

Gassero

technology for your comfort



ECO-FRIENDLY

FLOOR MOUNT CONDENSING BOILERS

www.gassero.com

Floor Mount Boilers

● Green dots indicate single heat exchanger ● Blue dots indicate twin heat exchanger.

Alubox X-treme

Capacity (kW)	
70	
115	
150	
170	
208	
210	
250	●
290	
300	●
335	
350	●
430	●
500	
530	
535	●
540	
640	●
660	
700LX	●
710	●
860	
880	●
1100	
1030	
1060	
1065	●
1160	
1315	●
1320	
1330	
1460	●
1550	●
1760	●
2060	
2200	
2630	●
2660	
2920	●
3100	●
3500	

Alubox

Capacity (kW)	
70	●
115	●
150	●
170	
208	●
210	
250	
290	●
300	
335	
350	
430	
500	
530	
535	
540	●
640	
660	
700	●
710	
860	
880	
1100	●
1030	
1060	
1065	
1160	
1315	
1320	
1330	
1460	
1550	
1760	
2060	
2200	●
2630	
2660	
2920	
3100	
3500	●

Ultrabox

Capacity (kW)	
70	
115	
150	
170	●
208	
210	●
255	●
290	
300	
315	●
350	
415	●
500	●
530	●
535	
540	
640	
660	
700	●
710	
860	●
880	
1100	
1030	●
1060	●
1065	
1160	●
1315	
1320	●
1330	●
1460	
1550	
1760	
2060	●
2200	
2630	
2660	●
2920	
3100	
3500	

Superbox

Capacity (kW)	
70	
115	
150	●
170	
208	
210	
250	
290	
300	
335	
350	
430	
500	●
530	
535	
540	
640	
660	
700	
710	
860	
880	
1000	●
1030	
1060	
1065	
1160	
1315	
1320	
1330	
1460	
1550	
1760	
2060	
2200	
2630	
2660	
2920	
3100	
3500	

Floor Mount Boilers

Alubox X-treme

- › 250-3100 kW capacity range
- › Aluminum heat exchanger
- › Low NOx value
- › Low flue gas temperatures
- › Turndown ratio up to 8:100
- › Efficiency up to %108,7 according to EN 15502-1+A1



Alubox

- › 70-3500 kW capacity range
- › Aluminum heat exchanger
- › Low NOx value
- › Low flue gas temperatures
- › Turndown ratio up to 14:100
- › Efficiency up to %108,2 according to EN 15502-1+A1



Ultrabox

- › 170-2660 kW capacity range
- › Stainless steel heat exchanger
- › Low NOx value
- › Low flue gas temperatures
- › Turndown ratio Up to 4:100
- › Efficiency up to %108,1 according to EN 15502-1+A1



Superbox

- › 150-1000 kW capacity range
- › Stainless steel heat exchanger
- › Low NOx
- › Low flue gas temperatures
- › Turndown ratio up to 3:100
- › Efficiency up to %109 according to EN 15502-1+A1



Alubox X-treme

Floor Mount Condensing Boiler



- 250-3100 kW capacity range
- Low NOx value
- Low flue gas temperatures
- Aluminum heat exchanger
- Efficiency up to %108,7 according to EN 15502-1+A1
- Turndown ratio up to 8:100
- Cascade operation option up to 16 boilers
- Low noise level
- Energy class A
- 6 bar operation pressure



Alubox X-treme



- ▶ High corrosion and lime resistance
- ▶ Latest technology, low emission premix burner
- ▶ High modulating and energy-efficient fan

**Smaller size,
High capacity.**

Safety Features:

- Frost protection
- Overheat protection
- Low and high water pressure safety
- Flue gas temperature and water pressure safety
- Pump/valve protection
- Legionella protection for DHW tank
- Condensate blockage safety with siphon sensor
- Fan speed safety
- Surface temperature safety
- High pressure switch for gas line

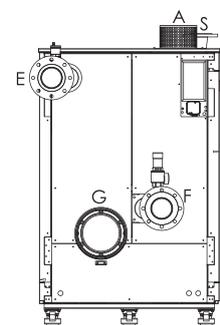
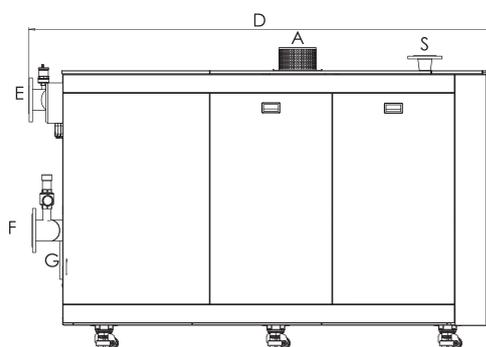
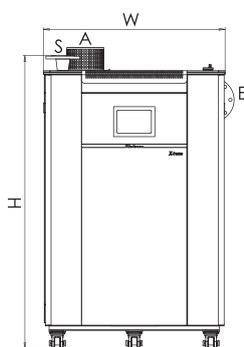
Alubox X-treme

Floor Mount Condensing Boiler

Technical Specifications

		Alubox X-treme						
		250	300	350	430	535	640	700 LX
THERMAL SPECIFICATIONS								
	UNIT							
Nominal heat input (min/max)	kW	48,0/242,0	48,0/285,0	65,0/335,0	85,0/425,0	102,0/510,0	75,0/615,0	118,4/672,4
Nominal heat output (80/60°C) (min/max)	kW	46,8/237,0	46,8/279,5	63,7/328,3	82,5/416,0	99,9/499,8	73,8/601,4	111,9/650,4
Nominal heat output (50/30°C) (min/max)	kW	51,4/254,0	51,4/302,0	70,2/351,7	91,6/445,9	107,1/540,6	81,0/641,4	127,6/702,0
Heating efficiency (80/60°C) (min/max)	%	96,0/98,1	96,1/98,2	96,3/98,0	96,8/97,9	97,1/98,2	97,0/97,9	96,4/97,0
Heating efficiency (50/30°C) (min/max)	%	108,1/105,3	107,6/106,2	107,1/106,2	108,0/105,0	107,6/106,1	107,5/106,4	108,1/104,8
Partial load efficiency (36/30°C)	%	107,6	107,5	107,5	107,6	107,4	107,6	108,8
Turndown ratio		20:100	17:100	20:100	20:100	20:100	13:100	18:100
HYDRAULIC SPECIFICATIONS								
Operation water pressure (min/max)	bar	0,8/6	0,8/6	0,8/6	0,8/6	0,8/6	0,8/6	0,8/6
Exchanger water volume	lt	23,0	23,0	36,2	43,7	51,1	58,8	81,7
Water flow rate (min/max)	m³/h	2,2/10,9	2,2/12,9	3,1/15,2	3,9/19,3	5,3/23,5	3,9/28,4	5,5/30,3
Pump head	mWC	5,9	6,6	5,4	6,0	6,2	6,2	5,9
Max. operation temp.	°C	90	90	90	90	90	90	90
GAS AND COMBUSTION SPECIFICATIONS								
Gas type		G20	G20	G20	G20	G20	G20	G20
Gas supply pressure (G20/G31)	mbar	20	20	20	20	20	20	20
Flue gas pressure	Pa	60	60	60	71	78	195	220
Combustion products flow rate (min/max)	g/sc	22/110	22/127	31/154	40/201	47/238	39/271	54/308
CO2 emission (min/max)	%	8,9/8,9	8,9/9,0	9,1/9,2	9,2/9,2	8,7/8,9	8,8/9,1	8,9/9,1
CO emission (min/maks)	ppm	7,0/23,0	7,0/28,0	2,0/70,0	2,0/89,0	3,0/47,0	8,0/90,0	0/74,0
Flue gas temp. (80/60°C) (min/max)	°C	56,1/69,2	55,8/71,8	57,8/68,7	59,0/69,0	57,7/69,5	58,1/67,9	60,2/73,5
Flue gas temp. (50/30°C) (min/max)	°C	31,4/45,6	31,4/47,9	30,7/45,4	31,2/46,1	29,7/47,6	31,0/44,9	31,6/48,3
NOx class		6	6	6	6	6	6	6
NOx value	mg/kWh	35	41	34	39	21	16	25
Gas consumption (min/max)	m³/h	4,9/25,5	4,8/30,1	6,9/35,2	8,8/44,6	10,8/53,9	8,5/64,5	12,1/70,1
CONNECTION SPECIFICATIONS								
Boiler water inlet (F) / outlet diameter (E)	DN	50/50	50/50	100/100	100/100	100/100	100/100	100/100
Fresh air (A) / flue gas diameter (G) (B23)	mm	100/200	100/200	125/250	200/250	200/250	200/250	200/250
Gas supply diameter (S)	DN	32	32	50	65	65	65	65
ELECTRICAL SPECIFICATIONS								
Power supply	V/Hz	230/50	230/50	230/50	230/50	230/50	230/50	230/50
Electrical consumption	W	260	310	260	450	670	900	942
GENERAL SPECIFICATIONS								
Energy efficiency class		A	A	A	A	A	A	A
Noise power level	dB(A)	63,7	65,2	67,6	64,2	68,4	70,1	72,3
Dimensions (W/D/H)	mm	690x1460x1360	690x1460x1360	835x1220x1600	935x1420x1600	935x1705x1600	935x1705x1600	935x1745x1600
Boiler weight	kg	280	280	305	381	425	452	525

