

## Power HT 115-320 kW



- Aluminium-silicon exchanger with glass wool insulation: high efficiency and reliability and long life
- Low emissions pre-mixing burner
- Digital control panel with back-lighted LCD display and advanced electronics to manage single and cascade installations (flue system to install up to 2 boilers in cascade)
- Easy to transport and to install
- Outdoor sensor
- Circulating pump not included inside the boiler

### Hydraulic system

Hydraulic connections on the rear side  
Sticking pump check system  
Flow and return NTC sensors  
Premixed low-emissions burner

### Thermoregulation system

Built-in climatic regulation  
(outdoor sensor included)  
Mixed zones systems  
(high and low temperatures)  
zone controllers as optional  
Cascade system installation option  
(up to 16 boilers)  
NTC sensor for DHW cylinder  
control option  
Heating and DHW scheduler  
integrated in the control panel

### Control system

Full electronic anti-frost device  
Electronic thermometer  
Flow over-temperature thermostat

## Outputs from 115 to 320 kW

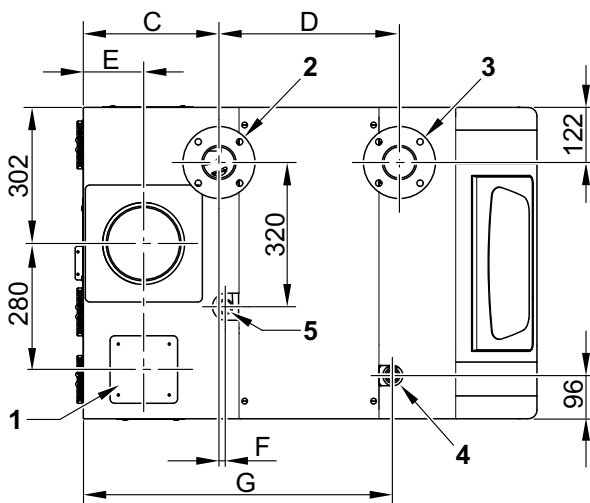
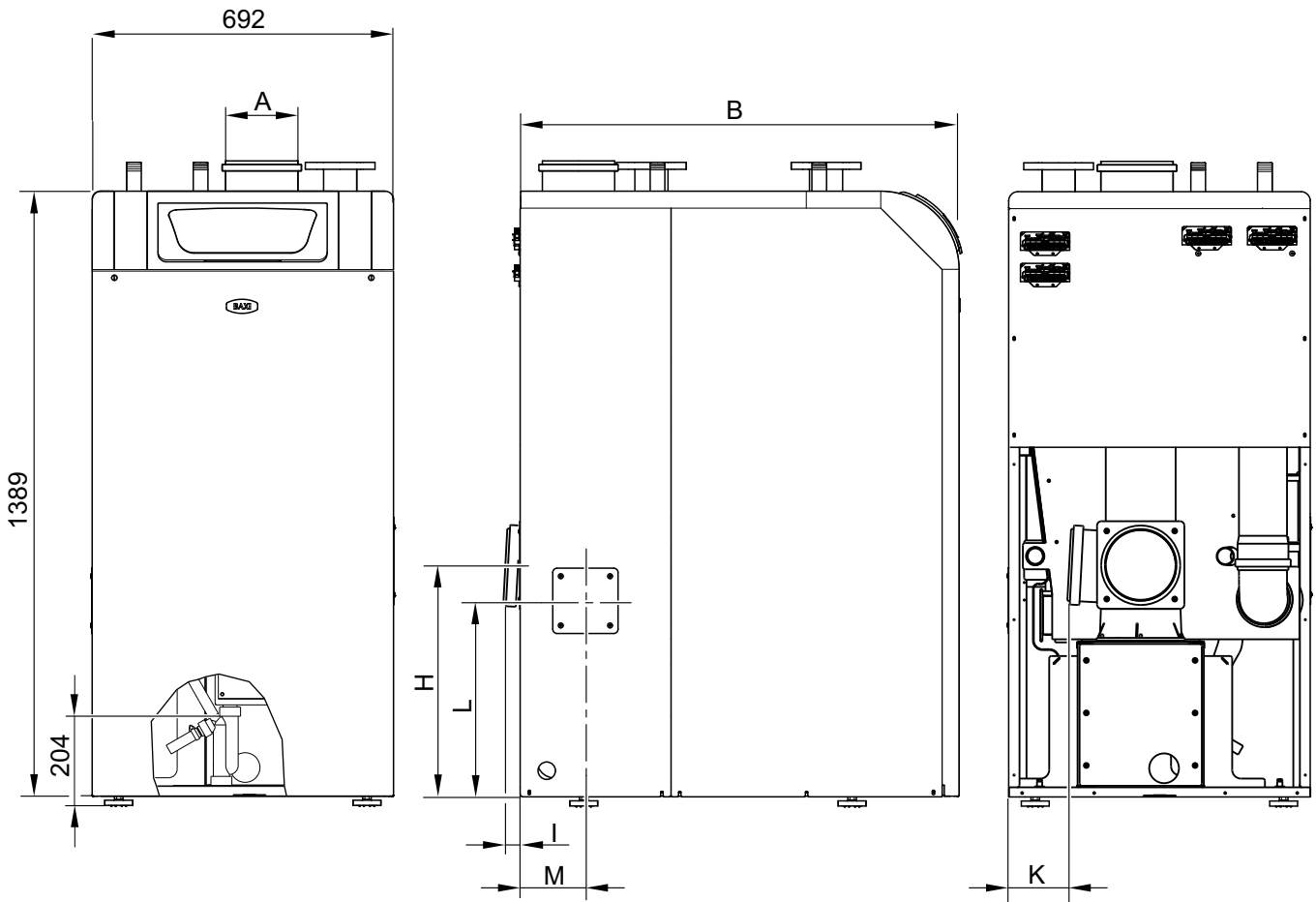
		Heating only					
		1.115	1.135	1.180	1.230	1.280	1.320
Maximum heat input (heating)	kW	114	125	170	215	260	300
Minimum heat input	kW	20	20	28	35	42	48
Rated heat output <i>Prated</i>	kW	115	122	166	210	255	294
Useful heat output at rated heat output and high temperature regime** $P_u$	kW	110,9	121,6	165,8	210	255	294
Useful heat output at 30% of rated heat output and low temperature regime** $P_L$	kW	37,2	40,8	55,5	69,7	84,4	97,3
