STIEBEL ELTRON
Comfort through Technology

The heat is there – let's use it!

› Using free environmental heat from the air with heat pump technology for central heating and domestic hot water

01 | 2020

STIEBEL ELTRON is full of energy

As a family company driven by innovation, throughout product development and manufacture we maintain a clear focus on environmentally responsible, efficient and convenient building services for your home. Because we're full of energy and ready to shape the future!

The future belongs to environmentally responsible and efficient building services.

Since 1924 we have been developing highly efficient products and maintain a clear focus on electricity as our primary energy source. Electricity which, nowadays, is increasingly obtained from renewables.

We rely on approximately 3700 employees around the world and their expertise at every stage of development – from the initial design, right through to the manufacture of the final product. The result – efficient and innovative solutions for domestic hot water, heat, ventilation and cooling. With our extensive product range, we always have the right option to help you prepare your home for the demands of the future – today.

At our head office in Holzminden, Germany, we have also established a clear focus on green technology – with the Energy Campus, our flagship project for sustainable construction which makes careful use of resources. This training and communication centre brings together high quality architecture and communication technology. And as a Plus Energy building, it generates more energy than it consumes. This is in keeping with our brand promise "Full of energy" and creates a space where the spirit of STIEBEL ELTRON can be experienced both in theory and practice.

Electricity – the energy source of the future

Renewable energies will become the norm for our future energy supply as more and more people recognise the benefits of green and self-generated power from renewable sources.

The goal of the energy transition is independence from fossil fuels
Fossil fuels are in decline on the electricity market – too harmful to the climate and ever more scarce. Nowadays, alternative energies using the sun, wind and water are being used to generate green power.

So it is only logical to act in good time to convert the largest energy consumer in your home – the heating system – to these futureproof forms of energy. As nearly 80 % of energy consumed in the home is used for heating and hot water, this makes perfect sense. So there is plenty of scope for implementing the energy transition in your own home.

Comfortable in both winter and summer

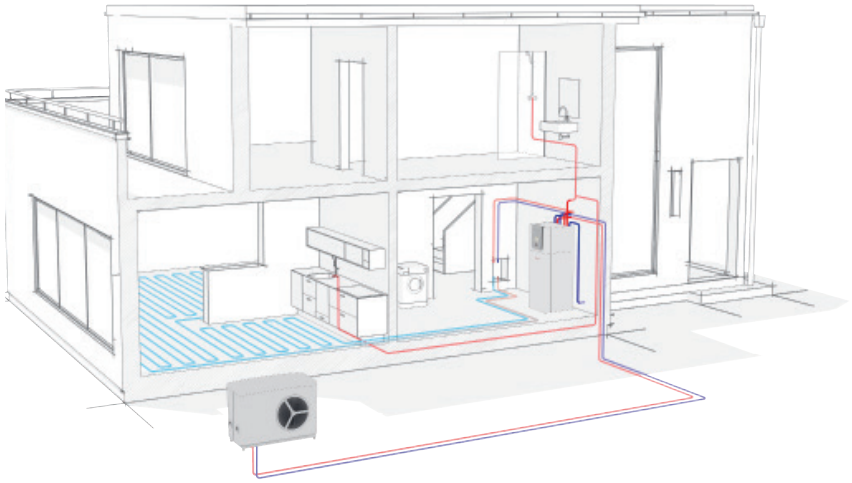
Pleasant temperatures have a positive influence on our wellbeing and performance. After all, a healthy room climate is not merely a comfort factor, but an important necessity. In fact, there is only a relatively narrow temperature range in which people feel consistently comfortable and perform well.

Pleasant temperatures all year round
› improve cognitive performance
› increase wellbeing

Cooling with the heating system – how exactly does that work?

In the cold months of the year, the heating water heated by the heat pump circulates in the underfloor heating system. A heat pump with cooling function is the only heat generator that can also cool this heating water. It allows pleasantly cool "heating water" to flow through your underfloor heating system, which lowers the room temperature.

Since no cool air is blown into the room, as is the case with air conditioning, there is no draught and no disruptive noise.



Heat pumps for cooling include the HPA-O C/CS Premium, WPL cool, WPL ICS/IKCS and HPA-O CS Plus air source heat pumps.

