Ecoflam

COMMERCIAL BOILERS CATALOGUE



www.ecoflam-burners.com

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Ecoflam

CUSTOMIZED SOLUTIONS FOR ANY TYPE OF APPLICATION





Our Experience

Thanks to more than 40 years of experience in the design and production of burners, Ecoflam offers a full range of blown air pressure jet burners covering an extremely wide range of power, from small products for residential heating applications to high power burners dedicated to the industrial segment.
Ecoflam burners are renowned worldwide for providing high efficiency products with reliable operation, significant energy savings and extreme ease of installation, maintenance and flexible boiler-burner matching.

Our Mission

Following a philosophy of continuous improving, the R&D Laboratory is constantly working to produce better results, such as the reduced NOx level emissions.
The development of new advanced combustion technologies allow to propose solutions in respect of the most stringent environmental regulations and to create the perfect condition to face the new upcoming market requests, such as Ultra Low NOx performance and ErP-ready products.





Our Professional Team

Ability to design state-of-the-art burners, manage demands of products for specific applications, ability to solve problems in real time are just some of the characteristics of our technicians and engineers.
But not only: Ecoflam has a worldwide network of service technicians able to support the installation, the commissioning and the periodic maintenance activities of the burner.

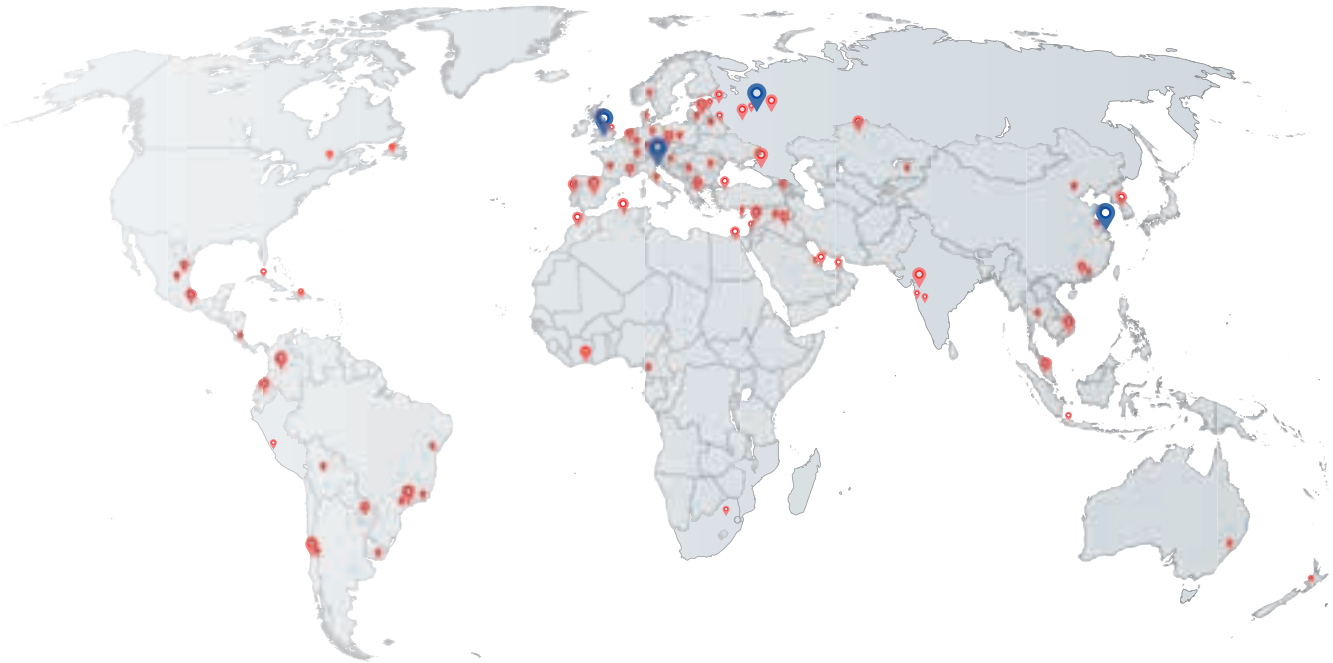
Our International Approach

Our products are designed, developed and manufactured in Italy, combining quality, reliability and high performance. All these features are necessary for the end-user satisfaction, which is the first target for Ecoflam.
Reaching this outcome throughout its extensive worldwide network of distributors and customers has always been a challenging task for Ecoflam, which was achieved only by developing a close and personalized relationship with each customer, always taking into account the needs and the distinctive characteristics of each individual market.



Our Commercial and Technical Network

Manufacturing is carried out in the factory of Resana (Treviso - Italy) and products are distributed worldwide thanks to a wide and highly qualified network of partners.
In more than 40 years, Ecoflam has been capable to build loyal partnerships and today can count on reliable partners in more than 100 Countries. They distribute Ecoflam products in their Countries of competence, they have good knowledge of the products, and can carry out commissioning and service by keeping constantly in touch with the headquarter.
Thanks to this international network Ecoflam is also able to offer original spare parts in order to guarantee reliability and safe continued operation of the end user installation.



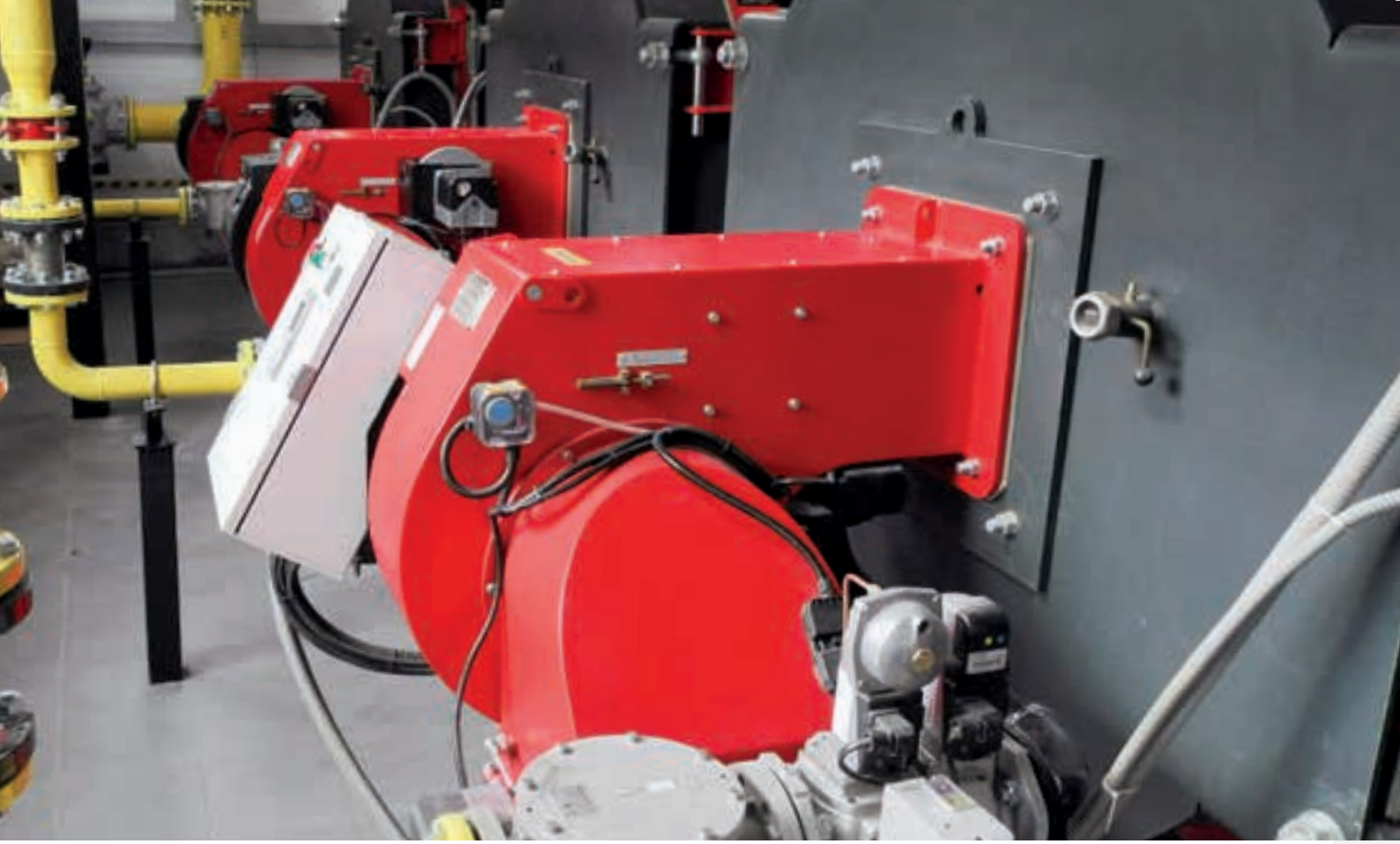
Ecoflam Worldwide

Headquarters in Italy
Subsidiary in UK
Sales Representative Office in Cina e Russia
Strong presence thanks to dealers and partners
Distribution in more than 100 Countries



Time to Market

To promptly deal with the requests of an ever changing market, Ecoflam has adopted a finished products and spare parts warehouse of over 8000 square meters. Quick response to customer requests and consistent warehouse availability allow to reduce the delivery time and give a better support to the end user.



Thanks to its strong expertise in customization, Ecoflam boasts many different solutions for a wide range of applications.
The flexibility of the Ecoflam range allows to grant quick response to each customer request, even the most demanding in term of technical specifications.

HEATING
INCINERATORS & WASTE
AGRICULTURE
ASPHALT & BUILDING
TEXTILE DRYING
FOOD PRODUCTION
WOOD BOILERS
CHEMICAL PLANTS
ENGINEERING
PLANT MODERNIZATION

Special Versions

Ecoflam is renowned for its ability to conceive and build flexible products and to propose customized solutions for any type of applications. Successful and satisfied customers, both from OEM or distribution fields, demonstrate throughout the years that Ecoflam is able to meet their requests offering a wide range of special products capable to satisfy even the most difficult ones.





Commissioning

For safe and efficient operation of the burner system it is very important that the burner is commissioned by an expert. The combustion will be optimally adjusted over the whole power range of the burner, and all the safeties will be tested. Ecoflam service technicians are able, like no other, in performing this job adequate and competent, to run the installation worry-free.

Maintenance and inspection

The burner is a crucial part of the installation. To keep the installation in good conditions, it is important to maintain the burner periodically. It is also very important to inspect all the safeties to ensure that the system operates safely.
The professional services of Ecoflam can perfectly perform this service for any type of installation.

The Burner Academy

In order to respond to the needs of the customers Ecoflam created the Burner Academy, a real school where the know-how of the internal technicians is diffused to partners and customers.
It's an opportunity for boiler room personnel, operators and engineers to attend a series of training sessions carried out on test bench by highly qualified instructors, who held the courses in English, German, French, Italian and Dutch language.
The Burner Academy uses various training locations where boilers are installed and where people can be trained in theory and in practice. Courses are available in different levels and there is also the possibility to handle customer-specific training.



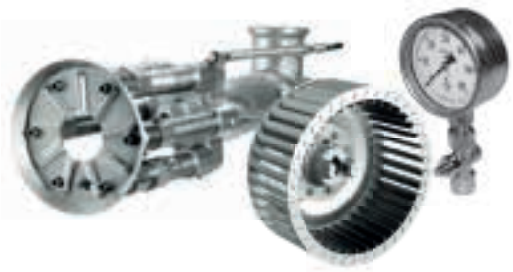


Worldwide Service Network

Ecoflam uses a worldwide network of partners, consisting of well-trained local engineers, to carry out its service operations.
These technicians are able to perform both commissioning and local service and they do it in a very professional way.

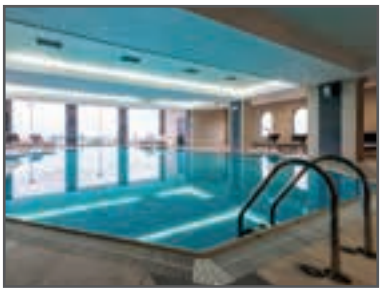
Reliable supply of spare parts

Spare parts have always had a great importance inside the Ecoflam world. Considering the high amount of parts involved in every single product, some of these parts might naturally need to be substituted. Ecoflam can count on a international network offering original spare parts in order to guarantee the highest quality, reliability and safe continued operation of the appliance.



WORLDWIDE REFERENCES









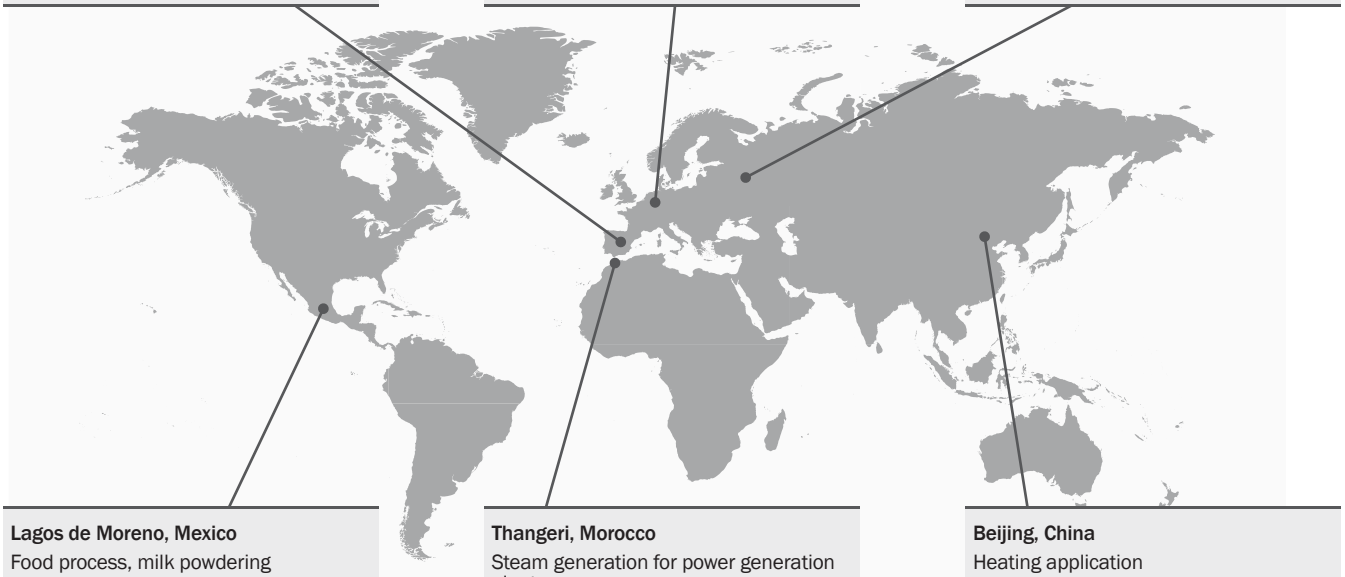




Villacañas, Toledo, Spain
Furniture industry waste (wood chips and sawdust)

Köln, Germany
Heating of the building complex as well as sanitary water

Moscow, Russia
Steam generation



Lagos de Moreno, Mexico
Food process, milk powdering

Thangeri, Morocco
Steam generation for power generation plant

Beijing, China
Heating application













ECOMAX NC 64-N÷291-N
Pressurised steel boilers with reversed flame

EFFICIENCY CLASS
according to ex Dir. 92/42/EC
★★ CE



MAIN FEATURES

COMPACT DIMENSIONS simplifies the transport and the positioning in boiler house
THERMAL EXCHANGE OPTIMISATION by driven water passage into the boiler
TUBE BUNDLE POSITIONING decentralized upwards, above the furnace, with drastic reduction of the possible condensation
Flue PIPES OF HIGH THICKNESS with anti-condensing effect
TURBULATORS for the thermal exchange optimisation into the flue pipes
BOTTOM OF THE FURNACE reinforced with U profiles for greater mechanical resistance
INTERNAL DOOR INSULATION in light refractory concrete
FRONT DOOR with self-centering locking
EXTERNAL CASING inclusive of 60 mm rock wool insulation
PANEL BOARD suitable for electronic control

ECOMAX NC 64-N÷291-N
Pressurised steel boilers with reversed flame

EFFICIENCY CLASS
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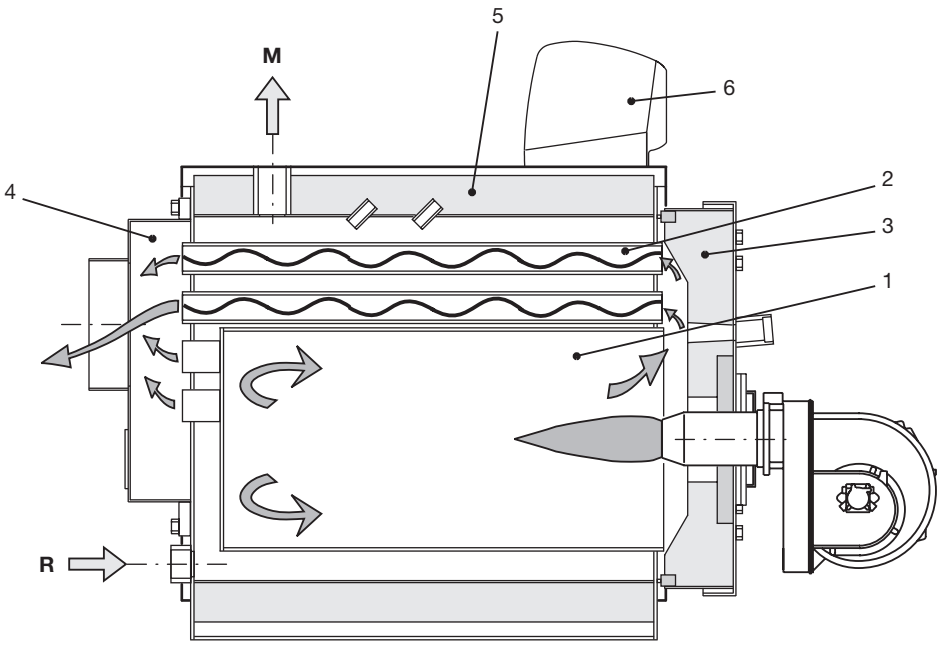
TECHNICAL DESCRIPTIONS

Pressurised steel boiler for gas or oil pressure jet burners

- Reversed flame combustion chamber
- Highly resistant to condensate thanks to:
  - Furnace misalignment against the outer shell
  - Patented fin effect on the welding seams of pipes onto the rear tube plate
- Anti-condensing helicoidal turbolators
- Heat losses reduction, due to the strong insulation (60 mm) with rock wool of the boiler body and to the ceramic fibre insulation on the door
- Adjustable door with double opening (left and right)
- Separate panel board
- Maximum working pressure: 6 bar; it is possible, under specific request, to provide a MWP of 7 - 8 - 9 - 10 bar

MAIN COMPONENTS

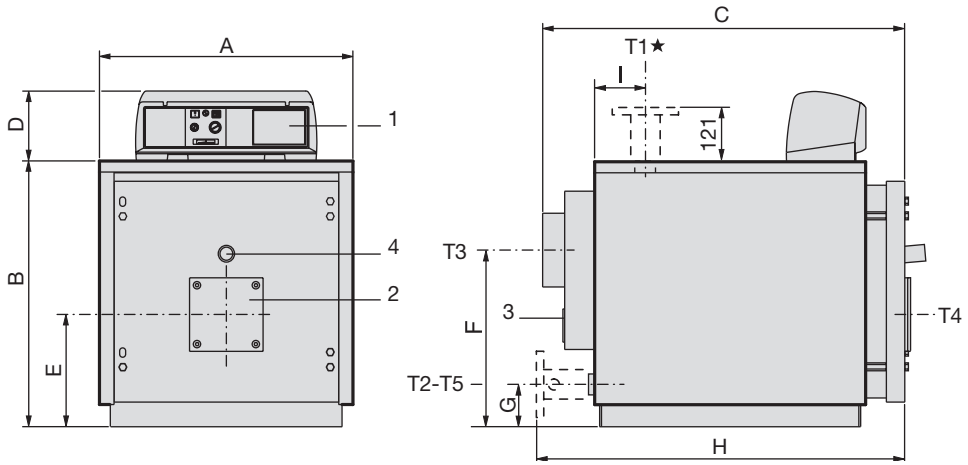
1. Furnace
2. Flue pipes with flue diverters
3. Door with flame control warning light
4. Flue chamber
5. Body insulation
6. Panel board



ECOMAX NC 64-N÷291-N
Pressurised steel boilers with reversed flame

EFFICIENCY CLASS
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DIMENSIONS



1 Board panel
2 Burner connection plate
3 Cleaning door
4 Sight glass
T1 C.H. flow
T2 C.H. return
T3 Flue connection
T4 Burner axis
T5 Boiler drain

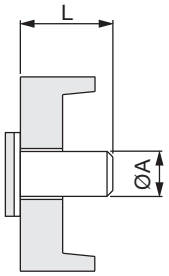
MODEL	Nominal output	Nominal input	Boiler capacity	Water pressure drops (**)	Flue gas pressure drop	Maximum boiler working pressure	Weight	CONNECTIONS			
								T1 - T2 ISO 7/1 UNI2278 PN16	T3 Øe	T4 Øi	T5 Øi
	kW	kW	l	m w.c.	mm w.c.	bar	kg		mm	mm	ISO 7/1
64-N	64	71	86	0,10	1,5	6	212	Rp 1½	200	130	Rp ¾
76-N	76	84	86	0,13	1,8	6	212	Rp 1½	200	130	Rp ¾
93-N	93	102	86	0,16	2,5	6	212	Rp 1½	200	130	Rp ¾
105-N	105	115	126	0,10	3	6	309	Rp 2	200	180	Rp ¾
116-N	116	128	126	0,10	3	6	309	Rp 2	200	180	Rp ¾
140-N	140	155	126	0,14	5	6	309	Rp 2	200	180	Rp ¾
163-N	163	180	151	0,20	8	6	349	Rp 2	200	180	Rp ¾
186-N	186	206	151	0,25	14	6	349	Rp 2	200	180	Rp ¾
233-N	233	258	203	0,22	18	6	485	DN 65*	250	180	Rp ¾
291-N	291	322	247	0,30	22	6	555	DN 65*	250	180	Rp ¾

MODEL	A	B	C	D	E	F	G	H	I
	mm	mm	mm	mm	mm	mm	mm	mm	mm
64-N	690	722	990	190	305	480	115	–	147
76-N	690	722	990	190	305	480	115	–	147
93-N	690	722	990	190	305	480	115	–	147
105-N	760	812	1205	190	350	500	130	–	157
116-N	760	812	1205	190	350	500	130	–	157
140-N	760	812	1205	190	350	500	130	–	157
163-N	760	812	1385	190	350	500	130	–	157
186-N	760	812	1385	190	350	500	130	–	258
233-N	860	937	1437	190	421	580	165	1482	258
291-N	860	937	1687	190	421	580	165	1732	258

(*) In the 233 and 291 models, connections T1 and T2 are flanged.
(**) Pressure drops corresponding to a thermal variation of 15K.