Useful efficiency at rated heat output and high temperature regime* $\eta_H$	%	87,7	87,7	87,9	88	88,2	88,3
Useful efficiency at 30% of rated heat output and low temperature regime** $\eta_L$	%	98	98	98	97,4	97,5	97,4
Efficiency $P_H$ (lower calorific value) - average temperature 70 °C	%	97,3	97,3	97,5	97,9	98	98
Efficiency 30% (lower calorific value) - return temperature 30 °C	%	108,8	108,8	108,8	105,4	105,6	105,7
NOx emissions	mg/kWh	38	38	38	39	39	39
Minimum working temperature	°C	-5	-5	-5	-5	-5	-5
Heating temperature range	°C	25-80	25-80	25-80	25-80	25-80	25-80
Minimum pressure heating circuit	bar	0,5	0,5	0,5	0,5	0,5	0,5
Maximum pressure heating circuit	bar	6	6	6	6	6	6
Flue	ø mm	160	160	160	200	200	200
Maximum flue mass flow rate	kg/s	0,052	0,057	0,077	0,097	0,118	0,136
Minimum flue mass flow rate	kg/s	0,0091	0,091	0,0127	0,016	0,019	0,021
Maximum flue temperature	°C	60	61	61	61	61	61
Dimensions (h x l x p)	mm	1445x692x1008	1445x692x1008	1445x692x1008	1458x692x1231	1458x692x1324	1458x692x1417
Net weight	kg	205	205	240	285	314	344
Gas type		Natural gas					
Power consumption	W	160	170	200	330	350	410
Auxiliary electrical power consumption - Full load <i>elmax</i>	kW	0,160	0,170	0,200	0,330	0,350	0,410
Auxiliary electrical power - Partial load <i>elmin</i>	kW	0,031	0,031	0,034	0,040	0,046	0,051
Auxiliary electrical power - Stand-by $P_{SB}$	kW	0,004	0,004	0,004	0,004	0,004	0,004
Suggested pumps		Magna 3 40-80 <sup>(1)</sup>	Magna 3 40-80 <sup>(1)</sup>	Magna 3 40-80 <sup>(1)</sup>	Magna 3 40-80 <sup>(1)</sup>	Magna 3 40-80 <sup>(1)</sup>	Magna 3 40-80 <sup>(1)</sup>