“For life, warmth is just as important as the air we breathe. With the right technology it is just as easy to harness. Our heat pump draws in outdoor air and extracts its latent heat which we use for central heating and domestic hot water. This even works on cold days!”

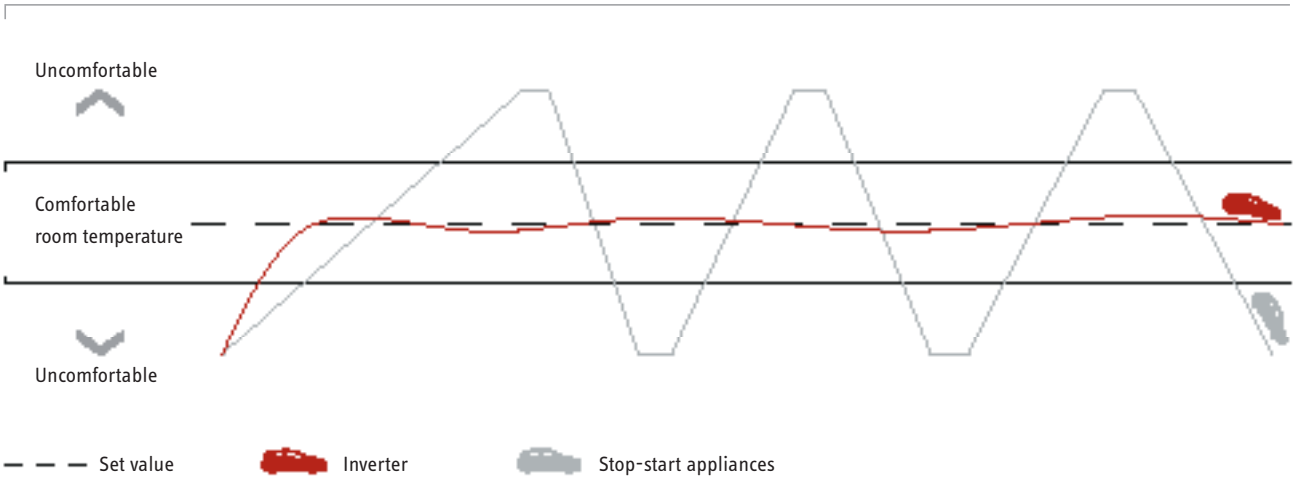
The air is full of energy

Outdoor air is supplied to the air source heat pump – installed either indoors or outdoors depending on the model – via flexible hoses and a quiet fan. A heat exchanger extracts the latent energy from the air, which is converted by the heat pump into useful heat for your home. Even at icy temperatures as low as –20 °C, the air source heat pump still operates efficiently and economically, all the while impressing with its very high COP. Very high flow temperatures can also still be achieved without backup from a booster heater.

- Continuous output matching
- Higher efficiency in the partial load range
- Very quiet
- Top technology – made by STIEBEL ELTRON
- Wide application range down to –20 °C
- Improved efficiency and heating output

Metered output – full efficiency
If cars only had two operating modes, i.e. full power or full braking, that would be neither comfortable nor efficient. Conventional heat pumps still operate just like that, as they are either on or off. This is where STIEBEL ELTRON air source heat pumps with inverter technology come into their own. They always deliver precisely the output that is currently required. Not only is this more energy efficient, it also reduces noise emissions during spring and autumn. This is because the fan and compressor operate, on average, with a lower output and are consequently even quieter than usual.

Comparison of inverter technology



A heat pump to suit any demand profile

Air source heat pumps require little installation effort – and this makes them more affordable to buy and more suitable to use when modernising an existing heating system. In new build, too, this form of heating technology is highly desirable because of its efficiency, and it can be employed in low energy houses, for example.

	INVERTER AIR SOURCE HEAT PUMPS		
	Page 08		Page 10
			
	PREMIUM		
Model	**HPA-O S/CS/C Premium**	**WPL 19/24 A**	**WPL 19/24 I(K)**
Energy efficiency class, W55/W35	A++/A+++	A++/A+++	A++/A+++
Detached and two-family house	■	■	■
Apartment building	■	■	■
Non-residential building			
New build | modernisation	■ | ■	- | ■	- | ■
Option for on-site PV power consumption*	■	■	■
Option for mobile control	■	■	■
Heating | cooling	■ | ■[1)]	■ | -	■ | -
Outdoor installation	■	■	
Indoor installation			■
Colour	White	White	White
Installation in tight spaces	■	■	■
Can be combined with other heat generators	■	■	■

[1)]HPA-O CS/C Premium only | WPL cool only. [2)]In Plus flex Set only.

