



Hot Water Boilers



Ecotherm is the leading brand for turnkey hot water, steam and solar systems for hotels, hospitals and the industry.

Ecotherm amazes with “Individual Heat Transfer Solutions” for hot water and steam generation.

Individuality

Ecotherm produces extensive turnkey systems as well as separate components. Each plant is specifically aligned to the customer’s individual requirements. The base is our own production facility in Austria and a wide product portfolio, which enables the combination of all relevant energy sources such as oil, gas, electricity and renewable energies.

Premium quality

Amongst others, our High Capacity Water Heaters are made of high-class duplex stainless steel and guarantee a long-life cycle and perfect hygiene. Ecotherm is certified to ISO 9001 : 2015 with all European standards. Our own test bench assures highest quality and reliability.

Innovation

We are always open to new ideas, we constantly investigate new technologies and we develop path-breaking and future-oriented products. Many patents are the result of the in-house innovation management. With an elaborated 3D visualization, Ecotherm systems can be guided and controlled at all times.

Premium service

Clients benefit from our extensive service at consulting, planning, engineering, supervision and training. Ecotherm regularly improves the know-how of its partners and clients with selective trainings.

Efficiency

The Ecotherm Group, managed by the owner, has slim decision-making structures. Consequent research and development work permanently optimize the energy efficiency and the durability of the products. Ecotherm turnkey solutions offer an optimal cost-benefit ratio.

Experience

With thousands of installations in the last 30 years in Europe, the Middle East, Asia, North Africa and Central America, Ecotherm has become the leading brand in technology and innovation for individual hot water, steam and solar solutions. The Ecotherm team is continuously refreshing their know-how with exceptional trainings and seminars that the Ecotherm Academy provides.

Reliability

Ecotherm systems are monitored all around the clock and can be serviced at low cost, quickly and efficiently with an advanced control panel. Our products and plants have low maintenance requirements .

Sustainability

Ecotherm products help our customers save energy and money. We save valuable resources by using renewable energies. Ecotherm high-performance plants have minimal space requirements and provide maximum energy savings. When planning new products, Ecotherm engineers take all the qualitative and economic principles into account in accordance with the ecological principles.

Partnership

We live in a partnership with all our customers, suppliers and employees. This relationship is characterized by honesty, commitment, openness, trust and reliability. The object is a joint long-term success.

Internationality

The international alignment of Ecotherm with branches in Dubai, Mexico and Hungary and further partners in more than 25 countries is the base for our flexible and efficient project implementation.

ECOTHERM Hot Water Boilers



Steel Boiler EHWB

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EHWB DUAL Stacked Combustion Chambers Steel Boiler

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EHWB DUAL Adjacent Combustion Chambers Steel Boiler

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EHWB Steel Boiler

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Hot Water Boiler Accessories

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EHWB: key to model

1st digit: E = ECOTHERM

2nd digit: H = Hot

3rd digit: W = Water

4th digit: B = Boiler

Top-12-Advantages



ECOTHERM
"The Green Calorifers"
Energy & Space Saving



Sustainability



Insulation

From recycled PET bottles, 100% recyclable, not flammable

Water Heaters

Stainless Steel, 100% recyclable



Maximum savings

Space & Energy Saving, Minimal maintenance costs, Long-life



Minimal floor space requirements

Due to individual design and high capacity components (shell & tube heat exchanger, flat heating coils)



Hygienic fresh water system

Hot water is generated on demand, low capacity of calorifiers, Anti-Legionella and Anti-Fouling cycle



Premium quality

All components are made of high quality stainless steel.



Simple on-site assembly

Pre-installed, wired, compact packaging



Individuality

Each system is individually designed and optimized



Efficiency

High capacity shell & tube heat exchanger with patented free floating turbulator rods



Easy control

Microprocessor control touch panel, remote control, BMS, Anti-Legionella & Anti-Fouling cycle



Experience

Worldwide more than 1,000 installed systems



ECOTHERM Academy

Best training and support



Advantages

ECOTHERM hot water boilers are the result of more than 15 years of research and development. All components of these premium quality products are made of high quality stainless steel. Each system is individually tailored to the needs of the customers, respectively the project. ECOTHERM engineers use a self-developed design software in order to design and optimize the system to yield maximum efficiency, minimal floor space requirements and maximum savings concerning energy and maintenance costs.

With more than thousand installations in Europe, the Middle East, Asia, North Africa and Central America, ECOTHERM has become one of the technology and innovation leaders for individual hot water, steam and solar solutions on the market.

Among these are some of the most prestigious buildings of the world as e. g. Burj Khalifa in Dubai - the highest building in the world, Abraj Al Bait Towers and Royal Clock Hotel Tower in Mecca - the second highest building in the world or JW Marriott Marquis Hotel in Dubai - the highest hotel building in the world.