BURNER HEAD TUBE DIMENSIONS

BOILER TYPE	øA mm	L mm
64-N÷93-N	130	150
105-N÷140-N	180	170
163-N÷186-N	180	170
233-N÷291-N	180	170



ECOMAX NC 64-N÷291-N
Pressurised steel boilers with reversed flame

EFFICIENCY CLASS
according to ex Dir. 92/42/EC
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TECHNICAL DATA

Gas fired		64-N	76-N	93-N	105-N	116-N
Nominal output	kW	64,0	76,0	93,0	105,0	116,0
Nominal input	kW	71,0	84,0	102,0	115,0	128,0
Water efficiency at full load (100%)	%	90,1	90,4	91,1	91,3	90,6
Water efficiency at part load (30%)	%	85,4	85,6	85,9	86	86,1
Efficiency class (ex dir. 92/42 CEE)		1	1	1	1	1
Combustion efficiency at nominal load (100%)	%	90,6	91	91,6	91,8	91,1
Casing heat losses (80°-60°C)	%	0,5	0,5	0,5	0,5	0,4
Chimney losses with burner on	%	9,3	8,9	8,3	8,1	8,9
Chimney losses with burner off	%	0,2	0,2	0,2	0,2	0,2
TNet flue gas temperature tf-ta	°C	187,0	180,4	169,2	167,3	182,3
CO_2 content	%	9,5	9,6	9,7	9,8	9,8
Flue gas mass flow rate	kg/h	109,0	128,5	154,7	172,9	192,4

Gas fired		140-N	163-N	186-N	233-N	291-N
Nominal output	kW	140,0	163,0	186,0	233,0	291,0
Nominal input	kW	155,0	180,0	206,0	258,0	322,0
Water efficiency at full load (100%)	%	90,3	90,5	90,2	90,3	90,3
Water efficiency at part load (30%)	%	86,4	86,6	86,8	87,1	87,3
Efficiency class (ex dir. 92/42 CEE)		1	1	1	1	1
Combustion efficiency at nominal load (100%)	%	90,8	91,2	91	91	90,8
Casing heat losses (80°-60°C)	%	0,5	0,6	0,7	0,7	0,5
Chimney losses with burner on	%	9,1	8,7	8,9	8,9	9,1
Chimney losses with burner off	%	0,2	0,2	0,2	0,2	0,2
Net flue gas temperature tf-ta	°C	187,9	179,5	184,2	183,2	187,0
CO_2 content	%	9,8	9,8	9,8	9,8	9,8
Flue gas mass flow rate	kg/h	233,0	270,6	309,6	387,8	484,0

ECOMAX NC 64-N÷291-N
Pressurised steel boilers with reversed flame

EFFICIENCY CLASS
according to ex Dir. 92/42/EC
★★ CE

TECHNICAL DATA

Funzionamento a Gasolio		64-N	76-N	93-N	105-N	116-N
Nominal output	kW	64,0	76,0	93,0	105,0	116,0
Nominal input	kW	71,0	84,0	102,0	115,0	128,0
Water efficiency at full load (100%)	%	90,1	90,4	91,1	91,3	90,6
Water efficiency at part load (30%)	%	85,4	85,6	85,9	86	86,1
Efficiency class (ex dir. 92/42 CEE)		1	1	1	1	1
Combustion efficiency at nominal load (100%)	%	90,6	91	91,6	91,7	91,1
Casing heat losses (80°-60°C)	%	0,5	0,5	0,4	0,4	0,4
Chimney losses with burner on	%	9,3	8,9	8,3	8,2	8,9
Chimney losses with burner off	%	0,2	0,2	0,2	0,2	0,2
Net flue gas temperature tf-ta	°C	200,0	193,0	181,0	179,0	195,0
CO_2 content	%	12,4	12,5	12,6	12,7	12,8
Flue gas mass flow rate	kg/h	111,4	131,6	158,6	177,4	196

Funzionamento a Gasolio		140-N	163-N	186-N	233-N	291-N
Nominal output	kW	140,0	163,0	186,0	233,0	291,0
Nominal input	kW	155,0	180,0	206,0	258,0	322,0
Water efficiency at full load (100%)	%	90,3	90,5	90,2	90,3	90,3
Water efficiency at part load (30%)	%	86,4	86,6	86,8	87,1	87,3
Efficiency class (ex dir. 92/42 CEE)		1	1	1	1	1
Combustion efficiency at nominal load (100%)	%	90,8	91,2	91	91	90,8
Casing heat losses (80°-60°C)	%	0,5	0,6	0,7	0,7	0,5
Chimney losses with burner on	%	9,1	8,7	8,9	8,9	9,1
Chimney losses with burner off	%	0,2	0,2	0,2	0,2	0,2
Net flue gas temperature tf-ta	°C	201,0	192,0	197,0	196,0	200,0
CO_2 content	%	12,8	12,8	12,8	12,8	12,8
Flue gas mass flow rate	kg/h	237,4	275,6	315,4	395,1	493,1

NOTE

ECOMAX NC 340-N÷7000-N
Pressurised steel boilers with reversed flame

EFFICIENCY CLASS
according to ex Dir. 92/42/EC
★★ CE



MAIN FEATURES

FLEXIBILITY OF USE
THERMAL EXCHANGE OPTIMISATION by driven water passage into the boiler
THE ELLIPTIC SHELL SHAPE (up to 970 kW) has interesting advantages:
- smaller dimensions (for easier transport and positioning)
- flue pipes positioning above the furnace with drastic reduction of the possible condensation

Flue PIPES OF HIGH THICKNESS with anti-condensing effect
TURBOLATORS for the thermal exchange optimisation into the flue pipes
CYLINDRICAL FLOATING FURNACE anti thermo-mechanic stress from 760 kW
BOTTOM OF THE FURNACE WITH DISSIPATION PLATES for greater performance and greater mechanical resistance
FRONT DOOR with self centering locking strong base plates

ECOMAX NC 340-N÷7000-N
Pressurised steel boilers with reversed flame

EFFICIENCY CLASS
according to ex Dir. 92/42/EC
★★ CE

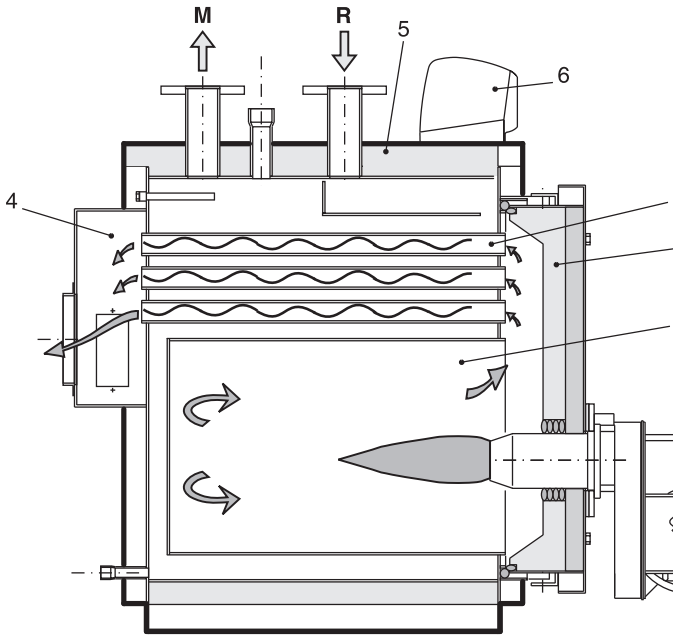
TECHNICAL DESCRIPTIONS

Pressurised steel boiler for gas, oil or heavy - oil pressure jet burners, with floating furnace from the model 730 up to the model 7000

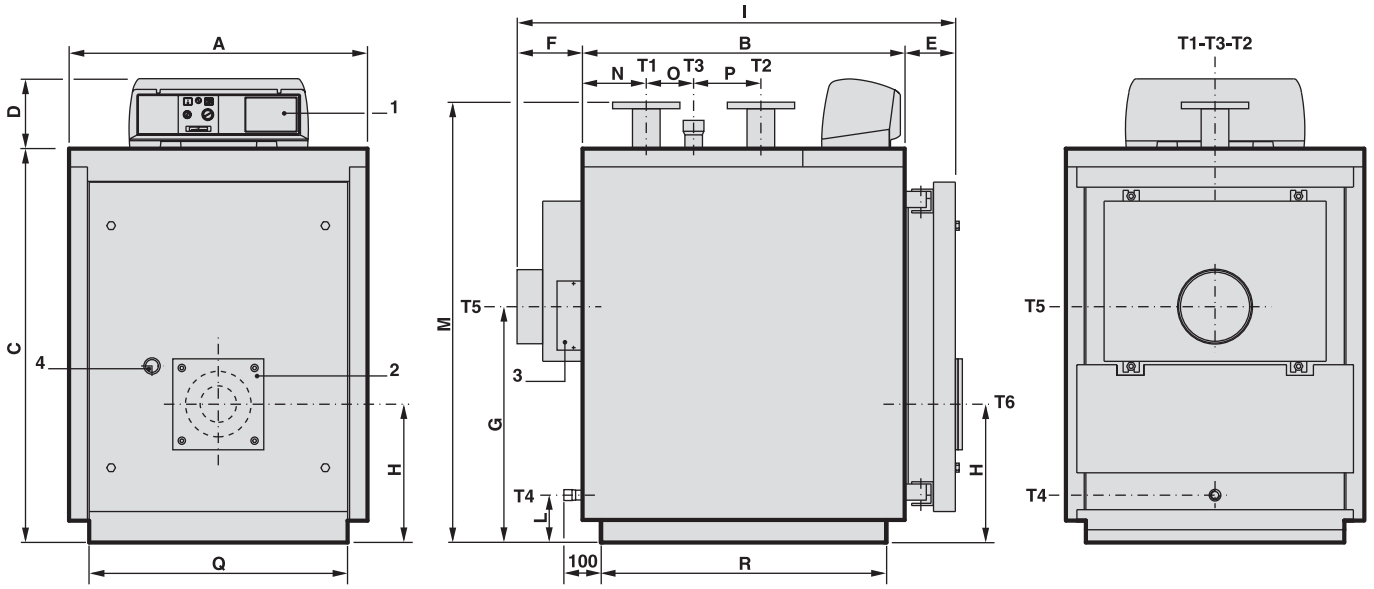
- Reversed flame combustion chamber
- Elliptic boiler body up to the model 970 kW
- Highly condensate resistant thanks to:
  - Misalignment of the furnace against the outer shell
  - Patented fin effect on the welding seams of pipes onto the rear tube plate
- Silent operation thanks to low counter pressure on flue side
- High mechanical resistance thanks to floating furnace (for the models 730 to 7000 the furnace, welded only to the front tube plate, is free to dilatate)
- Anti-condensing helicoidal turbolators
- Heat losses reduction, due to the strong insulation (80 mm) with rock wool of the boiler body and (up to the mod. 970), to the ceramic fibre insulation on the door (- 30% of radiation losses)
- Adjustable door with double opening (left and right)
- Approval as boiler with ranged output
- External panel board with mechanical control and safety thermostats (as an optional extra an outer compensator can be supplied)
- Easy installation
- Constrtuction according to the EN 303, part 1.
- Maximum Working Pressure: 6 bar; (for models 1100÷4000 it is possible, under specific request, to provide a MWP up to 10 bar)
- Two bulb holders, capable to accommodate 3 bulbs

MAIN COMPONENTS

1. Furnace
2. Flue pipes with flue diverters
3. Door with flame control warning light
4. Flue chamber
5. Body insulation
6. Panel board



DIMENSIONS - 340÷970



1 Panel board
2 Burner connection flange
3 Flue chamber cleaning door
4 Flame control warning light

T1 Heating flow
T2 Heating return
T3 Expansion vessel connection
T4 Boiler drain

T5 Chimney connection
T6 Burner connection

MODEL	Nominal output	Nominal input	Boiler capacity	Water pressure drops (**)	Flue gas pressure drop	Maximum boiler working pressure	Combustion chamber	Weight	CONNECTIONS				
									T1 T2	T3 ISO 7/1	T4	T5 Øi	T6 Ø
	kW	kW	l	m w.c.	mm w.c.	bar	m³	kg	UNI 2278 PN16	UNI 2278 PN16	ISO 7/1	mm	mm
340-N	255÷340	277÷371	298	0,16÷0,28	17÷34	6	0,226	629	DN 80	Rp 2	Rp ¾	250	220
420-N	315÷420	342÷459	398	0,09÷0,17	16÷29	6	0,288	796	DN 100	Rp 2	Rp ¾	250	220
510-N	385÷510	418÷557	462	0,14÷0,25	24÷43	6	0,337	919	DN 100	Rp 2	Rp ¾	250	220
630-N	480÷630	520÷688	565	0,21÷0,38	32÷55	6	0,416	1049	DN 100	Rp 2	Rp ¾	300	220
760-N	580÷760	630÷830	671	0,15÷0,26	29÷51	6	0,513	1341	DN 125	DN 65	Rp 1¼	350	270
870-N	660÷870	715÷950	753	0,19÷0,33	33÷57	6	0,584	1447	DN 125	DN 65	Rp 1¼	350	270
970-N	750÷970	815÷1060	836	0,24÷0,41	29÷49	6	0,656	1553	DN 125	DN 65	Rp 1¼	350	270

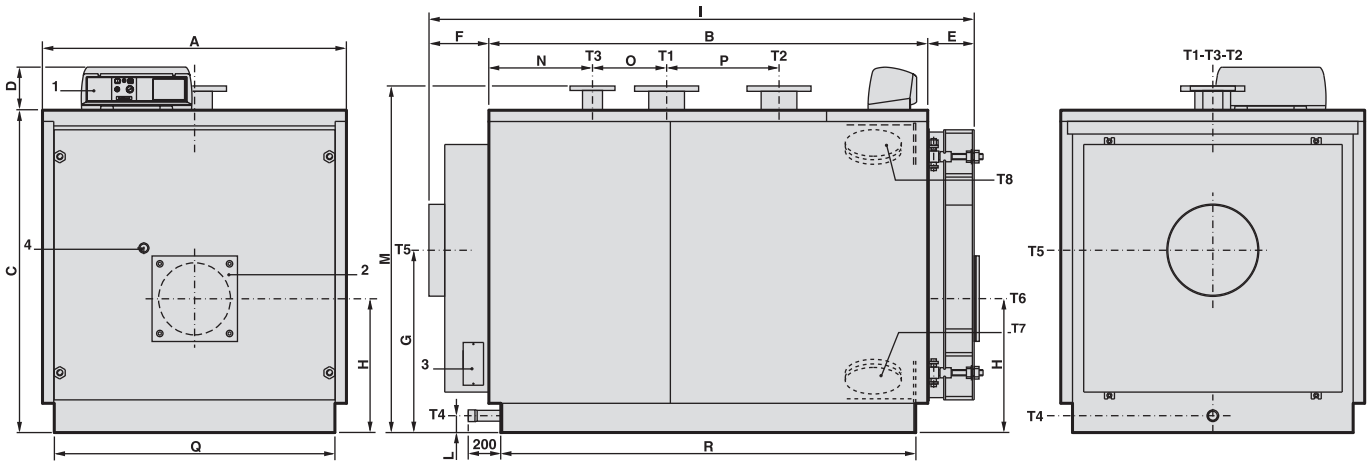
MODEL	A	B	C	D	E	F	G	H	I	L	M*	N	O	P	Q*	R*
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
340-N	860	1210	1182	190	139	190	708	400	1541	130	1310	215	340	250	750	1112
420-N	890	1275	1352	190	139	190	748	440	1606	125	1485	255	285	315	780	1177
510-N	890	1470	1352	190	139	190	748	440	1801	125	1485	255	480	315	780	1372
630-N	890	1780	1352	190	139	190	748	440	2113	125	1485	255	790	315	780	1682
760-N	1122	1605	1432	190	195	190	765	480	1989	125	1540	298	435	440	1020	1504
870-N	1122	1800	1432	190	195	190	765	480	2184	125	1540	298	630	440	1020	1699
970-N	1122	1995	1432	190	195	190	765	480	2379	125	1540	298	825	440	1020	1894

(*) Minimum dimensions for boiler room access.
(**) Pressure drops corresponding to a thermal variation of 15K.

ECOMAX NC 340-N÷7000-N
Pressurised steel boilers with reversed flame

EFFICIENCY CLASS
according to ex Dir. 92/42/EC
★★ CE

DIMENSIONS - 1100÷2650



1 Panel board
2 Burner connection flange
3 Flue chamber cleaning door
4 Flame control warning light

T1 Heating flow
T2 Heating return
T3 Expansion vessel connection
T4 Boiler drain

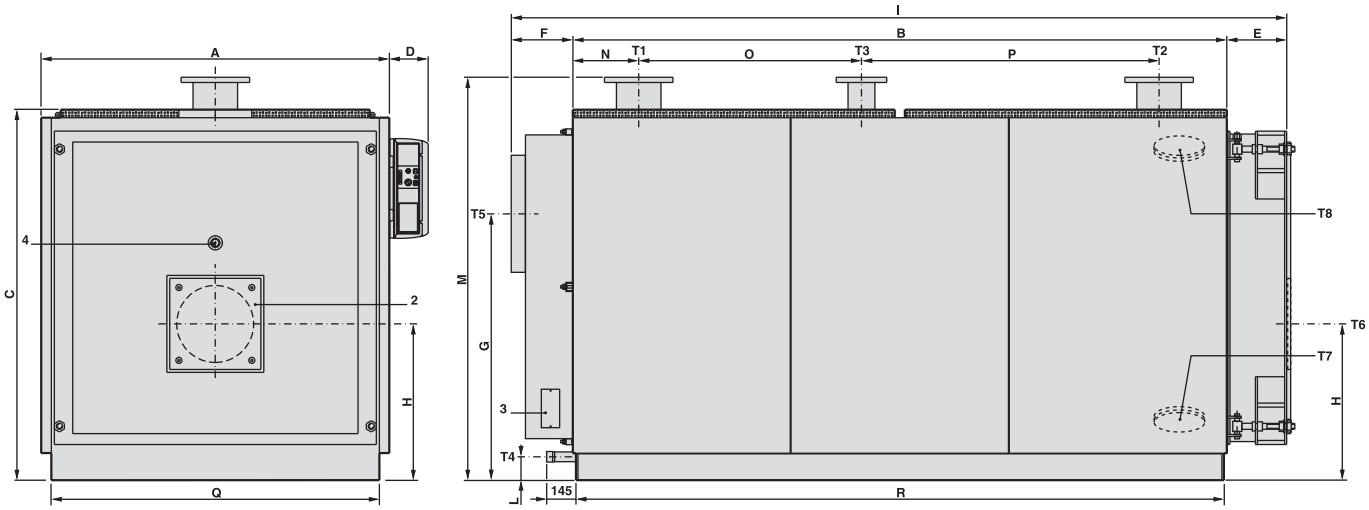
T5 Chimney connection
T6 Burner connection
T7 Boiler air bleed
T8 Inspection door

MODEL	Nominal output	Nominal input	Boiler capacity	Water pressure drops (**)	Perdite di carico lato fumi	Maximum boiler working pressure	Combustion chamber	Weight	CONNECTIONS				
									T1 T2	T3	T4	T5 Øi	T6 Ø
	kW	kW	l	m w.c.	mm w.c.	bar	m^3	kg	UNI 2278 PN16	UNI 2278 PN16	ISO 7/1	mm	mm
1100-N	860÷1100	935÷1200	1040	0,18÷0,30	32÷52	6	0,748	1821	DN 150	DN 80	Rp 1½	400	320
1320-N	1000÷1320	1087÷1442	1242	0,20÷0,35	38÷67	6	0,869	2030	DN 150	DN 80	Rp 1½	400	320
1570-N	1200÷1570	1304÷1715	1418	0,19÷0,33	35÷60	6	1,087	2780	DN 175	DN 100	Rp 1½	450	320
1850-N	1400÷1850	1520÷2020	1617	0,26÷0,45	42÷73	6	1,303	3280	DN 175	DN 100	Rp 1½	450	320
2200-N	1700÷2200	1845÷2400	2086	0,21÷0,34	39÷65	6	1,650	4145	DN 200	DN 125	Rp 1½	520	380
2650-N	2000÷2650	2170÷2890	2324	0,28÷0,48	43÷76	6	1,866	4465	DN 200	DN 125	Rp 1½	520	380

MODEL	A	B	C	D	E	F	G	H	I	L	M*	N	O	P	Q*	R*
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
1100-N	1352	1952	1432	190	207	187	810	595	2346	180	1540	461	330	500	1250	1846
1320-N	1352	2292	1432	190	207	187	810	595	2686	180	1540	461	670	500	1250	2186
1570-N	1462	2282	1542	190	227	272	880	640	2781	75	1650	561	510	550	1360	2176
1850-N	1462	2652	1542	190	227	272	880	640	3151	75	1650	561	880	550	1360	2546
2200-N	1622	2692	1702	190	259	274	950	690	3225	75	1810	661	670	700	1520	2590
2650-N	1622	3014	1702	190	258	273	950	690	3545	75	1810	662	990	700	1520	2910

(*) Minimum dimensions for boiler room access. (**) Pressure drops corresponding to a thermal variation of 15K.
On special order the boilers from model 1100 to 7000 can be manufactured for a max. working pressure up to 10 bar.

