



**Instruction manual
 for installation
 and operation
 F&H CRONE BXL
 Heating boiler**

ASME CODE IV H-stamped

Type	:	BXL
Boiler serialnummer	:	
User	:	
Date of issue	:	
Handed to	:	

Revision 2023- issue 0



Grote Esch 400
2841 MJ Moordrecht
T +31(0)182 - 614 482
F +31(0)182 - 633 257
E info@fhcrone.nl
I www.fhcrone.nl

GENERAL

The BXL ASME H-stamped boiler, of the three pass wetback type with direct passage, you have just received has been designed and manufactured with the greatest possible care in our factory in order to meet the requirements.

To ensure that it functions properly during a long life, it is important that it be installed, started and operated with equal care. That is why this booklet has been provided. You should read it carefully and follow the instructions.

Guarantee

The delivered boiler is covered with a guarantee period as described in the General Terms and Conditions of Delivery for the Metal and Electrical Engineering Industry, issued by the association for the Metal and Electrical Engineering Industry FME, which we will send to you free of charge upon request. The period starts after the commissioning of the boiler, but no later than 3 months after delivery. Any defects must be reported to us immediately. Problems that arise due to non-application or careless application of the instructions in this book are not covered by the warranty.

Warning

No lids or flanges may be detached or removed during operation. It is also pointed out that certain non-insulated parts can cause severe burns if touched. The boiler must also be earthed to prevent discharge of static electricity.

Fuel

Depending on the burner installed, the boiler is suitable for burning natural gas, LPG or butane. For further details, see the burner instructions.

INSTRUCTIONS FOR INSTALLATION

General

In addition to what is stated in this book, there are rules set by the national government that a boiler installation must comply with. Furthermore, one must be aware of the locally applicable rules, such as, for example, the Environmental License and the Energy Company's rules. The installation must be carried out by a skilled installer and must comply with the applicable (inter) national and regional standards. The boiler has a degree of protection of IP 20 and all equipment connected to it must be CE marked.

Positioning

The boiler is not suitable for outdoor installation and for areas with an earthquake risk. It must be ensured that a floor is present that is sufficiently heavy to support the total weight of the boiler filled with water. The floor must be perfectly level and flat so that the boiler members rest on the floor over their full length and give the boiler a purely horizontal arrangement. The boiler must be easily accessible for inspection and inspection work, whereby there must be sufficient space in front of the boiler door for cleaning and possibly replacing the boiler pipes.



Grote Esch 400
2841 MJ Moordrecht
T +31(0)182 - 614 482
F +31(0)182 - 633 257
E info@fhcrone.nl
I www.fhcrone.nl

Safety Relief Valves

It is necessary that there are sufficient safety valves within the main valves, preferably directly on the boiler, with a minimum capacity determined in accordance with locally applicable standards, but not smaller than in accordance with Appendix 5, adjusted to the maximum operating pressure. These must be mounted directly on the boiler body, ie without an intermediate valve. Unclosable pipes must also be laid from the safety valves in such a way that any hot water and / or steam blown off cannot cause damage or injury to people, animals or the environment. The function of the safety valves must be checked before the boiler is put into operation. Use a good pressure gauge for this.

Connections to the boiler

The pipes to be connected to the boiler must be laid in such a way that, due to expansion or otherwise, no forces are exerted on the boiler connections.

No changes to the boiler connections or connections may be made without the manufacturer's permission.

Insulation

The boiler is equipped with insulation with cladding as standard. This consists of 100 mm mineral non-combustible insulation wool, which comprises the entire boiler body, as well as the smoke tray. The insulation wool is applied in 2 layers of 50 mm. The method of insulation is carried out without heat bridges. If the insulation is not included in our delivery on special request, the insulation requirements stated here must be used, such that the surface temperature will be as low as possible, but maximum 80 ° C.

Thermostats

The installation must be equipped with such a control that the temperature of the boiler water cannot fall below 70 ° C. For the automatic switching on and off of the burner and possibly for the temperature control, the boiler must be equipped with thermostats. These are mounted directly on the boiler body using the existing welding socks. The maximum thermostat must be locked in such a way that the burner is locked with the signal obtained. This maximum thermostat must be set to a maximum of 95 ° C. The on / off thermostat is set so that the burner stops **before** the maximum thermostat starts. The control thermostat must be set to a maximum of 90 ° C.

Appendix 4 lists the CE-approved security devices to be used from which a choice must be made.

