### **PRODUCT: Buderus GE615 Boiler**

### **GE615 Floor Standing High Efficiency Boiler:**

GE615 - 570	511 - 570kW
GE615 - 660	571 – 660kW
GE615 - 740	661 - 740kW
GE615 - 820	741 - 820kW
GE615 - 920	821 - 920kW
GE615 - 1020	921 - 1020kW
GE615 - 1110	1021 - 1110kW
GE615 - 1200	1111 - 1200kW



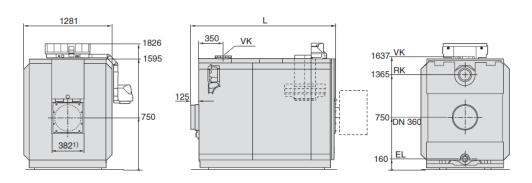
- ► Cast iron sectional boiler for use with pressure jet burners
- ► High efficiency up to 97% (NCV)
- ► G/GE Cast Iron Thermostream boilers have Ecostream Technology® patented worldwide
- ▶ Output available between 570kW and 1200kW
- ▶ Delivered as loose sections ready to be assembled on site
- ▶ No minimum flow rate
- ► Flexible controls option using the Buderus 4000 controls system
- Can be used in conjunction with renewable technologies such as solar thermal, heat pumps and CHP
- System safety kits as per BS:6644 are available upon request

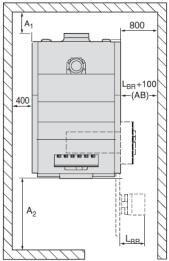




### **PRODUCT: Buderus GE615 Boiler**

### **GE615 Dimensions & Clearances:**





## **GE615 Dimensions (570 - 820kW):**

GE615		Unit	570	660	740	820	
Boiler sections			9	10	11	12	
Height	Н	mm	1826				
rieigiit	H <sub>K</sub>	mm		1595			
Length	L	mm	1926	2096	2266	2436	
Lengui	LK	mm	1804	1974	2144	2314	
Width		mm	1281				
Net weight (dry)		kg	2505 2747 2990 32				
Elua gas connection	Ø D <sub>AA</sub>	DN	360				
Flue gas connection	$H_{AA}$	mm	750				
Boiler flow connection	Ø VK	mm	DN150*				
Boller flow conflection	Hvk	mm	1637				
Boiler return connection	Ø RK	mm	DN150*				
Boller return connection	H <sub>RK</sub>	mm		1365			
Cold fill / drain	EL	Inch		Rp	) 3/4		
T / I	Length	mm	1804	1974	2144	2314	
Transport / Handling Assembled block	Width	mm	1096	1096	1096	1096	
ASSCRIBICA BIOCK	Height	mm	1640	1640	1640	1640	
To a constant / Lloudine	Length	mm	170				
Transport / Handling Unassembled sections	Width	mm	1096				
	Height	mm	1640				

<sup>\*</sup>The flow and return connections are DN150 flanges as standard, but these can be reduced to either DN125 or DN100 to match site requirements.





### **PRODUCT: Buderus GE615 Boiler**

## **GE615 Dimensions (920 - 1200kW):**

GE615		Unit	920	1020	1110	1200		
Boiler sections			13	14	15	16		
Hoight	Н	mm		1826				
Height	H <sub>K</sub>	mm		1595				
Longth	L	mm	2606	2776	2946	3116		
Length	LK	mm	2484	2654	2824	2994		
Width		mm	1281					
Net weight (dry)		kg	3475 3710 3953 414					
Elve see connection	Ø D <sub>AA</sub>	DN	360					
Flue gas connection	H <sub>AA</sub>	mm		750				
Dellas flavo compaction	Ø VK	mm	DN150*					
Boiler flow connection	H <sub>VK</sub>	mm	1637					
Dellas vatrous compostion	ØRK	mm	DN150*					
Boiler return connection	H <sub>RK</sub>	mm	1365					
Cold fill / drain	EL	Inch	Rp 3/4					
T ./ III	Length	mm	2484	2654	2824	2994		
Transport / Handling Assembled block	Width	mm	1096	1096	1096	1096		
Assembled block	Height	mm	1640	1640	1640	1640		
T / II IP	Length	mm	170					
Transport / Handling Unassembled sections	Width	mm		1096				
	Height	mm	1640					

<sup>\*</sup>The flow and return connections are DN150 flanges as standard, but these can be reduced to either DN125 or DN100 to match site requirements.

## **GE615 Service Clearances:**

GE615		Unit	570	660	740	820	
Front clearance	A <sub>2</sub>	mm	2300 (1400)				
Rear clearance*	A <sub>1</sub>	mm	1150 (820)				
Left clearance		mm	400				
Right clearance	AB	mm	Length of Burner (LBR) + 100				

GE615	Unit	920	1020	1110	1200		
Front clearance	A <sub>2</sub>	mm	3000 (1500)				
Rear clearance*	A <sub>1</sub>	mm	1150 (820)				
Left clearance		mm	400				
Right clearance	AB	mm	Length of Burner (LBR) + 100				

Recommended clearances around the boiler, values in brackets are the minimum required clearances.