EHWB Reverse Flame Steel Boiler

design pressure 5 bar

Main features

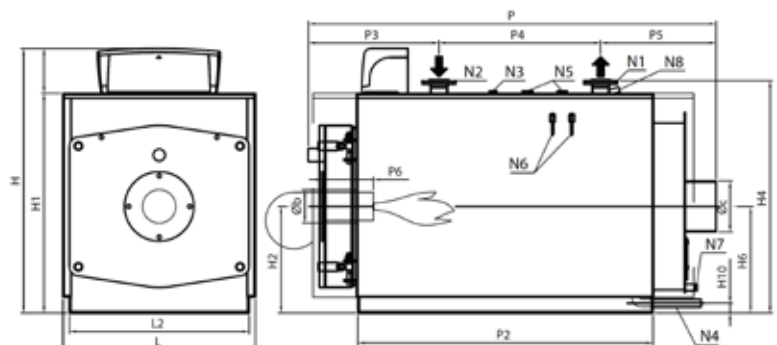
EHWB 7-130 steel boiler, employs a cylindrical concentric combustion chamber with reverse flame, a blind furnace completely supported by a submerged nozzle projection welded into the rear tube-plate facilitating a fully submersed wet back. The boiler is designed to be used in systems with water temperature between 60 and 100 °C (safety thermostat set at 110 °C). 3 stars classification according to 92/42/EEC directive in compliance with 192/05 and 311/06 Legislation.

Some of the product's main features are related below:

- Boiler body built from high quality steel, made from front tube sheet flanged to the combustion chamber using RSB procedures and from concave rear plate (rather than a flat surface for a better resistance internal pressure).
- Cylindrical reverse flame combustion chamber, supported by a submerged nozzle; the flame is positioned centrally within the chamber, whilst the hot gases return to the front of the furnace forming a second pass within the furnace, with the hot gases being conveyed through the tube bundle to the rear smoke box.
- EN10217-2 P235GH smoke tubes welded to tube plates, fitted with special helical turbulators.
- The rear smoke box, manufactured from thermally insulated steel sheets, constructed in one piece that can be easily opened and that allows smoke tube inspections, fastened with bolts, equipped with chimney connection and cleaning door.
- Boiler casing equipped with system and working device connections, all manufactured with approved welding procedures and qualified personnel.
- High density, glass wool mattress insulation, protected by easily removable, varnished steel panels.
- Steel sheet, fibre-ceramic, thermal insulated, reversible front door, mounted on hinges, easily opened with equipped lever by drilled ferrules.

Legend:

- N1 Boiler flow
- N2 Boiler return
- N3 Equipment connections
- N4 System load/drain connection
- N5 Safety valve connection
- N6 Bulb sheath
- N7 Condensate drain
- N8 Control cover



EHWB Reverse Flame Steel Boiler

design pressure 5 bar

Characteristics	Nominal Power Temp. Medium 70°C	Flow Thermal	100% efficiency (ref. C.O.P.) Temp. Medium 70°C	30% efficiency (ref. C.O.P.) Temp. Medium 70°C	Flue gas pressure drop	Hydraulic pressure drop (ΔT=12°C)	Water content	Total weight
Model	kW	kW	%	%	mbar	mbar	lt	kg
EHWB 7	70	76	92,11	91,40	0,8	8	105	216
EHWB 8	80	87	91,95	91,50	1,0	10	105	216
EHWB 9	90	98	91,84	91,55	0,8	13	123	258
EHWB 10	100	109	91,74	91,66	1,0	16	123	258
EHWB 12	120	130	92,31	91,45	1,1	23	123	258
EHWB15	150	163	92,02	91,30	1,2	35	172	346
EHWB 20	200	216	92,59	91,36	1,9	63	172	346
EHWB 25	250	271	92,25	91,70	2,0	98	220	431
EHWB 30	300	325	92,31	91,90	2,0	50	300	475
EHWB 35	350	379	92,35	91,90	2,9	67	356	542
EHWB 40	400	433	92,38	91,80	4,1	38	360	584
EHWB 50	500	542	92,25	91,90	4,2	60	540	853
EHWB 62	620	672	92,26	91,80	6,4	92	645	963
EHWB 75	750	813	92,25	91,80	5,2	55	855	1205
EHWB 85	850	921	92,29	91,80	7,2	71	855	1205
EHWB 95	950	1030	92,23	91,70	5,2	89	950	1417
EHWB 100	1020	1106	92,22	91,90	4,0	42	1200	1843
EHWB 120	1200	1301	92,24	91,80	5,5	58	1200	1843
EHWB 130	1300	1409	92,26	91,70	6,5	68	1200	1843