*For system and country-specific compatibility and availability, please see the information at: www.stiebel-eltron.de/iotcompatibility

	AIR SOURCE HEAT PUMPS				
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	PLUS				TREND
	WPL 09/17 ICS/IKCS classic	HPA-O CS Plus	WPL E/cool	WPL 33 HT	WPL 47/57
	A++/A++	A++/A+++	A++/A++	A+/A+	A+/A++
	■	■	■	■	
			■	■	■
					■
	■ | –	■ | –	■ | ■	■ | ■	■ | ■
	■	■	■	■	■
	■	■	■	■	■
	■ | ■	■ | ■	■ | ■[1)]	■ | –	■ | –
		■	■	■	■
	■		■	■	
	White	White	White	White	White
	■	■			
			■	■	■

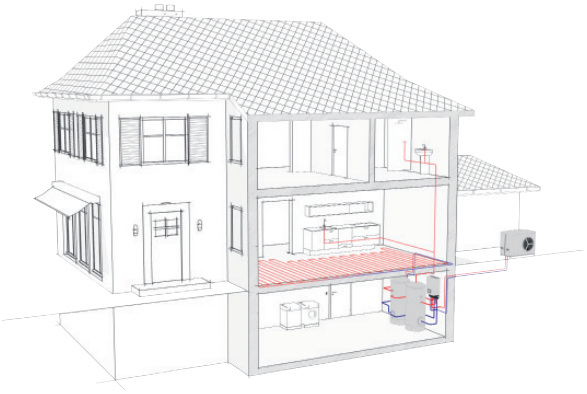
HPA-O Premium

COSY WARMTH FROM THE AIR, AT ANY TIME OF THE YEAR

The HPA-O Premium air source heat pump, designed for installation outdoors, delivers first class efficiency, even at temperatures significantly below freezing. Its high flow temperatures make the use of classic radiators possible.

Low noise – high efficiency

Low operating noise is of critical relevance for outdoor installations – particularly when considering neighbours. The quieter a heat pump is in operation, the smaller the clearance required to the nearest building. If required, a cascade of up to six heat pumps can be installed for heating and cooling larger living areas.



Benefits for your home

- Heat pump installed outdoors for heating and cooling
- With energy efficient inverter technology for high flow temperatures even on cold winter days
- Suitable for densely built-up areas thanks to low operating noise
- Particularly quiet night mode
- High energy efficiency class A++, even at a flow temperature of 55 °C

		PREMIUM							
Model		**HPA-O 7 S Premium**	**HPA-O 7 CS Premium**	**HPA-O 10 Premium**	**HPA-O 10 C Premium**	**HPA-O 13 Premium**	**HPA-O 13 C Premium**	**HPA-O 13 S Premium**	**HPA-O 13 CS Premium**
		238976	**238977**	**238978**	**238979**	**238982**	**238983**	**238980**	**238981**
Energy efficiency class		A+/A++	A++/A++	A++/A+++	A++/A+++	A++/A+++	A++/A+++	A++/A++	A++/A+++
Output at A2/W35 (EN 14511)	kW	4.23	4.23	8.33	8.33	8.33	8.33	8.33	8.33
Coefficient of performance at A2/W35 (EN 14511)		3.88	3.88	4.14	4.14	4.14	4.14	4.14	4.14
Output at A-7/W35 (EN 14511)	kW	6.86	6.86	9.54	9.54	12.86	12.86	12.86	12.86
Coefficient of performance at A-7/W35 (EN 14511)		2.83	2.83	3.26	3.26	2.93	2.93	2.98	2.98
SCOP (EN 14825)		3.84	4.04	4.7	4.87	4.63	4.76	4.39	4.53
Cooling capacity at A35/W18	kW		7.5		11.49		13.5		13.5
Cooling capacity at A35/W18			2.87		3.12		2.83		2.83
Sound power level (EN 12102)	dB(A)	50	50	54	54	54	54	54	54
Refrigerant		R410 A	R410 A	R410 A	R410 A	R410 A	R410 A	R410 A	R410 A
Heat source min./max. application limits	°C	-20-40	-20-40	-20-40	-20-40	-20-40	-20-40	-20-40	-20-40
Min. application limit on the heating side	°C	15	15	15	15	15	15	15	15
Max. application limit on the heating side	°C	65	65	65	65	65	65	65	65
Height	mm	900	900	1045	1045	1045	1045	1045	1045
Width	mm	1270	1270	1490	1490	1490	1490	1490	1490
Depth	mm	593	593	593	593	593	593	593	593
Weight	kg	160	160	175	175	175	175	175	175

