



**A nice hot shower
for everyone!**

Consul+ / CD+

High efficient hot water boilers



Eco
Heating Systems

Eco Heating Systems

The specialist in central heating and hot water solutions.

For more than 20 years we develop, produce and supply innovative solutions for applications in offices, apartments, industry and sport facilities across the world. Thanks to many projects, we have a wide experience in both central heating and domestic hot water (DHW).

The core qualities of Eco Heating Systems

- ✓ Enthusiastic professionals to give the best possible support
- ✓ Unique product features with a stainless steel heat exchanger
- ✓ Wide application range
- ✓ Dutch products developed and produced in a Dutch factory
- ✓ Short delivery time and a flexible attitude
- ✓ Competitive pricing



Our international sales team



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Application range

Health care centers

✓ Care centers ✓ Hospitals ✓ Health centers ✓ Senior citizen residences ✓ Residential care centers



Domestic

✓ Apartment buildings ✓ Flat buildings ✓ Student housing ✓ Refugee centers



Catering industry

✓ Hotels ✓ Restaurants ✓ Bed & Breakfasts ✓ Youth hostels ✓ Fast food chains



Recreation

✓ Camping facilities ✓ Bungalow facilities ✓ Wellness centers ✓ Swimming pools ✓ Marinas



Sport facilities

✓ Sport centers ✓ Sport clubs ✓ Fitness centers



Government agencies

- ✓ Fire brigades/barracks
- ✓ Penitentiary facilities
- ✓ Schools
- ✓ Sports federations



Work and industry

- ✓ Barber shops
- ✓ Food industry
- ✓ Industrial washing
- ✓ Agricultural sector



Culture

- ✓ District buildings
- ✓ Baptismal basins in churches
- ✓ Theaters
- ✓ Music centers
- ✓ Dancing schools
- ✓ Museums



Education

- ✓ Schools
- ✓ University campuses
- ✓ Sport training centers
- ✓ Police academies
- ✓ Defense training centers
- ✓ Dormitories

Why Eco Heating Systems?

Our core identity explained



Accessible

For more than 20 years we develop, produce and supply innovative solutions for applications in offices, apartments, industry and sport facilities across the world. Thanks to many projects, we have a wide experience in both central heating and domestic hot water which we like to share with our partners. We do this by providing comprehensive advice on project specific issues. This includes saving- and hot water calculations to get the right solution for every project. Contact us for a customized advice.



Fast and quick

Whether it comes to giving (technical) advice, providing a quotation or delivering our products: a fast and quick service is always important. We therefore attach great importance to fast and smooth communication with our customers. By keeping the lines short, we can support you quickly and in optimal way. Do you need any of our products urgently? No problem, both spare parts and complete boilers can be delivered from stock. Our service department and export managers are Available for supporting you.



Skilled and at your service

Calculating for hot water projects is part of our daily routine. With our knowledge and experience we can help you out easily. We offer an accurate advice to reach the desired solution for your application. Once you have chosen for one of our products, we will ensure the best quality and service support possible.

The benefits of our solutions

- ✓ Direct fired hot water system without plate exchanger, thus without loss of efficiency
- ✓ The heat exchanger is burdened less and has therefore a longer lifetime
- ✓ The central heating system doesn't need to run all year to heat up the water
- ✓ Direct fired system without hydraulic and technical control problems
- ✓ Everything in stainless steel (both boiler and tank) so there is no anode needed
- ✓ Constant storage tank temperature, so no temperature fluctuations
- ✓ Very fast response and short recovery time
- ✓ Relatively small storage tanks and therefore less standstill loss
- ✓ Easy to combine with external heat pump and solar system