Shuntinstallation

It is important for the boiler that the temperature of the water throughout the entire boiler is as similar as possible. To achieve this, the boiler must be equipped with a shunt (round pump) installation with a capacity such that at least an amount of water equal to 3 x the boiler capacity is pumped around per hour.

The boiler water is drawn out of the boiler by means of the shunt pump and brought into the internal distribution tank at the top of the boiler via the connection fitted to the boiler.

See Appendix 2 for clarification and required pump capacity.

Low water level safety control

The boiler must be equipped with a device that makes it impossible for the burner to operate while the boiler is not completely filled with water. This low water protection must be locked in such a way that the burner locks on the signal obtained.

Appendix 4 specifies the type of CE-approved low-water protection that must be applied.

Protection against over/under pressure

In addition to sufficient overpressure safety devices, the boiler must be directly connected to an expansion

vessel. In the event that the boiler is fired with closed shut-off valves and the resulting unacceptable overpressure has been discharged through the safety valves, an underpressure could possibly occur upon cooling, which is prevented in this way. For connection details, see Appendix 6 and 6A.

Fluegas exhaust

The flue gas discharge channel on the boiler must be executed and installed according to national and regional requirements.

The maximum permitted weight load as a result of the flue gas discharge on the boiler's flue gas box is 500 kg.

The flue gas discharge must be properly shored to prevent wind influences. Diameter of the flue gas channels are shown in the overview of Annexes 6 and 6A.

Condensbin (if applicable)

To ensure that the condensate discharge functions properly, the condensate drain pipe supplied must end up at least 50 mm below the outlet in the condensbin. See the instruction manual of the condenser for info.

COMMENCING INSTRUCTION

At the first commissioning and / or after carrying out work on the boiler, it must be checked whether there are no materials or tools in the boiler that have been accidentally left behind by engineers. It is also necessary to check whether the boiler is sufficiently filled with water.

Before starting the burner, the boiler door must be closed properly and the handwheels with the appropriate key must be tightened gradually, so that the sealing cord can form in the rebate and no leaks occur afterwards.

You must check the explosion cover on the rear of the boiler as follows:

Tap the lid all around with a mallet or block so that the sealing cord can form in the rebate. Tighten the nuts to such an extent that a considerable spring tension is created and there is still sufficient space between the windings of the springs, so that the cover can be pressed back in the event of an explosion.

Finally, the inspection hatch in the smoke tray, this should also be tightened gradually. Then one is ready to start the burner.

NOTE: When starting the burner it is necessary that a burner expert is present.

The boiler must be fired at a low flame setting to prevent unacceptable material stresses and cracks in the brickwork. During this firing, as long as the boiler temperature is below 60 ° C, a lot of condensation is created which can sometimes give the impression that the boiler is leaking. If the boiler is at the right temperature, all gaskets must be checked and possibly checked. It must also be ensured that the flame pipe / pipe plate connections are tight. Have any leakage remedied immediately by rolling.

The sight glass on the explosion cover is only for checking and adjusting the flame and must therefore be closed during normal operation.

The maximum capacity of the burner must be set in such a way that the maximum boiler capacity indicated on the stamp plate is not exceeded.

Drain

A pipe system must be installed from the drain valve of the boiler in such a way that the hot drain water does not endanger humans, animals or the environment. It must be ensured that the waste water pipe or hose and sink can also withstand high temperatures.

OPERATION AND MAINTENANCE INSTRUCTION

Boiler water quality

The boiler water must meet the requirements stated in Appendix 3.
The water may need to be processed before it is added to the installation.
An expert must be advised for this purpose.

Mandatory checks

During the use of the boiler, the amount of water that may be required to top up the installation must be checked. In the event of excessive topping up, there is a leak and this must be detected immediately and remedied, this to prevent oxygen corrosion, among other things. Flue gas-side leaks occurring during use must also be rectified immediately.

The flue gas temperature must not exceed 100 ° C above the boiler water temperature and must be measured regularly. When it rises, the boiler pipes must be cleaned.

Regularly check the operation of the condens bin (if present) and the presence of sediment in it.

Depending on the conditions of use, but at least twice a year, the boiler must be checked for the following:
Ensure adequate ventilation when entering the boiler, on both water and flue gas sides.