*At a flow temperature of 55 °C

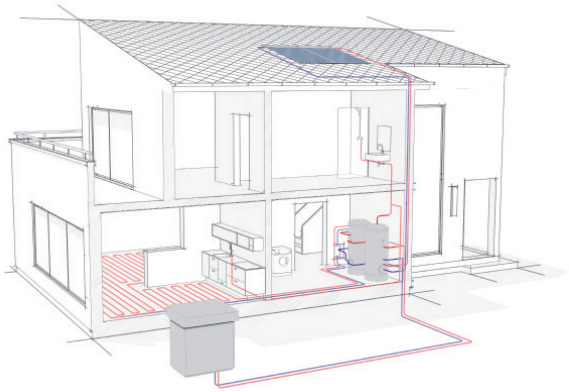
WPL 19/24 A

A SUCCESSFUL CONCEPT THAT ALSO PERFORMS WELL OUTSIDE

As the WPL 19/24 A for outdoor installation, this air source heat pump also demonstrates impressive efficiency and performance levels. The high flow temperature works well in modernisation projects, and also ensures an excellent domestic hot water supply.

Unobtrusive when it comes to sound levels

The WPL 19/24 A is optimised for freestanding installation out of doors. Further benefits are the low sound level and the option to reduce operating noise with silent mode, for example at night.



Benefits for your home

- Heat pump installed outdoors for heating
- Excellent energy efficiency using advanced inverter technology
- High flow temperature (+65 °C) for first class DHW convenience
- Evaporator protected against external damage for high operational reliability

		PREMIUM	
Model		**WPL 19 A**	**WPL 24 A**
		236412	**236413**
Energy efficiency class		A++/A+++	A++/A+++
Output at A2/W35 (EN 14511)	kW	7.41	9.04
Coefficient of performance at A2/W35 (EN 14511)		4.12	4
Output at A-7/W35 (EN 14511)	kW	9.91	13.45
Coefficient of performance at A-7/W35 (EN 14511)		3.32	3
SCOP (EN 14825)		4.6	4.58
Sound power level (EN 12102)	dB(A)	59	59
Heat source min./max. application limits	°C	-20-40	-20-40
Min. application limit on the heating side	°C	15	15
Max. application limit on the heating side	°C	65	65
Height	mm	1434	1434
Width	mm	1240	1240
Depth	mm	1280	1280
Weight	kg	279	279

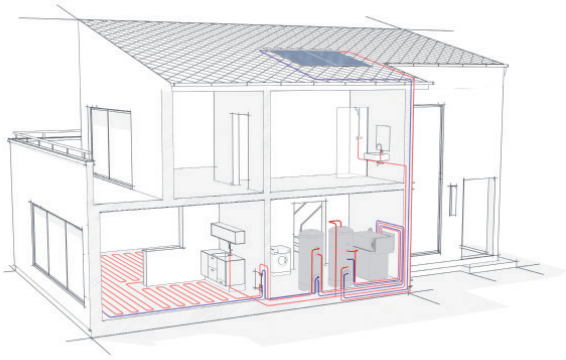
WPL 19/24 I(K)

EFFICIENT POWER PACK FOR STRAIGHTFORWARD REPLACEMENT

Modernisation with the WPL 19/24 I(K) achieves first class efficiency values due to its inverter technology. In addition, the combined enhanced vapour/enhanced saturated vapour injection allows a high system temperature all year round even with double-digit degrees of frost. This guarantees a high level of DHW convenience.

WPL I / WPL IK

Practically tailor-made
The WPL 19/24 I(K) for indoor installation is an excellent way of meeting the demands of modernised detached and two-family houses. Indoor installation with sound-optimised air hoses means it can be operated even where space is tight.