DIMENSIONS - 3000÷4000



1	Panel board	T1	C.H. flow	T5	Flue socket
2	Burner fixing plate	T2	C.H. return	T6	Burner connection
3	Flue chamber cleaning door	T3	Expansion vessel connection	T7	Sludge drain
4	Sight glass	T4	Boiler drain	T8	Inspection door

MODEL	Nominal output	Nominal input	Boiler capacity	Water pressure drops (**)	Flue gas pressure drop	Maximum boiler working pressure	Combustion chamber	Weight	CONNECTIONS				
									T1 T2	T3	T4	T5 Øi	T6 Ø
	kW	kW	l	m w.c.	mm w.c.	bar	m^3	kg	UNI 2278 PN16	UNI 2278 PN16	ISO 7/1	mm	mm
3000-N	2300÷3000	2492÷3280	2667	0,36÷0,62	35÷60	6	2,313	5110	DN 200	DN 125	Rp 1½	570	380
3500-N	2700÷3500	2930÷3825	4142	0,54÷0,84	47÷74	6	2,601	6700	DN 200	DN 125	Rp 1½	620	400
4000-N	3040÷4000	3297÷4371	4455	0,54÷0,85	60÷80	6	3,126	7500	DN 250	DN 125	Rp 1½	620	400

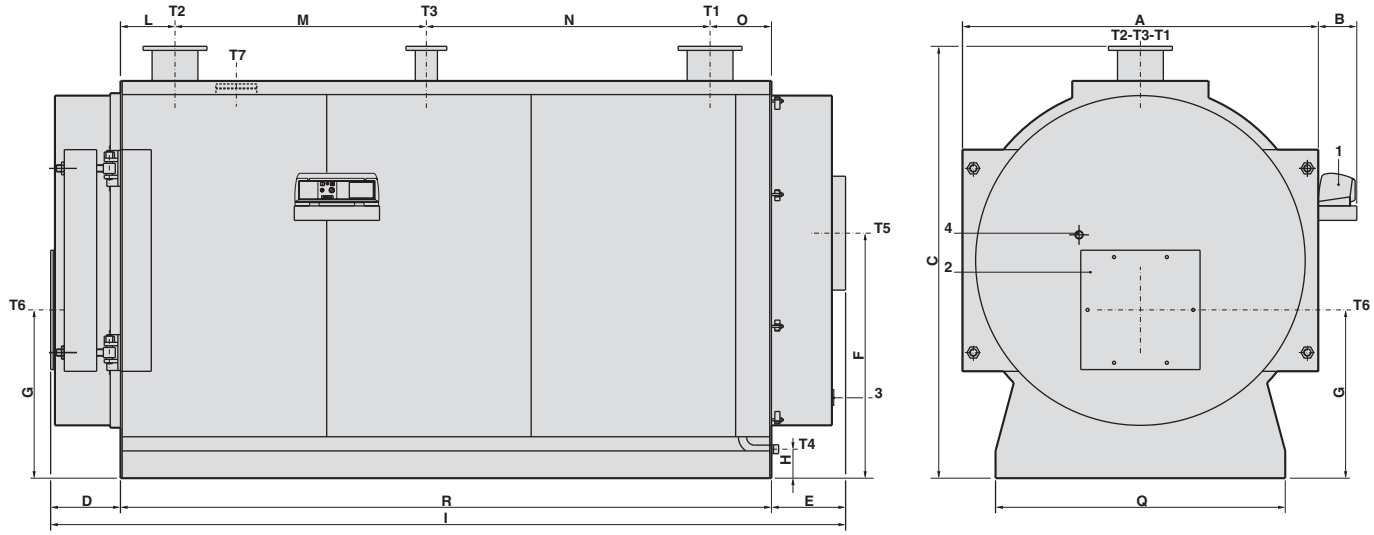
MODEL	A	B	C	D	E	F	G	H	I	L	M*	N	O	P	Q*	R*
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
3000-N	1720	3230	1830	190	295	310	1315	772	3835	115	1990	325	1100	1470	1620	3200
3500-N	1970	3194	2090	190	325	360	1535	915	3879	144	2271	377	1060	1420	1870	3164
4000-N	1970	3594	2090	190	325	360	1535	915	4279	144	2271	777	1060	1420	1870	3564

(*) Minimum dimensions for boiler room access. (**) Pressure drops corresponding to a thermal variation of 15K.
On special order the boilers from model 1100 to 7000 can be manufactured for a max. working pressure up to 10 bar.

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DIMENSIONS - 4500÷7000 (on request)



1 Panel board
2 Burner connection flange
3 Flue chamber cleaning door
4 Flame control warning light

T1 Heating flow
T2 Heating return
T3 Expansion vessel connection
T4 Boiler drain

T5 Chimney connection
T6 Burner connection
T7 Inspection door

MODEL	Nominal output	Nominal input	Boiler capacity	Water pressure drops (**)	Flue gas pressure drop	Maximum boiler working pressure	Combustion chamber	Weight	CONNECTIONS					
									T1 T2	T3	T4	T5 Øi	T6 Ø	T7 Ø
	kW	kW	l	m w.c.	mm w.c.	bar	m^3	kg	UNI 2278 PN16	UNI 2278 PN16	ISO 7/1	mm	mm	mm
4500-N	3420÷4500	3638,3÷4838,7	6012	0,70÷0,85	51÷88	6	4,151	8310	DN 250	DN 125	Rp 1½	660	500	133
5000-N	3800÷5000	4064,2÷5421,8	6012	0,80÷1,05	65÷110	6	4,151	8310	DN 250	DN 125	Rp 1½	660	500	133
5500-N	4180÷5500	4446,8÷5914	7058	0,95÷1,15	60÷100	6	4,838	9300	DN 250	DN 125	Rp 1½	660	500	133
6000-N	4560÷6000	4877÷6506,2	7058	1,00÷1,35	68÷120	6	4,838	9300	DN 250	DN 125	Rp 1½	660	500	133
6500-N	4940÷6500	5255,3÷6989,2	7909	1,05÷1,50	61÷105	6	6,832	12600	DN 250	DN 125	Rp 1½	720	500	133
7000-N	5320÷7000	5689,8÷7590,5	7909	1,10÷1,75	69÷120	6	6,832	12600	DN 250	DN 125	Rp 1½	720	500	133

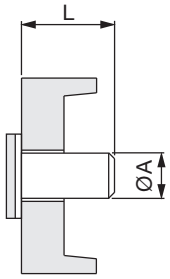
MODEL	A	B	C*	D	E	F	G	H	I	L	M	N	O	Q*	R*
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
4500-N	2088	226	2533	417	445	1437	987	170	4682	320	1475	1665	360	1700	3820
5000-N	2088	226	2533	417	445	1437	987	170	4682	320	1475	1665	360	1700	3820
5500-N	2214	240	2653	437	465	1550	1007	167	4872	320	1475	1815	360	1700	3970
6000-N	2214	240	2653	437	465	1550	1007	167	4872	320	1475	1815	360	1700	3970
6500-N	2380	240	2860	509	595	1650	1100	224	5484	325	2920	670	465	1850	4380
7000-N	2380	240	2860	509	595	1650	1100	224	5484	325	2920	670	465	1850	4380

(*) Minimum dimensions for boiler room access. (**) Pressure drops corresponding to a thermal variation of 15K.
On special order the boilers from model 1100 to 7000 can be manufactured for a max. working pressure up to 10 bar.

BURNER HEAD TUBE DIMENSIONS

BOILER TYPE	øA mm	L mm
340-N÷630-N	220	250
760-N÷970-N	270	270
1100-N÷1320-N	320	300
1570-N÷1850-N	320	320
2200-N÷2650-N	380	350

BOILER TYPE	øA mm	L mm
3000-N	380	400
3500-N÷4000-N	400	400
4500-N÷6000-N	500	520
6500-N÷7000-N	500	630



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TECHNICAL DATA

Oil fired		340-N	420-N	510-N	630-N	760-N	870-N	970-N	1100-N
Nominal heat output	kW	255÷340	315÷420	385÷510	480÷630	580÷760	660÷870	750÷970	860÷1100
Thermal output of furnace	kW	277÷371	342÷459	418÷557	520÷688	630÷830	715÷950	815÷1060	935÷1200
Heat efficiency at nominal load (100%)	%	92÷91,6	92,1÷91,5	92,1÷91,5	92,3÷91,5	92÷91,5	91,5÷91,5	92÷91,5	91,9÷91,6
Heat efficiency at 30% load	%	93,6÷93,6	93,9÷93,9	93,9÷93,9	93,9÷93,9	93,9÷93,9	3,9÷93,9	93,9÷93,9	93,9÷93,9
Combustion efficiency at nominal load (100%)	%	92,8÷92,5	92,7÷92,4	92,7÷92,4	92,6÷92	92,3÷92,1	92,1÷92,1	92,5÷91,9	92,3÷92
Heat loss at casing (min.-max.)	%	0,8÷0,8	0,6÷0,9	0,6÷0,9	0,3÷0,4	0,2÷0,5	0,5÷0,5	0,4÷0,4	0,4÷0,3
Heat loss at chimney with burner on (min.-max.)	%	7,1÷7,4	7,2÷7,5	7,3÷7,5	7,3÷7,9	7,6÷7,8	7,8÷7,8	7,4÷8	7,6÷7,9
Heat loss at chimney with burner off (min.-max.)	%	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2
Flue gas temperature tf-ta (min.-max.)	°C	156÷164	158÷166	160÷165	162÷175	168÷173	158÷172	164÷177	167÷175
CO_2 content	%	12,8÷12,8	12,8÷12,8	12,8÷12,8	12,8÷12,8	12,8÷12,8	12,8÷12,8	12,8÷12,8	12,8÷12,8
Flue gas mass flow rate (min.-max)	kg/h	424÷568	523÷702	640÷852	796÷1053	964÷1271	1094÷1454	1248÷1632	1431÷1837

Oil fired		1320-N	1570-N	1850-N	2200-N	2650-N	3000-N	3500-N	4000-N
Nominal heat output	kW	1000÷1320	1200÷1570	1400÷1850	1700÷2200	2000÷2650	2300÷3000	2700÷3500	3040÷4000
Thermal output of furnace	kW	1087÷1442	1304÷1715	1520÷2020	1845÷2400	2170÷2890	2492÷3280	2930÷3825	3297÷4371
Heat efficiency at nominal load (100%)	%	92÷91,5	92÷91,5	92,1÷91,5	92,1÷91,6	92,1÷91,7	92,3÷91,4	92,1÷91,4	92,2÷91,5
Heat efficiency at 30% load	%	93,9÷93,9	93,9÷93,9	93,9÷93,9	93,9÷93,9	93,9÷93,9	93,9÷93,9	93,9÷93,9	93,9÷93,9
Combustion efficiency at nominal load (100%)	%	92,2÷91,8	92,2÷91,9	92,4÷91,8	92,4÷91,9	92,4÷92	92,4÷91,7	92,4÷91,7	92,4÷91,8
Heat loss at casing (min.-max.)	%	0,2÷0,2	0,2÷0,3	0,3÷0,3	0,3÷0,3	0,3÷0,3	0,1÷0,3	0,3÷0,3	0,2÷0,3
Heat loss at chimney with burner on (min.-max.)	%	7,7÷8,1	7,7÷8	7,5÷8,1	7,5÷8	7,5÷7,9	7,5÷8,2	7,5÷8,2	7,5÷8,1
Heat loss at chimney with burner off (min.-max.)	%	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2
Flue gas temperature tf-ta (min.-max.)	°C	170÷179	170÷177	165÷178	165÷176	165÷175	165÷180	165÷180	165÷179
CO_2 content	%	12,8÷12,8	12,8÷12,8	12,8÷12,8	12,8÷12,8	12,8÷12,8	12,8÷12,8	12,8÷12,8	12,8÷12,8
Flue gas mass flow rate (min.-max)	kg/h	1664÷2208	1996÷2626	2327÷3093	2825÷3675	3322÷4425	3816÷5022	4486÷5861	5048÷6693

Oil fired		4500-N	5000-N	5500-N	6000-N	6500-N	7000-N
Nominal heat output	kW	3420÷4500	1200÷1570	1400÷1850	1700÷2200	2000÷2650	2300÷3000
Thermal output of furnace	kW	3638,3÷4838,7	1304÷1715	1520÷2020	1845÷2400	2170÷2890	2492÷3280
Heat efficiency at nominal load (100%)	%	94,0÷93,0	92÷91,5	92,1÷91,5	92,1÷91,6	92,1÷91,7	92,3÷91,4
Heat efficiency at 30% load	%	94,66÷93,65	93,9÷93,9	93,9÷93,9	93,9÷93,9	93,9÷93,9	93,9÷93,9
Combustion efficiency at nominal load (100%)	%	94,53÷93,48	92,2÷91,9	92,4÷91,9	92,4÷91,9	92,4÷92	92,4÷91,8
Heat loss at casing (min.-max.)	%	0,53÷0,48	0,2÷0,4	0,3÷0,3	0,3÷0,3	0,3÷0,3	0,2÷0,3
Heat loss at chimney with burner on (min.-max.)	%	5,47÷6,52	7,7÷8	7,5÷8,1	7,5÷8	7,5÷7,9	7,5÷8,1
Heat loss at chimney with burner off (min.-max.)	%	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2
Flue gas temperature tf-ta (min.-max.)	°C	120÷143	158÷165	153÷166	153÷164	153÷163	153÷167
CO_2 content	%	12,8÷12,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8
Flue gas mass flow rate (min.-max)	kg/h	5571,4÷7409,6	1960÷2577	2284÷3036	2773÷3607	3261÷4344	3745÷4930

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Gas fired		340-N	420-N	510-N	630-N	760-N	870-N	970-N	1100-N
Nominal heat output	kW	255÷340	315÷420	385÷510	480÷630	580÷760	660÷870	750÷970	860÷1100
Thermal output of furnace	kW	277÷371	342÷459	418÷557	520÷688	630÷830	715÷950	815÷1060	935÷1200
Heat efficiency at nominal load (100%)	%	92÷91,6	92,1÷91,5	92,1÷91,5	92,3÷91,5	92÷91,5	92,3÷91,5	92÷91,5	91,9÷91,6
Heat efficiency at 30% load	%	93,6÷93,6	93,9÷93,9	93,9÷93,9	93,9÷93,9	93,9÷93,9	93,9÷93,9	93,9÷93,9	93,9÷93,9
Combustion efficiency at nominal load (100%)	%	92,9÷92,5	92,8÷92,4	92,7÷92,4	92,6÷92	92,3÷92,1	92,8÷92,1	92,5÷91,9	91,4÷92
Heat loss at casing (min.-max.)	%	0,8÷0,8	0,7÷0,9	0,6÷0,9	0,3÷0,4	0,2÷0,5	0,5÷0,6	0,5÷0,4	0,4÷0,3
Heat loss at chimney with burner on (min.-max.)	%	7,1÷7,4	7,1÷7,5	7,2÷7,5	7,3÷7,9	7,6÷7,8	7,1÷7,8	7,4÷8	7,6÷7,9
Heat loss at chimney with burner off (min.-max.)	%	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2
Flue gas temperature tf-ta (min.-max.)	°C	145÷152	147÷154	149÷153	151÷163	156÷161	147÷160	152÷165	155÷163
CO_2 content	%	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8
Flue gas mass flow rate (min.-max)	kg/h	416÷557	514÷689	628÷837	781÷1034	947÷1247	1074÷1428	1225÷1593	1405÷1803

Gas fired		1320-N	1570-N	1850-N	2200-N	2650-N	3000-N	3500-N	4000-N
Nominal heat output	kW	1000÷1320	1200÷1570	1400÷1850	1700÷2200	2000÷2650	2300÷3000	2700÷3500	3040÷4000
Thermal output of furnace	kW	1087÷1442	1304÷1715	1520÷2020	1845÷2400	2170÷2890	2492÷3280	2930÷3825	3297÷4371
Heat efficiency at nominal load (100%)	%	92÷91,5	92÷91,5	92,1÷91,5	92,1÷91,6	92,1÷91,7	92,3÷91,4	92,1÷91,4	92,2÷91,5
Heat efficiency at 30% load	%	93,9÷93,9	93,9÷93,9	93,9÷93,9	93,9÷93,9	93,9÷93,9	93,9÷93,9	93,9÷93,9	93,9÷93,9
Combustion efficiency at nominal load (100%)	%	92,2÷91,8	92,2÷91,9	92,4÷91,9	92,4÷91,9	92,4÷92	92,4÷91,8	92,4÷91,8	92,4÷91,8
Heat loss at casing (min.-max.)	%	0,2÷0,3	0,2÷0,4	0,3÷0,3	0,3÷0,3	0,3÷0,3	0,2÷0,3	0,3÷0,3	0,2÷0,3
Heat loss at chimney with burner on (min.-max.)	%	7,7÷8,1	7,7÷8	7,5÷8,1	7,5÷8	7,5÷7,9	7,5÷8,1	7,5÷8,1	7,5÷8,1
Heat loss at chimney with burner off (min.-max.)	%	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2
Flue gas temperature tf-ta (min.-max.)	°C	158÷166	158÷165	153÷166	153÷164	153÷163	153÷167	153÷167	153÷166
CO_2 content	%	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8
Flue gas mass flow rate (min.-max)	kg/h	1633÷2167	1960÷2577	2284÷3036	2773÷3607	3261÷4344	3745÷4930	4404÷5754	4955÷6570

Gas fired		4500-N	5000-N	5500-N	6000-N	6500-N	7000-N
Nominal heat output	kW	3420÷4500	3800÷5000	4180÷5500	4560÷6000	4940÷6500	5320÷7000
Thermal output of furnace	kW	3638,3÷4838,7	4064,2÷5421,8	4446,8÷5914	4877÷6506,2	5255,3÷6989,2	5689,8÷7590,5
Heat efficiency at nominal load (100%)	%	94,0÷93,0	93,5÷92,22	94,0÷93,0	93,5÷92,22	94,0÷93,0	93,5÷92,22
Heat efficiency at 30% load	%	94,66÷93,65	94,15÷92,87	94,66÷93,65	94,15÷92,87	94,66÷93,65	94,15÷92,87
Combustion efficiency at nominal load (100%)	%	94,54÷93,51	94,05÷92,83	94,54÷93,46	94,05÷92,83	94,54÷93,46	94,05÷92,83
Heat loss at casing (min.-max.)	%	0,54÷0,51	0,55÷0,61	0,54÷0,46	0,55÷0,61	0,54÷0,46	0,55÷0,61
Heat loss at chimney with burner on (min.-max.)	%	5,46÷6,49	5,95÷7,17	5,46÷6,54	5,95÷7,17	5,46÷6,54	5,95÷7,17
Heat loss at chimney with burner off (min.-max.)	%	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2
Flue gas temperature tf-ta (min.-max.)	°C	112÷133	122÷147	112÷134	122÷147	112÷134	122÷147
CO2 content	%	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8
Flue gas mass flow rate (min.-max)	kg/h	5468,9÷7273,3	6109,0÷8149,8	6684,2÷8889,5	7330,8÷9779,7	7899,5÷10505,8	8552,6÷11409,7

ECOMAX 3SC 80-N÷6100-N
Pressurised steel boilers with reversed flame

EFFICIENCY CLASS
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MAIN FEATURES

CERTIFICATION IN OUTPUT RANGE
OUTER SHELL OF ELLIPTIC SHAPE (up to the model 870 kW) that creates the following advantages:
- small dimensions in width
- positioning of most of the tube bundle above the furnace, with drastic reduction of the possible formation of condensate

FLOATING FURNACE from model 680 and on, in order to reduce the mechanical stress due to the different dilatations of the furnace, flue pipes and outer shell.
FURNACE BOTTOM with heat recovering plates welded on the water side for efficiency increase and as stiffeners of the bottom it self.
MULTI-FIN, PATENTED, BIMETALLIC PIPES with high efficiency
OPTIMIZATION OF THE HEAT EXCHANGE thanks to:
- special helical turbulators in the front part of the flue pipes
- guided water way inside the boiler

FRONT DOOR with self-centring closing, adjustable in vertical / axial and transversal way, with bolts separated from the hinges to avoid mechanical stresses
INTERNAL DOOR INSULATION in recyclable super light concrete
OUTER PROTECTING CASING in steel sheet panels, with insulating mattress in mineral wool protected with anti-tearing fabric foil, rounded directly on the boiler body. Thickness of 50 - 60 - 80 - 100 mm according to the output.
Flue CHAMBER with condensate drain connection
BOARD PANEL thermostatic type (std) or electronic type (optional)
EASY HANDLING thanks to the upper hooks and strong base longitudinal members
AVAILABLE IN LOOSEN PARTS VERSION to be assembled in the boiler house (up to 870 kW).

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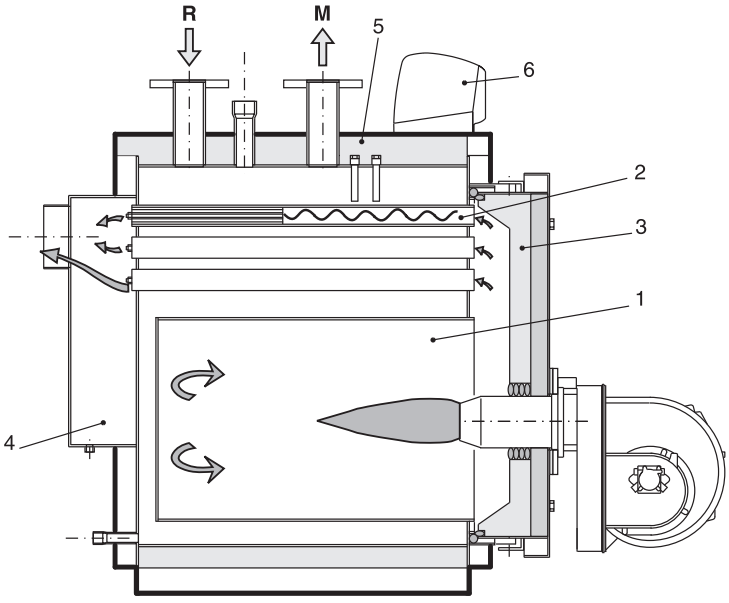
TECHNICAL DESCRIPTIONS

Pressurized, reversed flame, three pass, hot water boiler, in carbon steel, for gas burners only, also LOW NOx.