- condition of gaskets and boiler door (s), explosion cover, inspection hatch and sightglass;
- condition of boiler pipe / pipe plate connections;
- contamination and corrosion of the boiler pipes and other flue gas-side surfaces;
- condition of the burner brickwork;
- the operation of the shunt system;
- operation of the safety valve (s) or relief valve (s).

The boiler must be inspected annually on:

- water-side contamination such as sludge and scaling max. Thickness 0.25 mm, especially between the boilerpipes at the location of the pipe plate firebox, ensure good aeration when draining the boiler;
- Water-side corrosion;
- out of roundness of the furnace max. 1% of the diameter.

In the case of deviations, an expert must be consulted. After cleaning, the boiler can be used again closed, using new gaskets.

Burnerfan

The intake by the burner fan of air, contaminated with mists, components of plant protection products or other chemicals, can cause serious and unstoppable corrosion in the boiler and must therefore be excluded at all times.

Operation and maintenance burner and boiler controls

For the operation and maintenance of the burner and other equipment, explicit reference is made to instructions from the relevant suppliers.

Protection of the boiler against the weather.

During the annual inspection, care must also be taken that the boiler is still well protected against the weather. For example, leakage from the roof above the boiler through which water can come between the insulation of the boiler and thus cause external corrosion during standstill.

APPENDIX 1 : DATASHEET BXL

Table technical specifications					10 daPa = 100 Pa = 10 mmwc					
efficiency lower heating value 95,5% efficiency higher heating value 86,5%	nominal max. load l.v. kW	nominal capacity (90/70°C) kW	nominal load incl. economiser at incoming temperature 25°C kW	fumace pressure / resistance daPa	fumace diameter mm	fumace length mm	combustion chamber volumem ³	watersided resistance daPa	stand still lose boiler (0,1 %) kW	non-insulated economiser 1% kW
Type										
BXL 12	1304	1200		60	1100	3425	3,25	1000	1,2	
BXL 12 + L(C)12			1320	95				1000+400		1,2
BXL 15	1630	1500		55	1200	3425	3,87	1000	1,5	
BXL 15 + L(C)12			1650	90				1000+400		1,5
BXL 18	1957	1800		58	1250	4230	5,19	1000	1,8	
BXL 18 + L(C)18			1980	93				1000+440		1,8
BXL 24	2609	2400		62	1300	4590	6,09	1000	2,4	
BXL 24 + L(C)24			2640	97				1000+470		2,4
BXL 30	3261	3000		60	1380	4590	6,87	1000	3	
BXL 30 + L(C)30			3300	95				1000+520		3
BXL 36	3913	3600		55	1400	4590	7,07	1000	3,6	
BXL 36 + L(C)36			3960	90				1000+530		3,6
BXL 42	4565	4200		68	1450	5205	8,60	1000	4,2	
BXL 42 + L(C)42			4620	103				1000+540		4,2
BXL 48	5217	4800		65	1600	5205	10,47	1000	4,8	
BXL 48 + L(C)48			5280	100				1000+570		4,8
BXL 54	5870	5400		76	1600	5890	11,84	1000	5,4	
BXL 54 + L(C)60			5940	111				1000+600		5,4
BXL 60	6522	6000		75	1600	5890	11,84	1000	6	
BXL 60 + L(C)60			6600	110				1000+600		6
BXL 66	7174	6600		80	1650	5890	12,59	1000	6,6	
BXL 66 + L(C)72			7260	115				1000+600		6,6
BXL 72	7826	7200		80	1700	5890	13,37	1000	7,2	
BXL 72 + L(C)72			7920	115				1000+600		7,2
BXL 84	9130	8400		90	1800	5890	14,99	1000	8,4	
BXL 84 + L(C)84			9240	125				1000+670		8,4
BXL 96	10435	9600		98	1800	6330	16,11	1000	9,6	
BXL 96 + L(C)96			10560	133				1000+700		9,6
BXL 108	11739	10800		98	2000	6330	19,89	1000	10,8	
BXL 108 + L(C)108			11880	133				1000+700		10,8
BXL 120	13043	12000		120	2000	7390	23,22	1000	12	
BXL 120 + L(C)120			13200	155				1000+800		12
BXL 140	15217	14000		120	2200	7390	28,09	1000	14	
BXL 140 + L(C)140			15400	155				1000+900		14

Efficiency to higher heating value 86,5% / lower heating value 95,5% (1.11)

