

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**

ENERGY
EFFICIENTSYSTEM
MANAGEMENTMADE
IN EUROPEAUTO
FUNCTION

SUPER SILENT

ENERGY
SAVING

LOW EMISSIONS

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

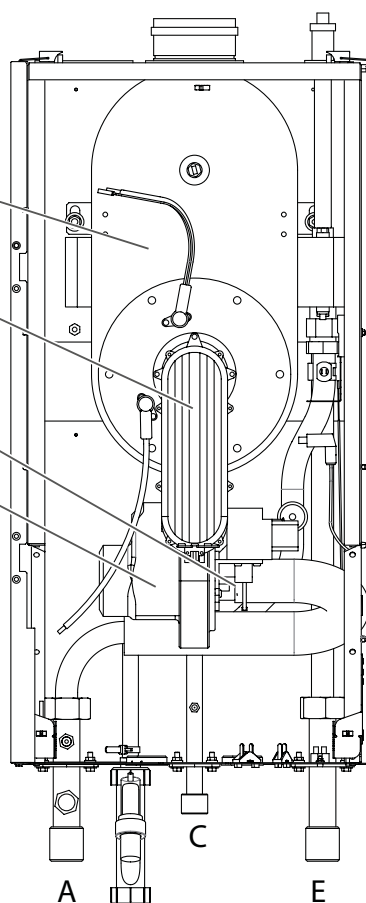
- Genus Premium Evo HP is made up with the best material available: the stainless steel used for the primary heat exchanger guarantee **high reliability and very long lifecycle**;
- The addition of heating return filter guarantees **boiler protection from water impurities accumulation**;
- The use of 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

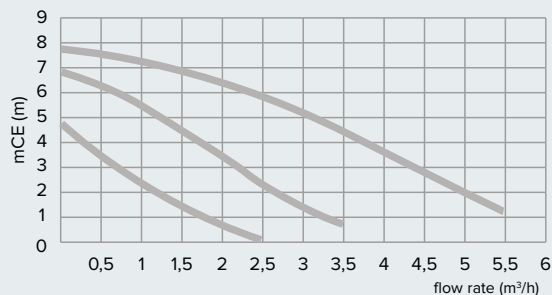
POWER SPECIFICATIONS

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

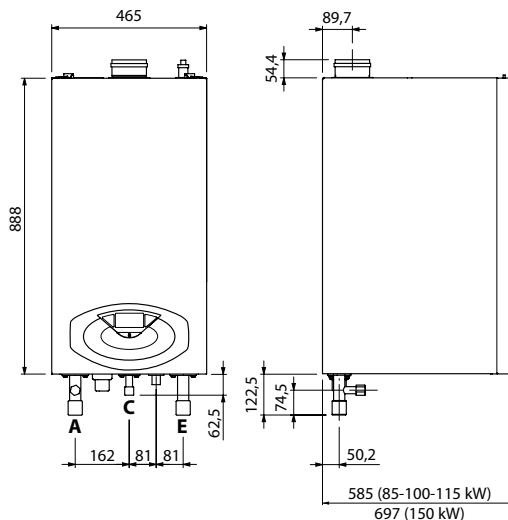
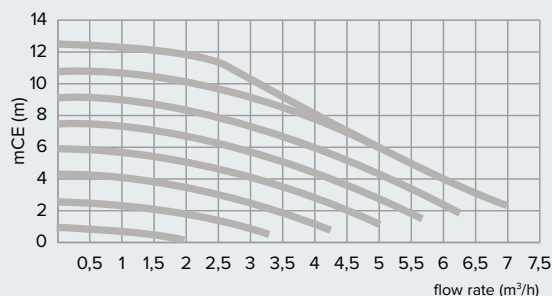
EMISSIONS

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)



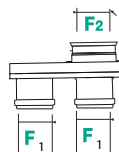
Residual Head (full modulating circulator as accessory)



LEGEND

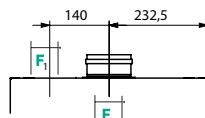
- A: Central heating flow line
- C: Gas connector
- E: Central heating return
- F: Exhausts (Ø mm)
- F1: 100
- F2: 110/150

Model FF - Coaxial exhausts

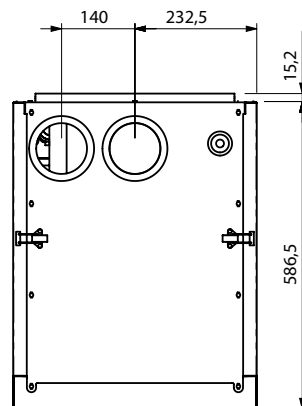


Maximum pipe length: Ø110/150 up to 5 m (only for 85-100)

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					
		3581566	3581567	3581568	3581569

OPTIONAL ACCESSORIES**CODE**

Sensys system interface



Room sensor

Bus interface- LPG transformation kit

Included

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

For the whole accessories list see pag. 116

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