Benefits for your home

- Heat pump installed indoors for heating
- Excellent energy efficiency using advanced inverter technology
- Minimal sound emissions plus particularly quiet night mode – silent mode
- High flow temperature (+65 °C) for first class DHW convenience
- Optionally controllable by smartphone

		PREMIUM			
Model		**WPL 19 I**	**WPL 24 I**	**WPL 19 IK**	**WPL 24 IK**
		235193	**235194**	**235878**	**235879**
Energy efficiency class		A++/A+++	A++/A+++	A++/A+++	A++/A+++
Output at A2/W35 (EN 14511)	kW	7.41	9.04	7.41	9.04
Coefficient of performance at A2/W35 (EN 14511)		4.12	4	4.12	4
Output at A-7/W35 (EN 14511)	kW	9.91	13.45	9.91	13.45
Coefficient of performance at A-7/W35 (EN 14511)		3.32	3	3.32	3
SCOP (EN 14825)		4.6	4.575	4.6	4.575
Sound power level (EN 12102)	dB(A)	54	54	52	54
Heat source min./max. application limits	°C	-20-40	-20-40	-20-40	-20-40
Min. application limit on the heating side	°C	15	15	15	15
Max. application limit on the heating side	°C	65	65	65	65
Height	mm	1182	1182	1820	1820
Width	mm	800	800	800	800
Depth	mm	1240	1240	1240	1240
Weight	kg	289	289	373	373

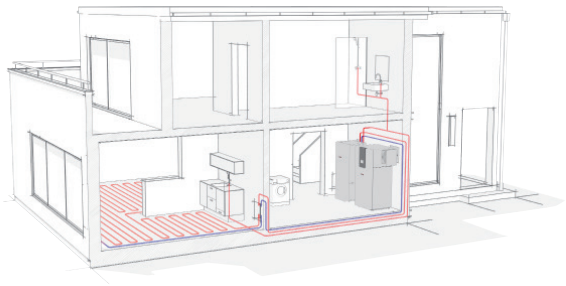
WPL ICS/IKCS classic

ELEGANT NEW BUILD SOLUTION FOR HIGHER ASPIRATIONS

With the WPL ICS/IKCS classic designed for indoor installation, STIEBEL ELTRON presents a system solution for the new build sector that is as elegant as it is efficient. Thanks to flexible air routing and pre-assembled air hoses, it can be connected almost anywhere, quickly and easily.

You want to have energy efficiency – not hear it

The excellent sound insulation of its air ducts make this heat pump barely audible, even in closely built-up areas. In silent mode, the WPL ICS/IKCS classic is even quieter.



Benefits for your home

- Heat pump installed indoors for heating and cooling
- Inverter technology for high efficiency and low energy bills
- Quietest operation thanks to innovative appliance design and low-noise night mode
- Space saving installation due to compact design

		PLUS			
Model		**WPL 09 ICS classic**	**WPL 17 ICS classic**	**WPL 09 IKCS classic**	**WPL 17 IKCS classic**
		236375	**236376**	**236377**	**236378**
Energy efficiency class		A++/A+++	A++/A++	A++/A+++	A++/A++
Output at A2/W35 (EN 14511)	kW	2.64	5.02	2.62	4.95
Coefficient of performance at A2/W35 (EN 14511)		3.83	3.83	3.76	3.7
Output at A-7/W35 (EN 14511)	kW	4.23	8.02	4.18	7.8
Coefficient of performance at A-7/W35 (EN 14511)		3.16	2.63	3.07	2.58
SCOP (EN 14825)		4.525	4.25	4.45	4.125
Cooling capacity at A35/W18	kW	1.85	3.6	1.85	3.6
Cooling capacity at A35/W18		3.96	2.78	3.86	2.68
Sound power level (EN 12102)	dB(A)	45	51	45	50
Refrigerant		R410A	R410A	R410A	R410A
Heat source min./max. application limits	°C	-20-35	-20-35	-20-35	-20-35
Min. application limit on the heating side	°C	15	15	15	15
Max. application limit on the heating side	°C	60	60	60	60
Height	mm	1381	1381	1892	1892
Width	mm	874	874	893	893
Depth	mm	874	874	833	833
Weight	kg	173	175	219	221