Our unique solutions

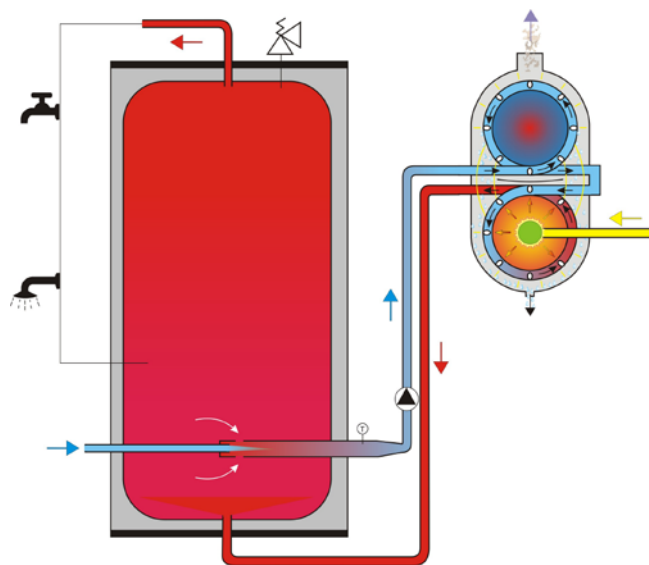
New insights

Is the Eco Heating System's Hot water really **ECO**?

Hot water installations often need to provide a huge amount of water with a high temperature. Transporting this water through a long circulation network raises the needed capacity even more. Additionally, end users like to shower longer and more comfortable, both increasing the amount of needed hot water. Our Consul+ and CD+ systems excel in providing the comfort, while doing this in a very energy efficient way due to some unique features. The direct fired systems are therefore labeled with an A-label.

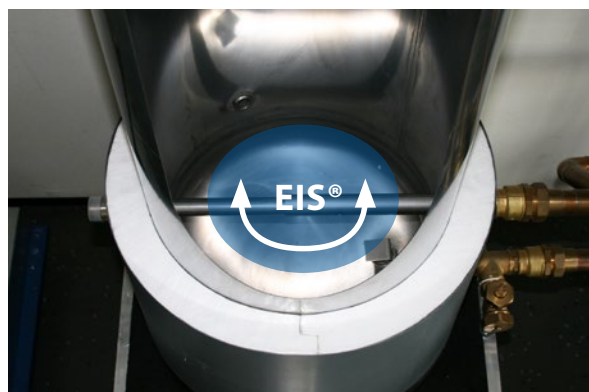
Direct fired hot water without energy loss

Heating the water without the intervention of a boiler spiral group or plate exchanger is the most energy efficient way. At Eco Heating Systems we have been doing this for years. Thanks to the stainless steel heat exchanger, our patented Consul+ and CD+ boilers are very well suited for direct heating of the tap water without the loss of efficiency.



Additional benefit:

The system for central heating doesn't have to run to heat up the tap water (for example during the summer period)



The Eco Injection System (EIS)®

In addition to the full stainless steel system, we supply a storage tank with a simply, but ingenious injection system. With the Eco Injection System the cold water will be preheated and mixed inside the storage tank. The important advantage of this system is that the boiler can run at a much lower temperature and thus achieve an efficiency of up to 107%.



Plenty of hot water!

Our Consul+ is a complete direct fired water heater, available in various capacities. With this plug and play solution, it is possible to provide an installation that meets the needs of any desired hot water demand.

The benefits

- ✓ A-label water heater
- ✓ Completely assembled plug and play system
- ✓ Large continuous tapping capacity
- ✓ Door-friendly, detachable with lightweight storage tank
- ✓ Very fast response system
- ✓ Short recovery time of less than 10 minutes
- ✓ Full stainless steel heat exchanger, storage tank and pipe work.
- ✓ Compact system of less than 1m²
- ✓ No waiting time for boiler start
- ✓ The boiler condensates while tapping water up to 60 °C
- ✓ Efficiency up to 107%
- ✓ Adjustable tapping water temperature of 35 to 75 °C
- ✓ Pump circuit with frost control
- ✓ Activatable legionella program
- ✓ Suitable for building management systems (BMS)
- ✓ Operates on both natural gas and propane

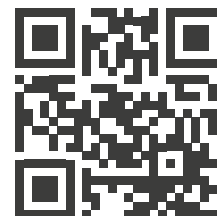
 XL A


efficiency up to
107%

Save energy with the Consul+

At many projects still indirect fired systems are being used, which means the central heating system also heats up the tap water. By replacing those systems by direct fired systems with a high efficient condensing water heater like the Consul+, a lot of energy can be saved. First of all, the entire central heating system will no longer be heated during the summer period. And secondly, there will be no efficiency loss due to the fact there is no plate exchanger needed when using the direct fired system.

