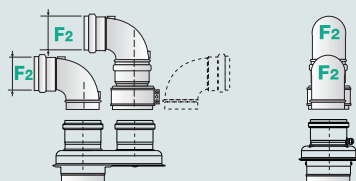


Model FF - Coaxial exhausts

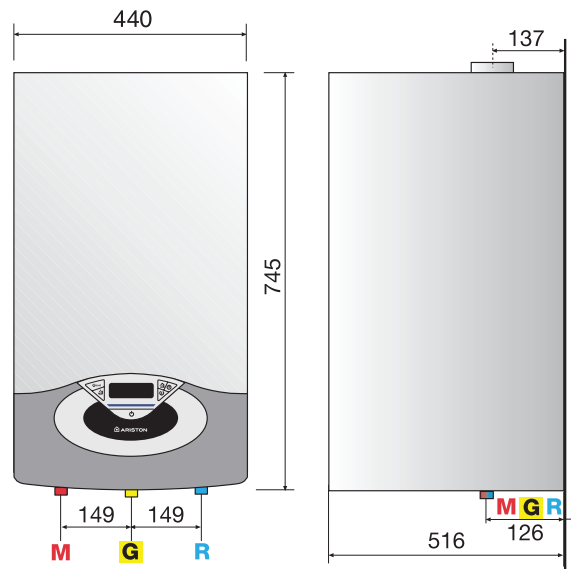


Maximum pipe length:
 Ø80/125: up to 12 m (45 kW) - 8 m (65 kW)

Model FF - Twin pipes exhausts

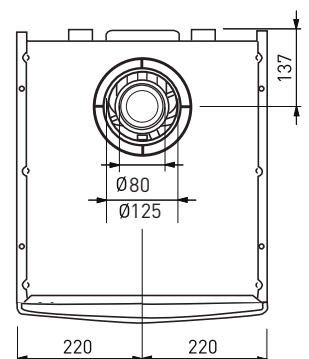


Maximum pipe length:
 Ø80/80: up to 49 m (45 kW) - 30 m (65 kW)



LEGEND

- M: Central heating flow line Ø 1" gas
- G: Gas connector Ø 3/4" gas
- R: Central heating return Ø 1" gas
- F: Exhausts (Ø mm)
- F1: 80/125
- F2: 80/80



TECHNICAL DATA

45

65

HEATING CIRCUIT

Residual head DT = 20°C	mCa	2,2	1,1
Maximum/Minimum heating pressure	bar	4 / 0,7	4 / 0,7
Min/max heating temperature (high temperature range)	°C	35 / 82	35 / 82
Min/max heating temperature (low temperature range)	°C	20 / 45	20 / 45

DOMESTIC HOT WATER CIRCUIT

Domestic hot water min/max temperature	°C	40 / 60	40 / 60
--	----	---------	---------

ELECTRICAL

Power supply voltage/frequency	V/Hz	230 / 50	230 / 50
Total electrical power absorbed	W	148	198
Minimum ambient temperature for use	°C	+5	+5
Protection level for the electrical appliance	IP	IPX4D	IPX4D

CONDENSATE

"Max condensate production (40°C- 30°C, max load - 20°C ambient)"	l/h	8,8	13,4
Condensate pH		3,2	3,2

Weight	kg	45	50
Dimensions (DxWxH)	mm	440/910/510	440/910/510

CODE NATURAL GAS

3581415

3581416

ACCESSORIES

CODE



Sensys system interface



Room sensor

INSTALLATION ACCESSORIES

Frame vertical bar (2 pcs needed)	3590279
Frame horizontal bar (1 pcs needed)	3590280
Frame foot (2 pcs needed)	3590283

HYDRAULIC ACCESSORIES

Shut off valve kit (for water and gas)	3590433
Low loss header	3580787
Domestic hot water 3-way valve kit (including cables)	3590436
Safety valve kit 3 bar	3590431

THERMOREGULATION ACCESSORIES

Sensys IT-GB-FR-ES-PT	3318585
Sensys TR-RUS-GR-CR-SRB	3318613
Sensys PL-CZ-HU-RO	3318615
Modulating Room sensor	3318586
External Probe (wired)	3318588
On-off Cronothermostat (wired)	3318590
On-off Cronothermostat (wireless)	3318591
On-off Cronothermostat BUS supplied (wired, no batteries)	3318593
On-off room thermostat	3318594

SOLAR INTEGRATION ACCESSORIES

Sensys IT-GB-FR-ES-PT	3318585
Solar Manager board kit CF	3318348
Digital pump group	3024151

FLUE PIPES

Flue adapter 80/125 - 80/80 (concentric to parallel)	3580784
--	---------

Included Accessories

Bus interface- LPG transformation kit- Exhaust starter

For the whole accessories list see pag. 114

GENUS PREMIUM EVO HP 85-100-115-150

Wall-Hung, high power, only heating condensing boiler



ENERGY EFFICIENCY

- With its condensing technology, Genus Premium Evo HP forgives you the **35% energy saving**, on your gas bill.
- Even **more energy saving** is guaranteed thanks to the two-speed pump (only for 85-100 kW) or full modulating pump (for 85-100-115-150 kW), available as optional accessories;
- The “AUTO function” in addition with the Sensys, the system interface, avoids temperature fluctuations, and by consequence the **reduced consumption** is assured.