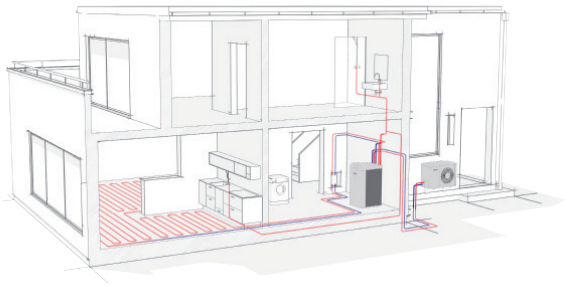
HPA-O Plus

RENEWABLES WITH HEAT, SPACE AND PRICE BENEFITS

The HPA-O Plus series sets benchmarks in the entry level segment for newly built detached houses. Thanks to its low operating noise, it can even be used where space is tight. Advanced inverter technology ensures high efficiency.

Convenient features that are second to none
A high flow temperature ensures excellent DHW provision at all times, whilst the optional cooling function creates a pleasant indoor environment on hot days.

WPL classic sets – perfectly matched
The sets range from complete system solutions all the way through to flexible design options in combination with STIEBEL ELTRON buffer and DHW cylinders of all types. Much of the necessary system technology is already integrated. This enables space saving, fast and neat installation.



Benefits for your home

- Heat pump installed outdoors for heating and cooling
- Minimum operating noise that can be further reduced with the silent mode function
- High efficiency thanks to inverter technology
- High DHW convenience with large amount of mixed water due to high flow temperature

		PLUS			
Model		**HPA-O 3 CS Plus**	**HPA-O 4 CS Plus**	**HPA-O 6 CS Plus**	**HPA-O 8 CS Plus**
Energy efficiency class		A+/A++	A+/A++	A+/A+++	A+/A+++
Output at A2/W35 (EN 14511)	kW	2.08	2.59	4.30	5.73
Coefficient of performance at A2/W35 (EN 14511)		3.75	3.72	3.97	3.97
Output at A-7/W35 (EN 14511)	kW	3.20	4.06	6.00	7.80
Coefficient of performance at A-7/W35 (EN 14511)		2.81	2.72	2.92	2.92
SCOP (EN 14825)		4.23	4.15	4.63	4.48
Cooling capacity at A35/W18	kW	1.50	1.50	2.50	3.00
Cooling capacity at A35/W18		3.56	3.56	3.28	3.28
Sound power level (EN 12102)	dB(A)	52	52	57	57
Refrigerant		R410A	R410A	R410A	R410A
Heat source min./max. application limits	°C	-20-40	-20-40	-20-40	-20-40
Min. application limit on the heating side	°C	15	15	15	15
Max. application limit on the heating side	°C	60	60	60	60
Height	mm	740	740	812	812
Width	mm	1022	1022	1152	1152
Depth	mm	524	524	524	524
Weight	kg	62	62	91	91

WPL E/cool

PERSUASIVE OUTPUT REGARDLESS OF SITUATION

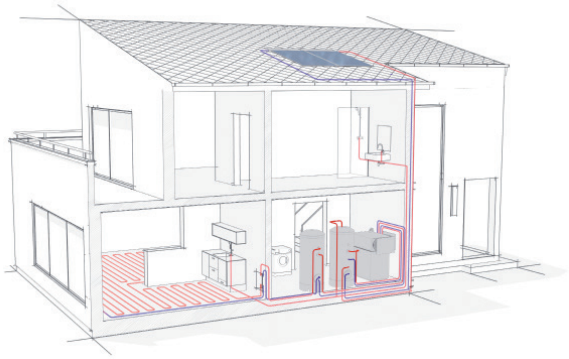
The robust WPL E/cool will benefit almost any type of building and any kind of application. Even at temperatures as low as −20 °C, they can reach flow temperatures of +60 °C which makes them an optimum choice when modernising older buildings.

And there is more

In addition to the almost limitless application options, this model can also be used in cascades. In larger buildings or smaller commercial units, the output can be multiplied easily by combining several WPL E/cool heat pumps into a cascade.

Highly flexible and universally applicable

In the WPL cool version, the heat pump also has a cooling function. With the WPIC air routing module, all WPL E/cool versions can also be installed indoors.