Single Hex

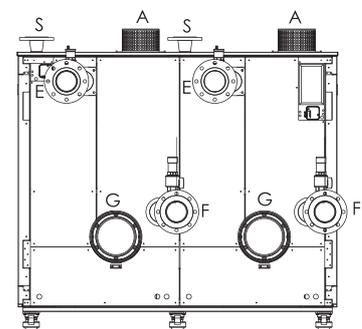
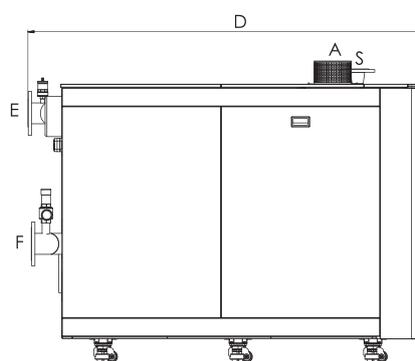
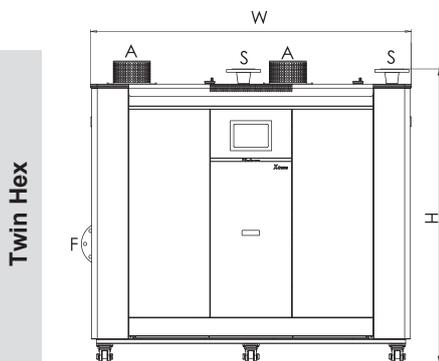


Alubox X-treme

*Twin hex are indicated in grey zone.

Alubox X-treme

710	880	1065	1315	1480	1550	*1760	*2630	*2920	*3100
134,6/685,6	132,9/849,4	159,5/1025	220,0/1261,0	250,0/1400,0	250,0/1490,0	132,9/1699	220/2522	250/2800	250/2980
129,6/669,2	124/824,5	152,9/999,9	212,0/1220,0	243,0/1360,0	243,0/1445,0	124/1649	212/2440	243/2720	243/2890
145,9/711,3	142,3/885,1	171,9/1065,5	235,0/1315,0	268,0/1460,0	268,0/1555,0	142,3/1770	235/2630	268/2920	268/3110
95,7/97,8	96,8/97,7	96,9/97,7	96,5/97,3	97,1/97,4	97,1/97,3	96,8/97,7	96,5/97,3	97,1/97,4	97,1/97,3
108,7/104,1	107,5/104,6	108,2/104,9	107,2/104,7	107,4/104,6	107,4/104,4	107,5/104,6	107,2/104,7	107,4/104,6	107,4/104,4
108,5	108,7	108,4	108,1	108,1	108,0	108,7	108,1	108,1	108,0
20:100	16:100	16:100	18:100	18:100	17:100	8:100	9:100	9:100	9:100
0,8/6	0,8/6	0,8/6	0,8/6	0,8/6	0,8/6	0,8/6	0,8/6	0,8/6	0,8/6
68,7	99,7	117,7	135,8	153,8	153,8	2x99,7	2x135,8	2x153,8	2x153,8
6,7/30,4	6,2/38,1	7,3/45,9	9,2/55,5	10,3/61,1	10,3/63,5	6,2/38,1	9,2/51,1	10,3/61,1	10,3/63,5
7,2	6,0	6,3	6,9	7,1	7,0	6,0	6,9	7,1	7,0
90	90	90	90	90	90	90	90	90	90
G20	G20	G20	G20						
20	20	20	20	20	20	20	20	20	20
220	179	252	265	221	255	2x179	2x265	2x221	2x255
63/314	60/389	73/467	104/556	112/622	112/668	60/389	104/556	112/622	112/668
9,0/9,1	9,1/9,0	8,9/9,1	8,6/9,4	8,9/8,9	9,1/9,1	9,1/9,0	8,6/9,4	8,9/8,9	9,1/9,1
5,0/71,0	0/63,0	0/68,0	2,0/74,0	1,0/54,0	1,0/72,0	0/63,0	2,0/74,0	1,0/54,0	1,0/72,0
60,0/70,0	59,4/69,5	59,6/68,7	59,6/68,7	59,8/67,3	59,8/67,5	59,4/69,5	59,6/68,7	59,8/67,3	59,8/67,5
31,3/43,0	30,3/46,3	31,2/45,0	31,1/46,7	30,8/42,0	30,8/43,1	30,3/46,3	31,1/46,7	30,8/42,0	30,8/43,1
6	6	6	6	6	6	6	6	6	6
23	32	32	36	27	33	32	36	27	33
14,0/71,8	13,4/88,5	16,4/106,6	22,7/129,6	25,5/139,7	25,5/150,3	13,4/177	22,7/259,3	25,5/279,4	25,5/300,7
100/100	125/125	125/125	125/125	125/125	125/125	125/125	125/125	125/125	125/125
200/250	200/250	200/250	200/250	200/250	200/250	200/250	200/250	200/250	200/250
65	65	65	65	65	65	65	65	65	65
230/50	400/50	400/50	400/50	400/50	400/50	400/50	400/50	400/50	400/50
880	1466	2213	3162	3726	4306	2932	6325	7451	8611
A	A	A	A	A	A	A	A	A	A
71,9	73,7	75,5	77,2	76,4	75,3	78,6	77,2	76,4	75,3
935x1745x1600	935x2140x1600	935x2140x1600	985x2730x1600	985x2730x1600	985x2730x1600	1738x2140x1600	1872x2680x1600	1872x2680x1600	1872x2680x1600
525	625	685	811	925	925	1120	1630	1700	1700



Twin Hex



Alubox

Floor Mount Condensing Boiler



- ▶ 70-3500 kW capacity range
- ▶ Low NOx Value
- ▶ Low flue gas temperatures
- ▶ Aluminum heat exchanger
- ▶ Efficiency up to %108,2 according to EN 15502-1+A1
- ▶ Turndown ratio up to 14:100
- ▶ Cascade operation option up to 16 boilers's
- ▶ Low noise level
- ▶ Energy class A
- ▶ 6 bar working pressure





- ▶ High corrosion and lime resistance
- ▶ Latest technology, low emission premix burner
- ▶ High modulating and energy-efficient fan

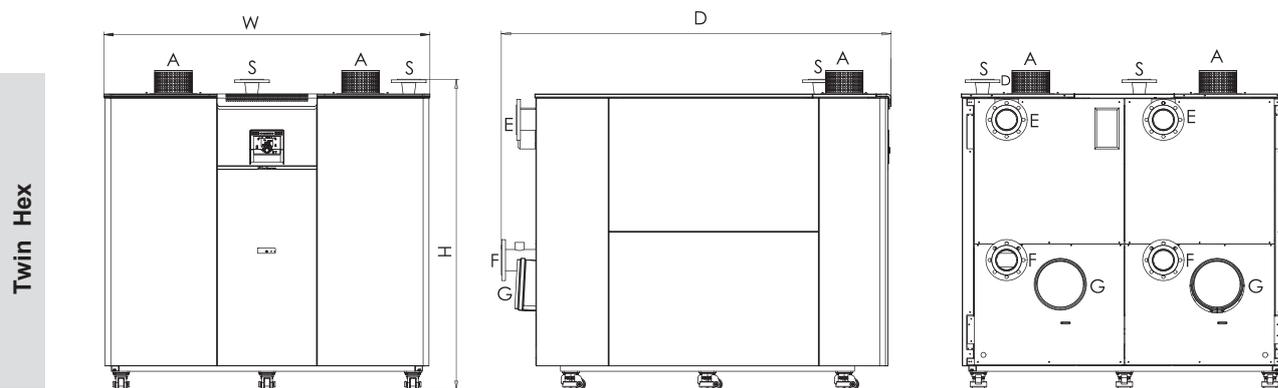
Safety Features:

- Frost protection
- Overheat protection
- Low and high water pressure safety
- Flue gas temperature and pressure safety
- Pump/valve protection
- Legionella protection
- Condensate blockage safety with siphon sensor
- Fan speed safety
- Surface temperature safety
- High pressure switch for gas line