DESIGN AND TECHNOLOGY

- Genus Premium Evo HP offers **the best enjoyable design** of its category, thanks to the accurate study of the lines, and of the external shape;
- The Wide Dot Matrix Backlit LCD display, with scrolling icons, allows a **very easy navigation, a full control of all the parameters**, working conditions, and the auto-diagnostic error code's;
- Genus Premium Evo HP gives a **full system capability**: thanks to bus bridgenet communication protocol and the Sensys, the system interface, you can easily manage all the components of your system;
- The new range of HP boilers is designed for the **cascade installation**, both in line and back to back to back one;

class A
★★★★ efficiency
+35% savings
class NOx 5
designed for
solar integration



**up to 6 boilers in line installation,
and up to 8 boilers
in back to back installation**

HIGH
EFFICIENCYCOMMUNICATION
PROTOCOLMADE IN
HOLLAND

AUTO



INFO TOP

SUPER
SILENCEEXTRA
SAVINGENVIRONMENTALLY
FRIENDLY

COMFORT

- The compatibility with modulating thermoregulation accessories, and the «AUTO function» avoid temperature fluctuations and peaks, forgiving a **constant temperature for the maximum thermic comfort**;
- The boiler can be easily connected with a three way-valve, and a tank probe in order to allow **the production of domestic hot water**, thanks to the connection with an external tank;

QUALITY

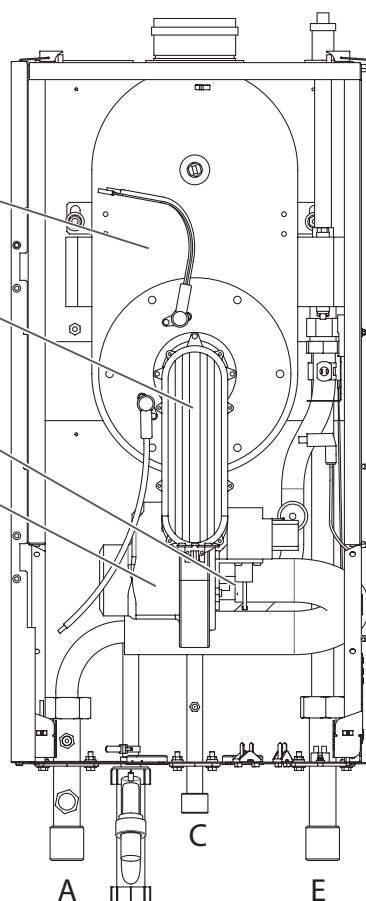
- Genus Premium Evo HP is made up with the best material available: the stainless steel used for the primary heat exchanger guarantee **high reliability and very long lifecycle**;
- The addition of heating return filter guarantees **boiler protection from water impurities accumulation**;
- The use of anti-seizing systems **prevent freezing and scale accumulation**, protecting not only the wall-hung boiler, but even your whole system;
- The included low pressure sensor **protects the boilers against low water pressure conditions**;

STAINLESS STEEL PRIMARY HEAT EXCHANGER WITH ISOTHERMAL CASING

TOTAL PREMIXING BURNER WITH LOW NOX EMISSIONS

AIR-GAS MIXER

SELF ADJUSTING MODULATING FAN



TECHNICAL DATA

85

100

115

150

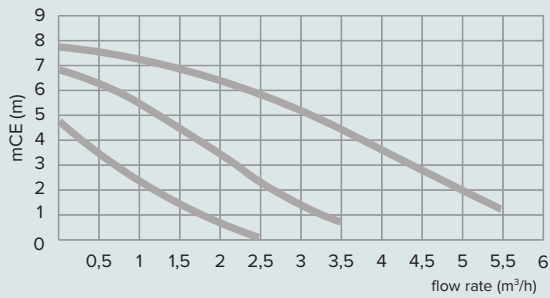
POWER SPECIFICATIONS

Max/min nominal calorific flow rate (Hi)	kW	80,0 / 20,0	88,3 / 22,1	109,0 / 27,3	140,0 / 35,0
Max/min nominal calorific flow rate (Hs)	kW	88,9 / 22,2	98,1 / 24,6	121,1 / 30,3	155,6 / 38,9
Max/min power output (80°C-60°C) (Central Heating)	kW	78,0 / 19,7	86,1 / 21,7	106,3 / 26,9	136,2 / 34,4
Max/min power output (50°C-30°C) (Central Heating)	kW	84,5 / 21,6	94,0 / 23,9	115,8 / 29,6	148,5 / 38,0
Max/min power output (40 °C - 30 °C)	kW	84,9 / 21,7	94,5 / 23,9	117,1 / 29,6	150,1 / 38,0
Combustion efficiency (of flue gas)	%	97,3	97,3	96,8	96,9
Nominal calorific flow rate efficiency (60/80°C) Max/min	%	97,5 / 98,4	97,5 / 98,4	97,5 / 98,4	97,3 / 98,4
Nominal calorific flow rate efficiency (30/50°C) Max/min	%	105,6 / 108,1	106,5 / 108,1	106,2 / 108,4	106,1 / 108,3
Nominal calorific flow rate efficiency (30/40 °C) Max/min	%	106,1 / 108,3	107,0 / 108,3	107,7 / 108,6	107,2 / 108,7
Efficiency at 30% at 30°C	%	108,1	108,1	108,3	108,5
Efficiency at 30% at 47°C	%	104,9	104,9	102,5	103,0
Efficiency rating (dir. 92/42/EEC)	stars	****	****	****	****
Sedbuk Rating	band				
Loss when stopped (ΔT = 50°C)	%	0,25	0,25	<0,15	<0,15
Loss of burner gas when operating	%	2,8	2,8	3,2	3,1