Dimen- sions	H	H1	H2	H4	H6	H10	L	L2	P	P2	P3	P4	P5	P6	Øb	Øc	N1	N2	N1/N2	N3	N4	N5	N6	N7	N8
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	DN/in	DN/in	PN	DN/in	DN/in	DN/in	DN/in	DN/in	DN/in
EHWB 7	1063	853	415	912	415	54,5	756	700	994	630	413	240	341	200-250	130	200	50	50	6	1"	1"	-	1/2"	1/2"	1/2"
EHWB 8	1063	853	415	912	415	54,5	756	700	994	630	413	240	341	200-250	130	200	50	50	6	1"	1"	-	1/2"	1/2"	1/2"
EHWB 9	1030	855	415	912	415	54,5	756	700	1119	755	513	265	341	200-250	130	200	50	50	6	1"	1"	-	1/2"	1/2"	1/2"
EHWB 10	1030	855	415	912	415	54,5	756	700	1119	755	513	265	341	200-250	130	200	50	50	6	1"	1"	-	1/2"	1/2"	1/2"
EHWB 12	1030	855	415	912	415	54,5	756	700	1119	755	513	265	341	200-250	130	200	50	50	6	1"	1"	-	1/2"	1/2"	1/2"
EHWB 15	1080	905	440	962	440	54,5	806	750	1364	1000	513	475	376	200-250	160	250	50	50	6	1"	1"	-	1/2"	1/2"	1/2"
EHWB 20	1080	905	440	962	440	54,5	806	750	1364	1000	513	475	376	200-250	160	250	50	50	6	1"	1"	-	1/2"	1/2"	1/2"
EHWB25	1080	905	440	962	440	54,5	806	750	1614	1250	513	725	376	200-250	160	250	50	50	6	1"	1"	-	1/2"	1/2"	1/2"
EHWB30	1180	1005	490	1061	490	54,5	906	850	1614	1250	523	700	391	200-250	180	250	65	65	6	1"	1"	-	1/2"	1/2"	1/2"
EHWB 35	1180	1005	490	1061	490	54,5	906	850	1864	1500	523	980	361	200-250	180	250	65	65	6	1"	1"	-	1/2"	1/2"	1/2"
EHWB 40	1190	1015	500	1095	500	50	946	890	1872	1502	600	850	422	230-280	225	250	80	80	6	1"	1"	1"1/4(1)	1/2"	1/2"	1/2"
EHWB50	1380	1205	610	1285	610	60	1166	1110	1946	1502	663	850	433	270-320	225	300	80	80	6	1"	1"1/4	1"1/4	1/2"	1/2"	1/2"
EHWB 62	1380	1205	610	1285	610	60	1166	1110	2235	1792	663	1150	422	270-320	225	300	80	80	6	1"	1"1/4	1"1/4	1/2"	1/2"	1/2"
EHWB 75	1510	1335	675	1417	675	60	1296	1240	2247	1753	704	1100	443	270-320	280	350	100	100	6	1"	1"1/4	1"1/2	1/2"	1/2"	1/2"
EHWB 85	1510	1335	675	1417	675	60	1296	1240	2247	1753	704	1100	443	270-320	280	350	100	100	6	1"	1"1/4	1"1/2	1/2"	1/2"	1/2"
EHWB 95	1510	1335	675	1417	675	60	1296	1240	2497	2003	704	1200	593	270-320	280	350	100	100	6	1"	1"1/4	1"1/2	1/2"	1/2"	1/2"
EHWB 100	1660	1485	750	1568	750	60	1446	1390	2477	2003	703	1200	574	270-320	280	400	125	125	6	1"	1"1/4	1"1/2	1/2"	1/2"	1/2"
EHWB 120	1660	1485	750	1568	750	60	1446	1390	2477	2003	703	1200	574	270-320	280	400	125	125	6	1"	1"1/4	1"1/2	1/2"	1/2"	1/2"
EHWB 130	1660	1485	750	1568	750	60	1446	1390	2477	2003	703	1200	574	270-320	280	400	125	125	6	1"	1"1/4	1"1/2	1/2"	1/2"	1/2"

EHWB Reverse Flame Steel Boiler

design pressure 5 bar



Main features

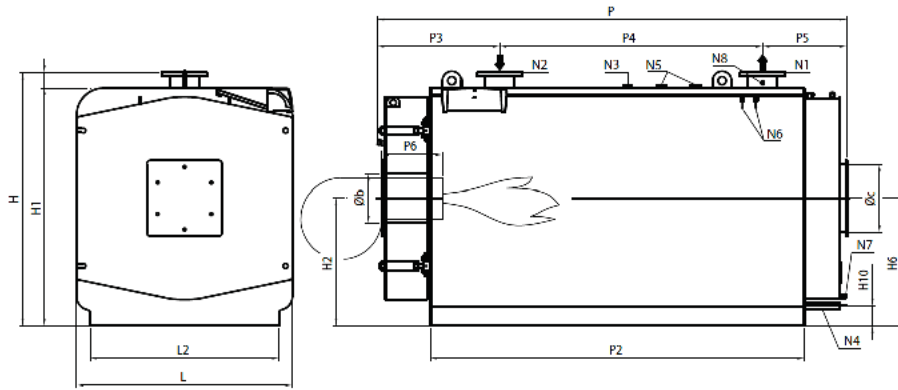
EHWB 140-350 steel boiler, employs a cylindrical concentric combustion chamber with reverse flame, a blind furnace completely supported by a submerged nozzle projection welded into the rear tube plate facilitating a fully submerged wet back. The boiler is designed to be used in systems with water temperature between 60 and 100 °C (safety thermostat set at 110 °C). 3 stars classification according to 92/42/EEC directive in compliance with 192/05 and 311/06 Legislation.