\* High temperature regime: 60°C return temperature at heater inlet and 80°C flow temperature at heater outlet

\*\* Low temperature: 30°C return temperature (at heater inlet)

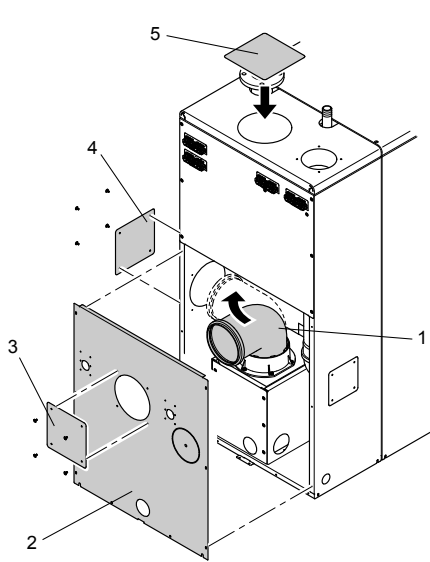
<sup>(1)</sup> In case of Grundfos Magna modulating pump installation a signal converter (230V / 0-10V KPM) must be ordered

## Dimensions Power HT 115-180 kW

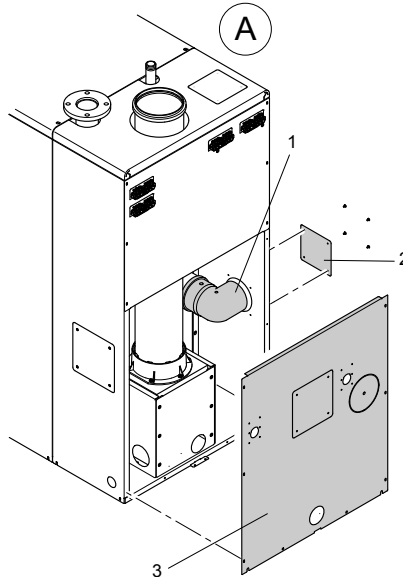


		Power HT 1.115	Power HT 1.135	Power HT 1.180
1 Air-flue duct	mm	Ø 110	Ø 110	Ø 110
2 Heating system flow		Flange DN 65		
3 Heating system return		Flange DN 65		
4 Gas inlet		R1"	R1 1/2"	
5 Safety group connection		R1"		
A	mm	160		
B	mm	1008		
C	mm	301		
D	mm	401		
E	mm	134		
F	mm	14		
G	mm	687		
H	mm	530		
I	mm	30		
K	mm	139		
L	mm	450		
M	mm	150		

## Installation instructions Power HT 115-180 kW

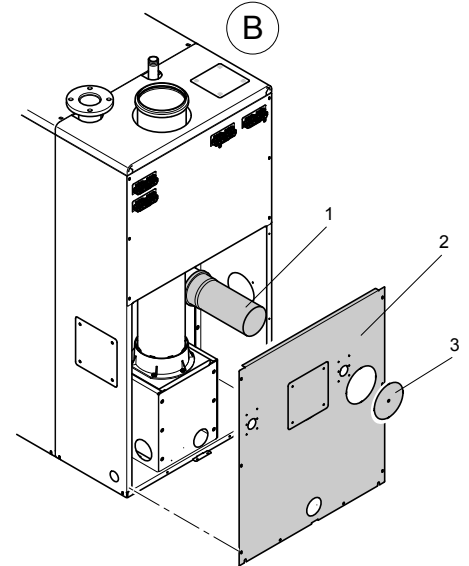


1. Remove lower rear wall (2) of the Power HT
2. Remove the gas connection leading upward and insert a 90° bend (1)
3. Turn 90° bend (1) in the desired position (side or towards the rear)
4. Remove either the rear cover plate (3) or the side cover plate (4)
5. Mount lower rear wall (2)