**With low emission values,
ECO friendly GASSERO.**

Technical Specifications

		Alubox						
		70	115	150	208	290	540	700
THERMAL SPECIFICATIONS								
	UNIT							
Nominal heat input (min/max)	kW	10,2/65,6	14,9/112,3	19,9/143,1	35,7/197,3	48,1/277,4	81,9/517,0	101,4/661,0
Nominal heat output (80/60°C) (min/max)	kW	9,9/63,4	14,3/109,5	19,2/139,8	34,9/192,2	46,8/270,2	79,1/502,9	97,8/643,1
Nominal heat output (50/30°C) (min/max)	kW	11,6/68,5	15,1/118,1	22,3/149,1	36,7/207,7	50,0/286,5	84,7/539,2	107,8/708,4
Heating efficiency (80/60°C) (min/max)	%	96,7/97,2	96,8/98,2	97,0/98,2	97,7/97,4	97,2/97,4	96,6/97,3	96,5/97,3
Heating efficiency (50/30°C) (min/max)	%	108,0/103,9	108,2/104,8	108,1/103,2	103,1/103,8	105,4/103,6	105,0/104,0	107,0/107,4
Partial load efficiency (36/30°C)	%	108,4	108,71	108,4	107,2	107,1	106,7	108,6
Turndown ratio		16:100	14:100	14:100	18:100	18:100	16:100	16:100
HYDRAULIC SPECIFICATIONS								
Operation water pressure (min/max)	bar	0,8/6	0,8/6	0,8/6	0,8/6	0,8/6	0,8/6	0,8/6
Exchanger water volume	lt	3,2	4,6	6	29,1	40,6	75,5	99,2
Water flow rate (min/max)	m³/h	0,6/3,8	0,6/4,5	0,8/6,2	1,6/8,9	2,0/12,4	3,4/23,6	4,4/30,1
Pump head	mWC	5,0	5,0	5,5	5,3	6,5	5,2	5,2
Max. operation temp.	°C	85	85	85	90	90	90	90
GAS AND COMBUSTION SPECIFICATIONS								
Gas type		G20	G20	G20	G20	G20	G20	G20
Gas supply pressure (G20/G31)	mbar	20	20	20	20	20	20	20
Flue gas pressure	Pa	130	200	330	160	160	150	150
Combustion products flow rate (min/max)	g/sc	5,0/28,0	6,0/49,0	9,0/63,0	16,5/69,3	22,5/119,6	38,0/235,1	47,0/292,4
CO ₂ emission (min/max)	%	9,1/9,6	9,4/9,4	9,5/9,6	8,8/9,1	9,0/9,4	8,9/9,1	8,9/9,4
CO emission (min/maks)	ppm	29/152	27/156	24/169	1/21	3/31	2/29	5/33
Flue gas temp. (80/60°C) (min/max)	°C	55,4/72,1	56,8/64,9	56,9/70,3	55,1/64,5	55,6/61,1	55,5/63,6	55,6/61,1
Flue gas temp. (50/30°C) (min/max)	°C	30,1/52,3	30,2/53,5	30,5/47,1	29/52,7	29/47,4	30,3/40,1	34,2/34,5
NO _x class		6	6	6	6	6	6	6
NO _x value	mg/kWh	28	43	44	32	63	36	51
Gas consumption (min/max)	m³/h	1,1/6,9	1,5/11,8	2,1/15,1	3,7/20,8	4,9/28,8	8,5/54,0	10,5/68,7
CONNECTION SPECIFICATIONS								
Boiler water inlet (F) / outlet diameter (E)	DN	25/25	25/25	25/25	50/50	50/50	80/80	80/80
Fresh air (A) / flue gas diameter (G) (B23)	mm	100/150	100/150	110/100	100/200	100/200	125/250	125/250
Gas supply diameter (S)	DN	20	25	25	32	32	65	65
ELECTRICAL SPECIFICATIONS								
Power supply	V/Hz	230/50	230/50	230/50	230/50	230/50	230/50	230/50
Electrical consumption	W	116	203	313	450	510	1400	1620
GENERAL SPECIFICATIONS								
Energy efficiency class		A	A	A	A	A	A	A
Noise power level	dB(A)	66,2	61,3	69,3	62,1	64,3	66,5	71,2
Dimensions (W/D/H)	mm	640x575x1095	640x575x1095	640x575x1095	645x1420x1420	645x1420x1420	838x1731x1680	838x1731x1680
Boiler weight	kg	85	93	103	262	295	450	510



Twin Hex

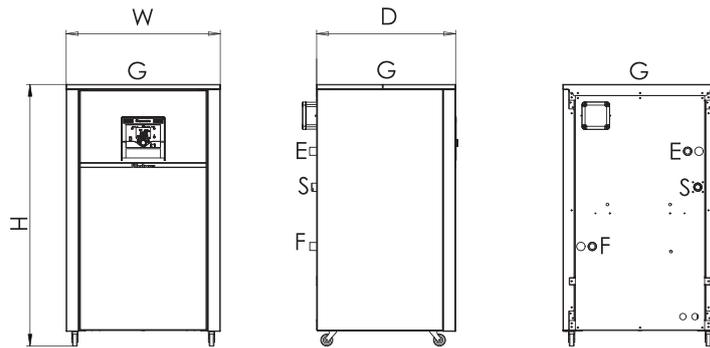
Alubox

*Twin hex are indicated in grey zone.

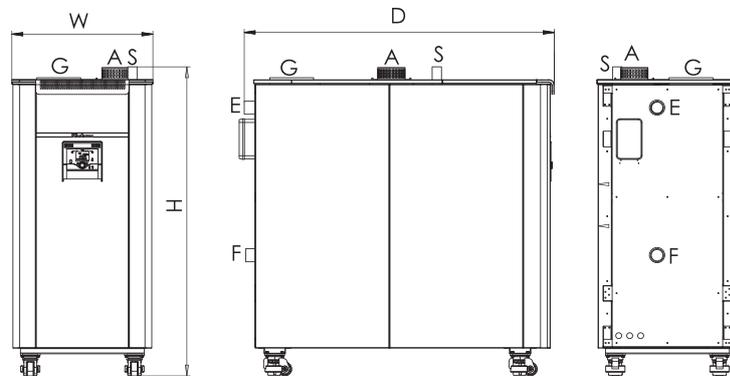
Alubox

1100	*2200	3500
150,5/1029,6	301,0/2059,2	174,4/3303,8
146,0/1001,8	292/2003,6	166,8/3233,0
160,7/1007,6	321,4/2215,2	187,9/3405,0
97,0/97,3	97,0/97,3	96,6/97,9
107,1/107,0	107,1/107	108,2/103,3
108,0	108,0	108,8
15:100	7:100	5:100
0,8/6	0,8/6	0,8/6
155,1	2x155,1	493,5
6,4/46,9	6,4/93,6	8,0/139,4
5,4	2x5,4	5,4
90	90	90
G20	G20	G20
20	20	20
150	2x150	130
69,1/459,6	69,1/459,6	79,4/1462,4
9,0/9,3	9,0/9,3	8,8/9,0
6/44	6/44	6/44
61,9/64,6	61,9/64,6	54,7/65,9
29,4/33,8	29,4/33,8	29,4/33,8
6	6	6
46	46	39
15,6/107,6	15,6/215,2	20,6/335,6
100/100	100/100	200/200
200/250	200/250	200/400
65	65	80
400/50	400/50	400/50
2650	5300	9112
A	A	A
74,9	74,9	84,7
898x2079x1670	1738x2079x1670	1300x2985x2365
680	1378	2540

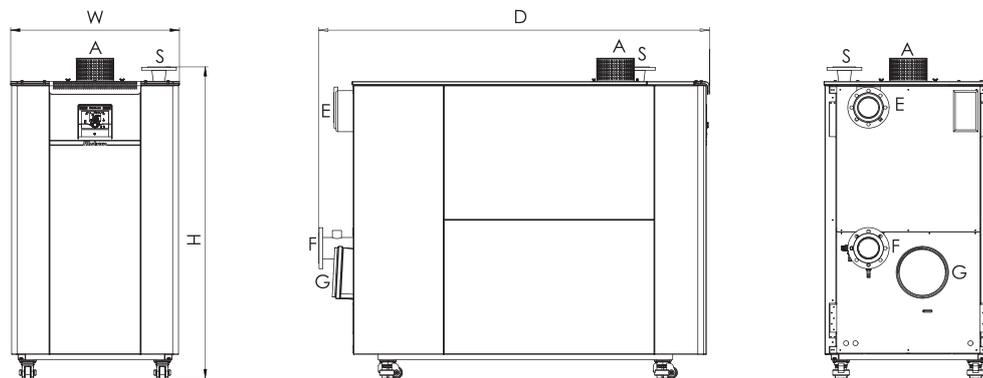
Alubox 70-115-150



Alubox 208-290



Alubox 540-700-1100



Ultrabox

Floor Mount Condensing Boiler



- ▶ 170-2660 kW capacity range
- ▶ Low CO emissions
- ▶ Low flue gas temperatures
- ▶ Stainless steel heat exchanger
- ▶ Efficiency up to %108,1 according to EN 15502-1+A1
- ▶ Turndown ratio up to 4:100
- ▶ Cascade operation option up to 16 boilers'
- ▶ Low NOx value
- ▶ Low noise level
- ▶ Energy class A
- ▶ 6 bar operation pressure



Ultrabox



- ▶ High efficient and durable heat exchanger
- ▶ Latest technology, low emission premix burner
- ▶ High modulating and energy-efficient fan

Safety Features:

- Frost protection
- Overheat protection
- Low and high water pressure safety
- Flue gas temperature and pressure safety system
- Pump/valve protection
- Legionella protection
- Condensate blockage safety with siphon sensor
- Fan speed safety
- Surface temperature safety
- High pressure switch for gas line

Advanced condensation technology,
Low fuel consumption.