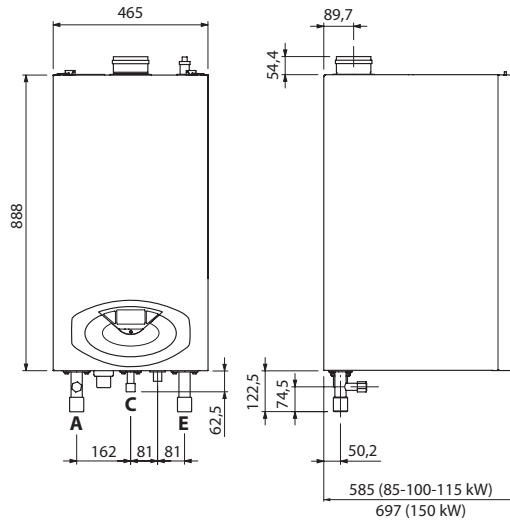
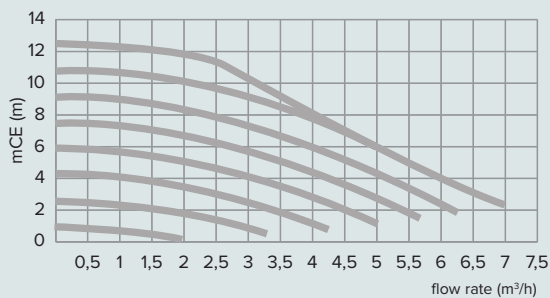
EMISSIONS

Available air pressure	Pa	140	140	180	200
NOx class (Less than 70 mg/kWh)	class	5	5	5	5
Flue gas temperature (G20) (80°C-60°C)	°C	61 / 63	68 / 63	76 / 65	74 / 63
CO2 content (G20) (max/min	%	9,0 / 8,4	9,0 / 8,4	9,0 / 8,4	9,0 / 8,4
CO2 content (G31) max/min	%	9,8 / 9,2	9,8 / 9,2	9,8 / 9,2	9,8 / 9,2
CO content (0%O2) (80°C-60°C)	ppm	95	90	117	131
O2 content (G20)	%	4,8	4,8	4,8	4,8
Maximum flue gas flow (G20) (80°C-60°C)	m³/h	102	113	143	182
Excess air max load	%	27	27	27	27

Residual Head (modulating circulator as accessory)



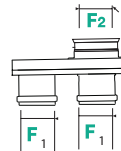
Residual Head (full modulating circulator as accessory)



LEGEND

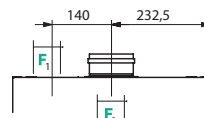
- A: Central heating flow line
- C: Gas connector
- E: Central heating return
- F: Exhausts (Ø mm)
- F1: 100
- F2: 110/150

Model FF - Coaxial exhausts

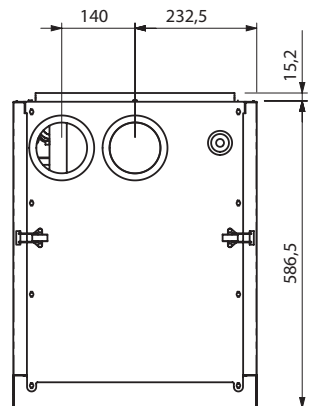


Maximum pipe length: Ø110/150 up to 5 m (only for 85-100)

Model FF - Twin pipes exhausts



Maximum pipe length: Ø100/110: up to 49 m (85-100 kW) up to 44 m (115 kW) - up to 28 m (150 kW)



TECHNICAL DATA

85

100

115

150

HEATING CIRCUIT

Maximum/Minimum heating pressure	bar	6 / 0,7	6 / 0,7	6 / 0,7	6 / 0,7
Min/max heating temperature (high temperature range)	°C	35 / 82	35 / 82	35 / 85	35 / 85
Min/max heating temperature (low temperature range)	°C	20 / 45	20 / 45	20 / 45	20 / 45

DOMESTIC HOT WATER CIRCUIT

Domestic hot water min/max temperature	°C	40 / 60	40 / 60	40 / 60	40 / 60
--	----	---------	---------	---------	---------

ELECTRICAL

Power supply voltage/frequency	V/Hz	230 / 50	230 / 50	230 / 50	230 / 50
Total electrical power absorbed	W	101	111	215	246
Minimum ambient temperature for use	°C	+5	+5	+5	+5
Protection level for the electrical appliance	IP	IPX4D	IPX4D	IP20	IP20

CONDENSATE

"Max condensate production (40°C- 30°C, max load - 20°C ambient)"	l/h	16,4	19,1	24,6	31,1
Condensate pH		3,2	3,2	3,2	3,2

Weight	kg	80	83	83	90
Dimension (W x H x D)	mm	585/465/1010	585/465/1010	585/465/1010	595/465/1010

CODE NATURAL GAS

	3581417	3581418	3581419	3581420
--	---------	---------	---------	---------

ACCESSORIES

CODE



Sensys system interface



Room sensor

INSTALLATION ACCESSORIES

Frame vertical bar (2 pcs needed)	3590279
Frame horizontal bar (1 pcs needed)	3590280
Frame foot (2 pcs needed)	3590283