Scan the QR code
for more information



General Consul+ boiler		Consul+ 35	Consul+ 55
Dimensions (h x w x d)	mm	520 x 405 x 310	
Weight (empty)	kg	22	26
Water in- and outlet connection	inch	R 1½"	R 1½"
Gas supply connection	inch	R ¾"	R ¾"
Flue/air parallel	mm	80-80	80-80
Flue/air concentric	kW	10,1 – 33,7	14,0 – 51,0
Nominal input (gross) G20, G25.3, G31 (min. - max.)	kW	11,2 – 37,4	15,6 – 58,8
Nominal output 80/60 °C (min. - max.)	kW	9,6 – 32,1	13,4 – 50,1
Nominal output 50/30 °C (min. - max.)	kW	10,4 – 34,7	14,2 – 53,7
Nominal output 37/30 °C (min. - max.)	kW	10,8 – 36,3	15,1 – 57,1
Efficiency 50/30 °C	%	107,6	107,6
Gas consumption G20 (Supply pressure: 20 mbar)	m ³ _{st} /u	1,07 – 3,57	1,48 – 5,60
Gas consumption G31 (Supply pressure: 30/37 mbar)	m ³ _{st} /u	0,41 – 1,38	0,57 – 2,16
NOx -class [EN15502-1]	-	6	
Available pressure for the flue system ¹	Pa	100	170
Sound power level, indoors (L _{WA} ; EN 15036-1:2006)	dB(A)	61	61
Max. water temperature	°C	75	
Pressure hot water system (min. - max.)	bar	1,0 - 8,0	
Overflow pressure (max.)	bar	10	
Power consumption without pump	W	55	90
Power supply	V / Hz	230 / 50	
Protection class		IPX4D	

¹ Maximum allowed combined resistance of flue gas and air supply piping at high fire

General Consul+ systems		Consul 35/150	Consul 35/230	Consul 55/230
Dimensions (h x w x d)	mm	1525x610x1000	1565x610x1000	1565x610x1000
Water volume storage tank	liter	150	240	240
Weight (empty)	kg	97	114	117
Power consumption including pump	W	160	160	195

Storage tank connections		EWD 150	EWD 230
Connection to the boiler	inch	1	1
Flow to and return from the water heater	inch	1	1
Free connection (T&P valve)	inch	¾	¾
Circulation return	inch	¾	¾
Thermometer connection	inch	½	½
Height	mm	1387	1418
Diameter	mm	511	606



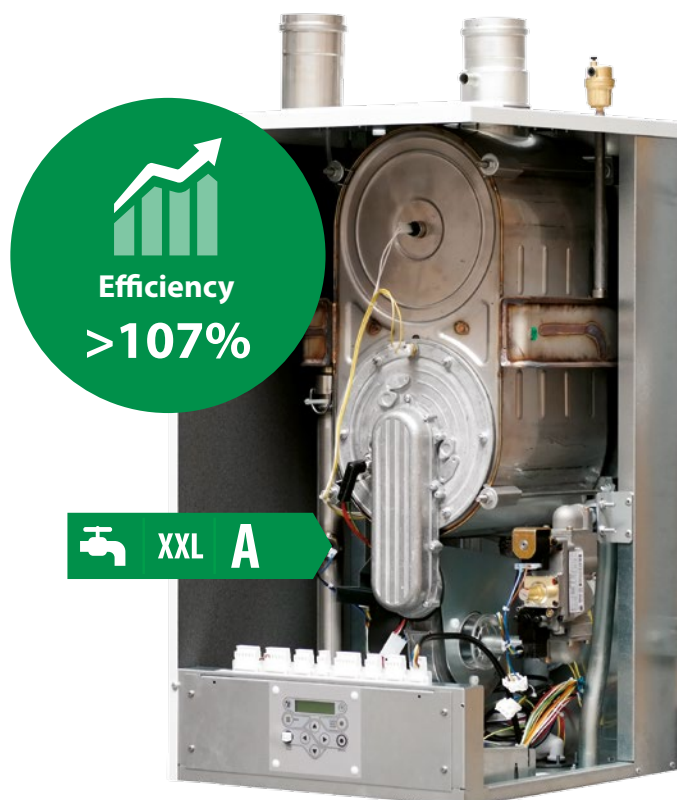
Combining creatively for high comfort

The CD+ range is a series of hot water boilers consisting of five types with increasing capacity. Those direct fired water heaters are very innovative due to their capacity and can be combined with several different storage tanks.