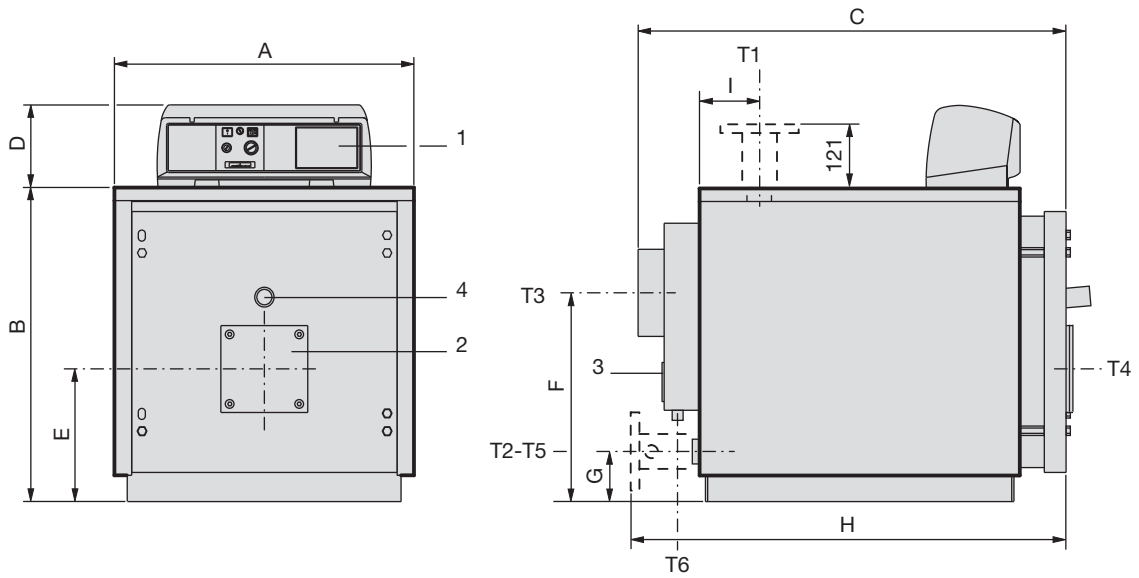
- Maximum working pressure: 6 bar
- Certified in ranged output
- Boiler body of elliptic shape, up to 870 kW, and cylindrical shape for the remaining models.
- High mechanical resistance thanks to the floating furnace from 680 to 6100 kW.
- Third actual flue pass in special multi-fin bimetallic pipes
  - first section of the pipes with turbolators and the last section with aluminum profiles that assures high thermal exchange withstanding the condensates
  - tab effect on the welding seams of the pipes to the rear tube plate
- Water ways guided and braked by special baffles inside the boiler body
- High thickness insulation in mineral wool
- Adjustable front door in vertical / trasversal / axial direction, with double opening (to the right and to the left), with insulation i recyclable super light concrete
- Construction according to EN 303-1 - pipes in carbon steel according to DIN 1626,
- 2 bulb holders of ½" with inside diameter from 15 mm (suitable for 3 bulbs each)

MAIN COMPONENTS

1. Furnace
2. Special flue pipes EASY STREAM PIPE with turbulators
3. Door with flame control warning light
4. Flue chamber
5. Body insulation
6. Panel board



DIMENSIONS - 80÷250



1 Panel board
2 Burner connection flange
3 Flue chamber cleaning door
4 Flame control warning light

T1 Heating flow
T2 Heating return
T3 Chimney connection
T4 Burner connection

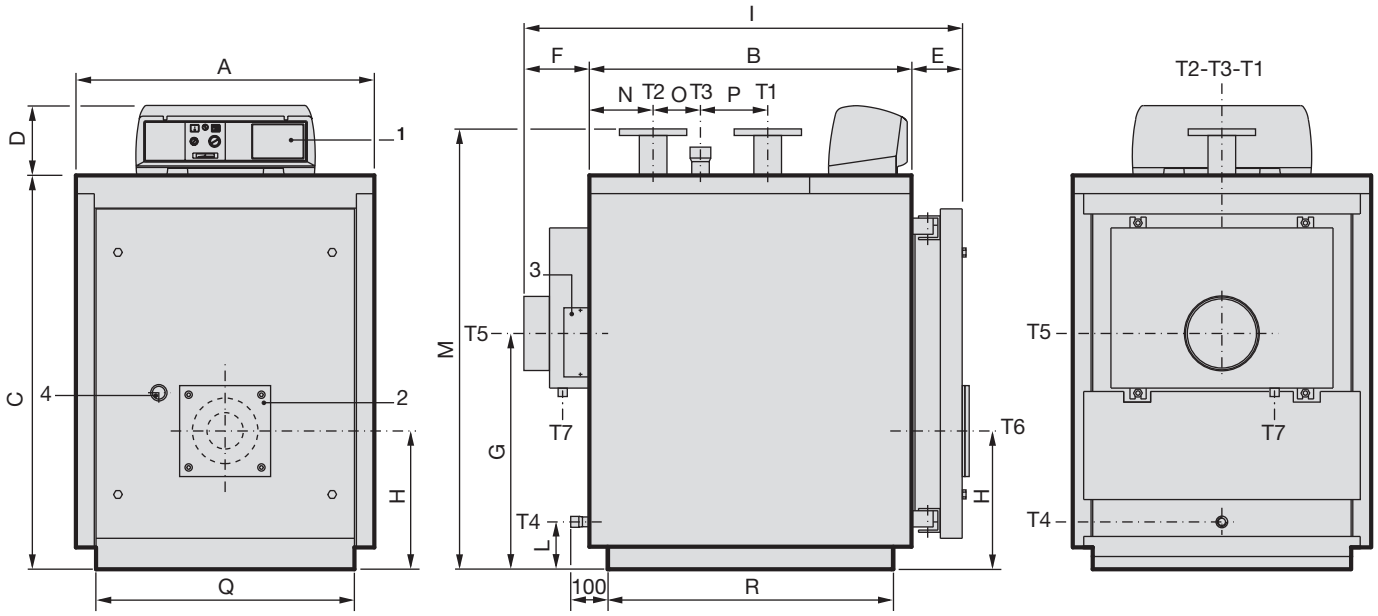
T5 Boiler drain
T6 Condensation drain

MODEL	Nominal output	Nominal input	Boiler capacity	Water pressure drops (**)	Flue gas pressure drop	Maximum boiler working pressure	Weight	CONNECTIONS				
								T1 T2 UNI 228	T3 Øe	T4 Øi	T5	T6 Øe
	kW	kW	l	m w.c.	mm w.c.	bar	kg	UNI 2278 PN16	mm	mm	UNI 228	mm
80-N	60÷80	63,3÷85,2	86	0,08÷0,15	3,8÷6,8	6	221	G 1½	200	130	G ¾	40
120-N	90÷120	94,6÷127,4	126	0,06÷0,11	6,1÷10,8	6	325	G 2	200	180	G ¾	40
160-N	120÷160	125,8÷169,4	151	0,11÷0,20	8,9÷15,8	6	366	G 2	200	180	G ¾	40
200-N	150÷200	157÷211,3	203	0,10÷0,17	11,1÷19,7	6	505	DN 65	250	180	G ¾	40
250-N	187,5÷250	195,8÷263,6	247	0,12÷0,22	13,3÷23,6	6	583	DN 65	250	180	G ¾	40

MODEL	A	B	C	D	E	F	G	H	I
	mm	mm	mm	mm	mm	mm	mm	mm	mm
80-N	690	722	995	190	305	480	115	–	147
120-N	760	812	1210	190	350	500	130	–	157
160-N	760	812	1390	190	350	500	130	–	157
200-N	860	937	1442	190	421	580	165	1487	258
250-N	860	937	1692	190	421	580	165	1737	258

(*) In the 200 and 250 models, connections T1 and T2 are flanged.
(**) Pressure drops corresponding to a thermal variation of 15K.

DIMENSIONS - 300÷560



1 Panel board
2 Burner connection flange
3 Flue chamber cleaning door
4 Flame control warning light

T1 Heating flow
T2 Heating return
T3 Expansion vessel connection
T4 Boiler drain

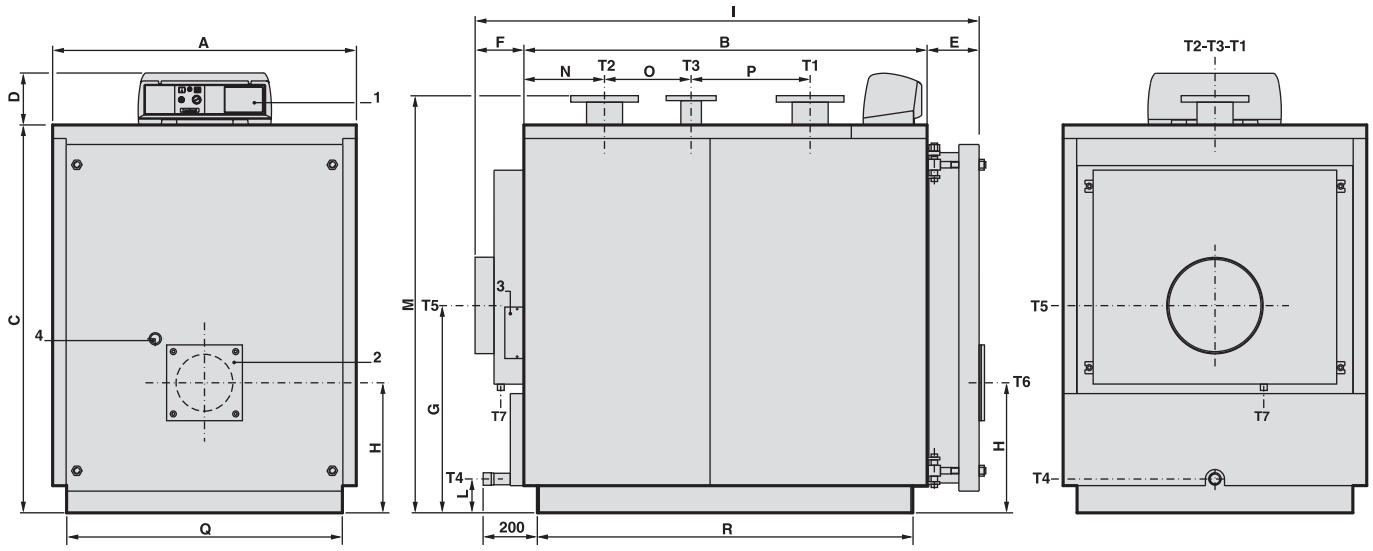
T5 Chimney connection
T6 Burner connection
T7 Condensation drain

MODEL	Potenza utile	Nominal input	Boiler capacity	Water pressure drops (**)	Flue gas pressure drop	Maximum boiler working pressure	Weight	CONNECTIONS					
								T1 T2	T3	T4	T5 Øi	T6 Ø	T7 Øe
	kW	kW	l	m w.c.	mm w.c.	bar	kg	UNI 2278 PN16	UNI 228	UNI 228	mm	mm	mm
300-N	225÷300	234,6÷315,8	298	0,12÷0,22	15,9÷28,4	6	665	DN 80	G 2	G ¾	250	220	40
370-N	277,5÷370	288,8÷388,7	398	0,08÷0,14	18,1÷32,2	6	845	DN 100	G 2	G ¾	250	220	40
450-N	337,5÷450	351÷472,4	462	0,11÷0,20	20,2÷35,8	6	986	DN 100	G 2	G ¾	250	220	40
560-N	420÷560	436,8÷587,9	565	0,17÷0,30	23,7÷42,1	6	1119	DN 100	G 2	G ¾	300	220	40

MODEL	A	B	C	D	E	F	G	H	I	L	M*	N	O	P	Q*	R*
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
300-N	860	1210	1182	190	140	191	708	400	1541	130	1310	215	340	250	750	1112
370-N	890	1275	1352	190	140	191	748	440	1606	125	1485	255	285	315	780	1177
450-N	890	1470	1352	190	140	191	748	440	1801	125	1485	255	480	315	780	1372
560-N	890	1780	1352	190	141	192	748	440	2113	125	1485	255	790	315	780	1684

(*) Minimum dimensions for boiler room access.
(**) Pressure drops corresponding to a thermal variation of 15K.

DIMENSIONS - 680÷870



1 Panel board
2 Burner connection flange
3 Flue chamber cleaning door
4 Flame sight glass

T1 Heating flow
T2 Heating return
T3 Expansion vessel connection
T4 Boiler drain

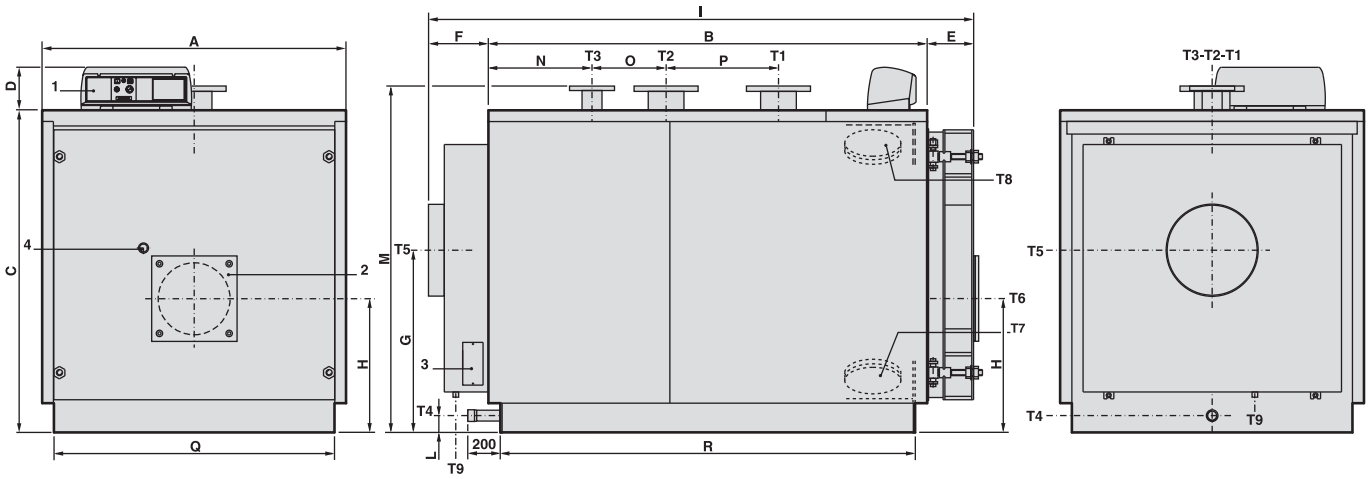
T5 Chimney connection
T6 Burner connection
T7 Condensation drain

MODEL	Nominal output	Nominal input	Boiler capacity	Water pressure drops (**)	Flue gas pressure drop	Maximum boiler working pressure	Weight	CONNECTIONS					
								T1 T2	T3	T4	T5 Øi	T6 Ø	T7 Øe
	kW	kW	l	m w.c.	mm w.c.	bar	kg	UNI2278PN16	UNI2278PN16	UNI228	mm	mm	mm
680-N	510÷680	530,4÷713,9	671	0,12÷0,21	27,8÷49,4	6	1435	DN 125	DN 65	G 1¼	350	270	40
780-N	585÷780	608,4÷818,9	753	0,15÷0,27	30,7÷54,5	6	1557	DN 125	DN 65	G 1¼	350	270	40
870-N	652,5÷870	678,6÷913,4	836	0,19÷0,33	33÷58,6	6	1656	DN 125	DN 65	G 1¼	350	270	40

MODEL	A	B	C	D	E	F	G	H	I	L	M*	N	O	P	Q*	R*
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
680-N	1122	1605	1432	190	195	190	765	480	1989	125	1540	298	435	440	1020	1504
780-N	1122	1800	1432	190	195	190	765	480	2184	125	1540	298	630	440	1020	1699
870-N	1122	1995	1432	190	195	190	765	480	2379	125	1540	298	825	440	1020	1894

(*) Minimum dimensions for boiler room access.
(**) Pressure drops corresponding to a thermal variation of 15K.

DIMENSIONS - 1000÷2350



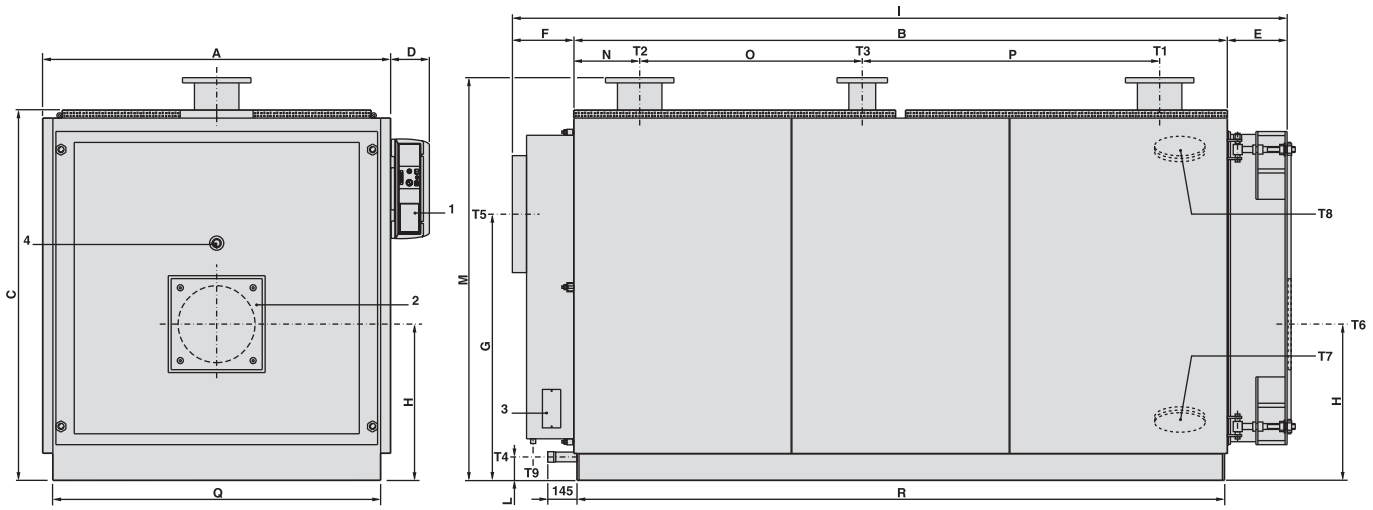
1	Panel board	T1	Heating flow	T5	Chimney connection	T9	Condensation drain
2	Burner connection flange	T2	Heating return	T6	Burner connection		
3	Flue chamber cleaning door	T3	Expansion vessel connection	T7	Boiler air bleed		
4	Flame sight glass	T4	Boiler drain	T8	Inspection door		

MODEL	Nominal output	Nominal input	Boiler capacity	Water pressure drops (**)	Flue gas pressure drop	Maximum boiler working pressure	Weight	CONNECTIONS					
								T1 T2	T3	T4	T5 Øi	T6 Ø	T9 Øe
	kW	kW	l	m w.c.	mm w.c.	bar	kg	UNI 2278 PN16	UNI 2278 PN16	UNI 228	mm	mm	mm
1000-N	750÷1000	780÷1049,8	1040	0,11÷0,19	35,9÷63,9	6	1970	DN 150	DN 80	G 1½	400	320	40
1180-N	885÷1180	920,4÷1238,8	1242	0,15÷0,26	38,6÷68,6	6	2175	DN 150	DN 80	G 1½	400	320	40
1400-N	1050÷1400	1092÷1469,8	1418	0,15÷0,26	42,1÷74,9	6	2975	DN 175	DN 100	G 1½	450	320	40
1650-N	1237,5÷1650	1287÷1732,3	1617	0,20÷0,36	45,5÷80,9	6	3465	DN 175	DN 100	G 1½	450	320	40
2000-N	1500÷2000	1560÷2099,7	2086	0,16÷0,28	40,5÷72	6	4390	DN 200	DN 125	G 1½	520	380	40
2350-N	1762,5÷2350	1833÷2467,1	2324	0,21÷0,38	43,2÷76,9	6	4700	DN 200	DN 125	G 1½	520	380	40

MODEL	A	B	C	D	E	F	G	H	I	L	M*	N	O	P	Q*	R*
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
1000-N	1352	1952	1432	190	207	187	810	595	2346	180	1540	461	330	500	1250	1846
1180-N	1352	2292	1432	190	207	187	810	595	2686	180	1540	461	670	500	1250	2186
1400-N	1462	2282	1542	190	227	272	880	640	2781	75	1650	561	510	550	1360	2176
1650-N	1462	2652	1542	190	227	272	880	640	3151	75	1650	561	880	550	1360	2546
2000-N	1622	2692	1702	190	259	274	950	690	3225	75	1810	661	670	700	1520	2590
2350-N	1622	3014	1702	190	258	273	950	690	3545	75	1810	662	990	700	1520	2910

(*) Minimum dimensions for boiler room access.
(**) Pressure drops corresponding to a thermal variation of 15K.
On special order the boilers from model ECOMAX 3SC 1000 to ECOMAX 3SC 6100 can be manufactured for a max. working pressure up to 10 bar

DIMENSIONS - 2700÷3500



1	Panel board	T1	Heating flow	T5	Chimney connection	T9	Condensation drain
2	Burner connection flange	T2	Heating return	T6	Burner connection		
3	Flue chamber cleaning door	T3	Expansion vessel connection	T7	Boiler air bleed		
4	Flame sight glass	T4	Boiler drain	T8	Inspection door		

MODEL	Nominal output	Nominal input	Boiler capacity	Water pressure drops (**)	Flue gas pressure drop	Maximum boiler working pressure	Weight	CONNECTIONS				
								T1 T2	T3	T4	T5 Øi	T6 Ø
	kW	kW	l	m w.c.	mm w.c.	bar	kg	UNI 2278 PN16	UNI 2278 PN16	UNI 228	mm	mm
2700-N	2025÷2700	2106÷2834,6	2667	0,28÷0,50	45,6÷81	6	5370	DN 200	DN 125	G 1½	570	380
3100-N	2325÷3100	2418,1÷3254,5	4142	0,37÷0,66	43,3÷76,9	6	6990	DN 200	DN 125	G 1½	620	400
3500-N	2625÷3500	2730,1÷3674,5	4455	0,37÷0,65	50,4÷89,5	6	7790	DN 250	DN 125	G 1½	620	400

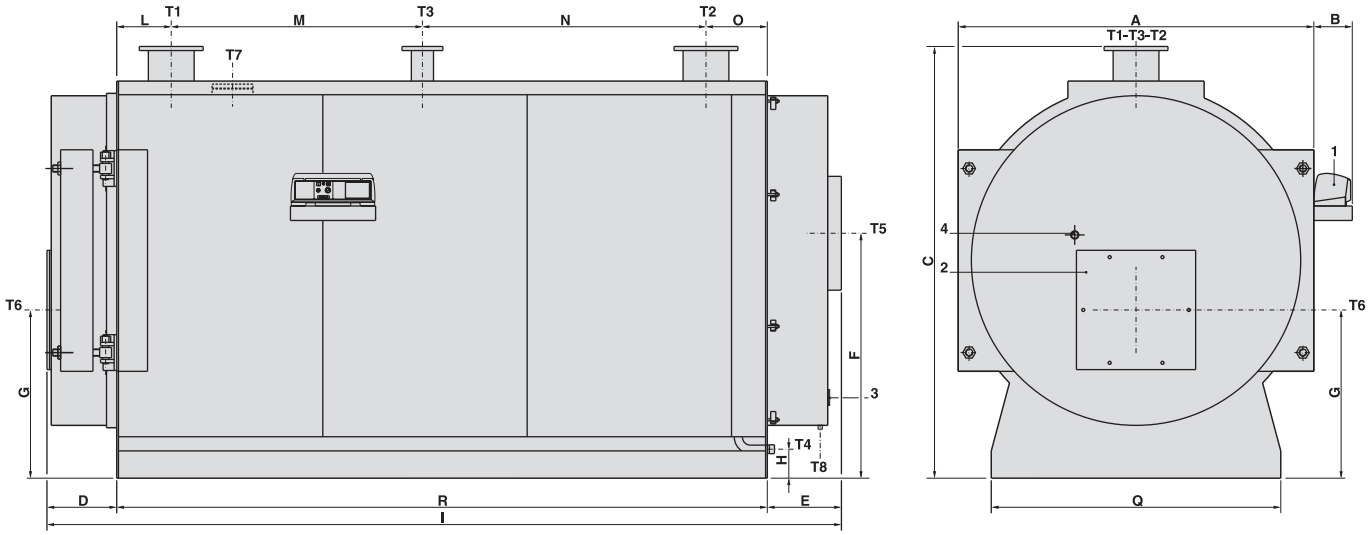
MODEL	A	B	C	D	E	F	G	H	I	L	M*	N	O	P	Q*	R*
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
2700-N	1720	3230	1830	190	295	310	1315	772	3835	115	1990	325	1100	1470	1620	3200
3100-N	1970	3194	2090	190	325	360	1535	915	3879	144	2271	377	1060	1420	1870	3164
3500-N	1970	3594	2090	190	325	360	1535	915	4279	144	2271	777	1060	1420	1870	3564

(*) Minimum dimensions for boiler room access.
(**) Pressure drops corresponding to a thermal variation of 15K.
On special order the boilers from model 1000 to 6100 can be manufactured for a max. working pressure up to 10 bar.