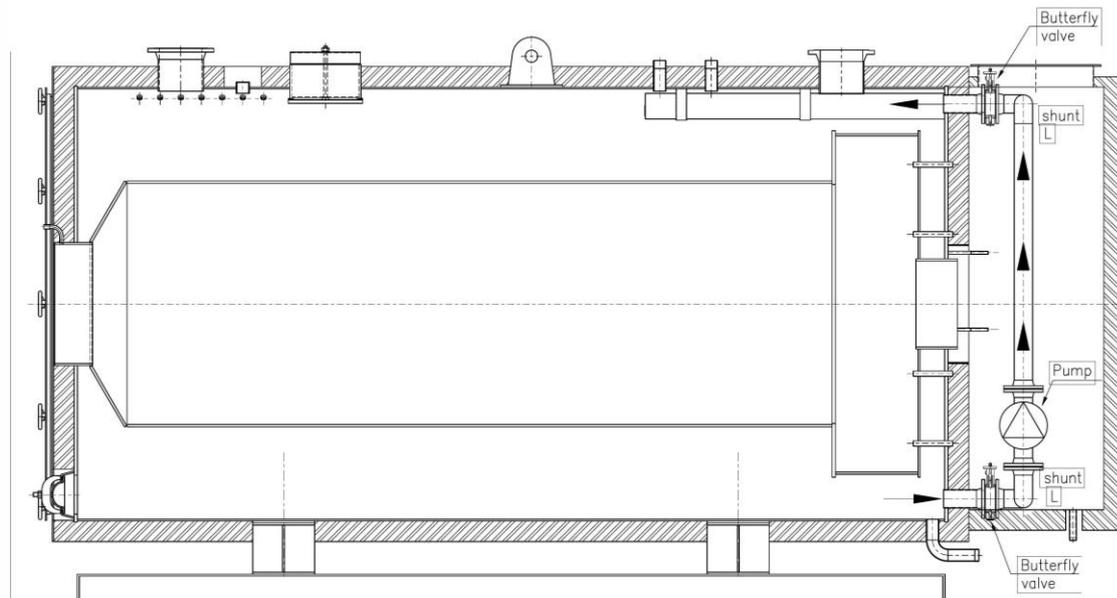
nominal min. load l.v. 15% of the nominal max. load lower value

Excess of combustion air for high load = 1.2

Excess of combustion air for low load = 1.3

APPENDIX 2 : SHUNTSYSTEM BXL

BOILER TYPE BXL



Boiler type	BXL12	BXL15	BXL18	BXL24	BXL30	BXL36	BXL42	BXL48	BXL54	BXL60	BXL66	BXL72	BXL84	BXL96	BXL108	BXL120	BXL140
Watervolume m ³	4.13	4.41	6.06	7.23	9.03	9.28	11.6	12.5	15.22	14.93	16.2	17.55	19.4	21.4	24.0	27.6	30.6
Min. pumpcapacity m ³ /h	12.4	13.2	18.2	21.7	27.1	27.8	34.8	37.5	45.7	44.8	48.6	52.7	58.2	64.2	72.0	82.8	91.8

APPENDIX 3: REQUIREMENTS WATER QUALITY HEATING BOILERS

Oxygen content and hardness

The amount of make-up water supplied to the heating system determines, among other things, the oxygen content and hardness of the water. The heating system must therefore be regularly checked for leaks and any leaks that may occur must be detected and remedied without delay.

Oxygen

As little oxygen as possible should enter the system. A source of oxygen uptake is diffusion through gaskets, O-rings, plastic, and the like. This form of oxygen uptake cannot be prevented, which is why corrosion prevention measures sometimes remain necessary.

Hardness

Calcium is formed when the water in the boiler is heated.

To get an idea whether the amount of lime that comes from a certain water type with a certain water supplementation can cause problems for the boiler, the formula below can be used.

Scale number	=	$tH \times (5 \times S_j + I) / Q_k$
Whereas:	tH	= Temporary hardness in ° DH (easy to measure with test set for temporary hardness).
	S _j	= Annual make-up water quantity (water meter installation in the make-up line is therefore absolutely necessary).
	I	= Content of the total system in m ³ .
	Q _k	= Boilercapacity in kW

If this calculation gives a result <0.25, then the chance of scaling that is dangerous for the boiler will be low. If the number is > 0.25, (partial) softening is recommended.

The system water must not be noticeably thickened (for example due to the escape of steam) because the chloride content in this water may not be more than 10% higher than in the make-up water.

