

A photograph of two white Hoval Belaria heat pumps with blue condenser coils, positioned in front of a modern building with large glass windows and grey panels. The sky is clear and blue. The heat pumps are modular and sustainable, designed for high-performance solutions with renewable energy.

Hoval

Hoval Belaria® fit (40-70)

Air/water heat pump
for high-performance solutions
with renewable energy

Efficient | Modular | Sustainable

Hoval Belaria® fit (40-70)

In detail.



Belaria® fit (40-70)

for high-performance solutions with renewable energy

The Belaria® fit is designed for systems with high outputs – monovalent or as a hybrid system with a high proportion of renewable energies.

- Efficient
- Modular
- Sustainable

It offers efficient heating, cooling and hot water production at the same time: for example, for industry, hotels, shopping malls, hospitals, office buildings, blocks of flats and many other applications.

Efficient

Systems with the Belaria® fit are particularly energy-efficient:

- Thanks to modulating inverter technology, it continuously adjusts its output over a very wide range of 30 – 100%, so it always runs at optimum efficiency.
- The evaporator fins are protected by a hydrophilic coating. This ensures consistently high efficiency and shorter defrosting times.
- The R32 refrigerant has a high volumetric refrigerating capacity. This enables high efficiency – both in heating and cooling mode. In addition, the evaporative behaviour of R32 is ideally suited to our temperate climate zone, resulting in high annual performance figures for heating and cooling (SCOP/SEER).

Modular

As a standalone heat pump, the Belaria® fit provides sufficient power for medium-sized buildings. However, its great advantages come into play in the system:

Up to 16 Belaria® fit units can be combined flexibly to form an easily controllable cascade. This increases operational reliability – and the output which can be modulated increases into the megawatt range.

Hybrid systems in which the Belaria® fit is combined with a gas condensing boiler, for example, offer particularly interesting price/performance ratios.

Sustainable and fit for the future

The R32 refrigerant complies with EU regulations and offers a solution with a low environmental footprint.

Systems with the Belaria® fit are considered sustainable due to their high efficiency and are eligible for subsidies.

Renewable energies up to 1.1 MW – in the hybrid system even up to 4 MW

With Belaria® fit, efficient systems with a high proportion of renewable energies can be planned. As a monovalent system, heating or cooling outputs of up to 1.1 MW are possible. Bivalent hybrid systems can even supply up to 4 MW – depending on the required proportion of renewable energies.

**50%
heat load through
heat pump** ➔ **80%
renewable energies
in the annual demand**

The Belaria® fit covers the base load of the entire annual demand. An additional heat generator only supplies the energy for demand peaks, at low outdoor temperatures or increased domestic water requirements. The entire system is controlled by the Hoval TopTronic® E system control.

In addition to ecological advantages, the hybrid systems offer:

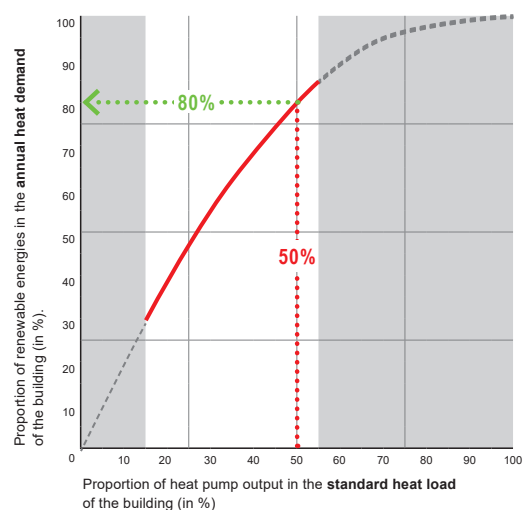
- Increased efficiency, as the advantages of the energy sources in terms of output and temperature level can be used selectively.
- Increased working safety due to redundancy of heat generators and reduced dependence on a specific energy source.
- Lower investment costs for the additional heat generators.

Renewable energy sources in refurbishment

The Belaria® fit opens up new possibilities for heating system refurbishment: Existing systems, for example gas condensing boiler systems, can be cost-effectively supplemented with a Belaria® fit. They are then considered renewable energy systems.



Bivalent hybrid system with Belaria® fit and gas condensing boiler UltraGas®.



With 50% of the heat load, the Belaria® fit provides 80% of the annual heat demand. As a result, legal requirements for a high proportion of renewable energies can be met cost-effectively, even in large plants.

Belaria® fit		(40)	(53)	(70)
Heat output/COP per unit at A2W35	kW / -	40.6 / 3.6	53.2 / 3.4	71.0 / 3.1
Cooling capacity/EER per unit for A35W7	kW / -	43.9 / 3.1	56.9 / 2.9	80.4 / 2.9
Seasonal coefficient of performance heating moderate climate 35 / 55 °C	SCOP	4.46 / 3.24	4.41 / 3.19	4.29 / 3.16
Seasonal energy efficiency cooling	SEER	4.32	4.25	4.23
Modulation	%	30-100	30-100	30-100
Sound power level (super silent mode)	dB(A)	71	72	75
Energy efficiency class 35 / 55 °C		A+++ / A++	A++ / A++	A++ / A+



Belaria® fit (40,53)



Belaria® fit (70)

Hoval quality.
You can count on us.

Hoval

Hoval is one of the leading international companies for heating and indoor climate solutions. Drawing on more than 75 years of experience and benefiting from a close-knit team culture, the Hoval Group delivers exciting solutions and develops technically superior products. This leadership role requires a sense of responsibility for energy and the environment, which is expressed in an intelligent combination of different heating technologies and customised indoor climate solutions.

Hoval also provides personal consultations and comprehensive customer service. With around 2500 employees in 15 companies around the world, Hoval sees itself not as a conglomerate, but as a large family that thinks and acts globally.

Hoval heating and indoor climate solutions are currently exported to more than 50 countries.

Responsibility for energy and environment

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