ECOMAX 3SC 80-N÷6100-N
Pressurised steel boilers with reversed flame

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DIMENSIONS - 3900÷6100



1 Panel board
2 Burner connection flange
3 Flue chamber cleaning door
4 Flame sight glass

T1 Heating flow
T2 Heating return
T3 Expansion vessel connection
T4 Boiler drain

T5 Chimney connection
T6 Burner connection
T7 Inspection door
T8 Condensation drain

MODEL	Nominal output	Nominal input	Boiler capacity	Water pressure drops (**)	Flue gas pressure drop	Maximum boiler working pressure	Weight	CONNECTIONS						
								T1 T2	T3	T4	T5 Øi	T6 Ø	T7 Ø	T8 Øe
	kW	kW	l	m w.c.	mm w.c.	bar	kg	UNI 2278 PN16	UNI 2278 PN16	ISO 7/1	mm	mm	mm	mm
3900-N	2925÷3900	3042,1÷4094,4	6012	0,28÷0,50	44,4÷78,6	6	8630	DN 250	DN 125	Rp 1½	660	500	133	40
4400-N	3300÷4400	3432,1÷4619,3	6012	0,35÷0,63	56,6÷100,5	6	8630	DN 250	DN 125	Rp 1½	660	500	133	40
4800-N	3600÷4800	3744,1÷5039,3	7058	0,42÷0,75	50,5÷92,2	6	9675	DN 250	DN 125	Rp 1½	660	500	133	40
5200-N	3900÷5200	4056,1÷5459,2	7058	0,50÷0,88	59,3÷105,4	6	9675	DN 250	DN 125	Rp 1½	660	500	133	40
5700-N	4275÷5700	4446,1÷5984,1	7909	0,59÷1,05	49,5÷90,5	6	13060	DN 250	DN 125	Rp 1½	720	500	133	40
6100-N	4575÷6100	4758,1÷6404,1	7909	0,68÷1,21	56,7÷100,7	6	13060	DN 250	DN 125	Rp 1½	720	500	133	40

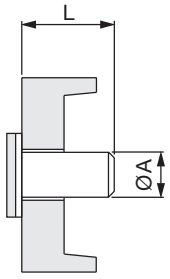
MODEL	A	B	C*	D	E	F	G	H	I	L	M	N	O	Q*	R*
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
3900-N	2088	226	2533	417	485	1437	987	170	4738	323	1475	1665	363	1700	3826
4400-N	2088	226	2533	417	485	1437	987	170	4738	323	1475	1665	363	1700	3826
4800-N	2214	240	2653	437	515	1550	1007	167	4928	323	1475	1815	363	1700	3976
5200-N	2214	240	2653	437	515	1550	1007	167	4928	323	1475	1815	363	1700	3976
5700-N	2380	240	2860	509	595	1650	1100	224	5484	325	2920	670	465	1850	4380
6100-N	2380	240	2860	509	595	1650	1100	224	5484	325	2920	670	465	1850	4380

(*) Minimum dimensions for boiler room access. (**) Pressure drops corresponding to a thermal variation of 15K.
On special order the boilers from model ECOMAX 3SC 1000 to ECOMAX 3SC 6100 can be manufactured for a max. working pressure up to 10 bar.

BURNER HEAD TUBE DIMENSIONS

BOILER TYPE	øA mm	L mm
80-N	130	150
120-N÷250-N	180	170
300-N÷560-N	220	250
680-N÷870-N	270	270
1000-N÷1180-N	320	300
1400-N÷1650-N	320	320

BOILER TYPE	øA mm	L mm
2000-N÷2350-N	380	350
2700-N	380	400
3100-N÷3500-N	400	400
3900-N÷5200-N	500	250
5700-N÷6100-N	500	630



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TECHNICAL DATA

Gas-fired		80-N	120 -N	160-N	200-N	250-N	300-N	370-N
Nominal heat output	kW	60÷80	90÷120	120÷160	150÷200	187,5÷250	225÷300	277,5÷370
Thermal output of furnace	kW	63,3÷85,2	94,6÷127,4	125,8÷169,4	157÷211,3	195,8÷263,6	234,6÷315,8	288,8÷388,7
Heat efficiency at nominal load (100%)	%	94,7÷93,8	95,1÷94,2	95,4÷94,5	95,5÷94,6	95,7÷94,8	95,9÷95	96,1÷95,2
Heat efficiency at 30% load	%	94,9÷94,0	95,3÷94,4	95,6÷94,7	95,7÷94,8	95,9÷95	96,1÷95,2	96,3÷95,4
Combustion efficiency at nominal load (100%)	%	95,4÷94,6	95,7÷94,9	95,9÷95,1	96,1÷95,2	96,2÷95,4	96,4÷95,5	96,3÷95,4
Heat loss at casing (min.-max.)	%	0,6÷0,7	0,6÷0,6	0,5÷0,6	0,5÷0,6	0,5÷0,6	0,5÷0,5	0,2÷0,2
Heat loss at chimney with burner on (min.-max.)	%	4,6÷5,4	4,3÷5,1	4,1÷4,9	3,9÷4,8	3,7÷4,6	3,6÷4,5	3,7÷4,6
Heat loss at chimney with burner off (min.-max.)	%	0,1÷0,1	0,1÷0,1	0,1÷0,1	0,1÷0,1	0,1÷0,1	0,1÷0,1	0,1÷0,1
Flue gas temperature tf-ta (min.-max.)	°C	94,9÷111,7	88,6÷105,7	84,4÷101,5	80,8÷97,9	77,2÷94,3	74,5÷91,9	76,6÷94,9
CO_2 content	%	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8
Flue gas mass flow rate (min.-max)	kg/h	95÷128	142÷191	189÷255	236÷318	294÷396	353÷475	434÷584

Gas-fired		450-N	560-N	680-N	780-N	870-N	1000-N	1180-N
Nominal heat output	kW	337,5÷450	420÷560	510÷680	585÷780	652,5÷870	750÷1000	885÷1180
Thermal output of furnace	kW	351÷472,4	436,8÷587,9	530,4÷713,9	608,4÷818,9	678,6÷913,4	780÷1049,8	920,4÷1238,8
Heat efficiency at nominal load (100%)	%	96,1÷95,2	96,1÷95,2	96,1÷95,2	96,1÷95,2	96,1÷95,2	96,1÷95,2	96,1÷95,2
Heat efficiency at 30% load	%	96,3÷95,4	96,3÷95,4	96,3÷95,4	96,3÷95,4	96,3÷95,4	96,3÷95,4	96,3÷95,4
Combustion efficiency at nominal load (100%)	%	96,3÷95,5	96,3÷95,5	96,3÷95,5	96,3÷95,5	96,3÷95,5	96,3÷95,5	96,3÷95,5
Heat loss at casing (min.-max.)	%	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2
Heat loss at chimney with burner on (min.-max.)	%	3,7÷4,5	3,7÷4,5	3,7÷4,5	3,7÷4,5	3,7÷4,5	3,7÷4,5	3,7÷4,5
Heat loss at chimney with burner off (min.-max.)	%	0,1÷0,1	0,1÷0,1	0,1÷0,1	0,1÷0,1	0,1÷0,1	0,1÷0,1	0,1÷0,1
Flue gas temperature tf-ta (min.-max.)	°C	75,4÷93,4	75,4÷93,4	75,4÷93,4	75,4÷93,4	75,4÷93,4	75,4÷93,4	75,4÷93,4
CO_2 content	%	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8
Flue gas mass flow rate (min.-max)	kg/h	528÷710	657÷884	797÷1073	914÷1231	1020,1÷1372,9	1172÷1578	1383÷1862

ECOMAX 3SC 80-N÷6100-N
Pressurised steel boilers with reversed flame

EFFICIENCY CLASS
according to ex Dir. 92/42/EC
★★★ CE

Gas-fired		1400-N	1650-N	2000-N	2350-N	2700-N	3100-N	3500-N
Nominal heat output	kW	1050÷1400	1237,5÷1650	1500÷2000	1762,5÷2350	2025÷2700	2325÷3100	2625÷3500
Thermal output of furnace	kW	1092÷1469,8	1287÷1732,3	1560÷2099,7	1833÷2467,1	2106÷2834,6	2418,1÷3254,5	2730,1÷3674,5
Heat efficiency at nominal load (100%)	%	96,1÷95,2	96,1÷95,2	96,1÷95,2	96,1÷95,2	96,1÷95,2	96,1÷95,2	96,1÷95,2
Heat efficiency at 30% load	%	96,3÷95,4	96,3÷95,4	96,3÷95,4	96,3÷95,4	96,3÷95,4	96,3÷95,4	96,3÷95,4
Combustion efficiency at nominal load (100%)	%	96,3÷95,5	96,3÷95,5	96,3÷95,5	96,3÷95,5	96,3÷95,5	96,3÷95,5	96,3÷95,5
Heat loss at casing (min.-max.)	%	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2
Heat loss at chimney with burner on (min.-max.)	%	3,7÷4,5	3,7÷4,5	3,7÷4,5	3,7÷4,5	3,7÷4,5	3,7÷4,5	3,7÷4,5
Heat loss at chimney with burner off (min.-max.)	%	0,1÷0,1	0,1÷0,1	0,1÷0,1	0,1÷0,1	0,1÷0,1	0,1÷0,1	0,1÷0,1
Flue gas temperature tf-ta (min.-max.)	°C	75,4÷93,4	75,4÷93,4	75,4÷93,4	75,4÷93,4	75,4÷93,4	75,4÷93,4	75,4÷93,4
CO_2 content	%	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8
Flue gas mass flow rate (min.-max)	kg/h	1641÷22095	1935÷2609	2345÷3156	2755÷3708	3166÷4261	3635÷4892	4104÷5523

Gas-fired		3900-N	4400-N	4800-N	5200-N	5700-N	6100-N
Nominal heat output	kW	2925÷3900	3300÷4400	3600÷4800	3900÷5200	4275÷5700	4575÷6100
Thermal output of furnace	kW	3042,1÷4094,4	3432,1÷4619,3	3744,1÷5039,3	4056,1÷5459,2	4446,1÷5984,1	4758,1÷6404,1
Heat efficiency at nominal load (100%)	%	96,1÷95,2	96,1÷95,2	96,1÷95,2	96,1÷95,2	96,1÷95,2	96,1÷95,2
Heat efficiency at 30% load	%	96,3÷95,4	96,3÷95,4	96,3÷95,4	96,3÷95,4	96,3÷95,4	96,3÷95,4
Combustion efficiency at nominal load (100%)	%	96,3÷95,5	96,3÷95,5	96,3÷95,5	96,3÷95,5	96,3÷95,5	96,3÷95,5
Heat loss at casing (min.-max.)	%	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2	0,2÷0,2
Heat loss at chimney with burner on (min.-max.)	%	3,7÷4,5	3,7÷4,5	3,7÷4,5	3,7÷4,5	3,7÷4,5	3,7÷4,5
Heat loss at chimney with burner off (min.-max.)	%	0,1÷0,1	0,1÷0,1	0,1÷0,1	0,1÷0,1	0,1÷0,1	0,1÷0,1
Flue gas temperature tf-ta (min.-max.)	°C	75,4÷93,4	75,4÷93,4	75,4÷93,4	75,4÷93,4	75,4÷93,4	75,4÷93,4
CO_2 content	%	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8
Flue gas mass flow rate (min.-max)	kg/h	4573÷6154	5159÷6943	5628÷7575	6097÷8206	6683÷8995	7152÷9626

TRIMAX 3SC 110-N÷3000-N
Pressurised carbon steel boilers with 3 real flue pass

EFFICIENCY CLASS
according to ex Dir. 92/42/EC
★★★ CE



MAIN FEATURES

UTILISATION FLEXIBILITY thanks to the certification in ranged output
REDUCED NOx EMISSIONS: < 100 mg/kWh thanks to the reduction of the specific thermal load
ELLIPTIC SHAPE OF THE OUTER SHELL (up to mod. 840 kW): reduced width making easier access through the doors
MAXIMIZATION OF THE THERMAL EXCHANGE through driven and braked run of the water within the boiler
Flue PIPES EASY STREAM PIPE Ø 1”1/2
FLOATING CYLINDRICAL FURNACE without thermomechanical stresses from 500 kW to 3000 kW
FURNACE BOTTOM with stiffening and heat dissipating plates
FRONT DOOR with self centering closing system
INSIDE DOOR INSULATION in special ceramic fibre up to 300 kW and in refractory concrete over 300 kW
HELICOIDAL STEEL TURBOLATORS
BOILER BODY INSULATION with a 80 mm thick tearing resistant mineral wool matress up to 85 kW and 100 mm over 85 kW
CONTROL PANEL BOARD of thermomechanical or electronic type
POSSIBLE INSTALLATION of one/two/three stage or modulating oil or gas pressure jet burners
EASY HANDLING thanks to the upper hooks and the strong l profiles of the base

TRIMAX 3SC 110-N÷3000-N
Pressurised carbon steel boilers with 3 real flue pass

EFFICIENCY CLASS
according to ex Dir. 92/42/EC
★★★ CE

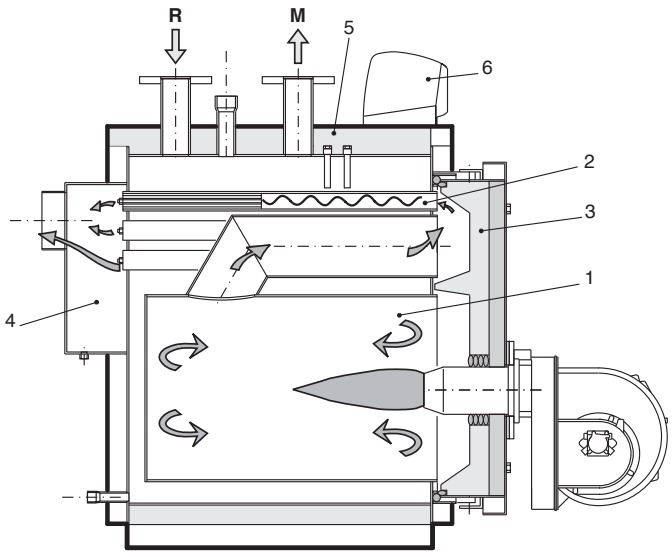
TECHNICAL DESCRIPTIONS

3 pass pressurized boiler with passing furnace, Body in steel with special progressive flue pipes in carbon steel with patented aluminium inserts “EASYSTREAM Pipe”, suitable for gas burners.

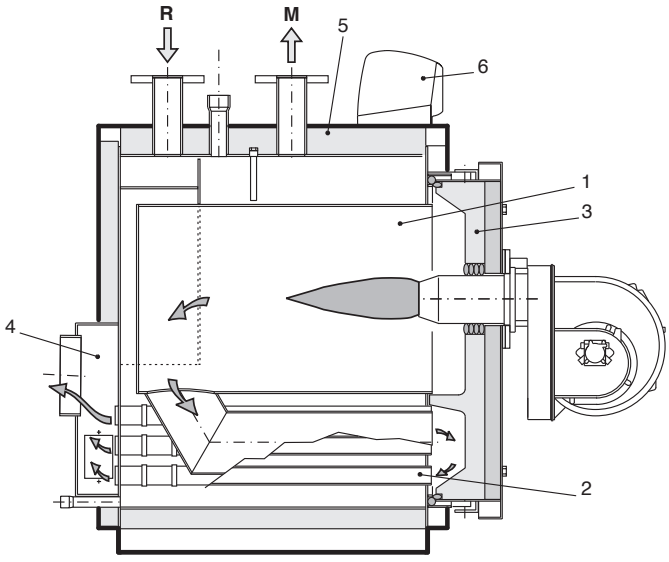
- Max. Working Pressure: 6 bar
- Low polluting emissions, thanks to the reduction of the specific thermal load, due to the wide exchange surface.
- Three pass flue way without inversion in the combustion chamber in an oval shaped body (passing furnace)
- Anti-condensate fin effect on the pipe welding seams on the rear tube plate
- Combustion chamber with absolute thermo-mechanical resistance to the condensate, thanks to the misalignment between the furnace and the flue pipes
- Reversing pipes of large diameter
- Third flue pass with special pipes “EASYSTREAM PIPE”, ø1 1/2”
- First section of invitation with turbulator
- Second multi-radial aluminium section that assures high heat exchange, withstanding the acidic condensate
- Flue chamber in carbon steel predisposed for inspection and condensate evacuation
- Casing heat losses reduction, thanks to the insulation with 100 mm thick, tear resistant, mineral wool
- Door with ceramic fibre insulation, up to 125 kW, and in extra light refractary concrete for the other models.
- Fully adjustable door with double opening possibility
- Door supporting hinges fixed to an anti-vibration counter-plate (up to 1900 kW)
- Certified as boiler with ranged output
- Manufacture according to EN 303-1
- Oil version upon request: with special, completely rolled pipes, with inside 6 x 60° sectors carbon steel pipes

MAIN COMPONENTS

Mod. 110-N ÷ 1900-N

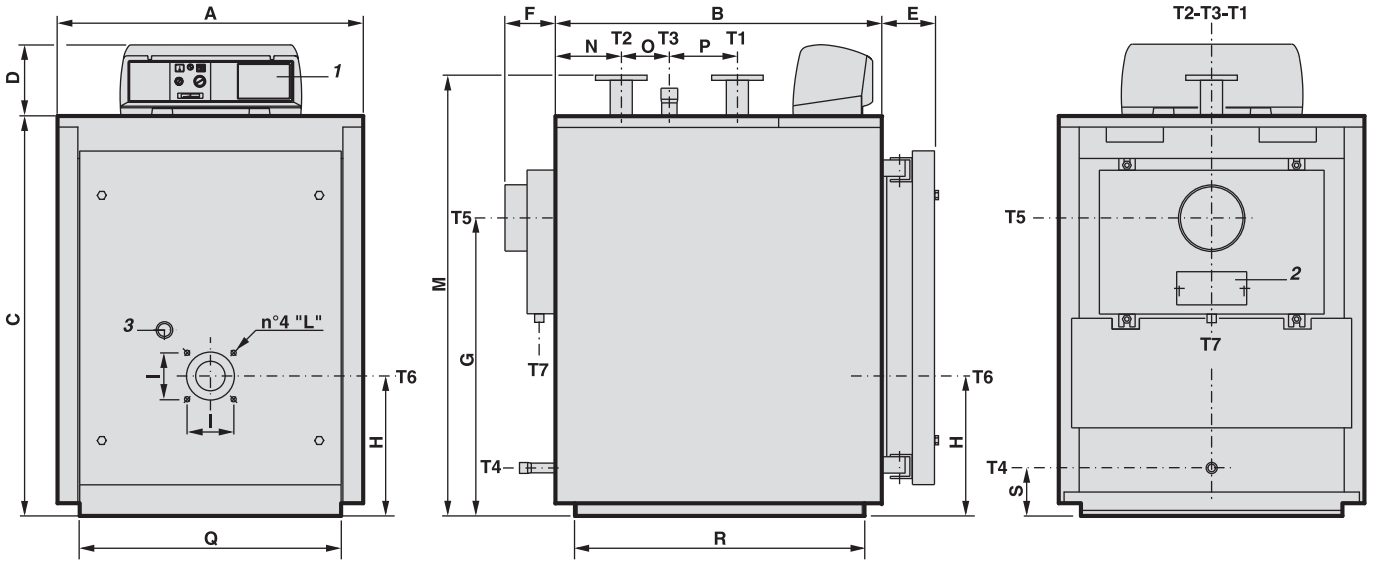


Mod. 2300-N÷3000-N



1. Furnace
2. Flue pipes with flue diverters
3. Door with flame sight glass
4. Flue chamber
5. Body insulation
6. Panel board

DIMENSIONS - 110÷380



1 Panel board
2 Flue chamber cleaning door
3 Flame sight glass

T1 Central Heating flow
T2 Central Heating return
T3 Expansion vessel connection
T4 Boiler drain

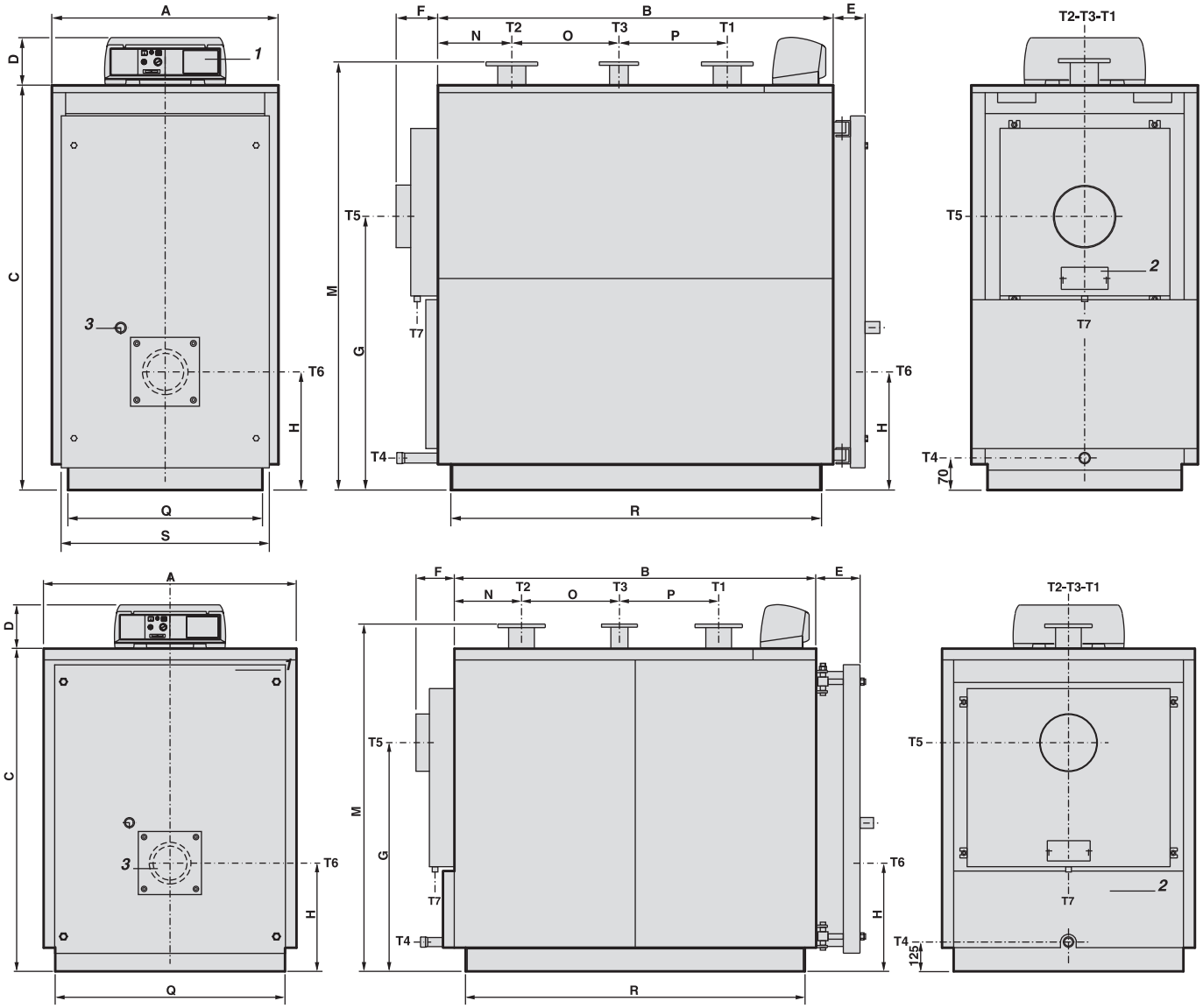
T5 Chimney connection
T6 Burner connection
T7 Condensation drain

MODEL	Nominal output	Nominal input	Boiler capacity	Water pressure drops (**)	Flue gas pressure drop	Maximum boiler working pressure	Combustion chamber	Weight	CONNECTIONS					
									T1 T2	T3	T4	T5 Øi	T6 Ø	T7 Øe
	kW	kW	l	m w.c.	mm w.c.	bar	m^3	kg	UNI 2278 PN16	ISO 7/1	ISO 7/1	mm	mm	mm
110-N	93÷109	98,1÷115,6	204	0,06÷0,08	7÷9,7	6	0,130	435	DN 50	Rp 1¼	Rp ¾	180	132	40
150-N	127÷150	133,6÷158,6	270	0,08÷0,10	11,2÷15,6	6	0,139	515	DN 50	Rp 1¼	Rp ¾	180	132	40
185-N	157÷185	164,9÷195,3	285	0,10÷0,18	14÷19,4	6	0,155	580	DN 65	Rp 1½	Rp ¾	180	180	40
225-N	191÷225	200,2÷237,1	322	0,17÷0,20	16,6÷23,1	6	0,176	640	DN 65	Rp 1½	Rp ¾	180	180	40
300-N	255÷300	265,9÷314,4	408	0,22÷0,35	20,5÷28,4	6	0,239	840	DN 80	Rp 2	Rp ¾	225	180	40
380-N	323÷380	336,8÷398,3	475	0,32÷0,53	23,6÷32,7	6	0,280	935	DN 80	Rp 2	Rp ¾	225	180	40

MODEL	A	B	C	D	E	F	G	H	I	L	M*	N	O	P	Q*	R*	S
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
110-N	820	885	1082	190	140	145	748	380	120	M 8	1210	175	130	185	710	786	130
150-N	820	1145	1082	190	140	145	748	380	120	M 8	1210	175	390	185	710	1046	130
185-N	860	1080	1182	190	140	145	828	400	–	–	1310	215	210	250	750	981	130
225-N	860	1210	1182	190	140	145	828	400	–	–	1310	215	340	250	750	1111	130
300-N	890	1275	1352	190	140	145	928	440	–	–	1485	255	285	315	780	1177	125
380-N	890	1470	1352	190	140	145	928	440	–	–	1485	255	480	315	780	1372	125

(*) Minimum dimensions for boiler room access.
(**) Pressure drops corresponding to a thermal drop of 15K.