The fully stainless steel equipped boiler has an A-label mark as flow-through water heater.

The benefits

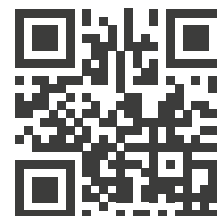
- ✓ A-label water heater
- ✓ Large continuous tapping capacity
- ✓ Very fast response system
- ✓ Short recovery time of less than 10 minutes
- ✓ Simple wall hung boiler technology
- ✓ Fully stainless steel
- ✓ Compact system
- ✓ Adjustable tapping water temperature of 35 to 75 °C
- ✓ Pump circuit with frost control
- ✓ Activatable legionella program
- ✓ Suitable for building management systems (BMS)
- ✓ Operates on both natural and propane gas
- ✓ No waiting time for boiler start
- ✓ The boiler condensates while tapping water up to 60 °C
- ✓ Efficiency up to 107%



Many combination possibilities

By providing the option to combine the CD+ boiler with our patented storage tank we offer unique solutions to meet the needs of every project for domestic hot water. For example you can choose for a high peak output and short recovery time at projects like sport facilities, while at other projects like health care facilities it is often better to choose a system that can provide a certain amount of hot water throughout the day.

Scan the QR code
for more information



General CD+		CD ⁺ 80	CD ⁺ 100	CD ⁺ 120	CD ⁺ 150	CD ⁺ 180
Dimensions (h x w x d)	mm	842 x 476 x 486			898 x 476 x 677	
Weight (empty)	kg	68	73	78	87	96
Water in- and outlet connection	inch	1½	2	2	2	2
Gas supply connection	inch	R ¾	R ¾	R ¾	R 1	R 1
Flue/air parallel	mm	80-80	100-100	100-100	130-130	130-130
Flue/air concentric	kW	14,6 - 74,3	17,2 - 92,2	26,0 - 111	34,0 - 138	45,0 - 166
Nominal input (gross) G20, G25.3, G31 (min. - max.)	kW	16,2 - 82,5	19,1 - 102	28,9 - 123	37,8 - 153	50,0 - 184
Nominal output 80/60 °C (min. - max.)	kW	14,0 - 71,2	16,5 - 88,4	24,7 - 106	32,6 - 132	43,3 - 160
Nominal output 50/30 °C (min. - max.)	kW	15,2 - 77,5	18,0 - 96,2	27,2 - 116	35,5 - 144	47,3 - 175
Nominal output 37/30 °C (min. - max.)	kW	15,7 - 80,1	18,6 - 99,5	28,1 - 120	36,7 - 149	48,5 - 179
Efficiency 50/30 °C	%	107,9	107,9	108,2	107,9	107,8
Gas consumption G20 (Supply pressure: 20 mbar)	m ³ _{st} /u	1,8 - 8,9	2,1 - 11,1	3,1 - 13,4	4,1 - 16,6	5,4 - 20,0
Gas consumption G31 (Supply pressure: 30/37 mbar)	m ³ _{st} /u	0,60 - 3,04	0,70 - 3,77	1,06 - 4,54	1,39 - 5,65	1,84 - 6,79
NOx -class [EN15502-1]	-	6				
Available pressure for the flue system ¹	Pa	200				
Sound power level, indoors (LWA ; EN 15036-1:2006)	dB(A)	67	65	62	66	69
Max. water temperature	°C	75				
Pressure hot water system (min. - max.)	bar	1,0 - 8,0				
Overflow pressure (max.)		10				
Power consumption	W	136	142	151	214	229
Power supply	V / Hz	230 / 50				
Protection class		IPX4D				

¹ Maximum allowed combined resistance of flue gas and air supply piping at high fire

Storage tank connections		EWD 300	EWD 500	EWD 750
Connection to the boiler	inch	2	2	2
Flow to and return from the water heater	inch	2	2	2
Free connection (T&P valve)	inch	¾	¾	¾
Circulation return	inch	1½	1½	1½
Thermometer connection	inch	½	½	½
Height	mm	1804	2020	1867
Diameter	mm	675	794	955