INSTALLATIONWATER

Checking the quality of the installation water, at least once a year, is recommended.

If this is done by an expert, he will also provide an assessment of that water and, if necessary, issue an opinion as to whether or not treatment is or becomes necessary. Under no circumstances may the following values be exceeded. (In case of pH the value may also not be lower than recommended value)

Solids (sludge)	:	absent or very small amount
pH	:	9 - 10 (in the presence of Aluminium 8 - 9)
Hardness	:	< 0,1 °DH
p-numberl	:	0,5 - 2 mval/l
m-numner	:	< 2 p-getal
Oxygen O ₂	:	< 0,1 mg/l
Conductivity	:	without additives < 1000 µS/cm
Cl	:	< 100 mg/1
Hydrazine	:	absent due to carcinogenicity
Phosphate PO ₄	:	20 - 50 mg/1
Sulfate SO ₄	:	< 100 mg/1

If chemicals need to be dosed, this should only be done by experts. Other treatment products on supplier's advice.

APPENDIX 4: PERMITTED THERMOSTATES AND LOW WATER CONTROL

Controlthermostat	Maximum (shut off) thermostat	Low watercontrol
JUMO PT100	JUMO AT STW-STB 90.3070	SYR 932.1
JUMO ATHs 60.3035	Siemens RAK TW1000HB	

APPENDIX 5: REQUIRED SAFETY VALVE CAPACITY

The safety valve (s) must have such a capacity that all on the water transferred heat can be discharged as steam.

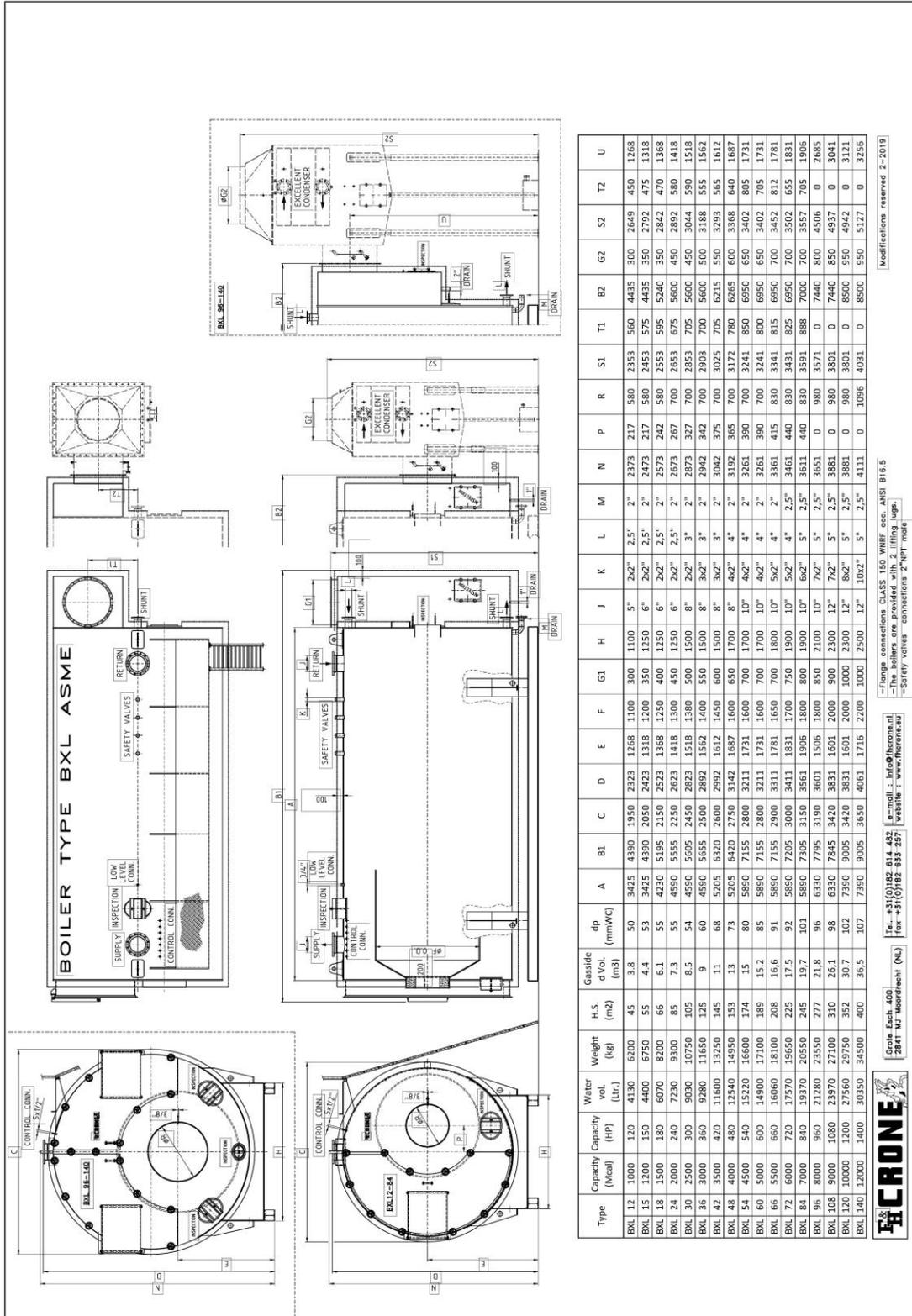
For example the following types may be used:

Watts Ocean Series 740 2" x 2 1/2" capacity at 30 PSI = 5.250 MBTU/H

Kunkle model 537 2" x 2 1/2" capacity at 30 PSI = 6.218 MBTU/H

Boilertype	capacity Mcal	MBU/h	* Required valves based upon Watts valves
BXL 12	1000	4.12	2 x 2"
BXL 15	1200	5.16	2 x 2"
BXL 18	1500	6.19	2 x 2"
BXL 24	2000	8.25	2 x 2"
BXL 30	2500	10.32	2 x 2"
BXL 36	3000	12.38	3 x 2"
BXL 42	3500	14.45	3 x 2"
BXL 48	4000	16.51	4 x 2"
BXL 54	4500	18.57	4 x 2"
BXL 60	5000	20.64	4 x 2"
BXL 66	5500	22.70	5 x 2"
BXL 72	6000	24.76	5 x 2"
BXL 84	7000	28.89	6 x 2"
BXL 96	8000	33.02	7 x 2"
BXL 108	9000	37.15	7 x 2"
BXL 120	10000	41.27	8 x 2"
BXL 140	12000	48.15	10 x 2"

APPENDIX 6: DIMENSIONS BXL



Type	Capacity (Mcal)	Capacity (HP)	Water vol. (Ltr.)	Weight (kg)	H.S. (m ²)	Gasside c.Vol. (m ³)	dp (mmWC)	A	B1	C	D	E	F	G1	H	J	K	L	M	N	P	R	S1	T1	B2	G2	S2	T2	U
BXL 12	1000	120	4130	6200	45	3.8	50	3425	4390	1950	2323	1268	1100	300	1100	5"	242"	2.5"	2	2373	217	580	2353	560	4435	300	2649	450	1268
BXL 15	1200	150	4400	6750	55	4.4	53	3425	4390	2050	2423	1318	1200	350	1250	6"	242"	2.5"	2	2473	217	580	2453	575	4435	350	2792	475	1318
BXL 18	1500	180	6070	8200	66	6.1	55	4230	5195	2150	2523	1368	1250	400	1250	6"	242"	2.5"	2	2573	242	580	2553	595	5240	350	2842	470	1368
BXL 24	2000	240	7230	9300	85	7.3	55	4590	5555	2250	2623	1418	1300	450	1250	6"	242"	2.5"	2	2673	267	700	2653	675	5600	450	2892	580	1418
BXL 30	2500	300	9030	10750	105	8.5	54	4590	5605	2450	2823	1518	1380	500	1500	8"	342"	3"	2	2873	327	700	2853	705	5600	450	3044	590	1518
BXL 36	3000	360	9280	11650	125	9	60	4590	5655	2500	2892	1562	1400	550	1500	8"	342"	3"	2	2942	342	700	2903	700	5600	500	3188	555	1562
BXL 42	3500	420	11600	13250	145	11	68	5205	6320	2600	2992	1612	1450	600	1500	8"	342"	3"	2	3042	375	700	3025	705	6215	550	3293	565	1612
BXL 48	4000	480	12540	14950	153	13	73	5205	6420	2750	3142	1687	1600	650	1700	8"	442"	4"	2	3192	365	700	3172	780	6265	600	3368	640	1687
BXL 54	4500	540	13220	16600	174	15	80	5890	7155	2800	3211	1731	1600	700	1700	10"	492"	4"	2	3261	390	700	3241	850	6950	650	3402	805	1731
BXL 60	5000	600	14900	17100	189	15.2	85	5890	7155	2800	3211	1731	1600	700	1700	10"	492"	4"	2	3261	390	700	3241	800	6950	650	3402	705	1731
BXL 66	5500	660	16060	18100	208	16.6	91	5890	7155	2900	3311	1781	1650	700	1800	10"	592"	4"	2	3361	415	830	3341	815	6950	700	3452	812	1781
BXL 72	6000	720	17570	19650	225	17.5	92	5890	7205	3000	3411	1831	1700	750	1900	10"	592"	4"	2.5	3461	440	830	3431	825	6950	700	3502	855	1831
BXL 84	7000	840	19370	20550	245	19.7	101	5890	7305	3150	3561	1906	1800	800	1900	10"	692"	5"	2.5	3611	440	830	3591	888	7000	700	3557	705	1906
BXL 96	8000	960	21280	23550	277	21.8	98	6330	7795	3190	3601	1906	1800	850	2100	10"	792"	5"	2.5	3881	0	980	3571	0	7440	800	4506	0	2685
BXL 108	9000	1080	23970	27100	310	26.1	98	6330	7845	3420	3831	1601	2000	900	2300	12"	842"	5"	2.5	3881	0	980	3801	0	7440	800	4506	0	3041
BXL 120	10000	1200	27560	29750	352	30.7	102	7390	9005	3420	3831	1601	2000	1000	2500	12"	842"	5"	2.5	3881	0	980	3801	0	8500	950	4942	0	3121
BXL 140	12000	1400	30350	34500	400	36.5	107	7390	9005	3650	4061	1716	2200	1000	2500	12"	1042"	5"	2.5	4111	0	1096	4031	0	8500	950	5127	0	3256