HYDRAULIC ACCESSORIES

Boiler pump - two speed (for 85-100-115-150 kW)	3590441
Boiler pump - high efficiency modulating (115-150 kW)	3590442
Shut off valve kit (for water and gas, 85-100 kW)	3590434
Shut off valve kit (for water and gas, 115-150 kW)	3590335
Low loss header	3590435
Domestic hot water 3-way valve kit (including cables), for 85-100 kW	3590437
Safety valve kit 3 bar, for 85-100 kW	3590432
Domestic hot water 3-way valve kit (including cables), for 115-150 kW	3590438
Safety valve kit 3 bar for 115-150 kW	3590330

THERMOREGULATION ACCESSORIES

Sensys IT-GB-FR-ES-PT	3318585
Sensys TR-RUS-GR-CR-SRB	3318613
Sensys PL-CZ-HU-RO	3318615
Modulating Room sensor	3318586
External Probe (wired)	3318588
On-off Cronothermostat (wired)	3318590
On-off Cronothermostat (wireless)	3318591
On-off Cronothermostat BUS supplied (wired, no batteries)	3318593
On-off room thermostat	3318594

SOLAR INTEGRATION ACCESSORIES

Sensys IT-GB-FR-ES-PT	3318585
Solar Manager board kit CF	3318348
Digital pump group	3024151

FLUE PIPES






Flue adapter, parallel to concentric - 100-100mm to 110/150mm	12076281
Flue adapter, parallel to concentric - 100-100mm to 100/150mm	12076292

Included Accessories

Bus interface- LPG transformation kit

For the whole accessories list see pag. 114

CHOICE TABLE OF ACCESSORIES FOR WALL-MOUNTED LINE INSTALLATION

ACCESSORY KITS - CASCADE INSTALLATION		Cascade output power		DN65: 90-600 kW		DN100: 601-1200 kW	
		n° of boilers	45-65	85-150	45-65	85-150	
LINE - WALL MOUNTED Contents: - collector supports; - collectors water and gas & blind flanges; - boiler connection kits with shut-off valves, non-return valve and safety valve 3 bar; - cascade manager RVS63; - communication gateway for boilers - header sensor.	2 	Code	3318835	3318840	-	-	
	3 	Code	3318836	3318841	-	-	
	4 	Code	3318837	3318842	-	3318843	
	5 	Code	3318838	-	-	3318844	
	6 	Code	3318839	-	-	3318845	
	Insulation for collector		collector 2 boilers	Code	3590458		3590470
		collector 3 boilers	Code	3590459		3590471	
Insulation for connection kit (one for each boiler)		Code	3590460				
Low loss header (one for the whole system)		Code	3590444		3590445		
Insulation for low loss header (one for the whole system)		Code	3590456		3590457		
Plated heat exchanger kit incl. insulation (one for the whole system, to be used in alternative to the low loss header)	$\Delta T = 15-20K$	kW	82-250	251-462	-		
		Type	CB200-30M	CB200-50M	-		
		Code	3590357	3590358	-		
	$\Delta T = 10K$	kW	82-250	251-462	-		
		Type	CB200-30M	CB200-64M	-		
		Code	3590357	3590359	-		
Expansion vessel (to be connected to the plate heat exchanger)	kW	0-250 kW	251-462 kW	-			
	L	4	4	-			
	Code	3590198	3590199	-			
Gas filter incl. connection material (one for the whole system)		Code	3590298		3590300		
Extension pipe for gas filter (one for the whole system)		Code	3590299		3590301		
Outdoor temperature sensor sensor QAC34 (excl. cable)		Code	171237				
Hot water temperature sensor sensor QAZ36 incl. 6m cable		Code	12081759				
Heating zone temperature sensor sensor QAD36 incl. 4m cable		Code	11002600				
Room controller (sensor + controls) Room unit QAA75		Code	12048253				

PUMP KITS

Pump kits (1 for each boiler required)		45-65kW	85-100kW	115-150kW
Boiler pump - 2 speed including connection cable	Type Code	RS 25/7-2 130 * ¹	RSG 25/8-2-C 3590441	-
Boiler pump - high efficiency modulating including connection cable	Type Code	-	UPMXL GEO 25-125 3590442	

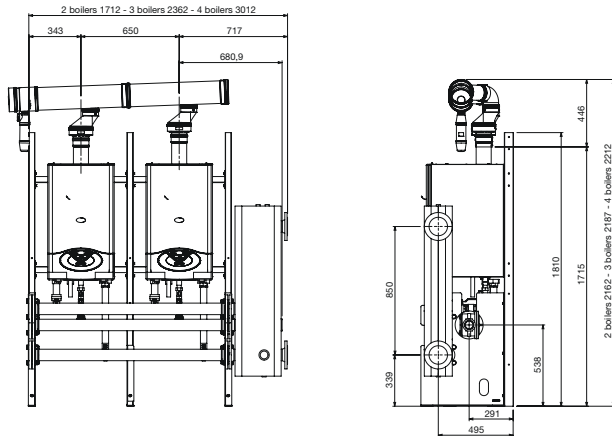
*¹ included in boiler

Installation scheme for line cascade boilers

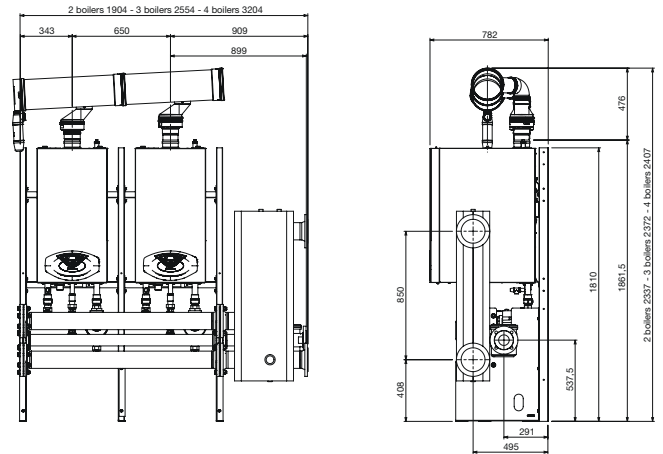
The cascade configuration allows the installation from 2 up to 6 boilers.