Some of the product's main features are related below:

- Boiler body built from high quality steel, made from front tube sheet flanged to the combustion chamber using RSB procedures and from concave rear plate (rather than a flat surface for a better resistance internal pressure)
- Cylindrical reverse flame combustion chamber, supported by a submerged nozzle; the flame is positioned centrally within the chamber, whilst the hot gases return to the front of the furnace forming a second pass within the furnace, with the hot gases being conveyed through the tube bundle to the rear smoke box
- EN10217-2 P235GH smoke tubes welded to tube plates, fitted with special helical turbulators
- The rear smoke box, manufactured from thermally insulated steel sheets, constructed in one piece that can be easily opened and that allows smoke tube inspections, fastened with bolts, equipped with chimney connection and cleaning door.
- Boiler casing equipped with system and working device connections, all manufactured with approved welding procedures and qualified personnel.
- High density, glass wool mattress insulation, protected by easily removable, varnished steel panels.
- Steel sheet, fibre-ceramic, thermal insulated, reversible front door, mounted on hinges, easily opened with equipped lever by drilled ferrules.

EHWB Reverse Flame Steel Boiler

design pressure 5 bar



Legend:

- N1 Boiler flow
- N2 Boiler return
- N3 Equipment connections
- N4 System load/drain connection
- N5 Safety valve connection
- N6 Bulb sheath
- N7 Condensate drain
- N8 Instrument pocket

Characteristics	Nominal Power Temp. Medium 70°C	Flow Thermal	100% efficiency (ref. C.O.P.) Temp. Medium 70°C	30% efficiency (ref. C.O.P.) Temp. Medium 70°C	Flue gas pressure drop	Hydraulic pressure drop (ΔT=12°C)	Water content	Total weight
Model	kW	kW	%	%	mbar	mbar	lt	kg
EHWB 140	1400	1517	92,29	91,70	6,0	38	1500	2600
EHWB 160	1600	1733	92,33	91,80	6,5	50	1500	2600
EHWB 180	1800	1950	92,31	91,80	7,0	63	1650	2750
EHWB 200	2000	2167	92,29	91,70	6,0	25	2000	3650
EHWB 240	2400	2600	92,31	91,80	7,5	35	2300	3900
EHWB 300	3000	3250	92,31	91,80	8,0	55	3150	5200
EHWB 350	3500	3792	92,30	91,70	9,0	75	3650	5700

Dimensions	H	H1	H2	H6	H10	L	L2	P	P2	P3	P4	P5	P6	Øb	Øc	N1	N2	N1/N2	N3	N4	N5	N6	N7	N8
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	DN/in	DN/in	PN	DN/in	DN/in	DN/in	DN/in	DN/in	DN/in
EHWB 140	1746	1630	880	880	150	1470	1270	2886	2300	831	1300	755	350-400	320	400	150	150	16	1"	1"1/4	1"1/2	1/2"	1/2"	1/2"
EHWB 160	1746	1630	880	880	150	1470	1270	2886	2300	831	1300	755	350-400	320	400	150	150	16	1"	1"1/4	1"1/2	1/2"	1/2"	1/2"
EHWB 180	1746	1630	880	880	150	1470	1270	3096	2510	771	1850	475	450-500	320	400	150	150	16	1"	1"1/4	1"1/2	1/2"	1/2"	1/2"
EHWB 200	1876	1760	945	945	150	1600	1400	3220	2510	903	1550	767	450-500	360	500	200	200	16	1"	1"1/4	2"	1/2"	1/2"	1/2"
EHWB 240	1876	1760	945	945	150	1600	1400	3480	2770	903	1950	627	450-500	360	500	200	200	16	1"	1"1/4	2"	1/2"	1/2"	1/2"
EHWB 300	2146	2030	1080	1080	150	1870	1670	3480	2770	903	2050	527	450-500	400	550	200	200	16	1"	1"1/4	2"	1/2"	1/2"	1/2"
EHWB 350	2146	2030	1080	1080	150	1870	1670	3935	3225	903	2050	982	450-500	400	550	200	200	16	1"	1"1/4	2"	1/2"	1/2"	1/2"

EHWB DUAL Stacked Combustion Chambers

Design pressure 5 bar



Main features

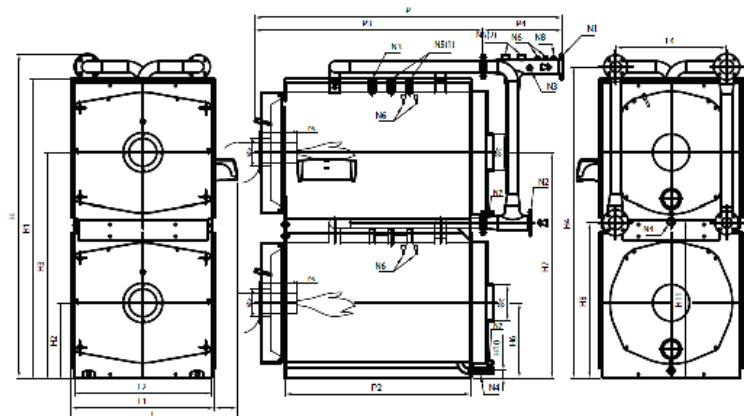
EHWB DUAL stacked module steel boiler, employs cylindrical concentric combustion chambers with reverse flame, a blind furnace completely supported by a submerged nozzle projection welded into the rear tube plate facilitating a fully submersed wet back. The boiler is designed to be used in systems with water temperature between 60 and 100 °C (safety thermostat set at 110 °C). 3 stars classification according to 92/42/EEC directive in compliance with 192/05 and 311/06 Legislation.