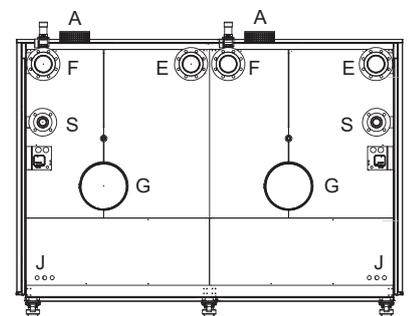
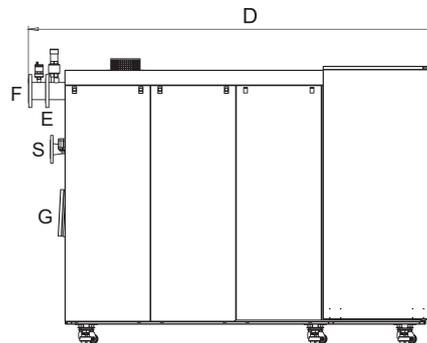
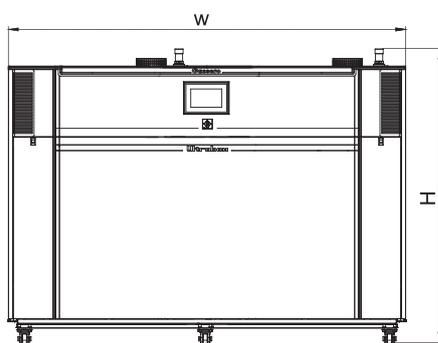
Ultrabox

Floor Mount Condensing Boiler

Technical Specifications

		Ultrabox						
		170	210	255	315	415	500	530
THERMAL SPECIFICATIONS		UNIT						
Nominal heat input (min/max)	kW	23,0/158,5	23,0/197,0	23,0/235,5	50,0/295,7	53,0/401,1	60,0/470,0	60,0/500,0
Nominal heat output (80/60°C) (min/max)	kW	22,3/154,3	22,3/191,8	22,3/228,9	48,6/288,0	51,6/389,5	58,4/456,3	58,4/486,0
Nominal heat output (50/30°C) (min/max)	kW	24,7/170,0	24,7/210,0	24,7/250,0	53,4/314,3	55,2/423,2	64,8/501,3	64,8/535,0
Heating efficiency (80/60°C) (min/max)	%	97,2/97,4	97,2/97,4	97,2/97,2	97,3/97,4	97,3/97,1	97,4/97,1	97,4/97,3
Heating efficiency (50/30°C) (min/max)	%	107,5/107,3	107,5/106,7	107,5/106,2	106,9/106,3	106,9/106,1	108,1/107,1	108,1/107,2
Partial load efficiency (36/30°C)	%	108,1	108,1	108,1	108,3	108,25	108,0	108,5
Turndown ratio		15:100	12:100	12:100	13:100	11:100	13:100	12:100
HYDRAULIC SPECIFICATIONS								
Operation water pressure (min/max)	bar	0,8/6	0,8/6	0,8/6	0,8/6	0,8/6	0,8/6	0,8/6
Exchanger water volume	lt	30,6	30,6	30,6	30,6	39,9	61,5	61,5
Water flow rate (min/max)	m³/h	1,0/7,4	1,0/9,1	1,0/10,6	2,32/13,64	2,40/18,01	2,6/21,7	2,6/22,8
Pump head	mWC	6,1	6,5	6,0	6,9	6,0	6,5	6,8
Max. operation temp.	°C	90	90	90	90	90	90	90
GAS AND COMBUSTION SPECIFICATIONS								
Gas type		G20	G20	G20	G20	G20	G20	G20
Gas supply pressure (G20/G31)	mbar	20	20	20	20	20	20	20
Flue gas pressure	Pa	90,2	90,2	90,2	187,3	187,3	209,9	209,9
Combustion products flow rate (min/max)	g/sc	12/77	12/95	12/112	24/142	24/207	40/230	40/235
CO ₂ emission (min/max)	%	8,6/8,8	8,6/8,7	8,6/8,7	8,9/9,4	9,0/9,3	8,9/8,7	8,9/9,2
CO emission (min/maks)	ppm	0/80	0/84	0/93	4/172	5/216	2/92	2/93
Flue gas temp. (80/60°C) (min/max)	°C	62,2/64,9	62,2/68,3	62,2/73,1	63,4/67,5	63,4/74,3	61,5/66,4	61,5/67,3
Flue gas temp. (50/30°C) (min/max)	°C	33,7/37,0	33,7/40,6	33,7/42,6	38,5/40,6	38,5/46,6	33,0/39,1	33,0/41,5
NO _x class		6	6	6	6	6	6	6
NO _x value	mg/kWh	34	34	34	35	33	24	24
Gas consumption (min/max)	m³/h	2,4/16,9	2,4/20,9	2,4/24,8	5,14/30,4	5,45/41,23	6,1/49,0	6,1/51,6
CONNECTION SPECIFICATIONS								
Boiler water inlet (F) / outlet diameter (E)	DN	50/50	50/50	50/50	50/50	50/50	65/65	65/65
Fresh air (A) / flue gas diameter (G) (B23)	mm	125/150	125/150	125/150	125/170	200/200	200/250	200/250
Gas supply diameter (S)	DN	32	32	32	32	50	65	65
ELECTRICAL SPECIFICATIONS								
Power supply	V/Hz	230/50	230/50	230/50	230/50	230/50	230/50	230/50
Electrical consumption	W	204	226	260	350	710	670	685
GENERAL SPECIFICATIONS								
Energy efficiency class		A	A	A	A	A	A	A
Noise power level	dB(A)	63,7	65,2	67,6	64,2	68,4	70,1	72,3
Dimensions (W/D/H)	mm	725x1160x950	725x1160x950	725x1160x950	960x1520x1072	960x1520x1072	960x1846x1072	960x1846x1072
Boiler weight	kg	180	260	260	270	451	451	461

Twin Hex



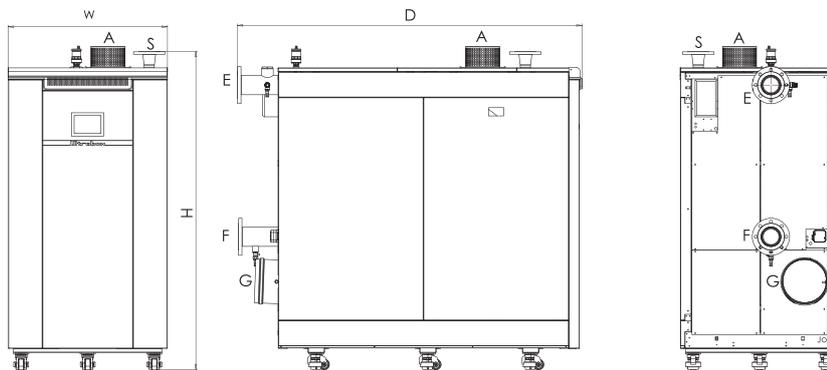
Ultrabox

*Twin hex are indicated in grey zone.

Ultrabox

660	*860	1030	*1060	*1160	*1320	1330	*2060	*2660
60,0/620,0	41,8/811,0	95,0/956,0	60,0/1000,0	60,9/1090,0	60,0/1240,0	95,0/1235,0	95,0/1912,0	95,0/2470,0
58,4/602,0	40,6/786,0	92,2/932,2	58,4/972,0	58,4/1058,3	58,4/1204,0	92,2/1205,0	92,2/1864,0	92,2/2410,0
64,8/665,0	45,0/860,0	102,0/1030,0	64,8/1070,0	64,8/1166,3	64,8/1330,0	102,0/1333,0	102,0/2060,0	102,0/2666,0
97,4/97,2	97,3/97,1	97,1/97,5	97,4/97,3	97,4/97,4	97,4/97,2	97,1/97,6	97,1/97,5	97,1/97,6
108,1/107,4	107,9/106,1	108,0/107,8	108,1/107,2	108,1/107,4	108,1/107,4	107,3/108,1	108,0/107,8	107,3/108,1
108,5	108,3	108,1	108,5	108,5	108,5	108,3	108,1	108,3
10:100	6:100	10:100	6:100	6:100	5:100	8:100	5:100	4:100
0,8/6	0,8/6	0,8/6	0,8/6	0,8/6	0,8/6	0,8/6	0,8/6	0,8/6
61,5	2x41,5	130,9	2x61,5	2x61,5	2x61,5	130,9	2x130,9	2x130,9
2,6/28,9	1,8/18,3	3,9/44,1	2,6/22,8	2,6/50,6	2,6/28,9	3,9/56,6	3,9/44,1	3,9/56,6
6,7	2x6,0	8,5	2x8,7	2x6,7	2x6,7	9,1	2x8,5	2x9,1
90	90	90	90	90	90	90	90	90
G20	G20	G20	G20	G20	G20	G20	G20	G20
20	20	20	20	20	20	20	20	20
287,3	2x187,3	285,4	2x209,9	2x287,3	2x287,3	285,4	2x285,4	2x285,4
40/280	24/202	62/460	40/235	40/280	40/280	108/561	62/460	108/561
8,9/8,7	8,7/8,8	9,0/9,2	8,9/9,2	8,9/8,7	8,9/8,7	9,0/9,0	9,0/9,2	9,0/9,0
0/98	0/96	0/96	2/93	0/98	0/98	0/84	0/96	0/84
61,5/73,1	63,4/71,3	65,1/66,6	61,5/67,3	61,5/73,1	61,5/73,1	65,1/66,1	65,1/66,1	65,1/66,1
33,3/47,7	38,5/46,6	37,5/38,7	33,0/47,5	33,0/47,7	33,0/47,7	37,4/36,3	37,5/38,8	37,4/36,3
6	6	6	6	6	6	6	6	6
22	33	36	24	22	22	33	36	32,9
6,1/64,1	4,0/76,5	9,7/97,8	5,5/95,3	6,1/113,1	6,1/128,2	9,8/128,8	9,7/195,6	9,8/257,5
65/65	65/65	100/100	65/65	100/100	65/65	100/100	100/100	100/100
200/250	200/200	200/300	200/250	200/250	200/250	200/300	200/300	200/300
65	65	65	65	65	65	65	65	65
230/50	230/50	400/50	230/50	230/50	230/50	400/50	400/50	400/50
909	900	2213	1370	1670	1800	3170	4426	6340
A	A	A	A	A	A	A	A	A
71,9	68,4	77,2	72,3	73,7	73,7	75,3	77,2	75,3
960x1846x1072	1975x1625x1502	1184x2080x1385	1835x1840x1270	1835x1846x1270	1835x1840x1270	1184x2490x1385	1184x2080x1385	2235x2492x1588
471	942	897	962	970	982	925	1834	1890