Modifications reserved 2-2019
 FH CRONE
 Grote Esch 400
 2841 MJ Moordrecht (NL)
 Tel: +31(0)182 614 482
 E-mail: info@fhcrone.nl
 Fax: +31(0)182 633 257
 Website: www.fhcrone.nl
 -Flanges connections: CLASS 150, WARP: ASME
 -The boiler are provided with 2 lifting lugs.
 -Safety valves -connections 2"NPT male

APPENDIX 6A: DIMENSIONS BXL WITH BUILT ON CONDENSER

Opmeting : Flansmattingen volgens DIN 2851

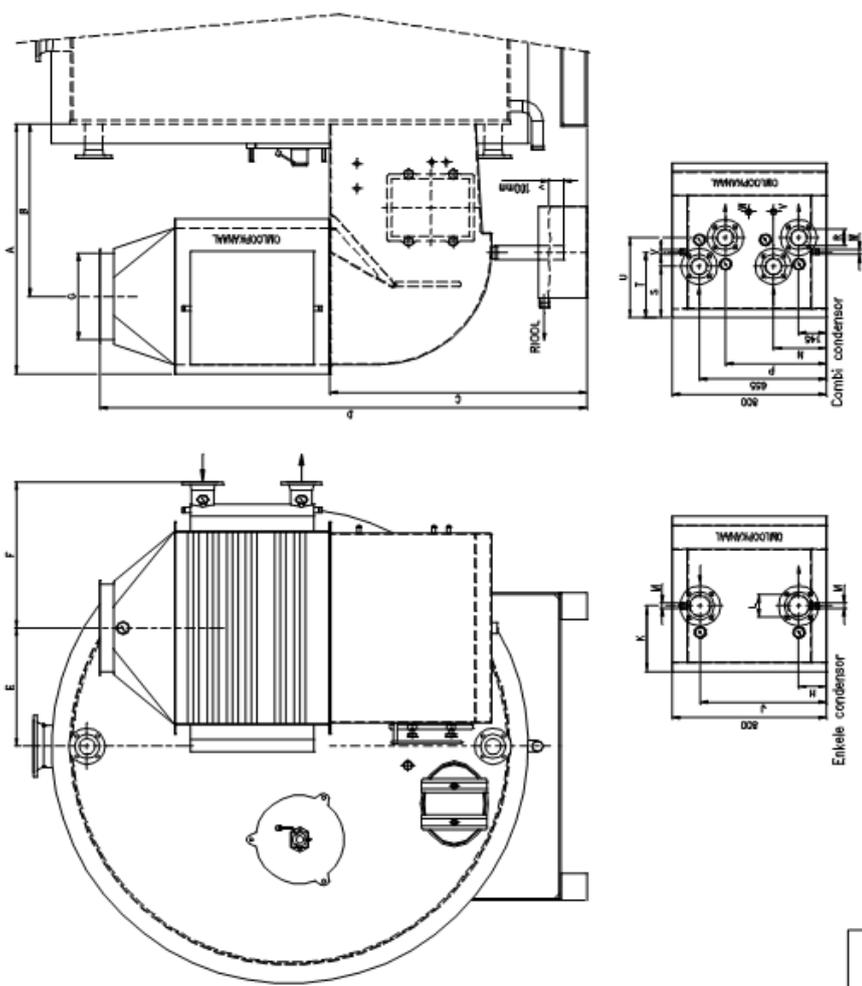
Type	H	J	K	L	M
LC06	145	655	168	DN100	2x1
LC12	145	655	274	DN150	3/4"
LC18	145	655	380	DN200	3/4"
LC24	145	655	487	DN250	3/4"
LC30	145	655	593	DN300	3/4"
LC36	145	655	700	DN350	3/4"
LC42	145	655	807	DN400	3/4"
LC48	145	655	914	DN450	3/4"
LC54	145	655	1021	DN500	3/4"
LC60	145	655	1128	DN550	3/4"
LC66	145	655	1235	DN600	3/4"
LC72	145	655	1342	DN650	3/4"
LC78	145	655	1449	DN700	3/4"
LC84	145	655	1556	DN750	3/4"
LC90	145	655	1663	DN800	3/4"
LC96	145	655	1770	DN850	3/4"
LC102	145	655	1877	DN900	3/4"

