

# Technology for your new home

# System 21

### Technology for energy-efficient houses

Jablotron brings a complete technology solution for low-energy houses in the form of System 21. Its essence is very simple: thanks to their excellent thermal insulation properties, low-energy houses can get by with very little, and living in them sensibly chosen technologies, they are not only more comfortable (and cheaper), but also healthier.

01

#### My dream house provides comfort and safety for me and my family

Jablotron offers a solution that meets all of my expectations. System 21 is smart and comprehensive while being intuitively easy to control.

02

#### Perfect insulation ensures both energy savings and low environmental impact

The better the building envelope, the simpler, cheaper and less operationally demanding technology the house requires.

03

#### I want to understand the technologies I use

I do not seek overly complicated solutions. I believe the most advanced technology may be complex on the inside, but at the same time, it should be intuitive and simple on the outside. When building an energy-efficient house, I know I need to focus on four aspects: heating, cooling, ventilation, hot water.

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#### I want to breathe fresh outdoor air even inside my house

I like spending time outside and enjoying fresh air. Futura ventilation unit with heat and moisture recovery creates similar conditions inside my house, while leaving all potential nuisances like bad weather, noise, dust or pollen behind

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#### Healthy environment means optimum humidity

I want to monitor not only the supply of fresh air, but also its humidity and keep it at optimum level. Jablotron's Futura stands out from other ventilation units thanks to its patented enthalpy exchanger. Moreover, Jablotron uses this enthalpy exchanger in a unique way that enables not only heat, but also moisture recovery.





#### I love summer, but want to keep my home cool during summer months

Despite these precautions, I want to ensure a supply of cool air. My energy-efficient house will not require regular air-condition to maintain enjoyable temperature during summer. All I need is Futura's additional module CoolBreeze that provides more natural cooling effect. CoolBreeze supplies cool air of 15 – 19 °C (60 – 66 °F). with half the power consumption than a conventional cooling would require.

#### Heating my energy-efficient house is easy

Investing in a well-insulated house creates twofold savings: my house has low heat losses, which helps me save on utility bills and at the same time does not require a complicated heating system, which saves my initial investment costs.

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#### When heating water, I take advantage of its natural heat-accumulating properties

In my low-energy house, the biggest share of energy consumption is spent on hot water supply. That is why I pay attention to the way the water is heated and opt for Jablotron Ambienta – a water heater with heat pump.

09

#### I want to check that everything at home works as it should - anytime, anywhere

Thanks to MyJABLOTRON mobile application, I can check whether everything at home is OK -anytime, anywhere. Not only do I see current status, but I can also simply control all Jablotron devices—I can remotely activate my home security system, switch off heating, reduce ventilation or water my lawn.

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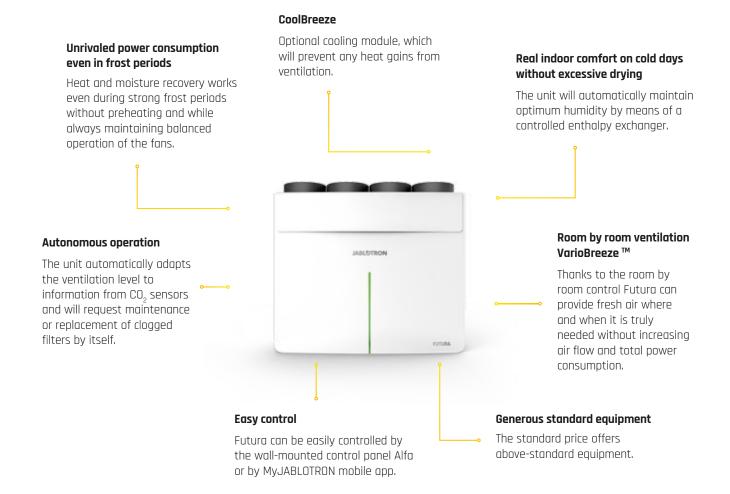
#### I am looking for reliable solutions, that make sense

That is why I choose Jablotron. Jablotron offers everything I need for comfort and security of my home: First—a complete solution for comfortable indoor environment, and second—a home security alarm.

www.jablotronlt.com/en/system21

## **Ventilation unit Futura**

### The lungs of your home



## Technical parameters

	FUTURA S	FUTURA M	FUTURA L
Air flow rate	60 - 200 m³/h	50 - 250 m³/h	100 - 350 m³/h
Energy efficiency class	A+	A+	A+
Heat exchanger	enthalpy countercurrent	enthalpy countercurrent with controlled humidity recovery	enthalpy countercurrent with controlled humidity recovery
Thermal efficiency of heat recovery at reference flow	82,5 %* at 110m³/h	91,8 %* at 175 m³/h	91,4 %* at 245 m³/h
Sound power level L <sub>wa</sub>	46 dBa*	46 dBa*	46 dBa*
Reference flow rate	110 m³/h	175 m³/h	245 m³/h
Electric power input of the fan at max. flow rate and max. pressure	140 W	230 W	320 W
Dimensions (h × w × d)	250 x 1019 x 594 mm	835 × 995 × 522 mm	835 × 995 × 522 mm
Weight	25 kg	47 kg	47,5 kg
Operating range without preheating	-20 °C to +40 °C	-19 °C to +45 °C	-19 °C to +45 °C