Some of the product's main features are related below:

- boiler body built from high quality steel, made from front tube sheet flanged to the combustion chamber using RSB procedures and from concave rear plate (rather than a flat surface for a better resistance internal pressure)
- cylindrical reverse flame combustion chamber, supported by a submerged nozzle; the flame is positioned centrally within the chamber, whilst the hot gases return to the front of the furnace forming a second pass within the furnace, with the hot gases being conveyed through the tube bundle to the rear smoke box
- EN10217-2 P235GH smoke tubes welded to tube plates, fitted with special helical turbulators
- the rear smoke box, manufactured from thermally insulated steel sheets, constructed in one piece that can be easily opened and that allows smoke tube inspections, fastened with bolts, equipped with chimney connection and cleaning door
- boiler casing equipped with system and working device connections, all manufactured with approved welding procedures and qualified personnel
- high density, glass wool mattress insulation, protected by easily removable, varnished steel panels
- steel sheet, fibre-ceramic, thermal insulated, reversible front door, mounted on hinges, easily opened with equipped lever by drilled ferrules

Legend:

- N1 Boiler flow
- N2 Boiler return
- N3 Equipment connections
- N4 System load/drain connection
- N5 Safety valve connection
- N6 Bulb sheath
- N7 Condensate drain
- N8 Instrument pocket



EHWB DUAL Stacked Combustion Chambers

Design pressure 5 bar

Characteristics	Nominal Power Temp. Medium 70°C	Flow Thermal	100% efficiency (ref. C.O.P.) Temp. Medium 70°C	30% efficiency (ref. C.O.P.) Temp. Medium 70°C	Flue gas pressure drop	Hydraulic pressure drop (ΔT=12°C)	Water content	Total weight
Model	kW	kW	%	%	mbar	mbar	lt	kg
EHWB DUAL 14	140	152	92,11	91,40	0,8	11	210	465
EHWB DUAL 16	160	174	91,95	91,50	1,0	14	210	465
EHWB DUAL 18	180	196	91,84	91,55	0,8	18	246	549
EHWB DUAL 20	200	218	91,74	91,66	1,0	22	246	549
EHWB DUAL 24	240	260	92,31	91,45	1,1	32	246	549
EHWB DUAL 30	300	326	92,02	91,30	1,2	22	344	726
EHWB DUAL 40	400	432	92,59	91,36	1,9	38	344	726
EHWB DUAL 50	500	542	92,25	91,70	2,0	60	440	898
EHWB DUAL 60	600	650	92,31	91,90	2,0	86	600	986
EHWB DUAL 70	700	758	92,35	91,90	2,9	118	712	1122
EHWB DUAL 80	800	866	92,38	91,80	4,1	63	720	1285
EHWB DUAL 100	1000	1084	92,25	91,90	4,2	98	1080	1830
EHWB DUAL 124	1240	1344	92,26	91,80	6,4	62	1290	2065
EHWB DUAL 150	1500	1626	92,25	91,80	5,2	44	1710	2621
EHWB DUAL 170	1700	1842	92,29	91,80	7,2	56	1710	2621