Single Hex



Superbox

Floor Mount Condensing Boiler



- 150-1000 kW capacity range
- Low NOx value
- Low flue gas temperatures
- Stainless steel heat exchanger
- Up to %109 efficiency according to EN 15502-1+A1
- Up to 3:100 turndown ratio
- Cascade operation option up to 16 boilers
- Low noise level
- Energy class A
- 6 bar operation pressure

- High efficient and durable heat exchanger
- Latest technology, low emission premix burner
- High modulating and energy-efficient fan

Safety Features:

- Frost protection
- Overheat protection
- Low and high water pressure safety
- Flue gas temperature and pressure safety system
- Pump/valve protection
- Legionella protection
- Condensate blockage safety with siphon sensor
- Fan speed safety
- Surface temperature safety
- High pressure switch for gas line



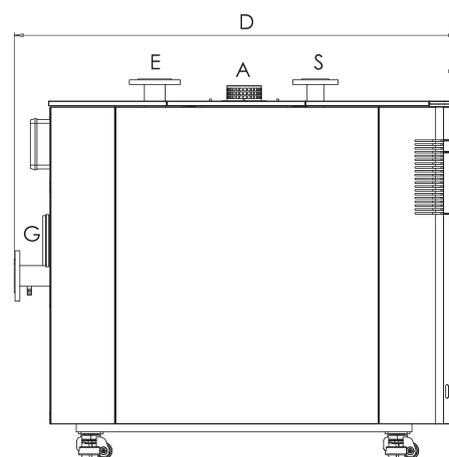
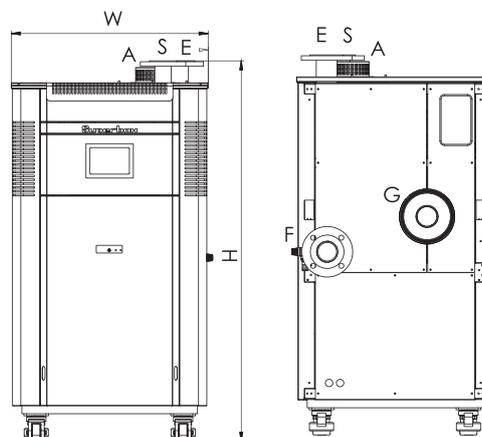
Superbox

* Twin hex are indicated in grey zone.

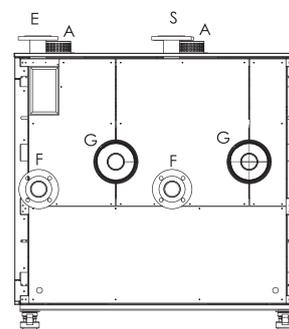
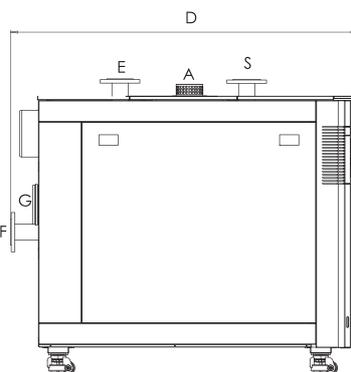
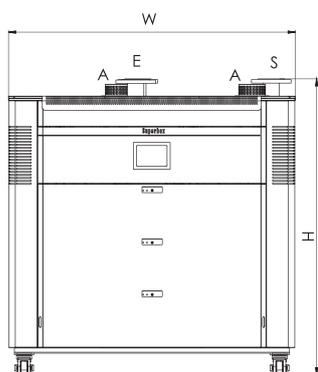
Technical Specifications

	Superbox			
	150	500	*1000	
THERMAL SPECIFICATIONS				
Nominal heat input (min/max)	UNIT			
	kW	21,0/143,0	27,2/498,5	27,2/996,9
Nominal heat output (80/60°C) (min/max)	kW	19,5/138,0	26,3/481,7	26,3/962,1
Nominal heat output (50/30°C) (min/max)	kW	22,7/150,0	29,1/527,4	29,1/1051,9
Heating efficiency (80/60°C) (min/max)	%	96,5/97,7	96,5/96,6	96,5/96,5
Heating efficiency (50/30°C) (min/max)	%	106,5/105,3	106,5/105,5	106,6/105,3
Partial load efficiency (36/30°C)	%	108,3	107,0	106,9
Turndown ratio		15:100	6:100	3:100
HYDRAULIC SPECIFICATIONS				
Operation water pressure (min/max)	bar	0,8/6	0,8/6	0,8/6
Exchanger water volume	lt	11,4	69,8	139,6
Water flow rate (min/max)	m³/h	0,9/6,3	1,1/21,4	1,1/42,8
Pump head	mWC	8,6	7,2	7,2
Max. operation temp.	°C	90	90	90
GAS AND COMBUSTION SPECIFICATIONS				
Gas type		G20	G20	G20
Gas supply pressure (G20/G31)	mbar	20	20	20
Flue gas pressure	Pa	310	100	100
Combustion products flow rate (min/max)	g/sc	9,7/67,3	12,6/226,7	12,6/226,7
CO ₂ emission (min/max)	%	9,4/9,8	9,0/9,2	9,0/9,2
CO emission (min/maks)	ppm	0/208	3/105	5/122
Flue gas temp. (80/60°C) (min/max)	°C	62,9/77,7	59,8/80,3	59,7/80,5
Flue gas temp. (50/30°C) (min/max)	°C	38,1/65,8	30,6/43,2	30,6/43,9
NO _x class		6	6	6
NO _x value	mg/kWh	37	45	53
Gas consumption (min/max)	m³/h	2,1/14,7	2,8/51,8	2,8/103,6
CONNECTION SPECIFICATIONS				
Boiler water inlet (F) / outlet diameter (E)	DN	32/32	65/65	65/65
Fresh air (A) / flue gas diameter (G) (B23)	mm	110/100	100/180	100/180
Gas supply diameter (S)	DN	25	50	65
ELECTRICAL SPECIFICATIONS				
Power supply	V/Hz	230/50	230/50	230/50
Electrical consumption	W	461	900	1440
GENERAL SPECIFICATIONS				
Energy efficiency class		A	A	A
Noise power level	dB(A)	61,7	68,3	72,1
Dimensions (W/D/H)	mm	555x780x990	715x1610x1394	1340x1620x1390
Boiler weight	kg	110	522	1060