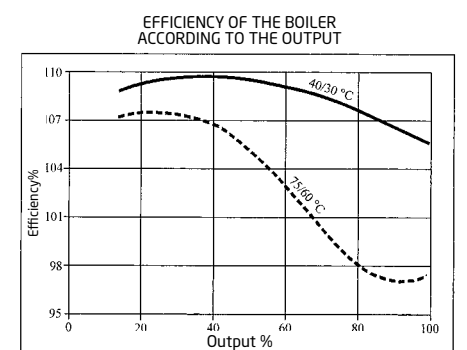
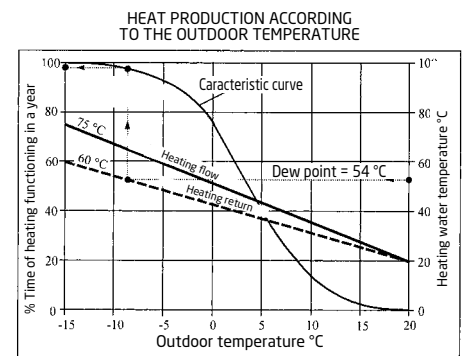
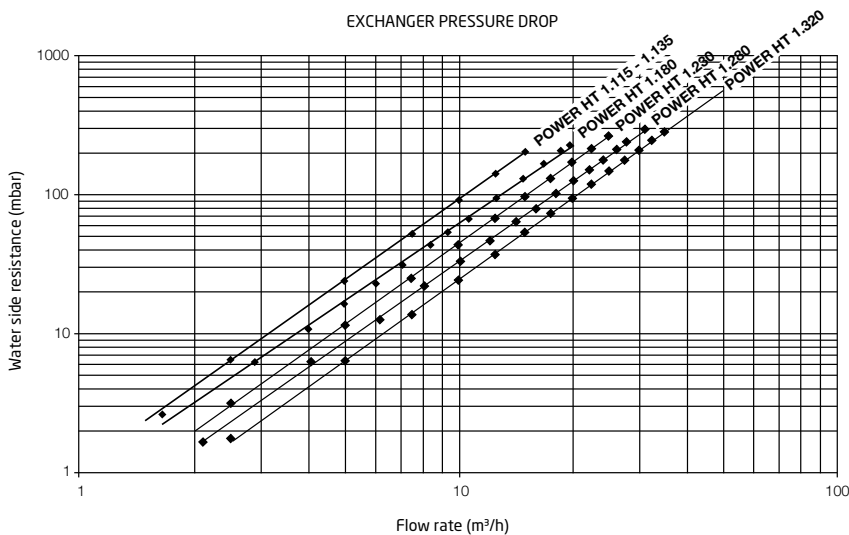
### Side supply air connection (A)

1. Remove lower rear wall (3)
2. Remove the covering panel (2)
3. Mount the bend of the intake pipe (1)
4. Turn intake pipe elbow into the side position (1)
5. Mount lower rear wall (3)