Dimensions	H	H1	H2	H3	H4	H6	H7	H8	H10	H11	L	L1	L2	P	P2	P3	P4	P6	Øb	Øc	N1	N2	N1/N2	N3	N4	N5	N6	N7	N8
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	DN/in	DN/in	PN	DN/in	DN/in	DN/in	DN/in	DN/in
EHWB DUAL 14	1693	-	415	1245	1610	415	1245	780	54,5	884,5	939	756	700	540	1365	630	996	369	200-250	130	200	65	6	1"	1"	1"	1/2"	1/2"	1/2"
EHWB DUAL 16	1693	-	415	1245	1610	415	1245	780	54,5	884,5	939	756	700	540	1365	630	996	369	200-250	130	200	65	6	1"	1"	1"	1/2"	1/2"	1/2"
EHWB DUAL 18	1693	-	415	1245	1610	415	1245	780	54,5	884,5	939	756	700	540	1490	755	1121	369	200-250	130	200	65	6	1"	1"	1"	1/2"	1/2"	1/2"
EHWB DUAL 20	1693	-	415	1245	1610	415	1245	780	54,5	884,5	939	756	700	540	1490	755	1121	369	200-250	130	200	65	6	1"	1"	1"	1/2"	1/2"	1/2"
EHWB DUAL 24	1693	-	415	1245	1610	415	1245	780	54,5	884,5	939	756	700	540	1490	755	1121	369	200-250	130	200	65	6	1"	1"	1"	1/2"	1/2"	1/2"
EHWB DUAL 30	1793	-	440	1320	1710	440	1320	830	54,5	934,5	989	806	750	590	1798	1000	1400	398	200-250	160	250	80	6	1"	1"	1"	1/2"	1/2"	1/2"
EHWB DUAL 40	1793	-	440	1320	1710	440	1320	830	54,5	934,5	989	806	750	590	1798	1000	1400	398	200-250	160	250	80	6	1"	1"	1"	1/2"	1/2"	1/2"
EHWB DUAL 50	1793	-	440	1320	1710	440	1320	830	54,5	1034,5	989	806	750	590	2048	1250	1650	398	200-250	160	250	80	6	1"	1"	1"	1/2"	1/2"	1/2"
EHWB DUAL 60	1993	-	490	1470	1910	490	1470	930	54,5	1034,5	1089	906	850	690	2049	1250	1651	398	200-250	180	250	80	6	1"	1"	1"	1/2"	1/2"	1/2"
EHWB DUAL 70	1993	-	490	1470	1910	490	1470	930	54,5	1034,5	1089	906	850	690	2299	1500	1901	398	200-250	180	250	80	6	1"	1"	1"	1/2"	1/2"	1/2"
EHWB DUAL 80	2244	2040	500	1525	2139	500	1525	1069	50	1075	1129	946	890	720	2440	1502	1795	645	230-280	225	250	100	6	1"	1"	1"1/4(1) +1"1/2(2)	1/2"	1/2"	1/2"
EHWB DUAL 100	2624	2420	610	1825	2520	610	1825	1259	60	1275	1349	1166	1110	900	2490	1502	1847	643	270-320	225	300	100	6	1"	1"1/4	1"1/4 +1"1/2(2)	1/2"	1/2"	1/2"
EHWB DUAL 124	2640	2420	610	1825	2520	610	1825	1259	60	1275	1349	1166	1110	900	2792	1792	2113	679	270-320	225	300	125	6	1"	1"1/4	1"1/4 +1"1/2(2)	1/2"	1/2"	1/2"
EHWB DUAL 150	2935	2680	675	2020	2793	675	2020	1372	60	1405	1479	1296	1240	1000	2756	1753	2087	668	270-320	280	350	150	6	1"	1"1/4	1"1/2 +1"1/2(2)	1/2"	1/2"	1/2"
EHWB DUAL 170	2935	2680	675	2020	2793	675	2020	1372	60	1405	1479	1296	1240	1000	2756	1753	2087	668	270-320	280	350	150	6	1"	1"1/4	1"1/2 +1"1/2(2)	1/2"	1/2"	1/2"

EHWB DUAL Adjacent Combustion Chambers

design pressure 5 bar



Main features

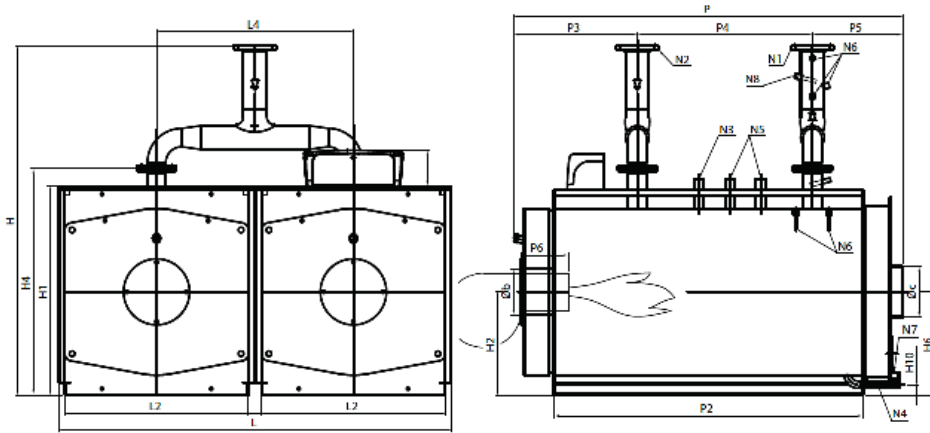
EHWB DUAL adjacent module steel boiler, employs cylindrical concentric combustion chambers with reverse flame, a blind furnace completely supported by a submerged nozzle projection welded into the rear tube plate facilitating a fully submerged wet back. The boiler is designed to be used in systems with water temperature between 60 and 100 °C (safety thermostat set at 110 °C). 3 stars classification according to 92/42/EEC directive in compliance with 192/05 and 311/06 Legislation.