Single Hex



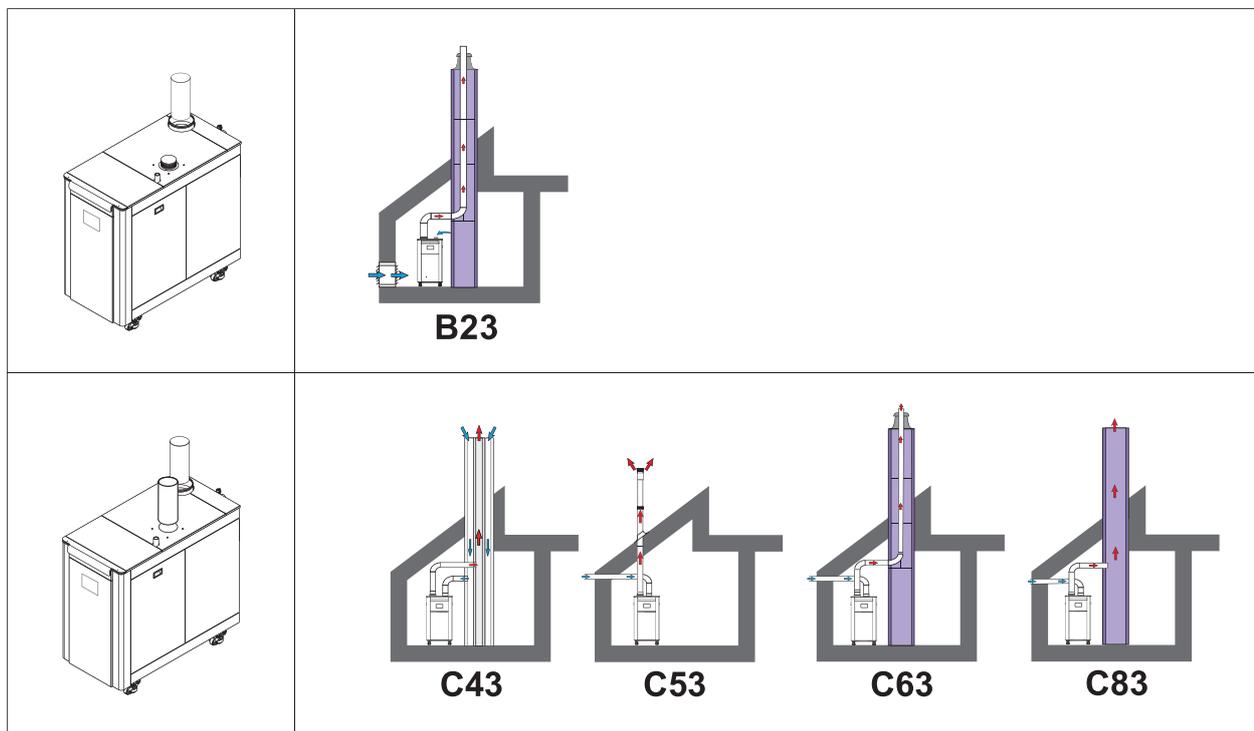
Twin Hex



Optional Accessories

Product Image	Product Name	Specifications
	<p>Outside Sensor</p>	<p>Operates between -50 °C and 70 °C. Max. distance 120 m with 1.5 mm² cable. Tolerance ±1 K</p>
	<p>Clamp Type Temperature Sensor</p>	<p>Operates between -30 °C and 125 °C. Max. distance 120 m with 1.5 mm² cable. Tolerance ±0,5 K</p>
	<p>Immersion Type Temperature Sensor</p>	<p>Operates between 0 °C and 95 °C. Tolerance ±0,5 K.</p>
	<p>External Zone Module</p>	<p>Provides 3-way valve control function on temperature based zones. Requires additional relay and sensor connections.</p>
	<p>Modbus Module</p>	<p>Provides Building Management Systems (BMS) connection.</p>

Flue Applications



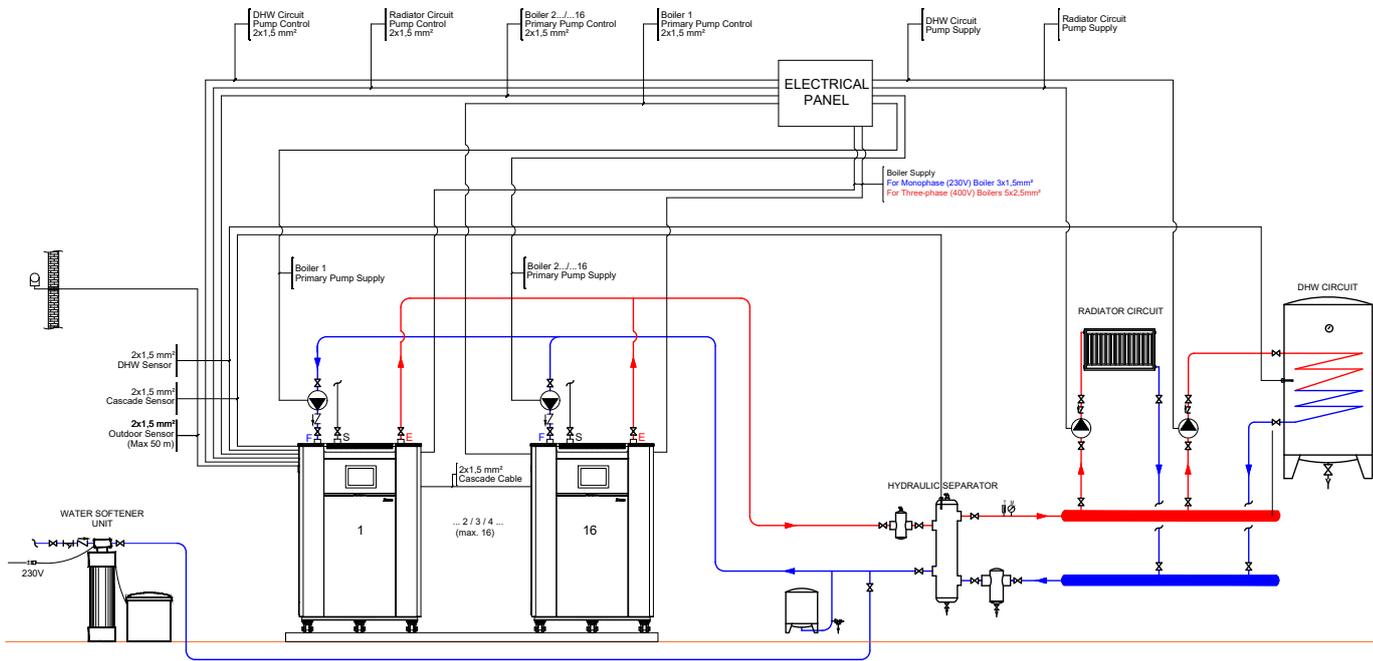
IRIS Air Adjustment Damper



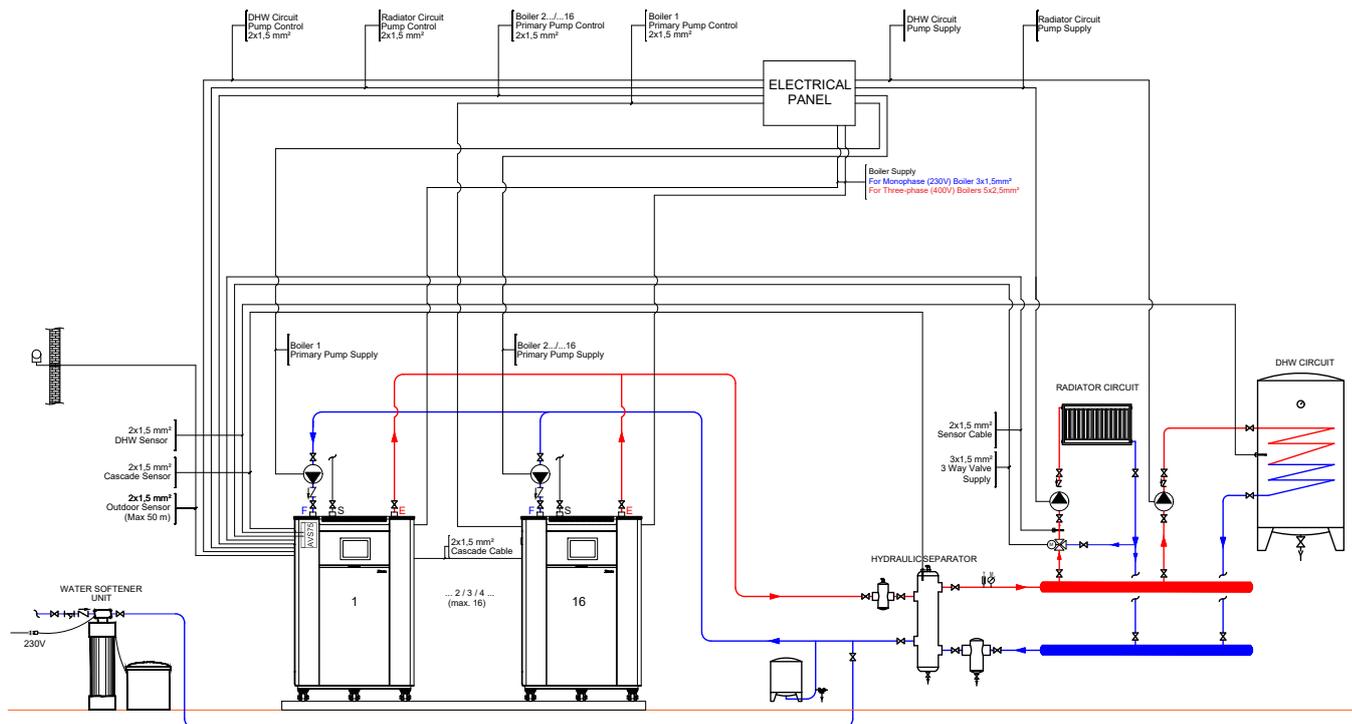
- Provides air adjustment option in radial air ducts.
- Manually controlled air damper can be adjusted at necessary air volume and fixed by the locking mechanism on it.
- Made of galvanized steel sheet.
- Ideal air flow adjustment and measuring equipment for radial air ducts.
- Provides an uniform air flow inside with adjustable iris diameter.
- Suitable for continuous use at -10 °C to +80 °C.