Regarding the sizes, please refer to the dimensions shown in the drawings , since the installation is modular.






2 GENUS PREMIUM EVO HP DN65



2 GENUS PREMIUM EVO HP DN100



CHOICE TABLE OF ACCESSORIES FOR LINE INSTALLATION

ACCESSORY KITS - CASCADE INSTALLATION		Cascade output power		DN65: 90-600 kW		DN100: 601-1200 kW	
		n° of boilers	GHP EVO	45-65	85-150	45-65	85-150
LINE - FRAME Contents: - collector supports & boiler frame; - collectors water and gas & blind flanges; - boiler connection kits with shut-off valves, non-return valve and safety valve 3 bar; - cascade manager RVS63; - communication gateway for boilers - header sensor.	2 	Code	3318809	3318814	-	-	
	3 	Code	3318810	3318815	-	-	
	4 	Code	3318811	3318816	-	3318817	
	5 	Code	3318812	-	-	3318818	
	6 	Code	3318813	-	-	3318819	
	Insulation for collector		collector 2 boilers	Code	3590458		3590470
		collector 3 boilers	Code	3590459		3590471	
Insulation for connection kit (one for each boiler)			Code	3590460			
Low loss header (one for the whole system)			Code	3590444		3590445	
Insulation for low loss header (one for the whole system)			Code	3590456		3590457	
Plated heat exchanger kit incl. insulation (one for the whole system, to be used in alternative to the low loss header)	$\Delta T = 15-20K$	kW	82-250	251-462	-		
		Type	CB200-30M	CB200-50M	-		
		Code	3590357	3590358	-		
	$\Delta T = 10K$	kW	82-250	251-462	-		
		Type	CB200-30M	CB200-64M	-		
		Code	3590357	3590359	-		
Expansion vessel (to be connected to the plate heat exchanger)	kW	0-250 kW	251-462 kW	-			
	L	4	8	-			
	Code	3590198	3590199	-			
Gas filter incl. connection material (one for the whole system)			Code	3590298		3590300	
Extension pipe for gas filter (one for the whole system)			Code	3590299		3590301	
Outdoor temperature sensor sensor QAC34 (excl. cable)			Code	171237			
Hot water temperature sensor sensor QAZ36 incl. 6m cable			Code	12081759			
Heating zone temperature sensor sensor QAD36 incl. 4m cable			Code	11002600			
Room controller (sensor + controls) Room unit QAA75			Code	12048253			

PUMP KITS

Pump kits (1 for each boiler required!)		45-65kW	85-100kW	115-150kW
Boiler pump - 2 speed including connection cable	Type	RS 25/7-2 130	RSG 25/8-2-C	-
	Code	*1	3590441	-
Boiler pump - high efficiency modulating including connection cable	Type	-	UPMXL GEO 25-125	
	Code	-	3590442	

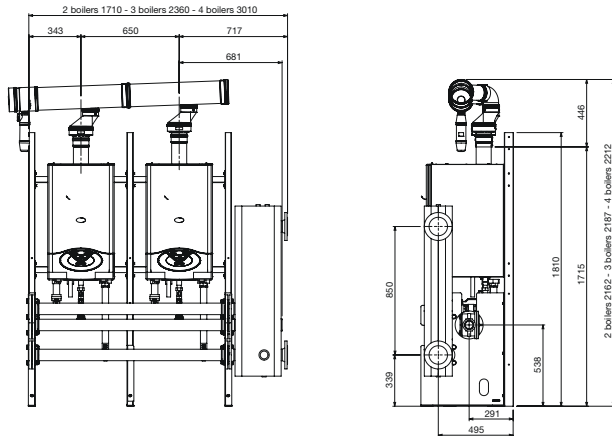
*1 included in boiler

Installation scheme for line cascade boilers

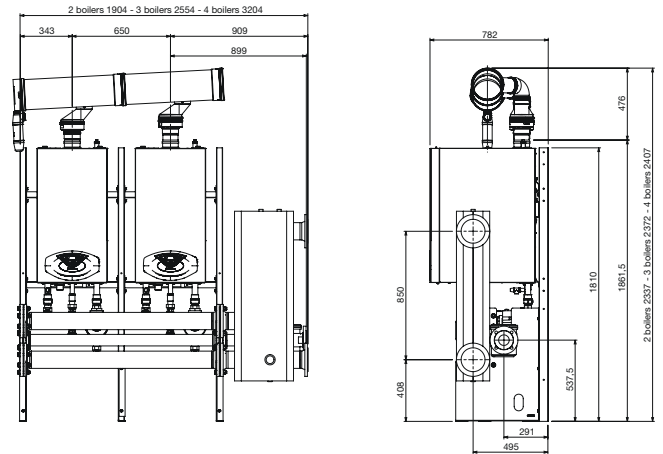
The cascade configuration allows the installation from 2 up to 6 boilers.

Regarding the sizes, please refer to the dimensions shown in the drawings , since the installation is modular.