Some of the product's main features are related below:

- boiler body built from high quality steel, made from front tube sheet flanged to the combustion chamber using RSB procedures and from concave rear plate (rather than a flat surface for a better resistance internal pressure)
- cylindrical reverse flame combustion chamber, supported by a submerged nozzle; the flame is positioned centrally within the chamber, whilst the hot gases return to the front of the furnace forming a second pass within the furnace, with the hot gases being conveyed through the tube bundle to the rear smoke box
- EN10217-2 P235GH smoke tubes welded to tube plates, fitted with special helical turbulators
- the rear smoke box, manufactured from thermally insulated steel sheets, constructed in one piece that can be easily opened and that allows smoke tube inspections, fastened with bolts, equipped with chimney connection and cleaning door
- boiler casing equipped with system and working device connections, all manufactured with approved welding procedures and qualified personnel
- high density, glass wool mattress insulation, protected by easily removable, varnished steel panels
- steel sheet, fibre-ceramic, thermal insulated, reversible front door, mounted on hinges, easily opened with equipped lever by drilled ferrules

EHWB DUAL Adjacent Combustion Chambers

design pressure 5 bar



Legend:

- N1 Boiler flow
- N2 Boiler return
- N3 Equipment connections
- N4 System load/drain connection
- N5 Safety valve connection
- N6 Bulb sheath
- N7 Condensate drain
- N8 Instrument pocket

Characteristics	Nominal Power Temp. Medium 70°C	Flow Thermal	100% efficiency (ref. C.O.P.) Temp. Medium 70°C	30% efficiency (ref. C.O.P.) Temp. Medium 70°C	Flue gas pressure drop	Hydraulic pressure drop (ΔT=12°C)	Water content	Total weight
Model	kW	kW	%	%	mbar	mbar	lt	kg
EHWB DUAL 80	800	866	92,38	91,80	4,1	63	720	1167
EHWB DUAL 100	1000	1084	92,25	91,90	4,2	98	1080	1705
EHWB DUAL 124	1240	1344	92,26	91,80	6,4	62	1290	1925
EHWB DUAL 150	1500	1626	92,25	91,80	5,2	44	1710	2409
EHWB DUAL 170	1700	1842	92,29	91,80	7,2	56	1710	2409
EHWB DUAL 190	1900	2060	92,23	91,70	5,2	22	1900	2833
EHWB DUAL 200	2040	2212	92,22	91,70	4,0	26	2400	3686
EHWB DUAL 240	2400	2602	92,24	91,80	5,5	35	2400	3686
EHWB DUAL 260	2600	2818	92,26	91,70	6,5	42	2400	3686

Dimensions	H	H1	H2	H4	H6	H10	L	L2	L4	P	P2	P3	P4	P5	P6	Øb	Øc	N1	N2	N1/N2	N3	N4	N5	N6	N7	N8
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	DN/in	DN/in	PN	DN/in	DN/in	DN/in	DN/in	DN/in	
EHWB DUAL 80	1690	1015	500	1095	500	50	1901	890	955	1872	1502	600	850	422	230-280	225	250	100	100	6	1"	1"	1"1/4(1)	1/2"	1/2"	1/2"
EHWB DUAL 100	1880	1205	610	1285	610	60	2341	1110	1175	1946	1502	663	850	433	270-320	225	300	100	100	6	1"	1"1/4	1"1/4	1/2"	1/2"	1/2"
EHWB DUAL 124	1902	1205	610	1285	610	60	2341	1110	1175	2235	1792	663	1150	422	270-320	225	300	125	125	6	1"	1"1/4	1"1/4	1/2"	1/2"	1/2"
EHWB DUAL 150	1990	1335	675	1417	675	60	2600	1240	1305	2247	1753	704	1100	443	270-320	280	350	150	150	6	1"	1"1/4	1"1/2	1/2"	1/2"	1/2"
EHWB DUAL 170	1990	1335	675	1417	675	60	2600	1240	1305	2247	1753	704	1100	443	270-320	280	350	150	150	6	1"	1"1/4	1"1/2	1/2"	1/2"	1/2"
EHWB DUAL 190	1990	1335	675	1417	675	60	2600	1240	1305	2497	2003	704	1200	593	270-320	280	350	200	200	6	1"	1"1/4	1"1/2	1/2"	1/2"	1/2"
EHWB DUAL 200	2025	1485	750	1568	750	60	2900	1390	1455	2477	2003	703	1200	574	270-320	280	400	200	200	6	1"	1"1/4	1"1/2	1/2"	1/2"	1/2"
EHWB DUAL 240	2025	1485	750	1568	750	60	2900	1390	1455	2477	2003	703	1200	574	270-320	280	400	200	200	6	1"	1"1/4	1"1/2	1/2"	1/2"	1/2"
EHWB DUAL 260	2025	1485	750	1568	750	60	2900	1390	1455	2477	2003	703	1200	574	270-320	280	400	200	200	6	1"	1"1/4	1"1/2	1/2"	1/2"	1/2"