\* According to ČSN EN 308

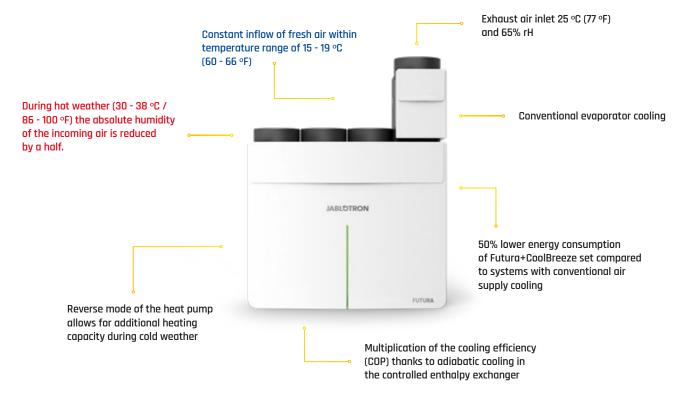
# CoolBreeze cooling / heating module

### Experience comfort all year round

The CoolBreeze module consists of a heat pump with the exchanger located in the ventilation system. It provides heating or cooling of freshly supplied air.

Our technically unique solution uses a combination of (I) conventional evaporator cooling and (II) adiabatic cooling by condensate evaporation in the controlled enthalpy exchanger. Therefore, our Futura and CoolBreeze set achieves the same performance as conventional cooling devices, but with about half the size of the outdoor unit = **smaller, quieter and cheaper.** 

In reverse mode, CoolBreeze can cover 50-70 % of the heat demand of a low-energy house. It is therefore very efficient way of heating, especially in combination with additional electric radiant heating (hot water or direct heating).



### **Technical parameters**

	OUTDOOR UNIT	INDOOR UNIT
Energy efficiency class cooling / heating	,	Q+++
Performance of the whole assembly including heat exchanger recovery - cooling / heating	4,4 kW	/ / 4,9 kW*
Seasonal energy efficiency (SCOP) cooling / heating	8.2	5 / 5.12
Acoustics	1 m disto	at maximum power in heating mode ance: 45.8 dB ance: 35,2 dB
Maximum power input cooling / heating	400 W / 500 W	
Refrigerant	750g R32 (GWP 675)	
Dimensions (h × w × d)	542 × 799 × 290 mm	364 × 254 × 481 mm
Weight	30 kg	6 kg

\* The cooling power is variable depending on the relative humidity and the temperature difference between the indoor and outdoor environments.

\* The heating output is variable depending on the temperature difference between indoor and outdoor environments.

## Ambienta W

### Domestic hot water tank with integrated heat pump



### **Technical parameters**

	AMBIENTA W
Volume of hot water	250 1
Weight without water	100 kg
Upper part material	Stainless steel + EPP
Water tank material	Steel plate with enamel
Insulation	Polyurethane foam 50 mm
Max. operation temperature	80 °C
Max. operation pressure	7 bar
Heat loss	1,01 kWh/24h
Refrigerant	R 134a / 1,2 kg
COP	2,84* / 3,47**
Energy efficiency class	A+*
Annual electricity consumption (AEC)	1428 kWh/a* / 1166 kWh/a**
Level of acoustic pressure	53,6 dB

\* A7/W10-54, according to EN16147 and EU regulation No. 812/2013 \*\* A14/W10-52, according to EN16147 and EU regulation No. 812/2013





## Alfa control panel

### Intuitive control and timeless design



E-ink is soothing to my eyes



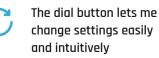
Integrated sensors monitor comfort at my home



I know immediately that the system needs my attention



Thanks to Jablotron, I have the entire system under direct supervision



I appreciate timeless design of the accessories in my house

## Delta electric heating controller

Exactly the temperature you want to have



Up to 16 independent heating zones



Controls room temperature or floor temperature



Regulates any electric heat source



Fully integrated into the ventilation system Futura



Full control of each room separately in the mobile app

Easy mounting into the

house switchboard



Uses existing Alfa control panel - no additional thermostats



Intelligent collaboration with the heat pump CoolBreeze saves energy



Developed and manufactured in the Czech Republic

## VARIOBREEZE™

JABLOTRON

Room-by-room ventilation - up to 16 individual zones

Room-by-room distribution significantly improves multiple parameters of the ventilation system



### Ventilation optimalization. Up to 50% less power consumption

VarioBreeze<sup>™</sup> neural network algorithm supplies fresh air where and when it is needed.



#### Higher relative humidity in winter

Minimizing airflow eliminates unwanted dehumidification during winter.

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### Lower electricity bills and less filter wear

Thanks to VarioBreeze™, ventilation system runs at minimum level most of the time, helping you save operating costs.



## Automatic anylysis of ducting system

Faster installation saves your time and money.

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# Minimum noise even with boost ventilation

VarioBreeze<sup>™</sup> does not increase overall power during boost ventilation of bathroom and kitchen, keeping its operation silent.



# Requires no additional software

VarioBreeze™ is included in our standard ventilation package thus offering unbeatable value for money.