

## Nothing lost — plenty of healthy fresh air gained

Innovative ventilation units that offer healthy indoor air and significantly lower energy bills





### 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 is increasingly obtained from renewables.

We rely on over 3100 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 is efficient and innovative solutions for domestic hot water, heat, ventilation and cooling. With our extensive product range, we always have the right option to prepare your home for the demands of the future.

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.



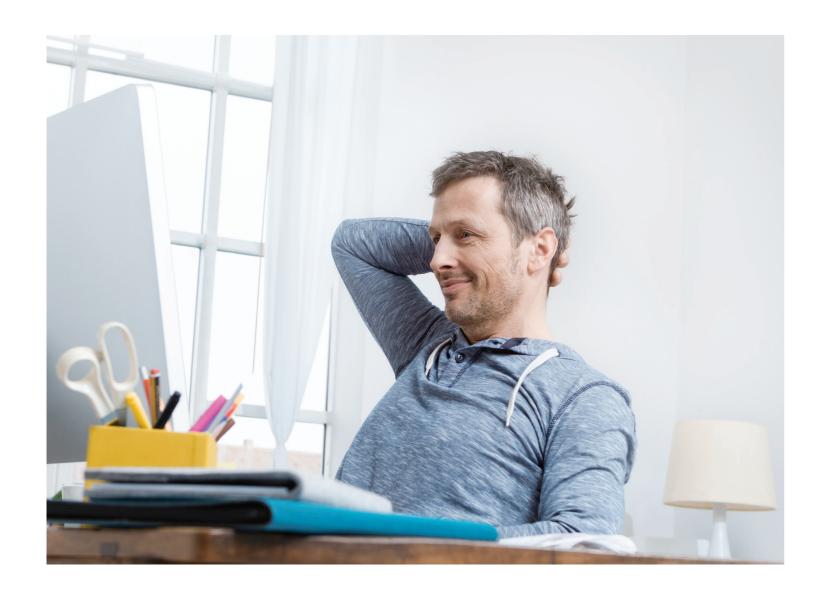
### Electricity — the energy source of the future

Renewable energies will become the norm for the future of 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 as they're 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.





"When I'm working, I don't want the room to get stuffy — I like plenty of fresh air. Luckily I don't need to suffer drafts from open widows to get this as my ventilation system does everything automatically. I can breathe freely in the knowledge that I am not wasting my heating energy either!"

### Systematic ventilation: For pleasant and healthy indoor air

The better a house is insulated, the fewer the natural air changes. If this situation is not alleviated by controlled ventilation, harmful effects such as the growth of mould and a rise in concentrations of pollutants can result. Experts recommend that about 40% of the indoor air should be replaced every hour throughout an average day. The solution: automatic ventilation units.

- ) Improved indoor air quality
- > Reduction of harmful emissions
- ) Improved comfort
- Heating energy otherwise lost by airing through open windows is retained
- Energy efficient ventilation through heat recovery
- › Building fabric protection and mould fungus prevention through controlled mechanical ventilation
- ) Beneficial for allergy sufferers

### Let your house breathe

Moisture accumulates in every building. If it remains in the rooms themselves, it can collect as condensation on windows and walls, providing perfect conditions for mould. This poses a risk, not only to the building, but also to the health of its residents. People with allergies will be pleased to know that fully automatic ventilation units have special filters which keep pollen and dust outside.

### Fresh air for healthy living

Fully automatic ventilation adjusts the supply of fresh air automatically according to actual humidity levels, while recovering up to 90 % of the heat that is otherwise lost through ventilation.

### The result of good indoor air

Generally, temperatures between 19 and 23 °C are felt to be comfortable in a house or apartment.



For a feeling of wellbeing, the CO<sub>2</sub> level in the air should be as low as possible.

Depending on the time of year and location, fresh outdoor air has an initial level of approximately 300 to 400 ppm.

For the movement of air within a living space to be perceived as pleasant, its rooms this should not sink below speed should lie between 0.1 and 0.15 m/s.

In our homes, optimum humidity lies between 40 and 50 %. In heated rooms this should not sink below speed should lie between 0.1 and 0.15 m/s.

### Centralised ventilation: for a fresh ambience throughout

With centralised ventilation, a single unit handles the supply and extraction of air to/from a building via a comprehensive ventilation system. The ventilation ducts required for this can be let into walls, concrete or suspended ceilings, the floor, or placed under a screed layer — even in the open. This option is therefore particularly appropriate for new build and for comprehensive modernisation projects. Its major advantage lies in the uniform fresh air quality it delivers throughout the entire building. The energy recovered from the extract air can be used to heat the supply air.

Centralised extractors are also suitable for existing buildings. The construction work required is considerably reduced because one centralised unit extracts the air, whilst fresh air is supplied through decentralised supply air vents and exterior wall outlets. The energy recovered from the extract air is used for domestic hot water heating.

CENTRALISED VENTILATION UNITS		
	Page 8	Page 9
	PREMIUM	TREND
Model	LWZ 180/280 (enthalpy)	LWZ 130 (enthalpy)
Energy efficiency class	LWZ 180/280 (enthalpy)	LWZ 130 (enthalpy)
Model Energy efficiency class Apartments   detached houses		
Energy efficiency class	А	A
Energy efficiency class Apartments   detached houses	А	A
Energy efficiency class Apartments   detached houses Living spaces   kitchen, bathroom, WC	A - ■	A ■ ■
Energy efficiency class  Apartments   detached houses  Living spaces   kitchen, bathroom, WC  Installation location	A - ■ Wall mounted	A ■   ■ Ceiling mounted
Energy efficiency class  Apartments   detached houses  Living spaces   kitchen, bathroom, WC  Installation location  Heat recovery	A - I ■ Wall mounted	A ■   ■ Ceiling mounted



### CREATING A VERY SPECIAL AMBIENCE IN THE HOME WITH THIS EXCLUSIVE VENTILATION UNIT

Its extremely quiet operation makes the wall mounted LWZ 180/280 an excellent choice for apartments, detached houses and small commercial properties. All functions can be very conveniently operated with the FEB remote control which is available as an option.