Installation Schemas

DHW + Radiator (Hydraulic Separator)



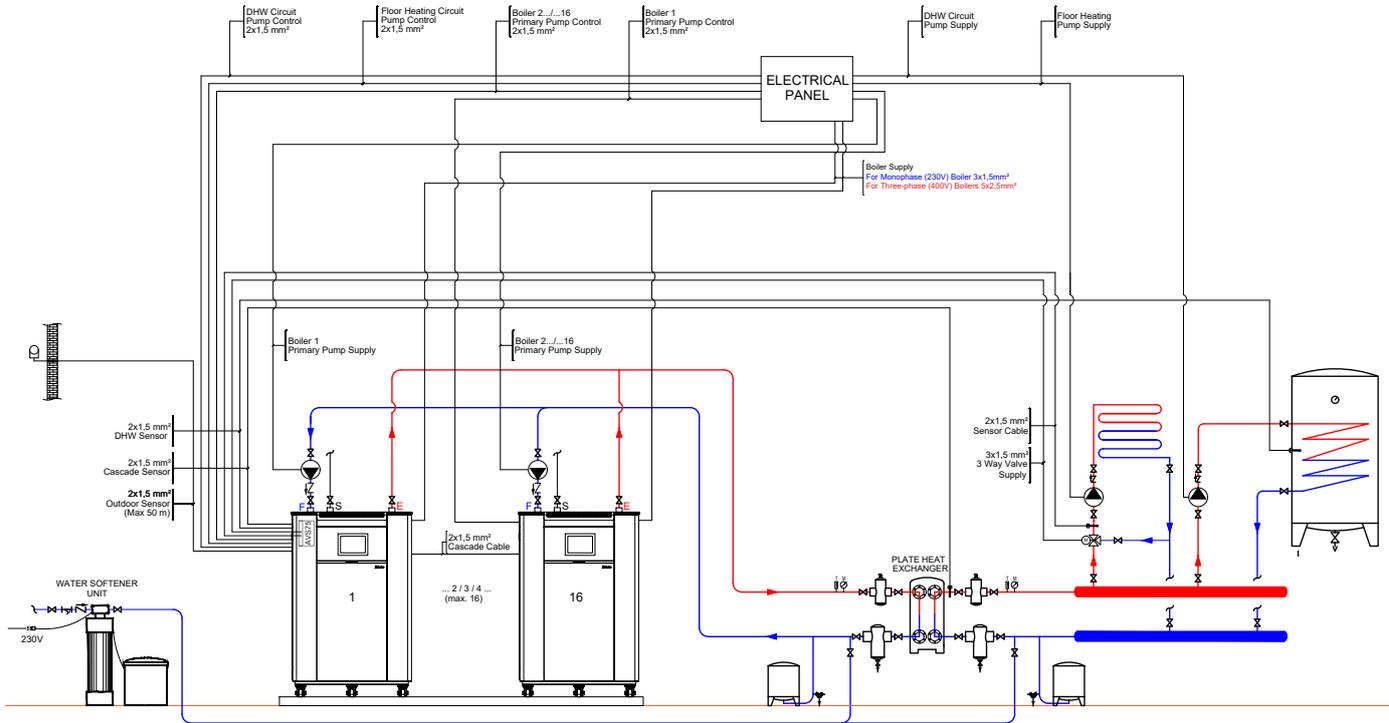
DHW + Radiator (Hydraulic Separator and 3 Way Valve)



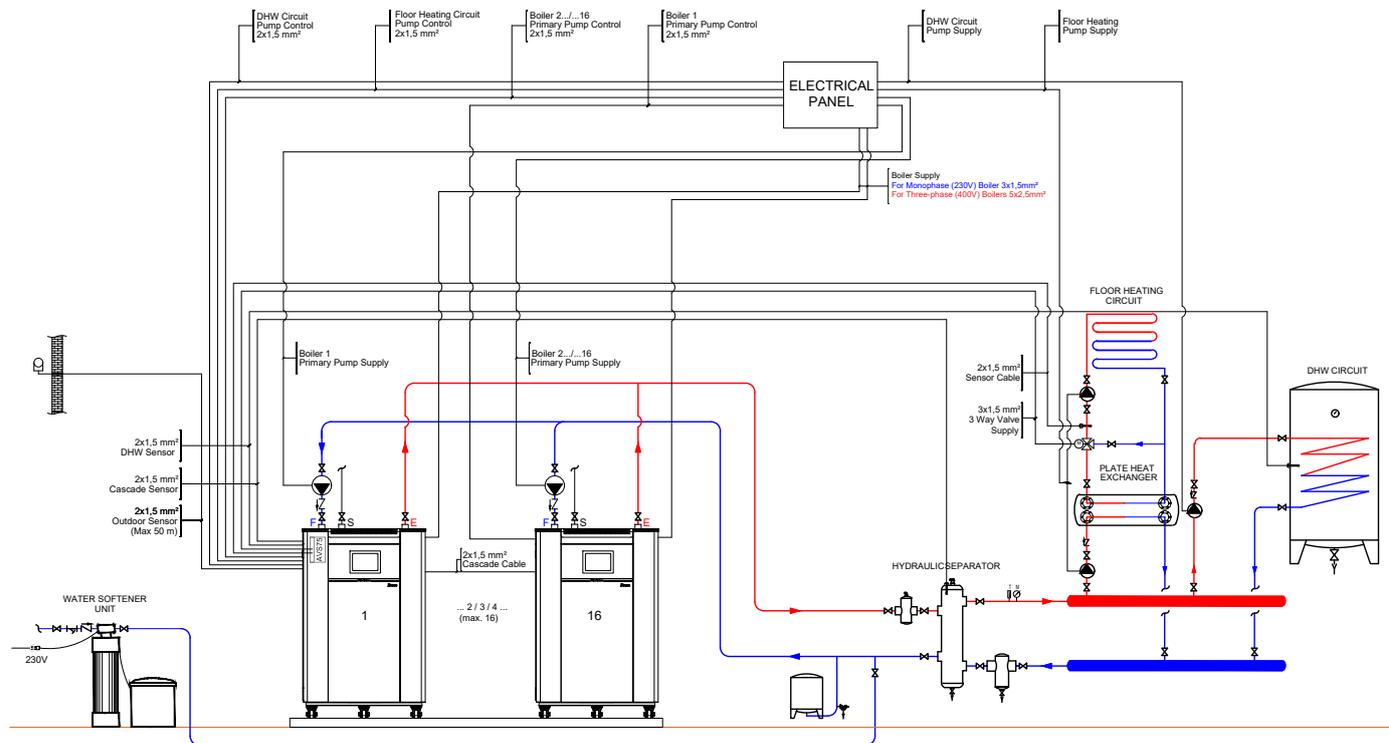
PUMP	VALVE	NON-RETURN VALVE	STRAINER	TEMPERATURE SENSOR	OUTDOOR SENSOR	AIR RELIEF VALVE	THERMOMETER	MANOMETER	SAFETY VALVE	DRAIN	AIR SEPARATOR	DIRT SEPARATOR	EXPANSION VESSEL

Installation Schemas

DHW + Floor Heating (Plate heat exchanger and 3 Way Valve)



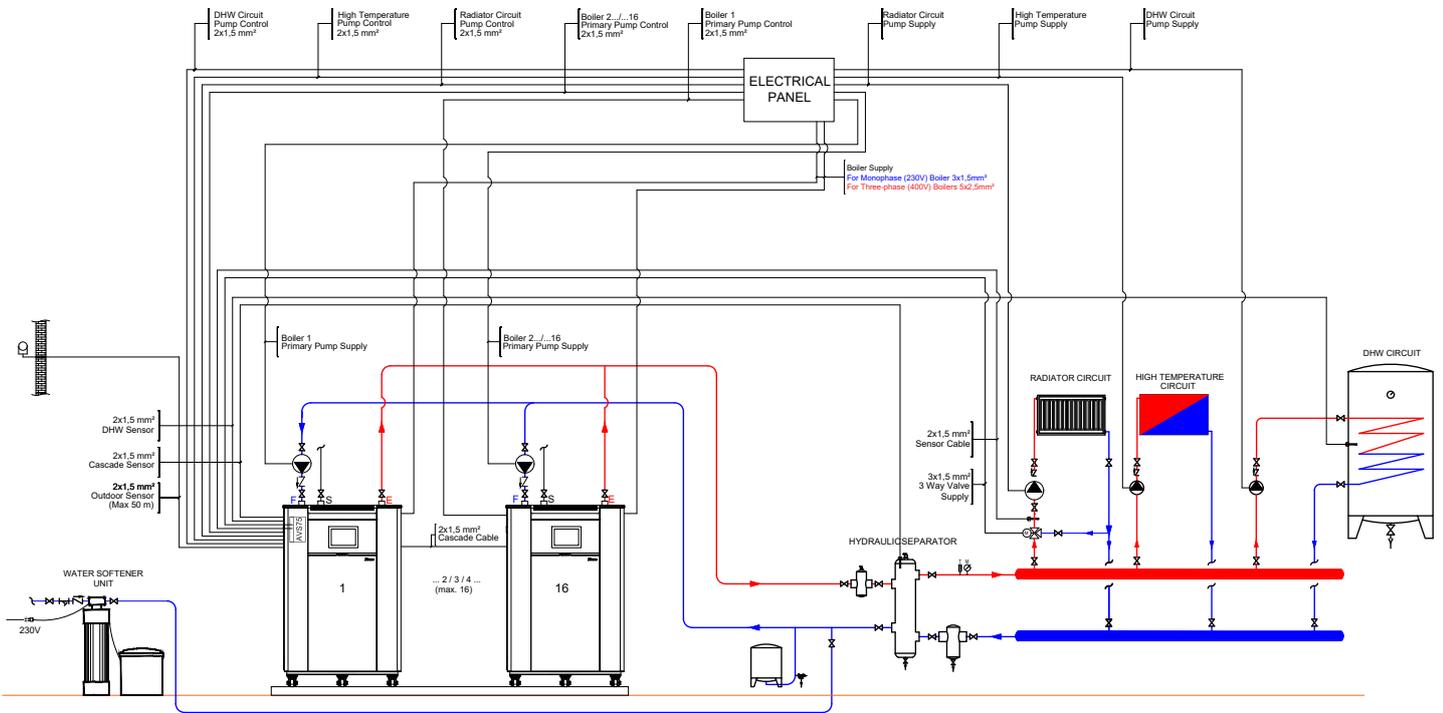
DHW + Floor Heating (Hydraulic Separator, Plate Heat Exchanger and 3 Way Valve)