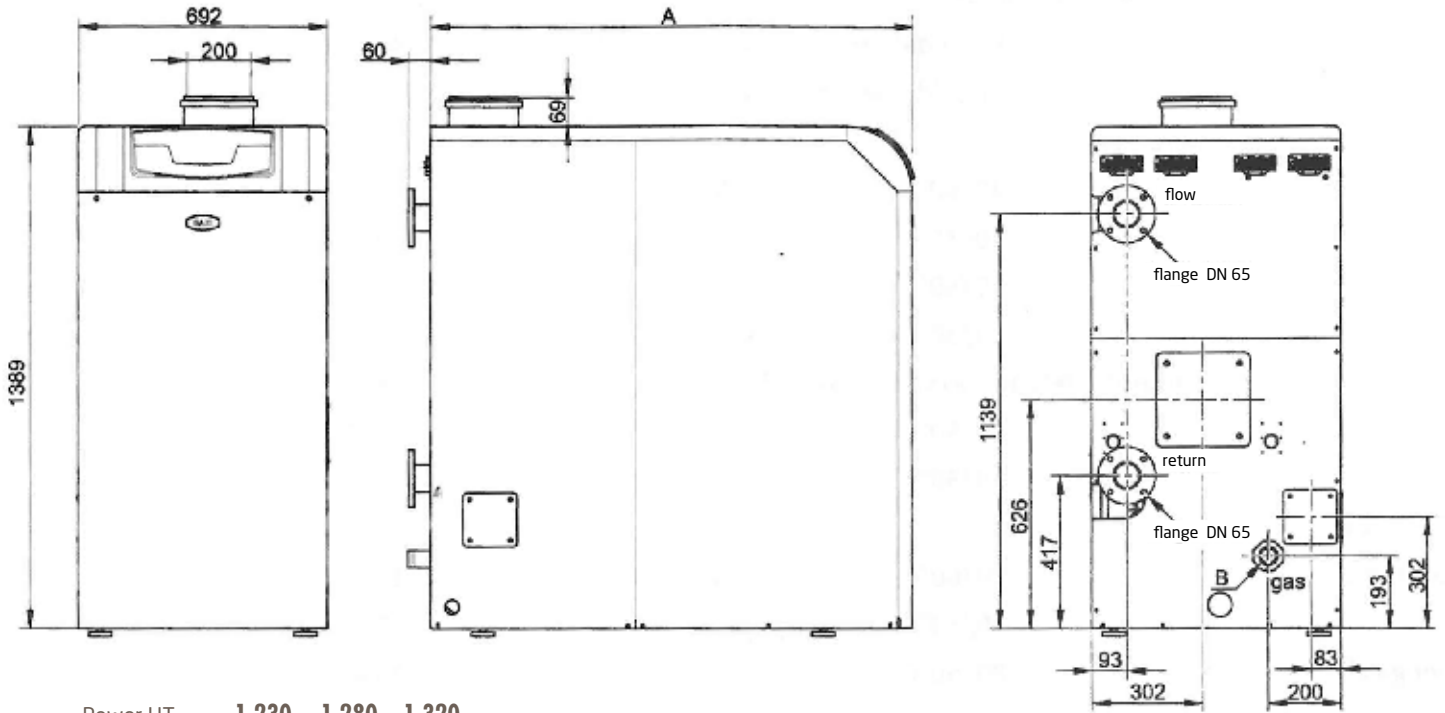


### Rear supply air connection (B)

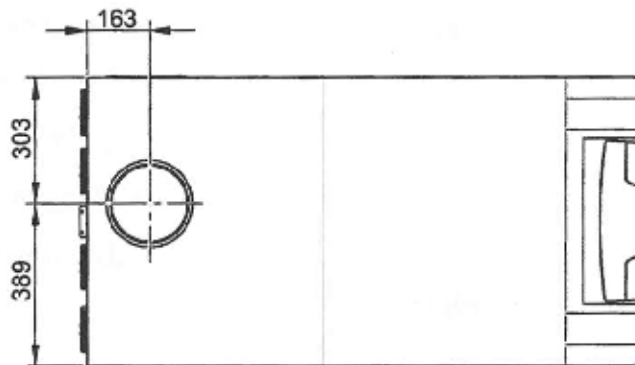
1. Remove lower rear wall (2)
2. Take out cover plate (3)
3. Mount straight intake pipe
4. Mount lower rear wall (2)