Benefits for your home

- Heat pump installed indoors or outdoors for heating and cooling
- Ideally suited to modernisation
- High output and excellent COP even at low outside temperatures
- Cost savings through efficient heat pump defrosting

Made in Germany

SG Ready

		PLUS						
Model		**WPL 13 E**	**WPL 18 E**	**WPL 23 E**	**WPL 13 cool**	**WPL 18 cool**	**WPL 23 cool**	**WPIC 3**
		227756	**227757**	**227758**	**223400**	**223401**	**223402**	**235874**
Energy efficiency class		A+/A++	A+/A++	A+/A+	A+/A+	A+/A++	A+/A+	
Output at A2/W35 (EN 14511)	kW	8.09	11.3	15.73	8.1	11.3	14.14	
Coefficient of performance at A2/W35 (EN 14511)		3.76	3.73	3.62	3.4	3.7	3.23	
Output at A-7/W35 (EN 14511)	kW	6.77	9.72	13.21	6.6	9.72	12.27	
Coefficient of performance at A-7/W35 (EN 14511)		3.2	3.27	3.14	3	3.2	2.91	
SCOP (EN 14825)		3.85	4	3.775	3.75	4.075	3.475	
Refrigerating capacity at A35/W20	kW				9.7	13.5	15.8	
Cooling factor at A35/W20					2.9	3	2.5	
Sound power level (EN 12102)	dB(A)	64	65	65	64	65	65	
Heat source min./max. application limits	°C	-20-40	-20-40	-20-40	-20-40	-20-40	-20-40	
Min. application limit on the heating side	°C	15	15	15	15	15	15	
Max. application limit on the heating side	°C	60	60	60	60	60	60	
Height	mm	1116	1116	1116	1116	1116	1116	637
Width	mm	784	784	784	784	784	784	1240
Depth	mm	1182	1182	1182	1182	1182	1182	800
Weight	kg	205	212	211	210	214	220	

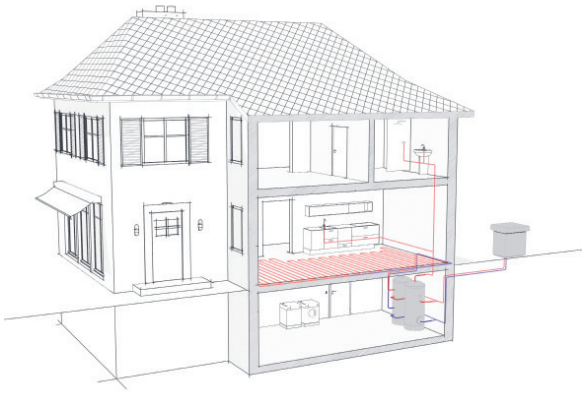
WPL 33 HT

CLEVER CHOICE FOR HEATING SYSTEM MODERNISATION

The WPL 33 HT was specifically designed for modernisation projects. High grade technology achieves the flow temperatures necessary for radiator operation even when it's freezing outside. Thanks to advanced inverter technology, energy efficiency remains high, too.

Totally flexible

The WPL 33 HT has been designed with maximum flexibility in mind, and as a result it can adjust optimally to the most diverse requirements. It can be sited indoors or out, and can be combined with other heat generators, such as a solar thermal system.



WPL 33 HT outdoor installation

Benefits for your home

- Heat pump installed outdoors for heating
- Inverter technology matches the heating output to the actual heat demand
- Ideal for use in older buildings
- Very quiet operation
- High DHW convenience
- Suitable for smaller apartment buildings

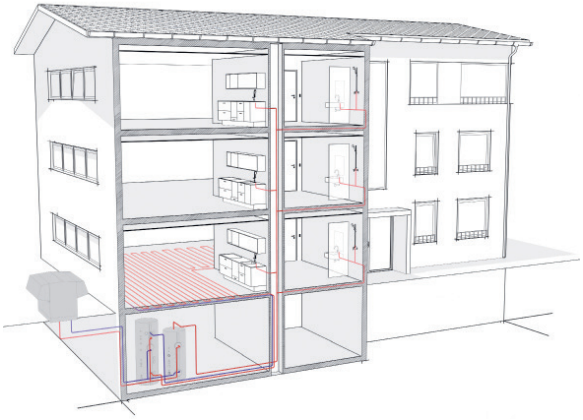
		PLUS
Model		**WPL 33 HT**
		229938
Energy efficiency class		A+/A+
Output at A2/W35 (EN 14511)	kW	7.45
Coefficient of performance at A2/W35 (EN 14511)		3.47
Output at A-7/W35 (EN 14511)	kW	12.38
Coefficient of performance at A-7/W35 (EN 14511)		2.47
SCOP (EN 14825)		3.75
Sound power level (EN 12102)	dB(A)	58
Heat source min./max. application limits	°C	-20-30
Min. application limit on the heating side	°C	15
Max. application limit on the heating side	°C	75
Height	mm	1116
Width	mm	784
Depth	mm	1332
Weight	kg	240