EHWB Steel Boiler

design pressure 6 bar



Main features

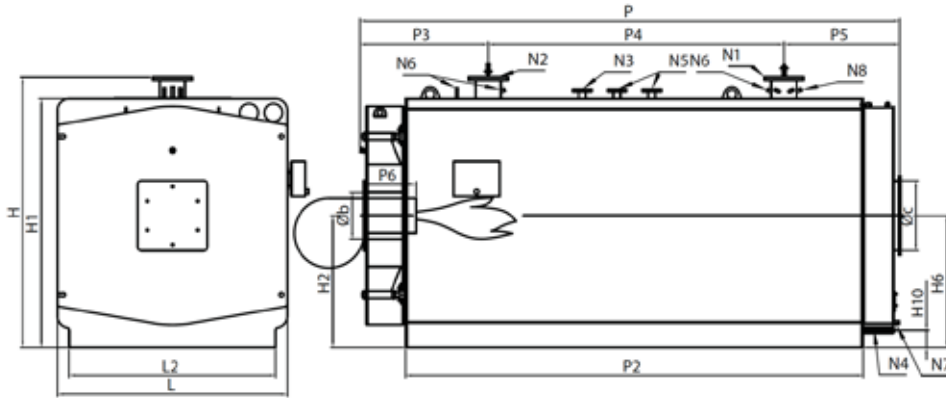
EHVB steel boiler, cylindrical combustion chamber with reverse flame, completely closed round posterior side supported by a completely submerged nozzle. Connectible to pressure air jet burner for liquid or gas fuel operation Used in systems with water temperature between 60 and 100 °C (safety thermostat set at 110 °C).

Some of the product's main features are related below:

- boiler body built from high quality steel, made from front tube sheet turned towards the combustion chamber using RSB procedures and from convex rear plate (rather than a flat surface for a better resistance internal pressure) with laser drilled holes
- cylindrical reverse flame combustion chamber, with the rear side completely sealed off by a convex bottom supported by a submerged nozzle; the flame presenting itself in the central part of the chamber, while hot gases return to the lower part of the partially submerged chamber. Hot gases will be conveyed through the tube bundle
- EN10217-2 P235GH smoke ducts welded to tube plates, fitted with special helical turbulators
- posterior fume box manufactured from thermal insulated steel sheets, constructed in one piece that can be easily opened and that allows smoke duct inspections, fastened with bolts, equipped with chimney connection and cleaning door
- boiler casing equipped with system and working device connections, all manufactured with approved welding procedures and qualified personnel
- round, embossed, aluminum casing
- high density fibreglass mattress insulation
- steel sheet, fibre-ceramic, thermal insulated rear door, mounted on hinges, easily opened with equipped lever by drilled ferrules
- support built from carbon steel sections able to support the entire unit

EHWB Steel Boiler

design pressure 6 bar



Legend:

- N1 Boiler flow
- N2 Boiler return
- N3 Equipment connections
- N4 System load/drain connection
- N5 Safety valve connection
- N6 Bulb sheath
- N7 Condensate drain
- N8 Control cover

Characteristics	Nominal Power Temp. Medium 70°C	Flow Thermal	100% efficiency (ref. C.O.P.) Temp. Medium 70°C	30% efficiency (ref. C.O.P.) Temp. Medium 70°C	Flue gas pressure drop	Hydraulic pressure drop (ΔT=12°C)	Water content	Total weight
Model	kW	kW	%	%	mbar	mbar	lt	kg
EHWB 400	4000	4333	92,31	91,80	9,0	98	4450	7420
EHWB 450	4500	4865	92,50	91,90	10,0	124	4900	7920
EHWB 500	5000	5402	92,56	91,90	10,0	63	6200	9530
EHWB 600	6000	6480	92,59	91,90	12,0	91	6900	10890

Dimensions	H	H1	H2	H6	H10	L	L2	P	P2	P3	P4	P5	P6	Øb	Øc	N1	N2	N1/N2	N3	N4	N5	N6	N7	N8
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	DN/in	DN/in	PN	DN/in	DN/in	DN/in	DN/in	DN/in	DN/in
EHWB 400	2326	2140	1135	1135	150	1980	1780	4310	3596	1105	2200	1005	450-500	400	600	200	200	16	50	1"1/4	50	1/2"-3/4"	1/2"	1/2"
EHWB 450	2326	2140	1135	1135	150	1980	1780	4660	3946	1105	2550	1005	500-550	400	600	200	200	16	50	1"1/4	50	1/2"-3/4"	1/2"	1/2"
EHWB 500	2529	2340	1235	1235	150	2180	1980	4729	3948	1174	2550	1005	500-550	450	650	250	250	16	65	1"1/4	65	1/2"-3/4"	1/2"	1/2"
EHWB 600	2529	2340	1235	1235	150	2180	1980	5261	4488	1174	3100	987	530-580	450	650	250	250	16	65	1"1/4	65	1/2"-3/4"	1/2"	1/2"

THERMOSTATIC CONTROL PANEL for EHWB models



Control panel complete with:

- Luminous signal
- 2 boiler regulating thermostats
- manual reset safety thermostat
- circulatory system consent thermostat
- burner switch
- system circulation switch
- boiler thermometer

Boiler reg. T	Security T
60° - 100° C	110° C
55° - 110° C	115° C

THERMOSTATIC CONTROL PANEL for EHWB DUAL models



Control panel complete with:

- Luminous signal
- 2 boiler regulating thermostats
- 2 manual reset security thermostats
- circulatory system consent thermostat
- burner switch
- system circulation switch
- boiler thermometer

Boiler reg. T	Security T
42° - 87° C	110° C
55° - 110° C	115° C

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