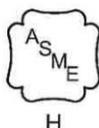
Type	N	P	R	S	T	U	V	W
LC06	273	527	DN100	164	224	284	3/4"	3/4"
LC12	273	527	DN150	207	282	367	3/4"	3/4"
LC18	273	527	DN200	250	320	415	3/4"	3/4"
LC24	273	527	DN250	293	360	458	3/4"	3/4"
LC30	273	527	DN300	336	403	501	3/4"	3/4"
LC36	273	527	DN350	379	438	544	3/4"	3/4"
LC42	273	527	DN400	422	473	587	3/4"	3/4"
LC48	273	527	DN450	465	518	630	3/4"	3/4"
LC54	273	527	DN500	508	563	673	3/4"	3/4"
LC60	273	527	DN550	551	608	716	3/4"	3/4"
LC66	273	527	DN600	594	653	759	3/4"	3/4"
LC72	273	527	DN650	637	698	802	3/4"	3/4"
LC78	273	527	DN700	680	743	845	3/4"	3/4"
LC84	273	527	DN750	723	788	888	3/4"	3/4"
LC90	273	527	DN800	766	833	931	3/4"	3/4"
LC96	273	527	DN850	809	878	974	3/4"	3/4"
LC102	273	527	DN900	852	923	1017	3/4"	3/4"

Ketel Kond.	A	B	C	D	E	F	G
LC106	288	512	DN1000	540	630	720	1.25" 3/4"
LC108	288	512	DN1000	540	630	720	1.25" 3/4"

Ketel Kond.	A	B	C	D	E	F	G
LC106	288	512	DN1000	540	630	720	1.25" 3/4"
LC108	288	512	DN1000	540	630	720	1.25" 3/4"

AANSLUITMATEN CONDENSORS





CERTIFICATE OF AUTHORIZATION

The named company is authorized by the American Society of Mechanical Engineers (ASME) for the scope of activity shown below in accordance with the applicable rules of the ASME Boiler and Pressure Vessel Code. The use of the ASME Certification Mark and the authority granted by this Certificate of Authorization are subject to the provisions of the agreement set forth in the application. Any construction stamped with the ASME Certification Mark shall have been built strictly in accordance with the provisions of the ASME Boiler and Pressure Vessel Code.

COMPANY:

F&H Crone B.V.
Grote Esch 400
Moordrecht 2841 MJ
The Netherlands

SCOPE:

Heating boilers except cast iron and cast aluminum at the above location only

AUTHORIZED: **July 19, 2020**

EXPIRES: **July 19, 2023**

CERTIFICATE NUMBER: **29077**

Board Chair, Conformity Assessment

Managing Director, Conformity Assessment