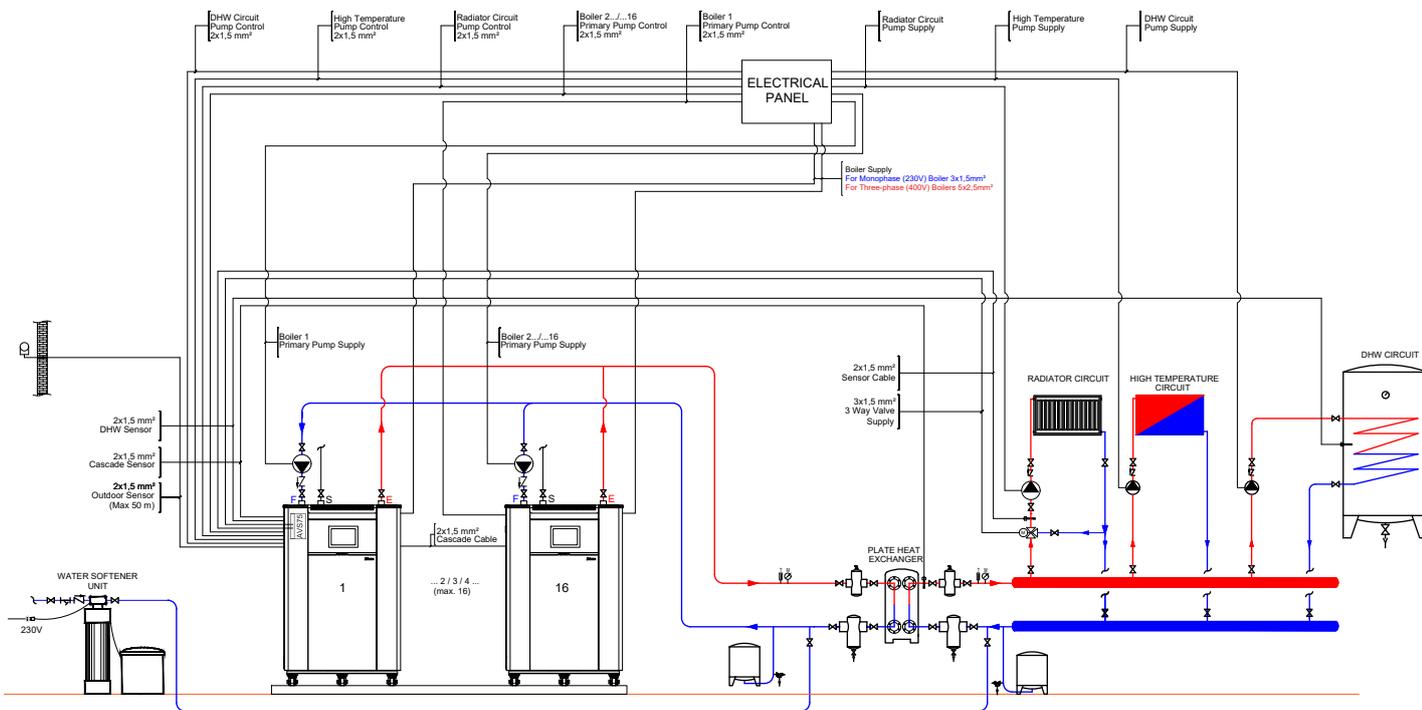
PUMP	VALVE	NON-RETURN VALVE	STRAINER	TEMPERATURE SENSOR	OUTDOOR SENSOR	AIR RELIEF VALVE	THERMOMETER	MANOMETER	SAFETY VALVE	DRAIN	AIR SEPARATOR	DIRT SEPARATOR	EXPANSION VESSEL

Installation Schemas

DHW + High Temperature Circuit + Radiator (Hydraulic Separator and 3 Way Valve)



DHW + High Temperature Circuit + Radiator (Plate Heat Exchanger and 3 Way Valve)



PUMP	VALVE	NON-RETURN VALVE	STRAINER	TEMPERATURE SENSOR	OUTDOOR SENSOR	AIR RELIEF VALVE	THERMOMETER	MANOMETER	SAFETY VALVE	DRAIN	AIR SEPARATOR	DIRT SEPARATOR	EXPANSION VESSEL

BOILER ROOM APPLICATION RECOMMENDATIONS

Gassero is strictly advising to use water softening unit before commissioning process for long term usage. Otherwise, system could harm because of undesirable substances.

It is highly recommended to use plate heat exchanger, if there is floor heating system on the heating line.

The devices that are commissioned outside of the required conditions, could be out of warranty.

Water Condition Range

Total Hardness °d	pH (Aluminium)	pH (Stainless)	Iron (Not Diluted)	Conductivity	Flushing
1	6,5-8,5	7,5-9,5	<10ppm	≤2000µS/cm	It is mandatory to comply with BSRIA 7593 (See: Gassero Flushing Process)

WATER CONDITIONS

Nitrite protection should not be used in boilers with aluminum heat exchangers

As GASSERO, we recommend flushing in the system to prolong the life of system and boilers. No acid-based products should be used during flushing.

The water used in the installation have to be city-water. **Never use well-water**

The boiler have to be serviced annually. All this maintenance should be made by authorized service, water values and the water softening unit (resin, salt etc.) values should be measured and maintained by service

Depending on the water conditions specified in the table, the problems that may occur in the boiler heat exchanger could make out of warranty.

Assembly and installation should made according to Gassero sample schemes.

HYDRAULIC

Boiler (primary) pump have to be selected to in accordance with the required pressure and flow rate.

The boiler (primary) pump have to be in the direction of the installation return line to the boiler.

The system operating pressure should match with the working pressure of boiler. Sales Engineers could give consultancy.

All heat exchanger manufacturers; recommends to use of plate exchanger instead of the hydraulic separator for separate the primary circuit and the secondary circuit.

Domestic waste system could be used for condensate water. In system with a total power of 200 KW and above, a neutralization tank must be used.

Boiler output and input diameters have to be strictly followed, other equipment should be selected according to the this diameters. In order to install other equipment, the diameter of the boiler out should not be reduced.

It is mandatory to use a suitable diameter filter and check valve to the boiler return line pipe at each boiler turn.

Please contact our service department about detail of collector connection in installation of floor mount boiler.

Additional zone control modules and sensors have to be requested if there are equipment such as three-way valves and boilers that must be checked on the heating collector. Please contact our Sales Engineer for more information.

Have to be used air separator and dirt separator with hydraulic separator.

In case the plate heat exchanger is used instead of the hydraulic separator as the system separator, expansion tank have to be placed in the primary circuit. If an automatic filling valve is used in the system, a water meter have to be used for following how much water is added to the system.

In cascade systems, the sensor housing must be placed on the hydraulic separator or on the secondary flow line. If the system is separated by a plate heat exchanger, place the sensor housing on the secondary circuit flow line.

ELECTRIC AND FLUE

6A fuses have to be used for the power supply of the boilers. The electrical system must be grounded.

Chimney connections have to be made in accordance with the chimney types and regulations.

The flue gas analysis measuring probe (probe hole) have to be opened by the flue company for each boiler.

Boiler chimneys should be extended by a minimum 1 meter from the boiler flue outlet direction and then connected to the chimney collector without elbows or with elbows.

If the chimney connections passes over the boiler, the connections should be checked properly and water tightening should be provided. Water in the chimney due to leaks may cause the system out of warranty. Adequate ventilation should be provided for the boiler room.

GAS AND OTHER

The operating pressure of the boilers in the natural gas installation is 21 Mbar. Therefore, it is necessary to use a regulator in the gas line. There should be a minimum distance of 1-2 meters between the regulator and the boiler gas flange. There should be discharge line after regulator for discharge of the excess air.

In order to control the gas pressures, the manometer must be fitted before and after the regulator.

Gassero boilers are manufactured for heating and domestic water. Not suitable for commercial or industrial purposes. **GASSERO shall not be held responsible for any problems arising out of the design purpose.**

www.gassero.com

Gassero
technology for your comfort

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