Please note that if the burner door hinge is changed to the opposite side, the left and right clearances must be swapped





### **PRODUCT: Buderus GE615 Boiler**

### GE615 Technical Specification (570 - 820kW):

GE615		Unit	570	660	740	820	
Rated heat output	Full load	kW	570	660	740	820	
	Part load	kW	511	571	661	741	
Rated heat input	Full load	kW	616.2	713.5	800.0	886.5	
Nateu fleat iliput	Part load	kW	546.5	610.7	707.0	792.5	
Net efficiency (NCV)		%	96.6	96.6	96.7	97.0	
Seasonal efficiency****		%	86.3	86.3	86.4	86.6	
Max safety temperature setting*		°C		12	20		
Max working pressure		bar		(	3		
Water content		I	561	621	681	741	
Water flow resistance	ΔT 20k	mbar	26.5	26.5	26.5	26.5	
water now resistance	ΔT 11k	mbar	82.0	83.0	83.0	83.0	
Flue gas temperature**	Full load	°C	170-180				
Fide gas temperature	Part load	°C		140			
	Full load		0.2328	0.2602	0.3012	0.3376	
Flue gas mass flow rate -		kg/s	- 0.2625	0.3039	- 0.3408	- 0.3776	
Gas***	Part load	kg/s	0.2625	0.3039	0.3408	0.3776	
	r art ioau	ng/s	0.1342	0.2592	0.2002	0.2213	
Flue gas mass flow rate -	Full load	kg/s	-	-	-	-	
Oil***		<u> </u>	0.2615	0.3028	0.3396	0.3763	
	Part load	kg/s	0.1537	0.1778	0.1995	0.2207	
CO <sub>2</sub> content	Gas	%	10				
CO2 content	Oil	%	13				
Flue gas resistance		mbar	2.4	3.4	4.2	4.2	
Required flue draught		Pa		(	)		
CE certification, product ID no.				CE-0461	L AU 417		

Please note: To maintain the boiler operating conditions, we recommend the use of a back-end protection system consisting of individual primary pump and back-end mixing valve.





<sup>\*</sup>The safety limit cut-out temperature can be adjusted within the 4000 series controls dependant on system requirements,

The maximum possible system flow temperature is the safety limit temperature minus 18k.

<sup>\*\*</sup>Calculated flue gas temperatures used for cross-sectional calculation according to EN 303

The actual flue gas temperature may differ from this, subject to burner setting and actual system temperature.

<sup>\*\*\*</sup>Flue gas mass flow has been measured at 60% for part load, and full load values relate to the upper and lower output range.

<sup>\*\*\*\*</sup>The seasonal efficiency has been calculated in accordance with the equation set out in the non-domestic building services compliance guide 2010.

### **PRODUCT: Buderus GE615 Boiler**

### GE615 Technical Specification (920 - 1200kW):

GE615		Unit	920	1020	1110	1200	
Rated heat output	Full load	kW	920	1020	1110	1200	
hated fleat output	Part load	kW	821	921	1021	1111	
Rated heat input	Full load	kW	994.6	1102.0	1200.0	1297.0	
nated fleat lilput	Part load	kW	878.1	985.0	1092.0	1188.0	
Net efficiency (NCV)		%		97	7.0		
Seasonal efficiency****		%		86	6.6		
Max safety temperature setting*		°C		12	20		
Max working pressure		bar		(	3		
Water content		I	801	861	921	981	
Water flow resistance	ΔT 20k	mbar	26.5	26.5	26.5	26.5	
Water now resistance	ΔT 11k	mbar	83.0	83.0	83.0	83.0	
Flue gas temperature**	Full load	°C	170-180				
Fide gas temperature	Part load	°C	140				
	Full load	. ,	0.3741	0.4196	0.4652	0.5061	
Flue gas mass flow rate -		kg/s	- 0.4237	- 0.4694	0.5112	- 0.5525	
Gas***	Part load	kg/s	0.4237	0.4694	0.3112	0.3246	
	1 art load	Ng/3	0.3727	0.4181	0.4635	0.5043	
Flue gas mass flow rate -	Full load	kg/s	-	-	-	-	
Oil***			0.4222	0.4678	0.5093	0.5505	
	Part load	kg/s	0.2479	0.2750	0.2992	0.3234	
CO <sub>2</sub> content	Gas	%		10			
oo <sub>2</sub> content	Oil	%	13				
Flue gas resistance		mbar	4.1	4.5	5.4	5.8	
Required flue draught		Pa		(	)		
CE certification, product ID no.			CE-0461 AU 417				

Please note: To maintain the boiler operating conditions, we recommend the use of a back-end protection system consisting of individual primary pump and back-end mixing valve.





<sup>\*</sup>The safety limit cut-out temperature can be adjusted within the 4000 series controls dependant on system requirements,

The maximum possible system flow temperature is the safety limit temperature minus 18k.

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The actual flue gas temperature may differ from this, subject to burner setting and actual system temperature.

<sup>\*\*\*</sup>Flue gas mass flow has been measured at 60% for part load, and full load values relate to the upper and lower output range.

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