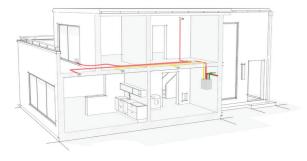
### Ensuring the right air quality and maximum efficiency at all times

The enthalpy cross-countercurrent heat exchanger in the ventilation unit recovers up to 65% of moisture and up to 90% of thermal energy in the extract air. In the summer months, an energy efficient cooling function ensures a high level of comfort in the home.



### Customised sets for top energy efficiency

The LWZ balance sets are equipped with components that are all optimally matched to one another. Users benefit from first class A+ energy efficiency and great value for money.



### Benefits for your home

- Quiet operation thanks to significantly reduced noise levels
- ) High heat recovery level of up to 93%
- ) Simple, intuitive operation directly at the appliance or as an option with the FEB remote control
- ) New modern STIEBEL ELTRON design
- ) Easy filter change
- ) Heat exchanger with moisture recovery ensures an even more pleasant indoor environment (LWZ 180/280 enthalpy)

		PREMIUM			
Model		LWZ 180	LWZ 280	LWZ 180 enthalpy	LWZ 280 enthalpy
		232361	232362	236646	236647
Energy efficiency class		Α	A	A	A
Power consumption	W	65	130	65	130
Heat availability level up to	%	94	94	89	89
Air flow rate	m³/h	60-250	60-350	60-250	60-350
Height	mm	997	997	997	997
Width	mm	690	690	690	690
Depth	mm	534	534	534	534
Weight	kg	78	78	80	80

### Centralised ventilation units

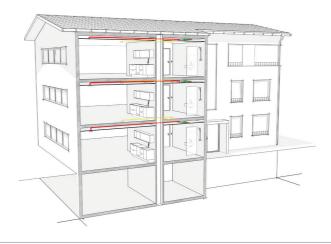
### 80

# BREATHE EASY Z 130 (enthalpy)

The centralised LWZ 130 ventilation unit is the solution to increased comfort in every home: this model recovers not only around 90% of the heat, but also over half of the moisture otherwise lost for an optimum room climate.

### Fresh air in the smallest of spaces

The compact design of the LWZ 130 is suitable for apartments and detached houses with a living space of up to 130 m². Mounted in a suspended ceiling, this model also saves space.



LWZ 130

### Benefits for your home

- Space efficient ceiling mounting
- ) Ideal for apartments and detached houses up to  $130\,\text{m}^2$
- > High living comfort thanks to optimum air quality
- > Even more pleasant indoor air through moisture recovery
- > Energy efficient ventilation through heat recovery
- More flexible installation, since a condensate drain (LWZ 130 enthalpy) is no longer required

		TREND		
Model		LWZ 130	LWZ 130 enthalpy	
		237805	237806	
Energy efficiency class		Α	A	
Heat availability level up to	%	87	87	
Air flow rate	m³/h	50-180	50-180	
Height	mm	237	237	
Width	mm	597	597	
Depth	mm	1113	1113	
Weight	kg	18	18	
weight	Kg	18		



## DISCOVERING POSSIBILITIES DISCOVERING POSSIBILITIES

Our extensive range of accessories allows all our appliances to be adjusted to your personal requirements – for tailor-made convenience. 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.co.uk or speak to your local trade partner.

### Remote contro

### Easy control from a distance

The hardwired FEB programming unit enables convenient operation of the system from the living space, as well as the display of system parameters. Suitable for LWZ 180/280 and LWZ 130. Using the multifunction display, the comfort functions

are individually adjustable at two levels. The upper level regulates the required fan stage. At the second level, the time program and information parameters can be selected.



### Ventilation grilles

### Fresh air and design combined with style

An optimum indoor environment is ensured not only through the LVE and LVS distribution systems, but also through the corresponding ventilation grilles. The rectangular air grilles are ideal for floor outlets in the supply air area and are particularly stable in form when it comes to installation in the floor. The round air grilles with

integral air filter are particularly suitable for wall mounting in the supply air area. Wall or ceiling mounting in the extract air area is also an option. All air grilles are available in different designs and in either plain white or brushed stainless steel.



Centralised ventilation units

### We speak one language the world over: German Engineering

We are represented in many key markets throughout the world with our products and solutions. This includes three international production facilities, 23 subsidiaries and agencies in over 120 countries. More than 40 per cent of turnover is now achieved internationally thanks to the high vertical range of manufacture of our products, the well-engineered quality "made in Germany" and in-depth knowledge of local markets.



■ Manufacturing facilities

### **SUCCESS ON FIVE CONTINENTS**

STIEBEL ELTRON products are available worldwide. We are represented on the international stage by our own subsidiaries as well as numerous trade partners. With their own sales organisations and service facilities they successfully serve a diverse range of markets.



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



STIEBEL ELTRON UK LTD | Unit 12 Stadium Court | Bromborough | CH62 3RP
Tel. 0151 346 2300 | Fax 0151 334 2913 | Email sales@stiebel-eltron.co.uk | www.stiebel-eltron.co.uk

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