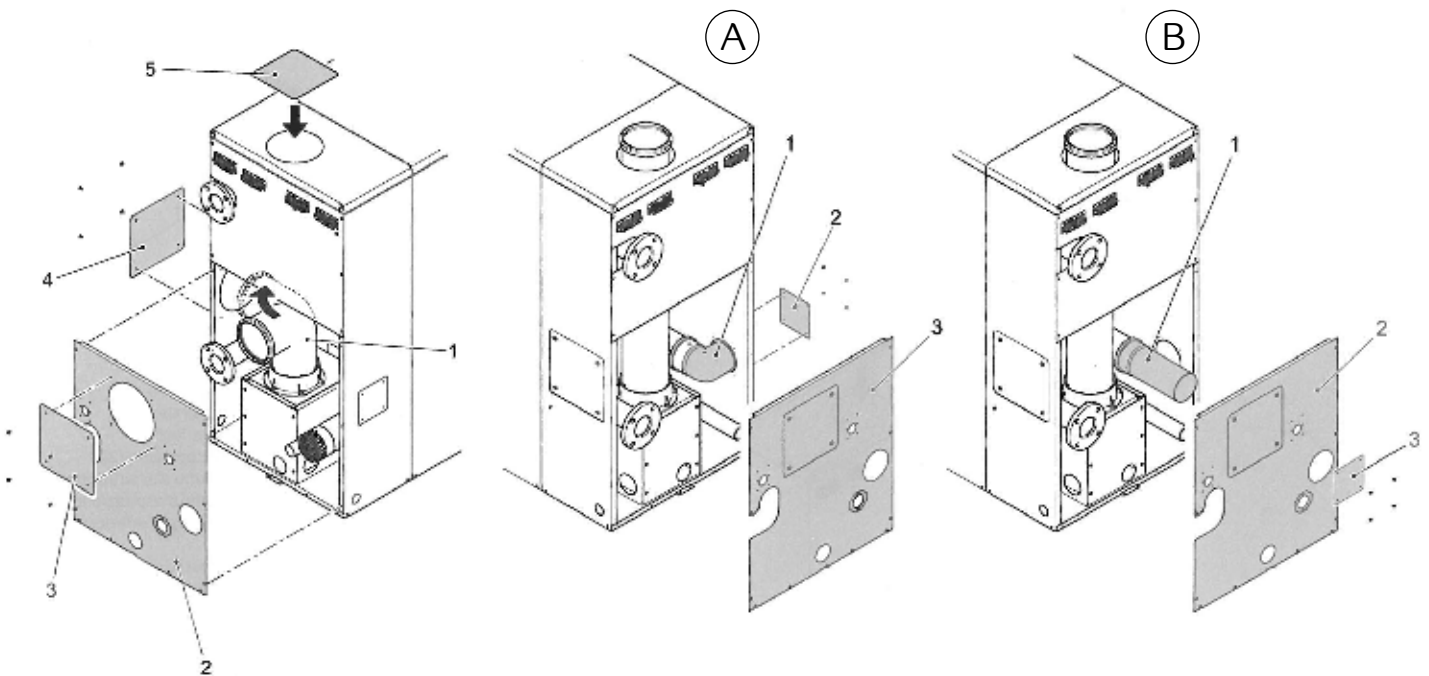
## Dimensions Power HT 230-320 kW



Power HT	<b>1.230</b>	<b>1.280</b>	<b>1.320</b>
Depth (A) mm	<b>1.171</b>	<b>1.264</b>	<b>1.357</b>



## Installation instructions Power HT 230-320 kW



1. Remove lower rear wall (2) of the Power HT
2. Remove the gas connection leading upward and insert a 90° bend (1)
3. Turn 90° bend (1) in the desired position (side or towards the rear)
4. Remove either the rear cover plate (3) or the side cover plate (4)
5. Mount lower rear wall (2)

### Side supply air connection (A)

1. Remove lower rear wall (3)
2. Remove the covering panel (2)
3. Mount the bend of the intake pipe (1)
4. Turn intake pipe elbow into the side position (1)
5. Mount lower rear wall (3)

### Rear supply air connection (B)

1. Remove lower rear wall (2)
2. Take out cover plate (3)
3. Mount straight intake pipe
4. Mount lower rear wall (2)

### Max lengths for the flue pipes with room air dependent working (type B installation)

Model		Power HT 1.115	Power HT 1.135	Power HT 1.180	Power HT 1.230	Power HT 1.280	Power HT 1.320
Flue pipe ø	mm	160	160	160	200	200	200
Max L. pipe inc. 90° bend	m	60	60	30	60	60	60

These lengths are only for single boilers  
 Decrease of the total lengths of the flue pipes:  
 1 piece 90° bend: 5 m  
 1 piece 45° bend: 2 m  
 1 piece 15° bend: 1 m