DIMENSIONS - 500÷730 - 840



1 Panel board
2 Flue chamber cleaning door
3 Flame sight glass

T1 Central Heating flow
T2 Central Heating return
T3 Expansion vessel connection
T4 Boiler drain

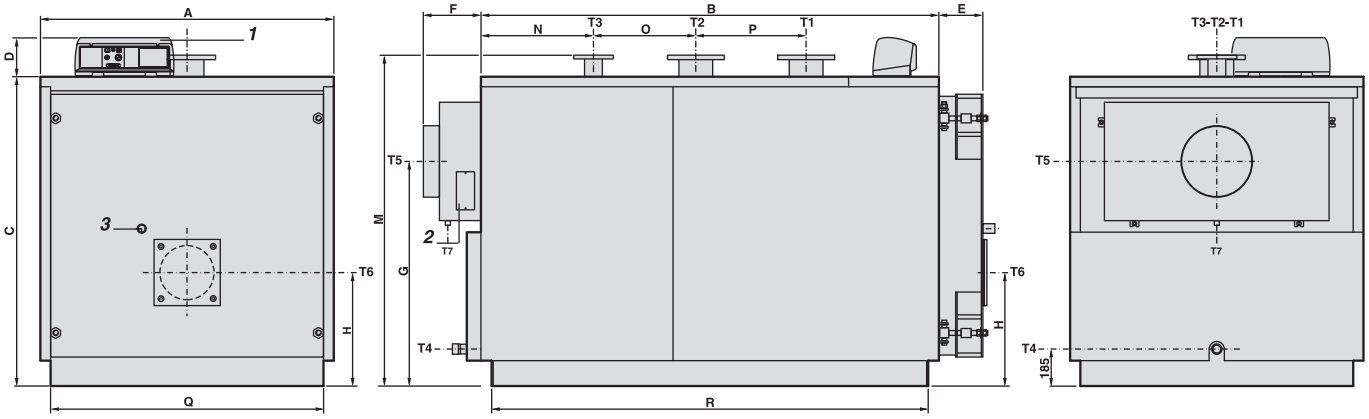
T5 Chimney connection
T6 Burner connection
T7 Condensation drain

MODEL	Nominal output	Nominal input	Boiler capacity	Water pressure drops (**)	Flue gas pressure drop	Maximum boiler working pressure	Combustion chamber	Weight	CONNECTIONS					
									T1 T2	T3	T4	T5 Øi	T6 Ø	T7 Øe
	kW	kW	l	m w.c.	mm w.c.	bar	m³	kg	UNI 2278 PN16	UNI 2278 PN16	ISO 7/1	mm	mm	mm
500-N	425÷500	443,1÷524,1	656	0,10÷0,15	27,3÷37,8	6	0,389	1260	DN 100	DN 65	Rp 1	250	220	40
630-N	535÷630	557,8÷660,3	737	0,16÷0,23	33,5÷46,5	6	0,443	1375	DN 100	DN 65	Rp 1	250	220	40
730-N	620÷730	646,5÷765,2	807	0,23÷0,33	37,5÷52	6	0,498	1510	DN 100	DN 65	Rp 1	250	220	40
840-N	714÷840	744,5÷880,5	932	0,35÷0,52	41,4÷57,3	6	0,542	1650	DN 100	DN 65	Rp 1¼	250	270	40

MODEL	A	B	C	D	E	F	G	H	M*	N	O	P	Q*	R*	S*
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
500-N	920	1605	1645	190	135	195	1110	480	1735	298	435	440	790	1505	860
630-N	920	1800	1645	190	135	195	1110	480	1735	298	630	440	790	1790	860
730-N	920	1995	1645	190	135	195	1110	480	1735	298	825	440	790	1895	860
840-N	1122	2115	1432	190	195	195	1025	480	1540	298	945	440	1020	2014	–

(*) Minimum dimensions for boiler room access.
(**) Pressure drops corresponding to a thermal drop of 15K.

DIMENSIONS - 1100÷1900



1 Panel board
2 Flue chamber cleaning door
3 Flame sight glass

T1 Central Heating flow
T2 Central Heating return
T3 Expansion vessel connection
T4 Boiler drain

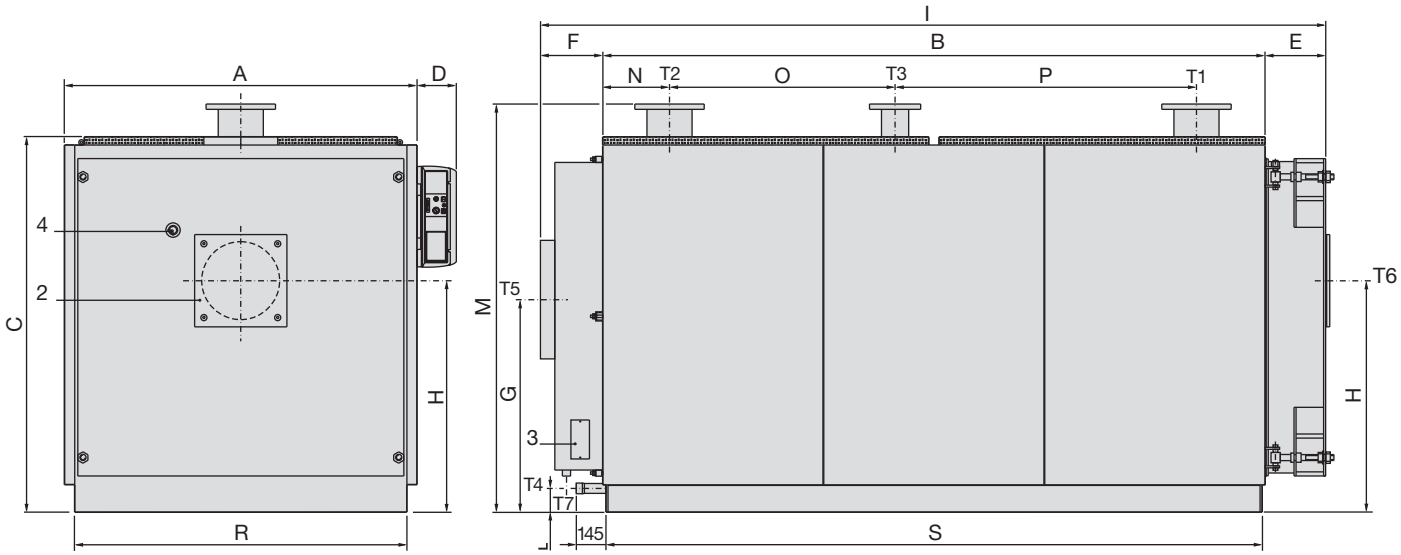
T5 Chimney connection
T6 Burner connection
T7 Condensation drain

MODEL	Nominal output	Nominal input	Boiler capacity	Water pressure drops (**)	Flue gas pressure drop	Maximum boiler working pressure	Combustion chamber	Weight	CONNECTIONS					
									T1 T2	T3	T4	T5 Øi	T6 Ø	T7 Øe
	kW	kW	l	m w.c.	mm w.c.	bar	m^3	kg	UNI 2278 PN16	UNI 2278 PN16	ISO 7/1	mm	mm	mm
1100-N	935÷1100	974,9÷1153	1580	0,15÷0,21	48,8÷67,5	6	0,753	2530	DN 150	DN 80	Rp 1½	350	270	40
1320-N	1122÷1320	1169,9÷1383,6	1791	0,21÷0,30	53,7÷74,3	6	0,889	3065	DN 150	DN 80	Rp 1½	350	270	40
1600-N	1360÷1600	1418,1÷1677,1	2297	0,20÷0,28	58,9÷81,6	6	1,116	4005	DN 175	DN 100	Rp 1½	400	285	40
1900-N	1615÷1900	1684÷1991,5	2496	0,27÷0,39	63,6÷88,1	6	1,261	4230	DN 175	DN 100	Rp 1½	400	285	40

MODEL	A	B	C	D	E	F	G	H	M*	N	O	P	Q*	R*
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
1100-N	1462	2282	1542	190	230	290	1120	565	1650	561	510	550	1360	2176
1320-N	1462	2652	1542	190	230	290	1120	565	1650	561	880	550	1360	2546
1600-N	1622	2692	1702	190	260	290	1245	605	1810	661	670	700	1520	2590
1900-N	1622	3014	1702	190	260	290	1245	605	1810	662	990	700	1520	2910

(*) Minimum dimensions for boiler room access.
(**) Pressure drops corresponding to a thermal drop of 15K.
On special order the boilers from model 1100 to 3000 can be manufactured for a max. working pressure up to 10 bar.

DIMENSIONS - 2300÷3000



1 Panel board
2 Burner connection flange
3 Flue chamber cleaning door
4 Flame control warming light

T1 Heating flow
T2 Heating return
T3 Expansion vessel connection
T4 Boiler drain

T5 Chimney connection
T6 Burner connection
T7 Condensation drain

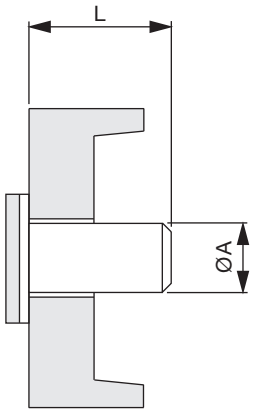
MODEL	Nominal output	Nominal input	Boiler capacity	Water pressure drops (**)	Flue gas pressure drop	Maximum boiler working pressure	Combustion chamber	Weight	CONNECTIONS					
									T1 T2	T3	T4	T5 Øi	T6 Ø	T7 Øe
	kW	kW	l	m w.c.	mm w.c.	bar	m^3	kg	UNI 2278 PN16	UNI 2278 PN16	ISO 7/1	mm	mm	mm
2300-N	1725÷2300	1798,7÷2410,8	2875	0,20÷0,35	45÷80	6	1,558	5350	DN 200	DN 125	Rp 1½	570	320	40
2650-N	1987,5÷2650	2072,4÷2777,7	4320	0,19÷0,33	41,3÷73,5	6	1,796	7070	DN 200	DN 125	Rp 1½	620	380	40
3000-N	2250÷3000	2346,1÷3144,5	4817	0,26÷0,45	50,6÷90	6	2,037	7600	DN 200	DN 125	Rp 1½	620	380	40

MODEL	A	B	C	D	E	F	G	H	I	L	M*	N	O	P	R*	S
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
2300-N	1720	3230	1830	190	295	310	1315	1225	3835	115	1990	325	1100	1470	1620	3200
2650-N	1970	3194	2090	190	325	360	1535	1450	3879	144	2271	377	1060	1420	1870	3164
3000-N	1970	3594	2090	190	325	360	1535	1450	4279	144	2271	777	1060	1420	1870	3564

(*) Minimum dimensions for boiler room access.
(**) Pressure drops corresponding to a thermal drop of 15K.
On special order the boilers from model 1100 to 3000 can be manufactured for a max. working pressure up to 10 bar.

BURNER HEAD TUBE DIMENSIONS

BOILER TYPE	øA mm	L mm
110-N÷150-N	132	180
185-N÷225-N	180	180
300-N÷380-N	180	200
500-N÷730-N	220	230
840-N	270	280
1100-N÷1320-N	270	320
1600-N÷1900-N	285	350
2300-N	320	350
2650-N÷3000-N	380	400



TECHNICAL DATA

Funzionamento a Gas		110 2-N	150 2-N	185 2-N
Nominal heat output	kW	93÷109	127÷150	157÷185
Nominal heat input	kW	98,1÷115,6	133,6÷158,6	164,9÷195,3
Heat efficiency at nominal load (100%)	%	94,8÷94,3	95÷94,5	95,2÷94,7
Heat efficiency at 30% load	%	95÷94,5	95,2÷94,7	95,4÷94,9
Number of stars (according to ex 92/42 EEC)		3	3	3
Combustion efficiency at nominal load (100%)	%	96÷95,2	96÷95,3	96,1÷95,4
Heat loss at casing (min.- max.)	%	1,2÷0,9	0,9÷0,7	0,8÷0,6
Heat loss at chimney with burner on (min.-max.)	%	4÷4,8	4÷4,7	3,9÷4,6
Heat loss at chimney with burner off (min.-max.)	%	0,1÷0,1	0,1÷0,1	0,1÷0,1
Flue gas temperature tf-ta (min.-max.)	°C	83÷98	82÷97	80÷95
CO_2 content	%	9,8÷9,8	9,8÷9,8	9,8÷9,8
Flue gas mass flow rate (min.-max)	kg/h	147,5÷173,8	200,8÷238,5	247,8÷293,5

Funzionamento a Gas		225-N	300-N	380-N	500-N	630-N
Nominal heat output	kW	191÷225	255÷300	323÷380	425÷500	535÷630
Nominal heat input	kW	200,2÷237,1	265,9÷314,4	336,8÷398,3	443,1÷524,1	557,8÷660,3
Heat efficiency at nominal load (100%)	%	95,4÷94,9	95,9÷95,4	95,9÷95,4	95,9÷95,4	95,9÷95,4
Heat efficiency at 30% load	%	95,6÷95,1	96,1÷95,6	96,1÷95,6	96,1÷95,6	96,1÷95,6
Number of stars (according to ex 92/42 EEC)		3	3	3	--	--
Combustion efficiency at nominal load (100%)	%	96,3÷95,6	96,3÷95,6	96,3÷95,6	96,3÷95,6	96,3÷95,6
Heat loss at casing (min.- max.)	%	0,9÷0,7	0,4÷0,2	0,4÷0,2	0,4÷0,2	0,4÷0,2
Heat loss at chimney with burner on (min.-max.)	%	3,7÷4,4	3,7÷4,4	3,7÷4,4	3,7÷4,4	3,7÷4,4
Heat loss at chimney with burner off (min.-max.)	%	0,1÷0,1	0,1÷0,1	0,1÷0,1	0,1÷0,1	0,1÷0,1
Flue gas temperature tf-ta (min.-max.)	°C	76÷91	75÷90	75÷90	75÷90	75÷90
CO_2 content	%	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8
Flue gas mass flow rate (min.-max)	kg/h	300,9÷356,4	399,7÷472,7	506,3÷598,7	666,1÷787,8	838,5÷992,6

TRIMAX 3SC 110-N÷3000-N
Pressurised carbon steel boilers with 3 real flue pass

EFFICIENCY CLASS
according to ex Dir. 92/42/EC
★★★ CE

Funzionamento a Gas		730-N	840-N	1100-N	1320-N	1600-N
Nominal heat output	kW	620÷730	714÷840	935÷1100	1122÷1320	1360÷1600
Nominal heat input	kW	646,5÷765,2	744,5÷880,5	974,9÷1153	1169,9÷1383,6	1418,1÷1677,1
Heat efficiency at nominal load (100%)	%	95,9÷95,4	95,9÷95,4	95,9÷95,4	95,9÷95,4	95,9÷95,4
Heat efficiency at 30% load	%	96,1÷95,6	96,1÷95,6	96,1÷95,6	96,1÷95,6	96,1÷95,6
Number of stars (according to ex 92/42 EEC)		--	--	--	--	--
Combustion efficiency at nominal load (100%)	%	96,3÷95,6	96,3÷95,6	96,3÷95,6	96,3÷95,6	96,3÷95,6
Heat loss at casing (min.- max.)	%	0,4÷0,2	0,4÷0,2	0,4÷0,2	0,4÷0,2	0,4÷0,2
Heat loss at chimney with burner on (min.-max.)	%	3,7÷4,4	3,7÷4,4	3,7÷4,4	3,7÷4,4	3,7÷4,4
Heat loss at chimney with burner off (min.-max.)	%	0,1÷0,1	0,1÷0,1	0,1÷0,1	0,1÷0,1	0,1÷0,1
Flue gas temperature tf-ta (min.-max.)	°C	75÷90	75÷90	75÷90	75÷90	75÷90
CO_2 content	%	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8
Flue gas mass flow rate (min.-max)	kg/h	971,7÷1150,2	1119,1÷1323,5	1465,5÷1733,1	1758,6÷2079,7	2131,6÷2520,9

Funzionamento a Gas		1900-N	2300-N	2650-N	3000-N
Nominal heat output	kW	1615÷1900	1725÷2300	1987,5÷2650	2250÷3000
Nominal heat input	kW	1684÷1991,5	1798,7÷2410,8	2072,4÷2777,7	2346,1÷3144,5
Heat efficiency at nominal load (100%)	%	95,9÷95,4	95,9÷95,4	95,9÷95,4	95,9÷95,4
Heat efficiency at 30% load	%	96,1÷95,6	96,1÷95,6	96,1÷95,6	96,1÷95,6
Number of stars (according to ex 92/42 EEC)		--	–	–	–
Combustion efficiency at nominal load (100%)	%	96,3÷95,6	96,3÷95,6	96,3÷95,6	96,3÷95,6
Heat loss at casing (min.- max.)	%	0,4÷0,2	0,4÷0,2	0,4÷0,2	0,4÷0,2
Heat loss at chimney with burner on (min.-max.)	%	3,7÷4,4	3,7÷4,4	3,7÷4,4	3,7÷4,4
Heat loss at chimney with burner off (min.-max.)	%	0,1÷0,1	0,1÷0,1	0,1÷0,1	0,1÷0,1
Flue gas temperature tf-ta (min.-max.)	°C	75÷90	75÷90	75÷90	75÷90
CO_2 content	%	9,8÷9,8	9,8÷9,8	9,8÷9,8	9,8÷9,8
Flue gas mass flow rate (min.-max)	kg/h	2531,3÷2993,5	2703,7÷3623,8	3115,1÷4175,2	3526,5÷4726,7

ECOMAX KC 120-X÷1140-X
Stainless steel pressurised condensing boilers

EFFICIENCY CLASS
according to ex Dir. 92/42/EC
★★★★ CE





MAIN FEATURES

VERY HIGH QUALITY OF THE EMPLOYED METALS Outer shell in high resistance carbon steel: flue chamber in stainless steel AISI 316L
PROGRESSIVE Flue PIPES (patented) With very high thermal exchange, stainless steel special progressive pipes, armoured on the outside, with inside multi-fin aluminium turbulators
SELFCLEANING OF THE TUBE BUNDLE thanks to the natural washout that the condensate produces for gravity
ELECTRONIC BOARD MASTERMODUL (optional) Certified and equipped with:
- Expandable electronic controller E8
- Burner manager with modulating operation

Prearrangement for cascade operation with
CASCATAMODUL board panel (optional) Up to 8 off, managed by E8
LEAST THERMAL LOSSES is insulated with a layer of 100 mm of thermal and acoustic mineral wool insulation material. Carbon steel door with thermal insulation in light cement
MAXIMIZATION OF THE THERMAL EXCHANGE Outer shell with reversed flame structure: in the blind cylindrical furnace the first two passes of the combustion gases are completed; subsequently they take the particular tube bundle used for the third pass.
VERY HIGH SAVING AND SEASONAL EFFICIENCY Thanks to the adoption of fan assisted modulating burners and to the hydraulic connection prearranged for two return connections (high / low temperature)
CERTIFIED EFFICIENCY 109% at 30% part load
SIMPLIFIED INSTALLATION
- Single flue evacuation
- No hydraulic interface between boiler and C.H. system

WIDE RANGE OF REGULATION ACCESSORIES
- Zones expansion via E8.1124 controller
- Temperature sensor for mixed zone flow connection
- Sensor PT 1000 for management of solar panels with E8
- Condensate neutralizers

ECOMAX KC 120-X÷1140-X
Stainless steel pressurised condensing boilers

EFFICIENCY CLASS
according to ex Dir. 92/42/EC
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TECHNICAL DESCRIPTIONS

Large water content condensing boiler, with outer pressure vessel in high resistance carbon steel. Pressurized, of flame reversion type