2 GENUS PREMIUM EVO HP DN65



2 GENUS PREMIUM EVO HP DN100



CHOICE TABLE OF ACCESSORIES FOR FRAME BACK TO BACK INSTALLATION

ACCESSORY KITS - CASCADE INSTALLATION		Cascade output power		DN65: 90-600 kW		DN100: 601-1200 kW		
		n° of boilers	GHP EVO	45-65	85-150	45-65	85-150	
BACK TO BACK - FRAME Contents: - collector supports & boiler frame; - collectors water and gas & blind flanges; - boiler connection kits with shut-off valves, non-return valve and safety valve 3 bar; - cascade manager RVS63; - communication gateway for boilers - header sensor.	3		Code	3318820	3318826	-	-	
	4		Code	3318821	3318827	-	3318829	
	5		Code	3318822	3318828	-	3318830	
	6		Code	3318823	-	-	3318831	
	7		Code	3318824	-	-	3318832	
	8		Code	3318825	-	-	3318833	
	Insulation for collector		collector 2 boilers	Code	3590458		3590470	
			collector 3 boilers	Code	3590459		3590471	
Insulation for connection kit (one for each boiler)			Code	3590460				
Low loss header (one for the whole system)			Code	3590444		3590445		
Insulation for low loss header (one for the whole system)			Code	3590456		3590457		
Plated heat exchanger kit incl. insulation (one for the whole system, to be used in alternative to the low loss header)		$\Delta T = 15-20K$	kW	82-250	251-462	-		
			Type	CB200-30M	CB200-50M	-		
			Code	3590357	3590358	-		
		$\Delta T = 10K$	kW	82-250	251-462	-		
			Type	CB200-30M	CB200-64M	-		
			Code	3590357	3590359	-		
Expansion vessel (to be connected to the plate heat exchanger)		kW	0-250 kW	251-462 kW	-			
		L	4	8	-			
		Code	3590198	3590199	-			
Gas filter incl. connection material (one for the whole system)			Code	3590298		3590300		
Extension pipe for gas filter (one for the whole system)			Code	3590299		3590301		
Outdoor temperature sensor sensor QAC34 (excl. cable)			Code	171237				
Hot water temperature sensor sensor QAZ36 incl. 6m cable			Code	12081759				
Heating zone temperature sensor sensor QAD36 incl. 4m cable			Code	11002600				
Room controller (sensor + controls) Room unit QAA75			Code	12048253				

PUMP KITS

Pump kits		45-65kW	85-100kW	115-150kW
Boiler pump - 2 speed including connection cable	Type Code	RS 25/7-2 130 *1	RSG 25/8-2-C 3590441	-
Boiler pump - high efficiency modulating including connection cable	Type Code	-	UPMXL GEO 25-125 3590442	

