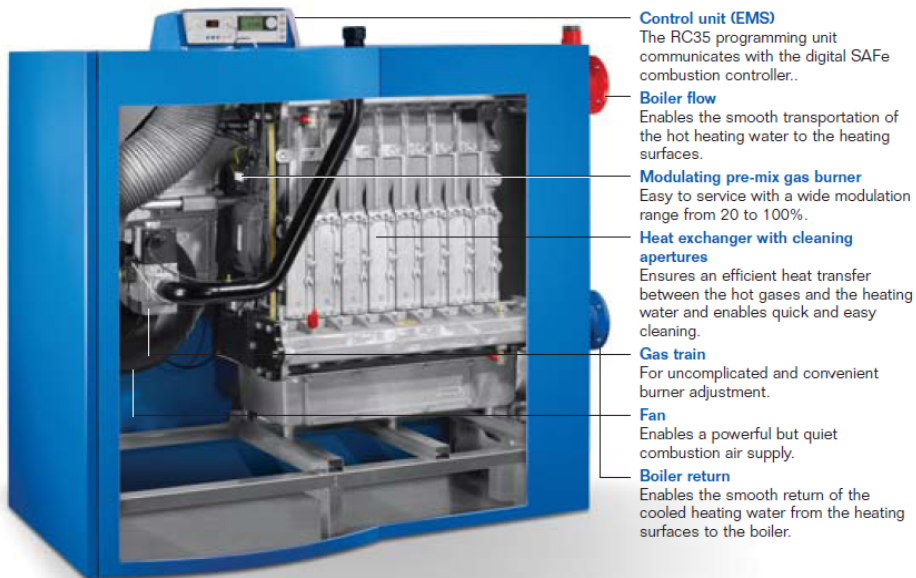


Key Features

- **GB402 Floor Standing Condensing Boiler**
- Key features
- Individual boiler outputs from 320 - 620 kW
- Suitable for installation in multiple boiler cascades
- Efficiency of 109.7% at 40/30°C
- NOx emissions of 40mg/kWhr
- Maximum operating pressure of 6 bar
- Operates quietly at 55dB(A) at full load
- Fully modulating pre-mix burner
- Low weight (depending upon output) 410kg to 520kg
- Easy transport, assembly and installation.
- Controls can be installed at the side or on the front of the boiler
- EMS control with auto-diagnosis-system
- Aluminium/Silicon heat exchanger
- Water-side stream optimised for effective and robust operation
- Simple commissioning and maintenance
- Sealed combustion operation possible



GB402 Floor Standing Condensing Boiler

Dimensions

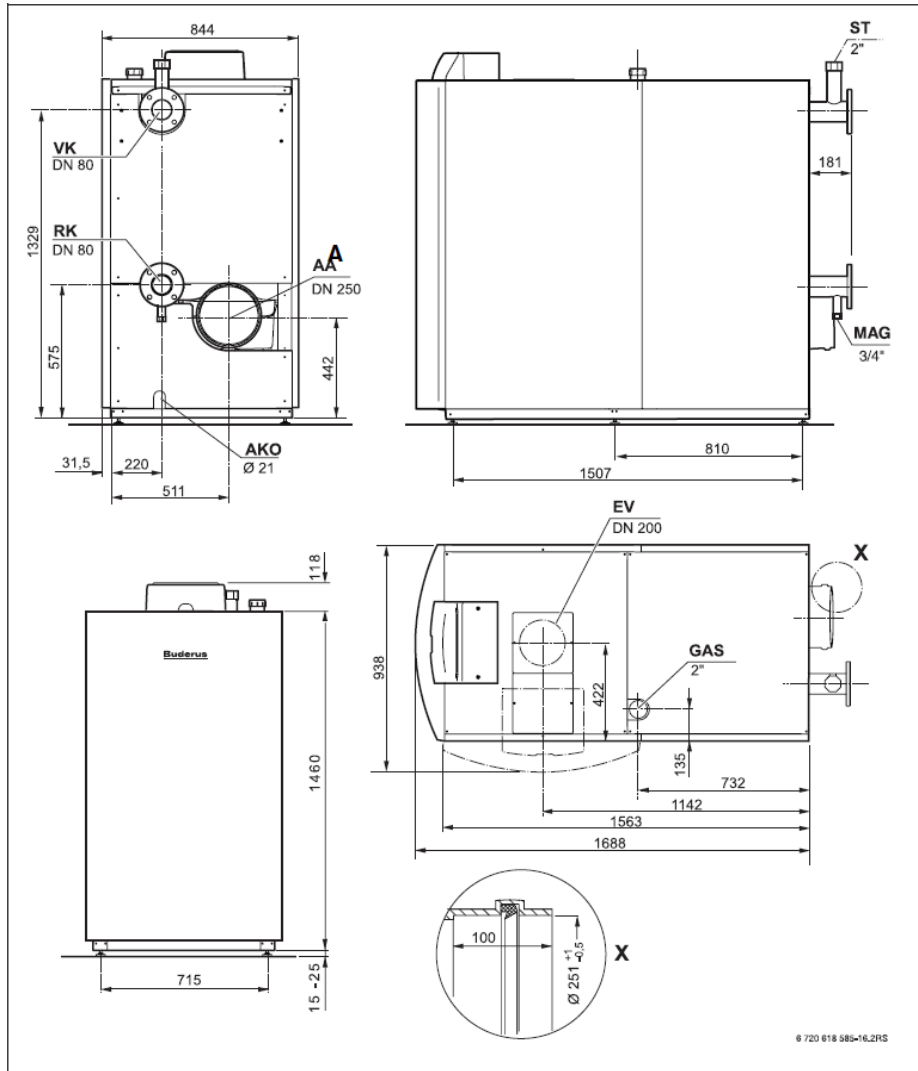


Fig. 2 Dimensions and connections for the Logano plus GB402 (dimensions in mm)