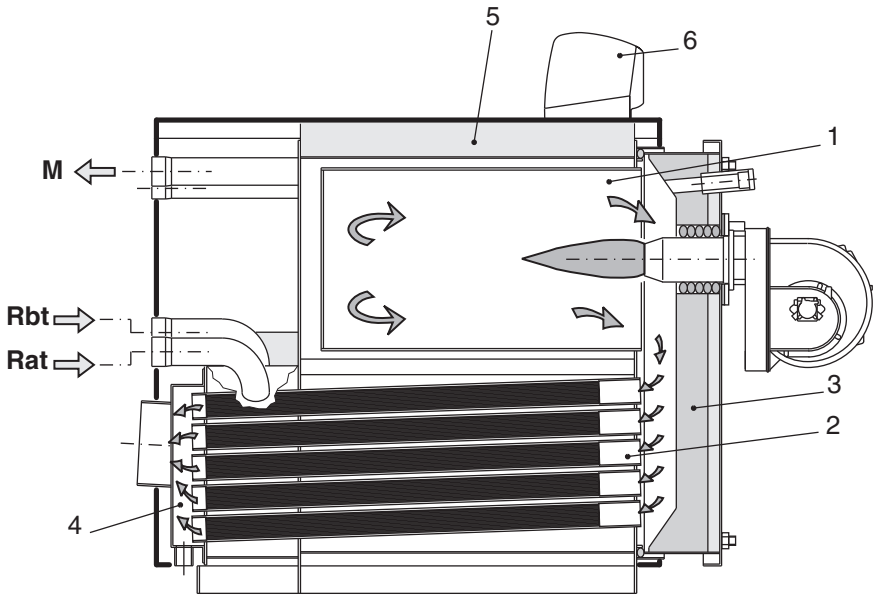
- Tube bundle made of special patented progressive pipes in stainless steel AISI 316 L, with special multi-fin inserts in Al/Si/Mg AISI 316 L
- Suitable for pressure jet gas burners in two stage, progressive two stage or modulating burners. Complete of rear flue chamber in stainless steel AISI 304, with drain connection of the condensate.
- Combustion chamber in stainless steel AISI 316 L, completely water cooled, placed above the tube bundles, such that the assembly forms a structure suitable to favour the heat exchange
- Inner water way driven and braked
- Special “progressive” patented flue pipes
  - The flue pipes are composed by an external pipe of 57 mm diameter, containing a multi-fin insert in Al/Si/Mg that assures a very high thermal exchange, withstanding the condensates.
  - Tube bundle slightly tilted toward the flue chamber for: natural outflow of the condensates, absence of wet acidic deposits, cleaning for gravity of the exchange surfaces
- Carbon steel door with recyclable insulation in special extra light refractory concrete, (30 % reduction of radiation heat losses)
- Panel board of electronic type with E8 controller, that allows the management of modulating burners,
- Prearrangement for cascade of more boilers with an additional E8 controller (optional)
- Double boiler body insulation
- The insulation is in anti-tearing rock wool (thickness 100 mm)
- Construction according to EN 303-1

Optional:
- Acidic condensate neutralizers

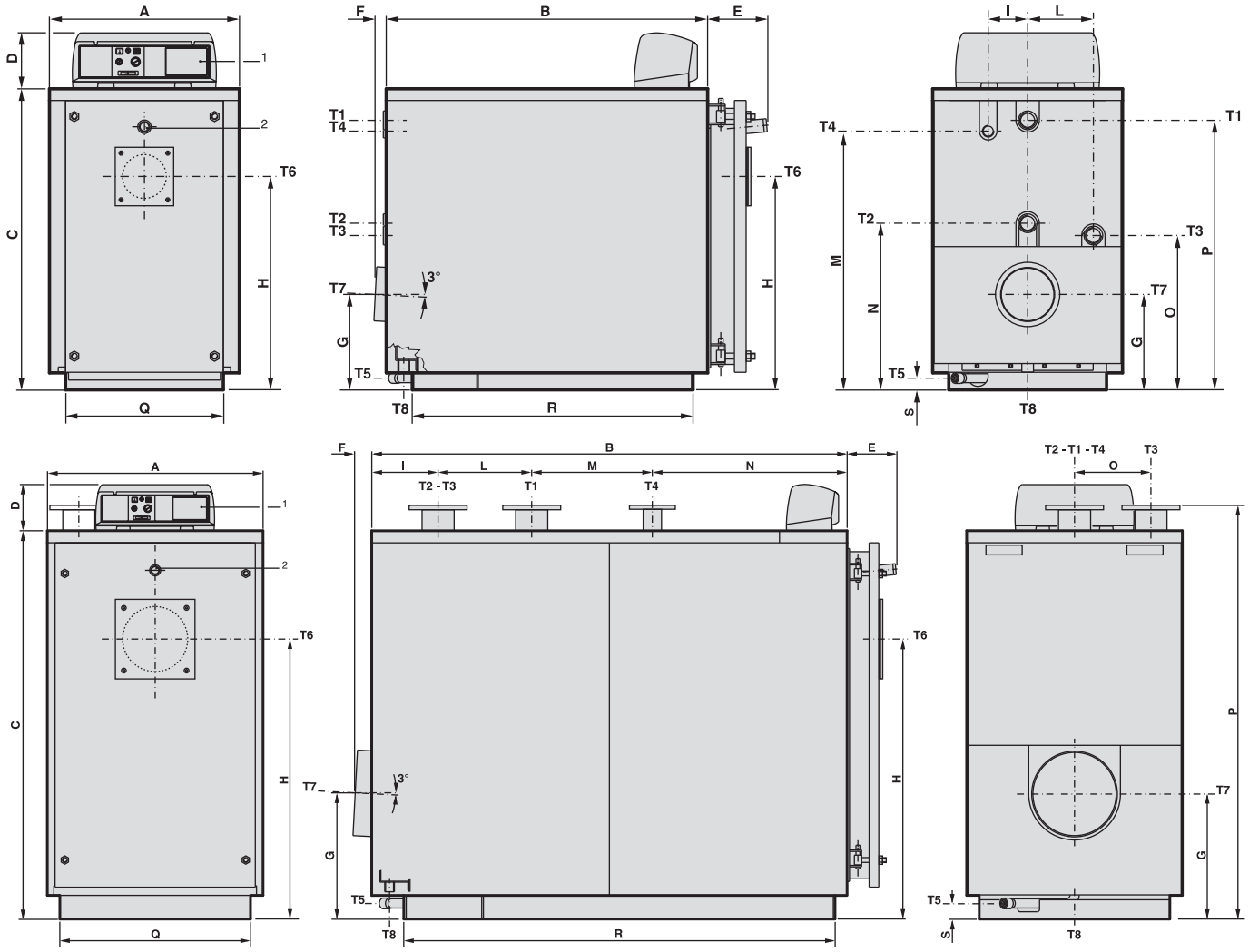
MAIN COMPONENTS

1. Furnace
2. Flue pipes with flue diverters
3. Door with flame sight glass
4. Flue chamber
5. Body insulation
6. Board panel

M Flow
Rbt Low temperature return
Rat High temperature return



DIMENSIONS -200÷570



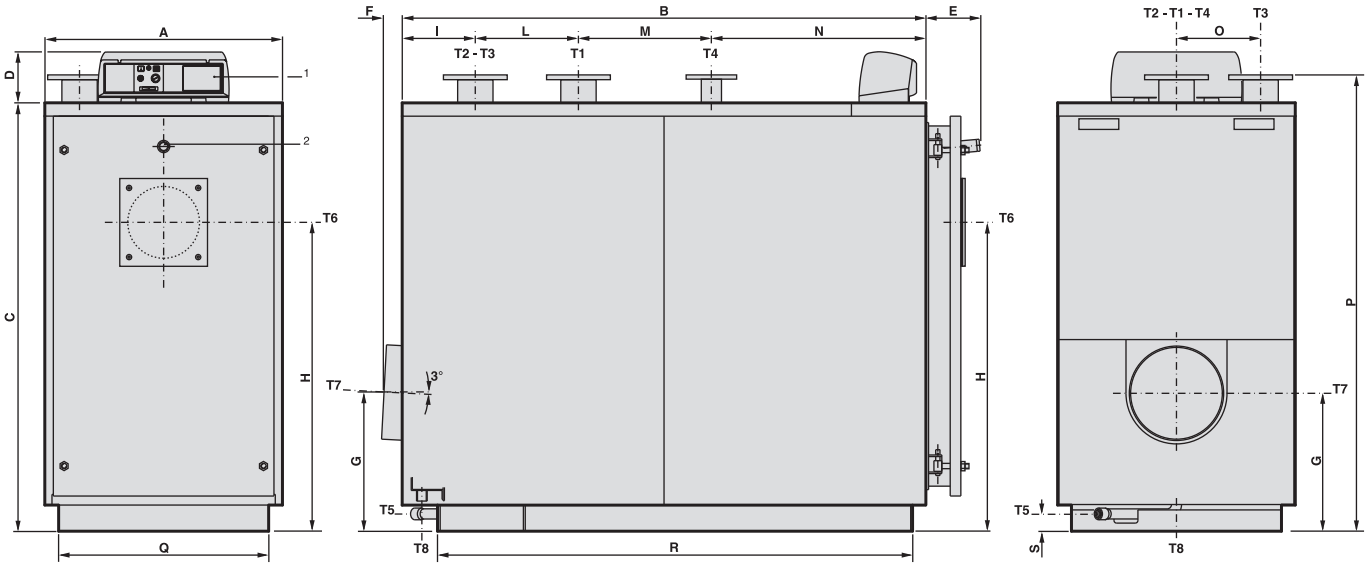
1 Panel board
2 Flame sight glass
T1 C.H. flow
T2 Low temperature C.H. return
T3 High temperature C.H. return
T4 Expansion vessel connection
T5 Boiler drain
T6 Burner connection
T7 Chimney connection
T8 Condensation drain

MODEL	Nominal output (80°-60°C)	Nominal output (50°-30°C)	Nominal input	Boiler capacity	Water pressure drops (**)	Flue gas pressure drop	Maximum boiler working pressure	Weight	CONNECTIONS						
									T1 T2	T3	T4	T5	T6 Ø	T7 Øi	T8 Øe
	kW	kW	kW	l	kPa	daPa	bar	kg	UNI 2276 PN6	UNI 2276 PN6	UNI 2276 PN6	ISO 7/1	mm	mm	mm
120-X	112,8	124	115,9	140	1,5	9,8	6	365	Rp 2	Rp 2	Rp 1¼	Rp ¾	150	182	40
200-X	182,7	200	186,9	260	3,8	18,6	6	525	DN 65	DN 65	Rp 1½	Rp ¾	180	202	40
290-X	265,6	290	271	305	2,5	25,4	6	660	DN 80	DN 80	Rp 2	Rp 1	180	252	40
400-X	367,1	400	373,8	332	3,2	32,3	6	800	DN 80	DN 80	Rp 2	Rp 1	180	252	40
480-X	440,7	480	448,6	544	2	34,3	6	1007	DN 100	DN 100	Rp 2	Rp 1	220	302	40
570-X	523,3	570	532,7	515	2,9	39,2	6	1137	DN 100	DN 100	Rp 2	Rp 1	220	302	40

MODEL	A	B	C	D	E	F	G	H	I	L	M	N	O	P*	Q*	R*	S
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
120-X	650	1100	1032	190	205	37	329	730	135	225	885	570	528	922	540	961	40
200-X	720	1450	1132	190	205	48	374	790	255	320	250	625	255	1248	610	1311	45
290-X	790	1465	1282	190	235	55	402	900	231	359	250	625	275	1385	680	1314	60
400-X	790	1755	1282	190	235	65	402	900	271	379	450	655	275	1385	680	1614	60
480-X	854	1770	1472	190	270	67	494	1062	306	358	500	606	306	1585	750	1606	65
570-X	854	1940	1472	190	270	67	494	1062	306	358	500	776	306	1585	750	1776	65

(*) Minimum dimensions for boiler room access. (**) Pressure drops corresponding to a thermal variation of 15K.

DIMENSIONS -700÷2160



1 Panel board
2 Flame sight glass
T1 C.H. flow
T2 Low temperature C.H. return
T3 High temperature C.H. return
T4 Expansion vessel connection
T5 Boiler drain
T6 Burner connection
T7 Chimney connection
T8 Condensation drain

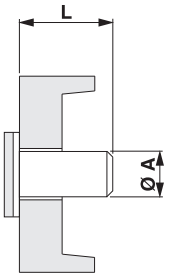
MODEL	Nominal output (80°-60°C)	Nominal output (50°-30°C)	Nominal input	Boiler capacity	Water pressure drops (**)	Flue gas pressure drop	Maximum boiler working pressure	Weight	CONNECTIONS						
									T1 T2	T3	T4	T5	T6 Ø	T7 Øi	T8 Øe
	kW	kW	kW	l	kPa	daPa	bar	kg	UNI 2276 PN6	UNI 2276 PN6	UNI 2276 PN6	ISO 7/1	mm	mm	mm
700-X	642,6	700	654,2	625	3	46	6	1376	DN 125	DN 125	DN 65	Rp 1	270	352	40
900-X	826,2	900	841,1	664	3,7	58,8	6	1613	DN 125	DN 125	DN 65	Rp 1	270	352	40
1140-X	1046,6	1140	1065,4	1107	3,5	73,5	6	2158	DN 150	DN 150	DN 80	Rp 1½	320	402	40

MODEL	A	B	C	D	E	F	G	H	I	L	M	N	O	P*	Q*	R*	S
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
700-X	894	1970	1612	190	292	65	523	1161	275	388	500	807	316	1715	790	1787	65
900-X	894	2340	1612	190	292	65	523	1161	405	388	500	1047	316	1715	790	2157	65
1140-X	1064	2360	1802	190	317	57	551	1287	289	624	900	547	390	1911	960	2157	55

(*) Minimum dimensions for boiler room access.
(**) Pressure drops corresponding to a thermal variation of 15K.

BURNER HEAD TUBE DIMENSIONS

BOILER TYPE	øA mm	L mm
120-X	150	230
200-X	180	230
290-X÷400-X	180	270
480-X÷570-X	220	300
700-X÷900-X	270	320
1140-X÷1420-X	320	350
1820-X÷2160-X	320	420



TECHNICAL DATA

Funzionamento a Gas		120-X	200-X	290-X	400-X	480-X	570-X
Nominal heat output (80°-60°C)	kW	112,8	182,7	265,6	367,1	440,7	523,3
Nominal heat output (50°-30°C)	kW	124	200	290	400	480	570
Nominal heat output	kW	115,9	186,9	271	373,8	448,6	532,7
Heat efficiency at nominal load (80°-60°C)	%	97,3	97,72	98,2	98,2	98,23	98,23
Heat efficiency at nominal load (50°-30°C)	%	107	107	107	107	107	107
Heat efficiency at 30% load	%	109	109	109	109	109	109
Combustion efficiency (80°- 60°C)	%	98,06	98,1	98,23	98,37	98,37	98,37
Combustion efficiency (50°- 30°C)	%	99	99	99	99	99	99
Heat loss at shell (80°- 60°C)	%	0,76	0,38	0,23	0,17	0,14	0,14
Heat loss at shell (50°- 30°C)	%	0,68	0,34	0,21	0,15	0,12	0,12
Heat loss at chimney with burner on (80°-60°C)	%	1,94	1,90	1,77	1,63	1,63	1,63
Heat loss at chimney with burner on (50°-30°C)	%	1,03	1,03	1,03	1,03	1,03	1,03
Heat loss at chimney with burner off	%	0,05	0,05	0,05	0,05	0,05	0,05
Flue gas temperature tf-ta (80°-60°C)	°C	44	43	40	37	37	37
Flue gas temperature tf-ta (50°-30°C)	°C	22	22	22	22	22	22
Tenore di CO_2	%	10,3	10,3	10,3	10,3	10,3	10,3
Flue gas mass flow rate (min.-max)	kg/h	166,9	269,1	390,2	538,3	645,9	767
Maximum condensation production (natural gas)	l/h	19,61	31,62	45,85	63,24	75,89	90,12

Funzionamento a Gas		700-X	900-X	1140-X
Nominal heat output (80°-60°C)	kW	642,6	826,2	1046,6
Nominal heat output (50°-30°C)	kW	700	900	1140
Nominal heat output	kW	654,2	841,1	1065,4
Heat efficiency at nominal load (80°-60°C)	%	98,23	98,23	98,23
Heat efficiency at nominal load (50°-30°C)	%	107	107	107
Heat efficiency at 30% load	%	109	109	109
Combustion efficiency (80°- 60°C)	%	98,37	98,37	98,37
Combustion efficiency (50°- 30°C)	%	99	99	99
Heat loss at shell (80°- 60°C)	%	0,14	0,14	0,14
Heat loss at shell (50°- 30°C)	%	0,12	0,12	0,12
Heat loss at chimney with burner on (80°-60°C)	%	1,63	1,63	1,63
Heat loss at chimney with burner on (50°-30°C)	%	1,03	1,03	1,03
Heat loss at chimney with burner off	%	0,05	0,05	0,05
Flue gas temperature tf-ta (80°-60°C)	°C	37	37	37
Flue gas temperature tf-ta (50°-30°C)	°C	22	22	22
Tenore di CO_2	%	10,3	10,3	10,3
Flue gas mass flow rate (min.-max)	kg/h	941,9	1211,1	1534
Maximum condensation production (natural gas)	l/h	110,68	142,3	180,24

NOTE

ECOMAX KC 350-J÷1000-J
Stainless steel pressurised condensing boilers

EFFICIENCY CLASS
according to ex Dir. 92/42/EC
★★★★ CE



MAIN FEATURES

METALS Boiler totally in stainless steel: combustion chamber in AISI 316 L, outer shell in AISI 304.
HIGHLY EFFICIENT VERTICAL PIPES Progressive, armoured, vertical pipes in Stainless Steel 316 L on the outside and with inside aluminium fins.
A SPECIAL PLATE conveniently perforated, positioned between the furnace, where is the entrance of the flue pipes and the underlying body, develops the double important function of:
- important increase of the heat exchange of the pipes, avoiding short hydraulic circuits;
- sensitive increase of the mechanical resistance of the assembly.

SELF CLEANING OF TUBE BUNDLES
thanks to the natural scouring that the condensates produce for gravity.
ELECTRONIC PANEL BOARD MASTERMODUL (optional)
Certified and equipped with:
- Expandable electronic regulator E8
- Modulating burner controller

Predisposition for cascade operation with panel board CASCATAMODUL (optional) Up to 8 managed by E8.
MINIMIZATION OF THE THERMICAL
DISPERSIONS The boilers have a thermal and acoustic insulating layer of 100 mm in linen mineral wool. In addition, the door is insulated with refractory material resisting to 1400 °C.
MAXIMIZATION OF THE THERMAL
EXCHANGE
The outer shell is in reversed L shaped. The assembly forms a simple structure, countersigned by a horizontal initial part where the burner flame develops. Through an entrance obtained on the bottom the outflow of the smokes refolds to 90 degrees in low.
ELEVATED SAVING AND SEASONAL EFFICIENCY
With the adoption of modulating pressure jet burners with modulation ratio over than 1:6 and the hydraulic connection predisposed for two C.H. returns (high/low temperature).
EFFICIENCY OF 109% at partial load
SIMPLIFIED INSTALLATION
- Just one smokes connection with the manometric head necessary for the evacuation of the smokes under all weather conditions.
- None hydraulic interface between boiler and C.H. installation.

WIDE RANGE OF REGULATION ACCESSORIES
- Zones expansion regulator E8.1124
- Mixed flow temperature sensor
- Sensor PT 1000 for management of solar collectors with E8.

ECOMAX KC 350-J÷1000-J
Stainless steel pressurised condensing boilers

EFFICIENCY CLASS
according to ex Dir. 92/42/EC
★★★★ CE

TECHNICAL DESCRIPTIONS

Pressurized large water content, very low temperature, condensing boiler, with body in stainless steel: AISI 316 L type for flame exposed surfaces and AISI 304 type for the outer shell and the flue chamber

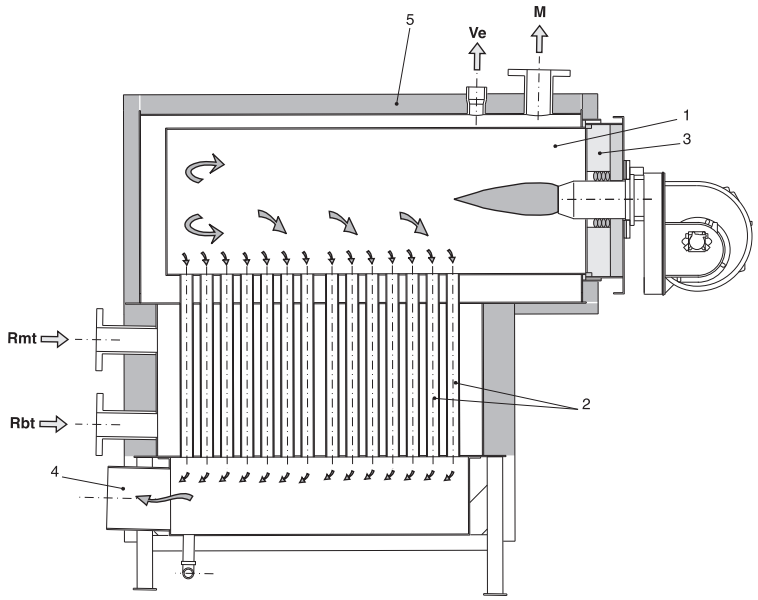
- Patented, stainless steel, progressive pipes, rolled on special three sector aluminium baffles vertically positioned in order to:
  - evacuate the condensate
  - avoid acid stagnation
  - clean by gravity the exchange surfaces
- Construction according to EN 303 -1
- Combustion chamber completely water cooled
- Excellent noiseless operation due to the low counter-pressure in the flue pipes
- Underlying flue chamber with condensate evacuation connection.
- Adjustable and reversible combustion chamber door, insulated with bio-soluble fibre, which reduces by 30% the radiation losses.
- Upwards flow connection, placed in the front part of the outer shell and two return connections, placed on the rear, for high and low temperature.
- Approved for ranged output
- Easy mounting of the burner
- Two bulb holders
- Ease of cleaning and servicing, due to the vertical position of the tube bundles
- Cascade operation with panel boards MASTERMODUL and CASCATAMODUL, equipped with E8 controller (up to a max of 8 boilers)

Optional:
- Acidic condensate neutralisers

MAIN COMPONENTS

1. Furnace
2. Flue pipe with flue deflectors
3. Door with Flame inspection
4. Smokebox
5. Insulation body

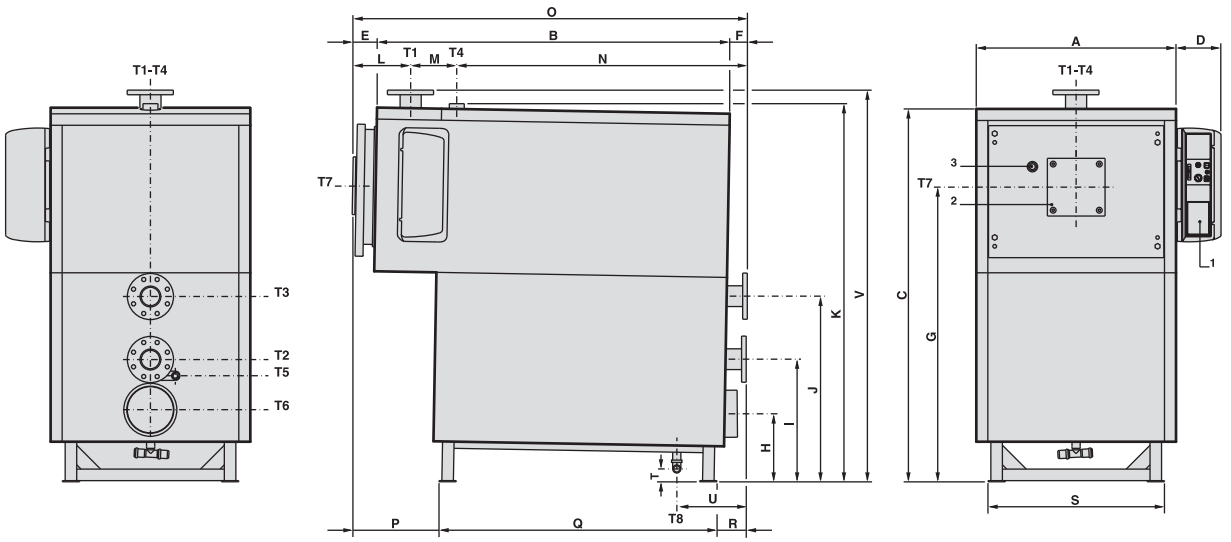
-- Tool panel (not visible)
M System delivery
Rbt System return low Temperature
Rmt System return medium temperature
Ve Expansion tank



ECOMAX KC 350-J÷1000-J
Stainless steel pressurised condensing boilers

EFFICIENCY CLASS
according to ex Dir. 92/42/EC
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DIMENSIONS



1 Control panel
2 Burner flange
3 Flame inspection

T1 Heating flow
T2 Low-temperature heating return
T3 Medium temperature heating return
T4 Expansion tank connection

T5 Boiler drain
T6 Chimney connection
T7 Burner connection
T8 Drain condense

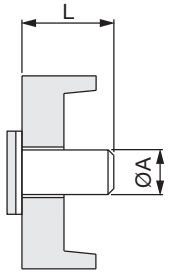
MODEL	Nominal output (80°-60°C)	Nominal output (50°-30°C)	Nominal input	Boiler capacity	Water pressure drops (**)	Flue gas pressure drop	Maximum boiler working pressure	Weight	CONNECTIONS					
									T1 T2 T3	T4	T5	T6 Øi	T7 Øi	T8 Øe
										ISO 7/1				
	kW	kW	kW	l	m w.c.	mm w.c.	bar	kg	UNI 2278 PN16	UNI 2276 PN6	ISO 7/1	mm	mm	mm
350-J	316	350	327	380	0,55	23	5	675	80	2	¾	200	180	40
450-J	406	450	420	533	0,30	18	5	1090	100	65	1	250	210	40
600-J	541	600	560	533	0,50	32	5	1090	100	65	1	250	210	40
800-J	720	800	746	907	0,37	30	5	1650	125	80	1	300	270	40
1000-J	902	1000	934	907	0,60	45	5	1650	125	80	1	300	270	40

MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S(*)	T	U	V(*)
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
350-J	866	1530	1649	190	112	91	1309	300	536	809	1635	287	220	1226	1733	353	1205	175	765	85	355	1745
450-J	896	1952	1790	190	125	66	1415	328	590	845	1893	312	320	1511	2143	288	1666	189	795	85	400	1893
600-J	896	1952	1790	190	125	66	1415	328	590	845	1893	312	320	1511	2143	288	1666	189	795	85	400	1893
800-J	1076	2250	2075	190	140	78	1629	345	655	940	2178	341	340	1787	2468	364	1866	238	975	85	490	2178
1000-J	1076	2250	2075	190	140	78	1629	345	655	940	2178	341	340	1787	2468	364	1866	238	975	85	490	2178

(*) Minimum dimensions for boiler room access. (**) Pressure drops corresponding to a thermal variation of 15K.