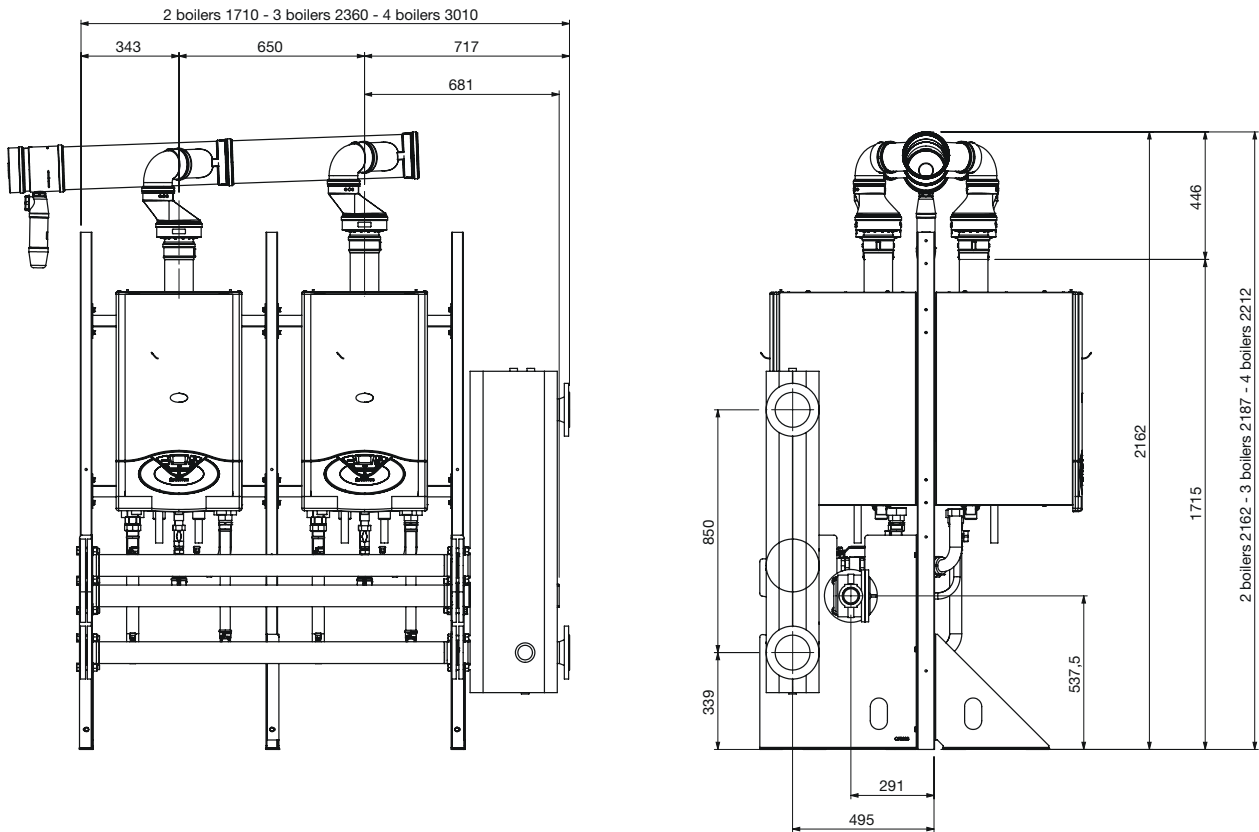
*1 included in boiler

Installation scheme for back to back cascade boilers

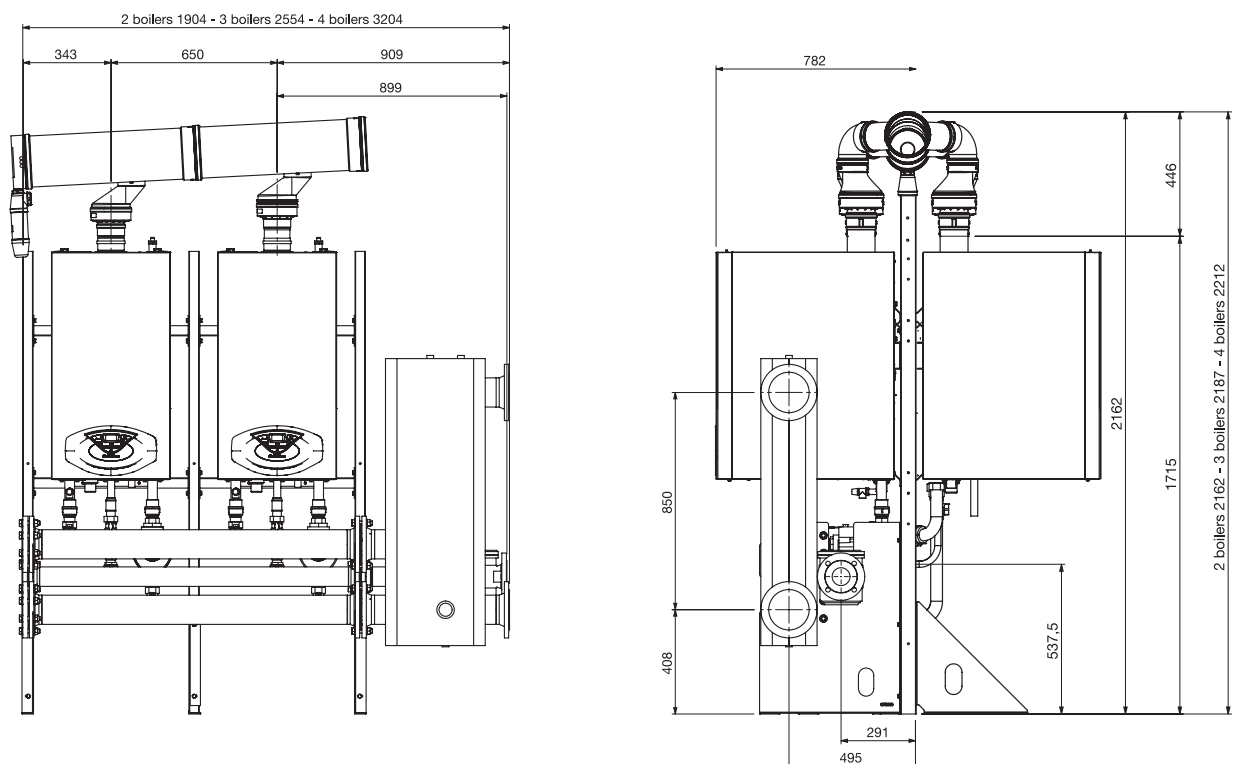
The cascade configuration allows the installation from 3 up to 8 boilers.

Regarding the sizes, please refer to the dimensions shown in the drawings , since the installation is modular

2 GENUS PREMIUM EVO HP DN65



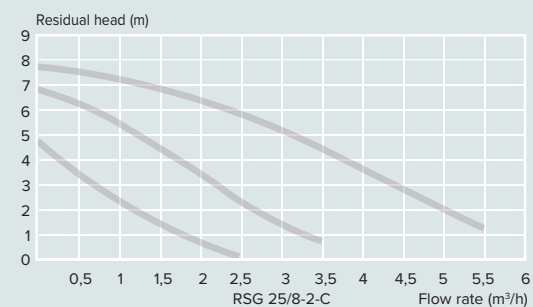
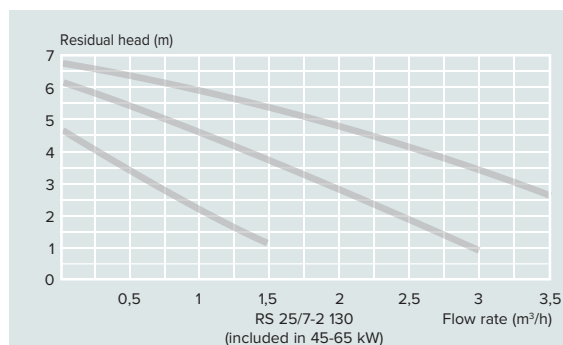
2 GENUS PREMIUM EVO HP DN100