- | | |
|--|--|
| AA Flue gas outlet | ST Safety valve or safety assembly connection |
| AKO Condensate outlet | VK Boiler flow |
| EV Combustion air pipe inlet (balanced flue operation only) | |
| GAS Gas supply | |
| RK Boiler return | |

GB402 Floor Standing Condensing Boiler

Installed dimensions

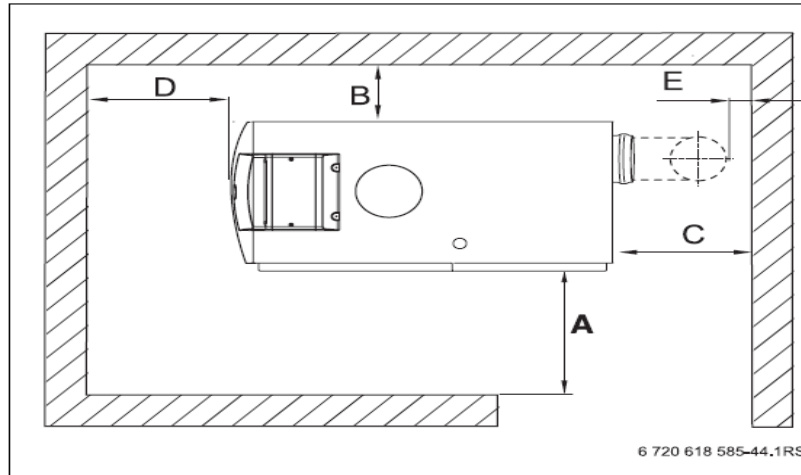


Fig. 8 Wall clearances in the installation room

Dimension	Wall clearance in mm	
	minimum	recommended
A	700	1000
W	150	400
C¹⁾	–	–
D	700	1000
E¹⁾	150	400

Tab. 6 Recommended and minimum wall clearances
(dimensions in mm)

1) This clearance dimension applies independently of the installed flue system

Maintain the stated minimum dimensions when siting the boiler. Select the recommended wall clearances to enable easy access for installation, maintenance and service work.

GB402 Floor Standing Condensing Boiler

	Unit	Boiler model / variant				
		GB402-320	GB402-395	GB402-470	GB402-545	GB402-620
Performance						
Nominal heat output at 50/30°C	kW	66.7 - 320.0	80.5 - 395.0	95.6 - 468.2	113.0 - 545.0	127.6 - 621.4
Nominal heat output at 80/60°C	kW	58.9 - 297.2	72.6 - 367.4	85.2 - 435.8	100.7 - 507.0	114.9 - 577.1
Rated heat input	kW	61.0 - 304.8	75.2 - 376.2	89.5 - 447.6	103.8 - 519.0	118.0 - 590.0
Net efficiency [NCV]	%	110	110	110	110	110
Seasonal efficiency [L2B]	%	96.4	96.8	96.7	97	96.8
Standby heat loss (30K / 50 K)	%	0.20/0.33	0.16/0.27	0.14/0.23	0.12/0.20	0.11/0.17
Maximum working pressure	bar	6	6	6	6	6
Flow temperature	°C	30 - 85	30 - 85	30 - 85	30 - 85	30 - 85
Water content	litres	47.3	53.3	59.3	65.3	75.3
Pressure drop @ ?T20°C	mbar	99	105	95	108	113
Flow rate @ ?T20°C	kg/s	3.82	4.72	5.61	6.51	7.41
Pressure drop @ ?T11°C / flow rate kg/s	mbar	325	350	320	360	380
Flow rate @ ?T11°C	kg/s	6.95	8.58	10.21	11.84	13.46
Noise level at 1m, full load	dB[A]	57.6	59.9	58.9	59.6	59.8
Noise level at 1m, part load	dB[A]	n.a.	n.a.	n.a.	n.a.	n.a.
Flue gas						
NOx rating at 0% oxygen, dry, mg/kWh		40	40	40	40	40
Flue gas temperature 80/60°C, full load	°C	65	65	65	65	65
Flue gas temperature 80/60°C, part load	°C	58	58	58	58	58
Flue gas temperature 50/30°C, full load	°C	45	45	45	45	45
Flue gas temperature 50/30°C, part load	°C	30	30	30	30	30
Flue gas mass flow rate 80/60°C, full load	g/s	142.4	174.5	207.1	249.6	271.9
Flue gas mass flow rate 80/60°C, part load	g/s	28.7	36.8	40.6	48	53.2
Feed pressure of fan	Pa	100	100	100	100	100
CO2 content at full load	%	9.1	9.1	9.1	9.1	9.1
CO2 content at part load	%	9.3	9.3	9.3	9.3	9.3
Condensate						
Condensate water rate	l/h	38.3	47.4	56.3	65.3	74.3
Acidity of condensate water	pH	approx. 4.1	approx. 4.1	approx. 4.1	approx. 4.1	approx. 4.1
Gas supply						
Gas pressure	mbar	17 - 25	17 - 25	17 - 25	17 - 25	17 - 25
Gas rating at 15°C 1013mbar (natural gas)	m³/h	34.3	42.4	50.4	58.4	66.5
Electrical supply						
Operating voltage	V/Hz	230/50	230/50	230/50	230/50	230/50
Electrical supply (number of phases)		1	1	1	1	1
Maximum fuse rating	A	10	10	10	10	10
Electrical power consumption, full load (excluding pump)	W	395	449	487	588	734
Electrical power consumption, part load (excluding pump)	W	40	45	42	45	49
Electrical ingress protection		IPX0D	IPX0D	IPX0D	IPX0D	IPX0D