Need more information? Call +31(0)50 - 547 04 70 or mail to sales@ecohts.nl

Project references

Some successful project in The Netherlands

Callantsoog



Beach park Roots
14 taps for hot water

Amsterdam

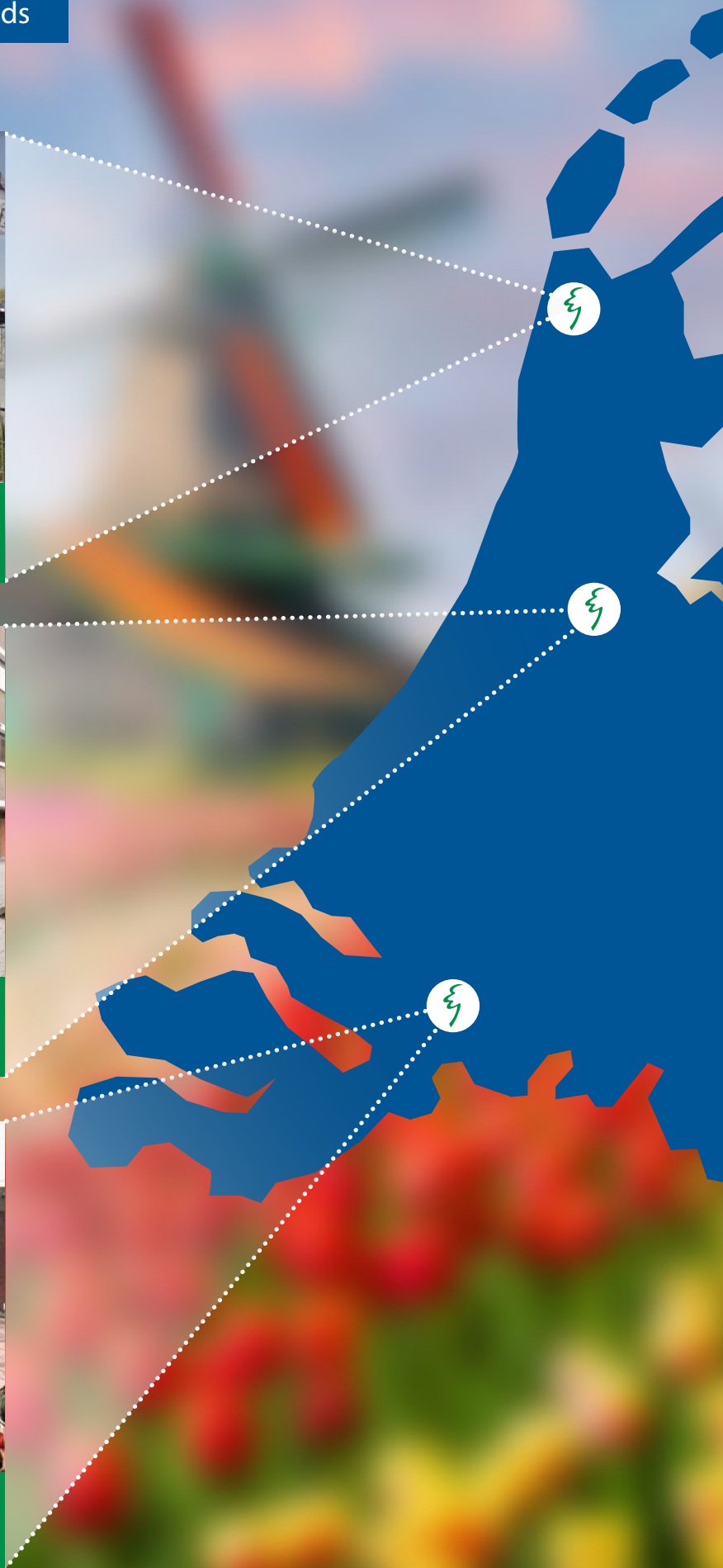


NH Hotel
200 rooms with a bath and shower

Roosendaal



E. van Nassaukazerne
Shower facilities in the barracks





Assen



De Bonte Wever

Several systems for both hotel and recreation facilities

Enschede



Macandra Studentenflat

210 rooms with a shower

Arnhem



Sportcentre Papendal

52 showers at the changing rooms

Quick sizing tool

Curious about the possibilities of our hot water systems? The table below shows for how many minutes a certain boiler and storage tank combination can provide hot water of 38 °C. This way you can easily determine which setup is the best solution. For example, is there a project with 9 showers which each provide 6 liters per minute and is starting point that it should be possible to use all showers for at least 10 minutes before the temperature may drop below 38 °C? Then choose the Consul+ 55/230! This plug and play model is able to provide 55 liters per minute for more than 11 minutes.