Two - Speed Pump Features

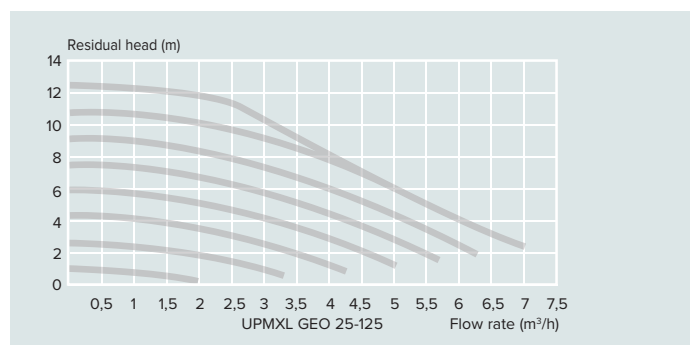
		45 FF	65 FF	85 FF	100 FF	115 FF	150 FF
HYDRAULIC DATA							
Flow Rate $\Delta T=20K$	m ³ /h	1,7	2,5	3,4	3,7	4,6	5,9
Pressure drop at the nominal flow rate	kPa	34	40	23	23	26	37
TWO - SPEED PUMP DATA							
Pump model and type of control	-	RS 25/7-2 130	RS 25/7-2 130	RSG 25/8-2-C	RSG 25/8-2-C	-	-
	Code	Included	Included	3590441	3590441	-	-
Voltage	V	230	230	230	230	-	-
Maximum consumption	W	93	111	151	151	-	-
Minimum consumption	W	62	62	81	81	-	-
Residual head at the nominal flow rate	kPa	56	51	46	41	-	-

	Code
Two - Speed Pump	3590441



High-Efficiency Full Modulating Pump Features

		45 FF	65 FF	85 FF	100 FF	115 FF	150 FF
HYDRAULIC DATA							
Flow Rate $\Delta T=20K$	m ³ /h	1,7	2,5	3,4	3,7	4,6	5,9
Pressure drop at the nominal flow rate	kPa	34	40	23	23	26	37
HIGH-EFFICIENCY FULL MODULATING PUMP DATA							
Pump model and type of control	-	-	-	UPMXL GEO 25-125	UPMXL GEO 25-125	UPMXL GEO 25-125	UPMXL GEO 25-125
	Code	-	-	3590442	3590442	3590442	3590442
Voltage	V	-	-	230	230	230	230
Maximum consumption	W	-	-	180	180	180	180
Minimum consumption	W	-	-	8	8	8	8
Residual head at the nominal flow rate	kPa	-	-	96	90	72	50



	Code
High-Efficiency Full Modulating Pump	3590442

Exhaust configuration

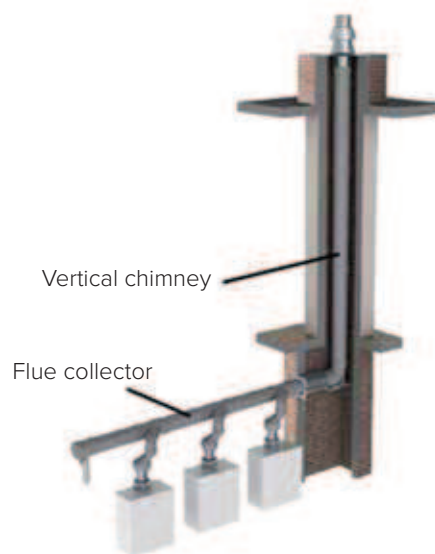
CHIMNEY SELECTION (diameter for required output):

Max. output [kW] by diameter (collector/chimney)			
Diameter	Chimney height		
	5m	15m	30m
150/150mm	327	313	288
150/200mm	450	412	370
200/200mm	530	500	482
200/250mm	697	675	646
200/300mm	855	835	797

Calculation based on 3m horizontal flue in boiler room

The cascade flue systems are available with a diameter of 150 and 200 mm. Horizontal collector's and vertical chimney's diameters depend on the total installed power, and on vertical chimney length.

The table shows the maximum power, in accordance with the vertical length of the chimney.



The informations are indicative and the proper sizing of an exhaust system depends on the chimney configuration.

Flue system composition		DN150											
		LINE						BACK 2 BACK					
	# boilers	2	3	4	5	6	3	4	5	6	7	8	
Cascade flue kit basic LINE	3590461	2	3	4	5	6	1		1		1		
Cascade flue kit basic BACK 2 BACK	3590462	-	-	-	-	-	1	2	2	3	3	4	
Condensate trap + syphon + cap	3590463	1	1	1	1	1	1	1	1	1	1	1	
Adapter 80 to 100mm for 45-65kW boiler	3590467	2*	3*	4*	5*	6*	3*	4*	5*	6*	7*	8*	

* Only in case of 45-65kW boilers

Flue system composition		DN200											
		LINE						BACK 2 BACK					
	# boilers	2	3	4	5	6	3	4	5	6	7	8	
Cascade flue kit basic LINE	3590464	2	3	4	5	6	1		1		1		
Cascade flue kit basic BACK 2 BACK	3590465	-	-	-	-	-	1	2	2	3	3	4	
Condensate trap + syphon + cap	3590466	1	1	1	1	1	1	1	1	1	1	1	
Adapter 80 to 100mm for 45-65kW boiler	3590467	2*	3*	4*	5*	6*	3*	4*	5*	6*	7*	8*	

* Only in case of 45-65kW boilers



/ REDUCED CONSUMPTIONS, MAXIMUM COMFORT AND SAVINGS

**/ ENERGY, ENVIRONMENT AND WELLBEING:
PERFECTLY HARMONIZED**

/ THE QUALITY OF A BRAND SPECIALIZED IN THE THERMIC COMFORT