WPL 47/57

ENERGY PACKS FOR MAJOR TASKS

The WPL 47/57 has adequate energy reserves to cope with higher heating demands, such as those common in apartment blocks or commercial buildings. A cascade layout enables the output to be multiplied and matched accurately to the building in question.

Adaptable down to the last detail
The WPL 47/57 for outdoor installation offers a wide range of options. The variable heat pump manager even enables use in combination with other heat generators.



WPL

Benefits for your home

- Heat pump installed outdoors for heating
- High coefficients of performance for apartment buildings and commercial buildings
- Evaporator protected against external damage for high operational reliability
- Suitable for link-up with an additional energy source for dual mode operation
- Low installed height in relation to high coefficients of performance

		TREND	
Model		**WPL 47**	**WPL 57**
		228836	**228837**
Energy efficiency class		A+/A++	A+/A+
Output at A2/W35 (EN 14511)	kW	24.82	29.81
Coefficient of performance at A2/W35 (EN 14511)		3.43	3.3
Output at A-7/W35 (EN 14511)	kW	21.68	24.02
Coefficient of performance at A-7/W35 (EN 14511)		3.05	2.84
SCOP (EN 14825)		3.85	3.475
Sound power level (EN 12102)	dB(A)	67	69
Heat source min./max. application limits	°C	-20-40	-20-40
Min. application limit on the heating side	°C	15	15
Max. application limit on the heating side	°C	60	60
Height	mm	1485	1485
Width	mm	1860	1860
Depth	mm	2040	2040
Weight	kg	540	600

Accessories

DISCOVERING POSSIBILITIES

Our extensive range of accessories allows all our appliances to be adjusted to your personal requirements – for tailor-made comfort. These adaptations can range from the control unit of a single appliance to a complex system – STIEBEL ELTRON offers everything from a single source. For that reason, all components are perfectly matched to each other and guarantee a long service life for lasting solutions. For further information on our extensive range of accessories for your STIEBEL ELTRON products, see www.stiebel-eltron.com or speak to your local trade partner.

WPMsystem

Highly functional and modular
The system components combine functionality, extendibility and ease of installation. At the same time, they feature the attractive new STIEBEL ELTRON design and have significantly improved connections for the electrical installation components.

The WPM heat pump manager is the brains of the system and is able to regulate numerous functions via its integral programming unit. For larger demands, the WPM with the WPE extension controller can be extended with additional functions, to enable the integration of a woodburning stove via a universal differential controller, for example.

The FET Touch-Wheel remote control enables the required room temperature to be controlled with great accuracy. The backlit graphic display shows the room temperature, relative humidity, time and outside temperature.

We speak one language the world over: German engineering

STIEBEL ELTRON is a global company with German roots. We aim to impress with innovations and quality – worldwide. We are represented with six production facilities, 26 subsidiaries and agencies in over 120 countries.

We consider ourselves a partner in the market and focus on requirements. Accordingly, we conceive ideas and develop products that suit each particular market and the ways in which people actually live. With our high level of vertical manufacturing, spirit of invention and unwillingness to settle for the first solution to a problem, we ensure the quality of our products worldwide.

We believe the best solutions arise in an environment where both engineering excellence and outstanding employees with exacting quality standards are appreciated.

The future – made by STIEBEL ELTRON

STIEBEL ELTRON

Comfort through Technology

STIEBEL ELTRON

Comfort through Technology

Your local trade partner:

Have we sparked your interest? For further information, see www.stiebel-eltron.com or consult your local trade partner.

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Issue 01_20 | 318658_02_19_MEHR | Subject to error and technical modifications.