Tank volume →	150	230	230	300	300	500	300	500	750	300	500	750	300	500	750	300	500	750	300	500	750
Consul/CD →	35	35	55	35	55	55	80	80	80	100	100	100	120	120	120	150	150	150	180	180	180
Liters per minute ↓																					
10																					
15																					
20	93	143		186																	
25	27	42		55																	
30	16	25	161	32	211	351															
35	11	17	44	23	57	95															
40	9	13	25	18	33	55															
45	7	11	18	14	23	38	96	160	240												
50	6	9	14	12	18	30	43	72	107												
55	5	8	11	10	14	24	28	46	69	102	170	255									
60	5	7	9	9	12	20	20	34	51	44	74	110									
65	4	6	8	8	11	18	16	27	40	28	47	70	109	181	272						
70	4	6	7	7	9	15	13	22	33	21	34	52	45	76	113						
75	3	5	6	7	8	14	11	19	29	16	27	41	29	48	72						
80	3	5	6	6	7	12	10	17	25	13	22	34	21	35	52	121	201	302			
85	3	4	5	6	7	11	9	15	22	11	19	29	16	27	41	47	79	118			
90	3	4	5	5	6	10	8	13	20	10	17	25	14	23	34	29	49	74			
95	3	4	4	5	6	10	7	12	18	9	15	22	12	19	29	21	36	53	136	227	340
100	2	4	4	5	5	9	7	11	16	8	13	20	10	17	25	17	28	42	49	82	124
105	2	3	4	4	5	8	6	10	15	7	12	18	9	15	22	14	23	34	30	50	76
110	2	3	4	4	5	8	6	9	14	7	11	17	8	13	20	12	19	29	22	36	54
115	2	3	3	4	4	7	5	9	13	6	10	15	7	12	18	10	17	25	17	28	42
120	2	3	3	4	4	7	5	8	12	6	9	14	7	11	17	9	15	22	14	23	35
125	2	3	3	4	4	7	5	8	12	5	9	13	6	10	15	8	13	20	12	20	30
130	2	3	3	3	4	6	4	7	11	5	8	12	6	9	14	7	12	18	10	17	26
135	2	3	3	3	4	6	4	7	10	5	8	12	5	9	13	7	11	17	9	15	23
140	2	2	3	3	3	6	4	7	10	4	7	11	5	8	12	6	10	15	8	14	20
145	2	2	3	3	3	6	4	6	9	4	7	10	5	8	12	6	9	14	7	12	18
150	1	2	2	3	3	5	4	6	9	4	7	10	4	7	11	5	9	13	7	11	17
160	1	2	2	3	3	5	3	5	8	4	6	9	4	7	10	5	8	12	6	10	14
170	1	2	2	3	3	5	3	5	8	3	5	8	4	6	9	4	7	10	5	8	12
180	1	2	2	2	3	4	3	5	7	3	5	8	3	5	8	4	6	9	4	7	11
190	1	2	2	2	2	4	3	4	7	3	5	7	3	5	8	3	6	9	4	7	10
200	1	2	2	2	2	4	2	4	6	3	4	7	3	5	7	3	5	8	4	6	9

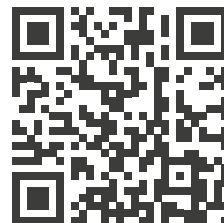
The values in the table indicate how many minutes a certain amount of liters per minute can be provided by the system. The completely filled cells indicate that the system is able to provide the amount of liters per minute continuously.

$T_{\text{tank}} = 75\text{ °C}$ $T_{\text{shower}} = 38\text{ °C}$ $T_{\text{cold water in}} = 10\text{ °C}$

Need a central heating system?

Let us help you out!

Scan the QR code
for more information



Ambassador+ CV Cascade

Modular heating system for every heating demand
120 - 2160 kW
Cascade manager standard integrated

Ambassador+ boiler

Versatile and flexible heating
A+ 60 - 80 - 100 - 120 - 150 - 180
Full stainless steel boiler





We believe in the strength of our partners!

Service and support

We believe in the strength of our partners. Craftsmanship, customer oriented and always looking for the best solution for the customer; that's how we stand together with our partners to realize a great partnership. We are there to help in any way we can.



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