BURNER HEAD TUBE DIMENSIONS

BOILER TYPE	øA	L
	mm	mm
350 -J	180	280
450-J÷600-J	210	320
800-J÷1000-J	270	350



TECHNICAL DATA

Funzionamento a Gas		350-J	450-J
Potenza termica utile nominale (80°-60°C)	kW	320,5	412,5
Potenza termica utile nominale (50°-30°C)	kW	350	450
Potenza termica del focolare	kW	327	420
Rendimento termico utile a carico nominale (80°-60°C)	%	98	98,2
Rendimento termico utile a carico nominale (50°-30°C)	%	107	107,1
Rendimento termico utile al 30% del carico	%	109	109
Rendimento di combustione (80°-60°C)	%	98,1	98,3
Rendimento di combustione (50°-30°C)	%	99,1	99,1
Perdite al mantello (80°-60°C)	%	0,14	0,12
Perdite al mantello (50°-30°C)	%	0,10	0,09
Perdite al camino con bruciatore acceso (80°-60°C)	%	1,85	1,66
Perdite al camino con bruciatore acceso (50°-30°C)	%	0,92	0,92
Perdite al camino con bruciatore spento	%	0,10	0,10
Temperatura dei fumi tf-ta (80°-60°C)	°C	40	36
Temperatura dei fumi tf-ta (50°-30°C)	°C	20	20
Tenore di CO_2	%	10,5	10,5
Portata massica fumi	kg/h	463,1	594,8
Massima produzione condensa (a metano)	l/h	48,8	62,7

Funzionamento a Gas		600-J	800-J	1000-J
Potenza termica utile nominale (80°-60°C)	kW	550	732,8	917,5
Potenza termica utile nominale (50°-30°C)	kW	600	800	1000
Potenza termica del focolare	kW	560	746	934
Rendimento termico utile a carico nominale (80°-60°C)	%	98,2	98,2	98,2
Rendimento termico utile a carico nominale (50°-30°C)	%	107,1	107,2	107
Rendimento termico utile al 30% del carico	%	109	109	109
Rendimento di combustione (80°-60°C)	%	98,3	98,3	98,3
Rendimento di combustione (50°-30°C)	%	99,1	99,1	99,1
Perdite al mantello (80°-60°C)	%	0,12	0,11	0,10
Perdite al mantello (50°-30°C)	%	0,09	0,07	0,07
Perdite al camino con bruciatore acceso (80°-60°C)	%	1,66	1,66	1,66
Perdite al camino con bruciatore acceso (50°-30°C)	%	0,92	0,92	0,92
Perdite al camino con bruciatore spento	%	0,10	0,10	0,10
Temperatura dei fumi tf-ta (80°-60°C)	°C	36	36	36
Temperatura dei fumi tf-ta (50°-30°C)	°C	20	20	20
Tenore di CO_2	%	10,5	10,5	10,5
Portata massica fumi	kg/h	793,1	1056,5	1322,7
Massima produzione condensa (a metano)	l/h	83,6	111,3	139,4

ECOMAX NC - Pressurised steel boilers with reversed flame

Model	Nominal Output kW	Combustion head	Gas burners model
64	71	150	MAX GAS 105 P ARISTON TL
76	84	150	MAX GAS 105 P ARISTON TL
93	102	150	MAX GAS 120 P ARISTON TL
105	115	170	MAX GAS 120 P ARISTON TL
116	128	170	MAX GAS 170 P - 170 PAB ARISTON TC
140	155	170	MAX GAS 170 P - 170 PAB ARISTON TC
163	180	170	MAX GAS 250 P - 250 PAB ARISTON TC
186	206	170	MAX GAS 250 P - 250 PAB ARISTON TC
233	258	170	MAX GAS 350 P - 350 PAB ARISTON TC
291	322	170	MAX GAS 350 P - 350 PAB - 350 PR ARISTON TC
340	371	250	MAX GAS 500 P - 500 PAB - 500 PR ARISTON TL
420	459	250	MAX GAS 500 P - 500 PAB - 500 PR ARISTON TL
510	557	250	BLU 700.1 PAB - 700.1 PR TL
630	688	250	BLU 700.1 PAB - 700.1 PR TL
760	830	270	BLU 1000.1 PAB - 1000.1 PR - 1000.1 PRE TL
870	950	270	BLU 1200.1 PAB - 1200.1 PR - 1200.1 PRE TC
970	1060	270	BLU 1200.1 PAB - 1200.1 PR - 1200.1 PRE TC
1100	1200	300	BLU 1500.1 PAB - 1500.1 PR - 1500.1 PRE TC
1320	1442	300	BLU 1700.1 PAB - 1700.1 PR - 1700.1 PRE TC
1570	1715	320	BLU 2000.1 PAB - 2000.1 PR - 2000.1 PRE TC
1850	2020	320	BLU 2000.1 PAB - 2000.1 PR - 2000.1 PRE TC
2200	2400	350	BLU 3000.1 PR - 3000.1 PRE TL
2650	2890	350	BLU 3000.1 PR - 3000.1 PRE TL
3000	3280	400	BLU 4000.1 PR - 4000.1 PRE TL
3500	3825	400	BLU 4000.1 PR - 4000.1 PRE TL
4000	4371	400	BLU 5000.1 PR - 5000.1 PRE TL
4500	4839	520	BLU 5000.1 PR - 5000.1 PRE TL
5000	5422	520	BLU 6000.1 PR - 6000.1 PRE TL
5500	5914	520	BLU 7000.1 PR
5500	5914	520	BLU 7000.1 PRE
6000	6506	520	BLU 7000.1 PR
6000	6506	520	BLU 7000.1 PRE
6500	6990	630	BLU 7000.1 PR
6500	6990	630	BLU 7000.1 PRE
7000	7590	630	BLU 8000.1 PR
7000	7590	630	BLU 8000.1 PRE

Gas trains to choose on the price list in functions of types and pressures of gas.

ECOMAX 3SC - Pressurised steel boilers with reversed flame

Model	Nominal Output kW	Combustion head	Gas burners model
80	85,2	150	MAX GAS 105 P ARISTON TL
120	127,4	170	MAX GAS 170 P - 170 PAB ARISTON TC
160	169,4	170	MAX GAS 250 P - 250 PAB ARISTON TC
200	211,3	170	MAX GAS 250 P - 250 PAB ARISTON TC
250	263,6	170	MAX GAS 350 P - 350 PAB ARISTON TC
300	315,8	250	MAX GAS 350 P - 350 PAB - 350 PR ARISTON TC
370	388,7	250	MAX GAS 500 P - 500 PAB - 500 PR ARISTON TC
450	472,4	250	MAX GAS 500 P - 500 PAB - 500 PR ARISTON TC
560	587,9	250	BLU 700.1 PAB - 700.1 PR TL
680	713,9	270	BLU 1000.1 PAB - 1000.1 PR TL
780	818,9	270	BLU 1000.1 PAB - 1000.1 PR - 1000.1 PRE TL
870	913,4	270	BLU 1200.1 PAB - 1200.1 PR - 1200.1 PRE TC
1000	1049,8	300	BLU 1200.1 PAB - 1200.1 PR - 1200.1 PRE TC
1180	1238,8	300	BLU 1500.1 PAB - 1500.1 PR - 1500.1 PRE TC
1400	1469,8	320	BLU 1700.1 PAB - 1700.1 PR - 1700.1 PRE TC
1650	1732,3	320	BLU 2000.1 PAB - 2000.1 PR - 2000.1 PRE TC
2000	2099,7	350	BLU 3000.1 PAB - 3000.1 PR - 3000.1 PRE TC
2350	2467,1	350	BLU 3000.1 PR - 3000.1 PRE TL
2700	2834,6	400	BLU 3000.1 PR - 3000.1 PRE TL
3100	3254,5	400	BLU 4000.1 PR - 4000.1 PRE TL
3500	3674,5	400	BLU 4000.1 PR - 4000.1 PRE TL
3900	4094,4		BLU 5000.1 PR - 5000.1 PRE TL
4400	4619,3		BLU 5000.1 PR - 5000.1 PRE TL
4800	5093,3		BLU 6000.1 PR - 6000.1 PRE TL
5200	5459,2		BLU 6000.1 PR - 6000.1 PRE TL
5700	5984,1	630	BLU 7000.1 PR - 7000.1 PRE TL
6100	6404,1	630	BLU 7000.1 PR - 7000.1 PRE TL

Gas trains to choose on the price list in functions of types and pressures of gas.

TRIMAX 3SC - Pressurised carbon steel boilers with 3 real flue pass

Model	Nominal Output kW	Combustion head	Gas burners model
110	115,6	180	MAX GAS 120 P ARISTON
150	158,6	180	MAX GAS 170 P - 170 PAB ARISTON TC
185	195,3	180	MAX GAS 250 P - 250 PAB ARISTON TC
225	237,1	180	MAX GAS 350 P - 350 PAB ARISTON TL
300	314,4	200	MAX GAS 350 P - 350 PAB ARISTON TL
380	398,3	200	MAX GAS 500 P - 500 PAB ARISTON TL
500	524,1	230	BLU 700.1 PAB - 700.1 PR TL
630	660,3	230	BLU 700.1 PAB - 700.1 PR TL
730	765,2	230	BLU 1000.1 PAB - 1000.1 PR TL
840	880,5	280	BLU 1200.1 PAB - 1200.1 PR TC 1200.1 PRE TL
1100	1153	320	BLU 1200.1 PAB - 1200.1 PR 1200.1 PRE TC
1320	1383,6	320	BLU 1700.1 PAB - 1700.1 PR TC 1700.1 PRE TL
1600	1677,1	350	BLU 1700.1 PAB - 1700.1 PR TL 1700.1 PRE TC
1900	1991,5	350	BLU 2000.1 PAB - 2000.1 PR 2000.1 PRE TC
2300	2410,8	350	BLU 2000.1 PR 2000.1 PRE TL
2650	2777,7	400	BLU 3000.1 PR 3000.1 PRE TL
3000	3144,5	400	BLU 4000.1 PR 4000.1 PRE TL

Gas trains to choose on the price list in functions of types and pressures of gas.

ECOMAX KC - Stainless steel pressurised condensing boilers

Model	Nominal Output kW	Combustion head	Gas burners model
120	124	230	MAX GAS 170 P - 170 PAB ARISTON TL
200	200	230	MAX GAS 250 P - 250 PAB ARISTON TL
290	290	270	MAX GAS 350 P - 350 PAB - 350 PR ARISTON TL
400	400	270	MAX GAS 500 P - 500 PAB - 500 PR ARISTON TL
480	480	300	MAX GAS 500 P - 500 PAB - 500 PR ARISTON TL
570	570	300	BLU 700.1 PAB - 700.1 PR TL
700	700	320	BLU 1000.1 PAB - 1000.1 PR TL
900	900	320	BLU 1200.1 PAB - 1200.1 PR - 1200.1 PRE TL
1140	1140	350	BLU 1500.1 PAB - 1500.1 PR - 1500.1 PRE TL
1420	1420	350	BLU 1700.1 PAB - 1700.1 PR - 1700.1 PRE TL
1820	1820	420	BLU 2000.1 PAB - 2000.1 PR - 2000.1 PRE TL
2160	2160	420	BLU 3000.1 PR - 3000.1 PRE TL

Gas trains to choose on the price list in functions of types and pressures of gas.

TRIMAX KC - Stainless steel pressurised condensing boilers

Model	Nominal Output kW	Combustion head	Gas burners model
150	150	280	MAX GAS 170 P - 170 PAB ARISTON TL
200	200	280	MAX GAS 250 P - 250 PAB ARISTON TL
270	270	280	MAX GAS 350 P - 350 PAB - 350 PR ARISTON TL
350	350	280	MAX GAS 500 P - 500 PAB - 500 PR ARISTON TL
450	450	320	MAX GAS 500 P - 500 PAB - 500 PR ARISTON TL
600	600	320	BLU 700.1 PAB - 700.1 PR TL - 700.1PRE TL
800	800	350	BLU 1000.1 PAB - 1000.1 PR - 1000.1 PRE TL
1000	1000	350	BLU 1200.1 PAB - 1200.1 PR - 1200.1 PRE TL

ECOMAX NC - Pressurised steel boilers with reversed flame

Model	Nominal Output kW	Combustion head	Light oil burners model
64	71	150	MAX 8 ARISTON TL
76	84	150	MAX 8 ARISTON TL
93	102	150	MAX 12 ARISTON TL
93	102	150	MAX P 12 AB HS TL
105	115	170	MAX 12 ARISTON TL - MAX P 12 AB HS TL
116	128	170	MAX 12 ARISTON TL - MAX P 12 AB HS TL
140	155	170	MAX 15 ARISTON TL - MAX P 15 AB HS
163	180	170	MAX 15 ARISTON TL - MAX P 15 AB HS
186	206	170	MAX 20 ARISTON TL - MAX P 25 AB HS TL
233	258	170	MAX 30 ARISTON TL - MAX P 25 AB HS TL
291	322	170	MAX P 35 AB HS TC
340	371	250	MAX P 35 AB HS TL
420	459	250	MAX P 45 AB HS TL - MAIOR P 45 PR
510	557	250	MAIOR P 60 AB HS TL - MAIOR P 60 PR
630	688	250	MAIOR P 60 AB HS TL - MAIOR P 60 PR
760	830	270	MAIOR P 80 AB HS TL - MAIOR P 80 PR
870	950	270	MAIOR P 120 AB HS TL - MAIOR P 120 PR
970	1060	270	MAIOR P 120 AB HS TL - MAIOR P 120 PR
1100	1200	300	MAIOR P 120 AB HS TL - MAIOR P 120 PR
1320	1442	300	MAIOR P 150.1 AB HS TL - MAIOR P 150.1 PR
1570	1715	320	MAIOR P 150.1 AB HS TL - MAIOR P 150.1 PR
1850	2020	320	MAIOR P 200.1 AB HS TL - MAIOR P 200.1 PR
2200	2400	350	MAIOR P 300.1 AB HS TL - MAIOR P 300.1 PR TL
2650	2890	350	MAIOR P 300.1 AB HS TL - MAIOR P 300.1 PR TL
3000	3280	400	MAIOR P 400.1 AB HS TL - MAIOR P 400.1 PR TL
3500	3825	400	MAIOR P 500.1 AB HS TL - MAIOR P 500.1 PR TL
4000	4371	400	MAIOR P 500.1 PR TL
4500	4839	520	MAIOR P 500.1 PR TL
5000	5422	520	MAIOR P 700.1 PR TL
5500	5914	520	MAIOR P 700.1 PR TL
6000	6506	520	MAIOR P 800.1 PR TL
6500	6990	630	MAIOR P 800.1 PR TL
7000	7590	630	MAIOR P 800.1 PR TL

ECOMAX 3SC - Pressurised steel boilers with reversed flame

Model	Nominal Output kW	Combustion head	Light oil burners model
80	85,2	150	MAX 8 ARISTON TL
120	127,4	170	MAX 15 ARISTON TL - MAX P 15 AB HS TL
160	169,4	170	MAX 15 ARISTON TL - MAX P 15 AB HS TL
200	211,3	170	MAX 20 ARISTON TL - MAX P 25 AB HS TL
250	263,6	170	MAX 30 ARISTON TL
300	315,8	250	MAX P 35 AB HS TC
370	388,7	250	MAX P 35 AB HS TL
450	472,4	250	MAX P 45 AB HS TL - MAIOR P 45 PR
560	587,9	250	MAIOR P 60 AB HS TL - MAIOR P 60 PR
680	713,9	270	MAIOR P 80 AB HS TL - MAIOR P 80 PR
780	818,9	270	MAIOR P 80 AB HS TL - MAIOR P 80 PR
870	913,4	270	MAIOR P 120 AB HS TL - MAIOR P 120 PR
1000	1049,8	300	MAIOR P 120 AB HS TL - MAIOR P 120 PR
1180	1238,8	300	MAIOR P 120 AB HS TL - MAIOR P 120 PR
1400	1469,8	320	MAIOR P 150.1 AB HS TL - MAIOR P 150.1 PR
1650	1732,3	320	MAIOR P 200.1 AB HS TL - MAIOR P 200.1 PR
2000	2099,7	350	MAIOR P 200.1 AB HS TL - MAIOR P 200.1 PR
2350	2467,1	350	MAIOR P 300.1 AB HS TL - MAIOR P 300.1 PR TL
2700	2834,6	400	MAIOR P 300.1 AB HS TL - MAIOR P 300.1 PR TL
3100	3254,5	400	MAIOR P 400.1 AB HS TL - MAIOR P 400.1 PR TL
3500	3674,5	400	MAIOR P 500.1 AB HS TL - MAIOR P 500.1 PR TL
3900	4094,4	CONTROLLARE DIMENSIONE A CATALOGO	MAIOR P 500.1 PR TL
4400	4619,3		MAIOR P 500.1 PR TL
4800	5093,3		MAIOR P 600.1 PR TL
5200	5459,2		MAIOR P 700.1 PR TL
5700	5984,1	630	MAIOR P 700.1 PR TL
6100	6404,1	630	MAIOR P 700.1 PR TL

TRIMAX 3SC - Pressurised carbon steel boilers with 3 real flue pass

Model	Nominal Output kW	Combustion head	Light oil burners model
110	115,6	180	MAX 12 ARISTON TL - MAX P 12 AB HS TL
150	158,6	180	MAX 15 ARISTON TL - MAX P 15 AB HS TL
185	195,3	180	MAX 20 ARISTON TL - MAX P 25 AB HS TL
225	237,1	180	MAX 30 ARISTON TL - MAX P 25 AB HS TL
300	314,4	200	MAX P 35 AB HS TC
380	398,3	200	MAX P 35 AB HS TL
500	524,1	230	MAX P 45 AB HS TL - MAIOR P 45 PR
630	660,3	230	MAIOR P 60 AB HS TL - MAIOR P 60 PR
730	765,2	230	MAIOR P 80 AB HS TL - MAIOR P 80 PR
840	880,5	280	MAIOR P 80 AB HS TL - MAIOR P 80 PR
1100	1153	320	MAIOR P 120 AB HS TL - MAIOR P 120 PR
1320	1383,6	320	MAIOR P 150 AB HS TL - MAIOR P 150 PR
1600	1677,1	350	MAIOR P 150.1 AB HS TL - MAIOR P 150.1 PR
1900	1991,5	350	MAIOR P 200.1 AB HS TL - MAIOR P 200.1 PR
2300	2410,8	350	MAIOR P 300.1 AB HS TL - MAIOR P 300.1 PR TL
2650	2777,7	400	MAIOR P 300.1 AB HS TL - MAIOR P 300.1 PR TL
3000	3144,5	400	MAIOR P 400.1 AB HS TL - MAIOR P 400.1 PR TL

ECOMAX KC - Stainless steel pressurised condensing boilers

Model	Nominal Output kW	Combustion head	Light oil burners model
120	124	230	MAX 15 ARISTON TL - MAX P 15 AB HS TL
200	200	230	MAX 20 ARISTON TL - MAX P 25 AB HS TL
290	290	270	MAX P 35 AB HS TC
400	400	270	MAX P 45 AB HS TL
480	480	300	MAX P 45 AB HS TL - MAIOR P 45 PR
570	570	300	MAIOR P 60 AB HS TL - MAIOR P 60 PR
700	700	320	MAIOR P 80 AB HS TL - MAIOR P 80 PR
900	900	320	MAIOR P 120 AB HS TL - MAIOR P 120 PR
1140	1140	350	MAIOR P 120 AB HS TL - MAIOR P 120 PR
1420	1420	350	MAIOR P 150.1 AB HS TL - MAIOR P 150.1 PR
1820	1820	420	MAIOR P 200.1 AB HS TL - MAIOR P 200.1 PR
2160	2160	420	MAIOR P 200.1 AB HS TL - MAIOR P 200.1 PR

TRIMAX KC - Stainless steel pressurised condensing boilers

Model	Nominal Output kW	Combustion head	Light oil burners model
150	150	280	MAX 15 ARISTON TL - MAX P 15 AB HS TL
200	200	280	MAX 20 ARISTON TL - MAX P 25 AB HS TL
270	270	280	MAX 30 ARISTON TL - MAX P 25 AB HS TL
350	350	280	MAX P 35 AB HS TL
450	450	320	MAX P 45 AB HS TL - MAIOR P 45 PR
600	600	320	MAIOR P 60 AB HS TL - MAIOR P 60 PR
800	800	350	MAIOR P 80 AB HS TL - MAIOR P 80 PR
1000	1000	350	MAIOR P 120 AB HS TL - MAIOR P 120 PR

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