NEW
THE IVT 495 TWIN

The heat pump that gets double the power, from exhaust air and ground heat

Greater savings Security for the future

The IVT 495 TWIN exhaust air and ground heat pump

IVT has developed a completely new and unique heat pump system. We have combined the best solutions from over 30 years of development. This enables us now to present the IVT 495 TWIN. This is a heat pump that offers all the advantages of an exhaust air heat pump. At the same time it utilises the considerable amount of heat stored in the ground.

The result is twice the heating power. With the IVT 495 TWIN we offer a solution for the future, both in terms of economics and the environment. Even as energy prices rise, house owners can enjoy continued low costs for heating and domestic hot water. The IVT 495 TWIN provides nicely comfortable heating, and a healthy indoor climate, regardless of the temperature outdoors.

A complete system for the best heating comfort

The IVT 495 TWIN is a modern system solution for your house. The combination of an exhaust air heat pump and soil heating doubles its heating power. The heat pump is part of a complete system in which heating, hot water and ventilation are controlled by the heat pump's computerised control centre.

THE COMPLETE SOLUTION

For a newly built house, IVT solves all the heating, hot water and ventilation needs, providing planning, products, installation, commissioning and tuning to ensure the best possible heating economy and comfort. We use CAD to draw up the entire system and adapt it to suit your house.

BASICALLY EFFICIENT

The IVT 495 TWIN builds on the technology of our best-selling and very efficient IVT 490 exhaust heat pump, which more than halves the cost of heating and domestic hot water, whilst providing the best of indoor environments and living comfort.

WHY THE IVT 495 TWIN?

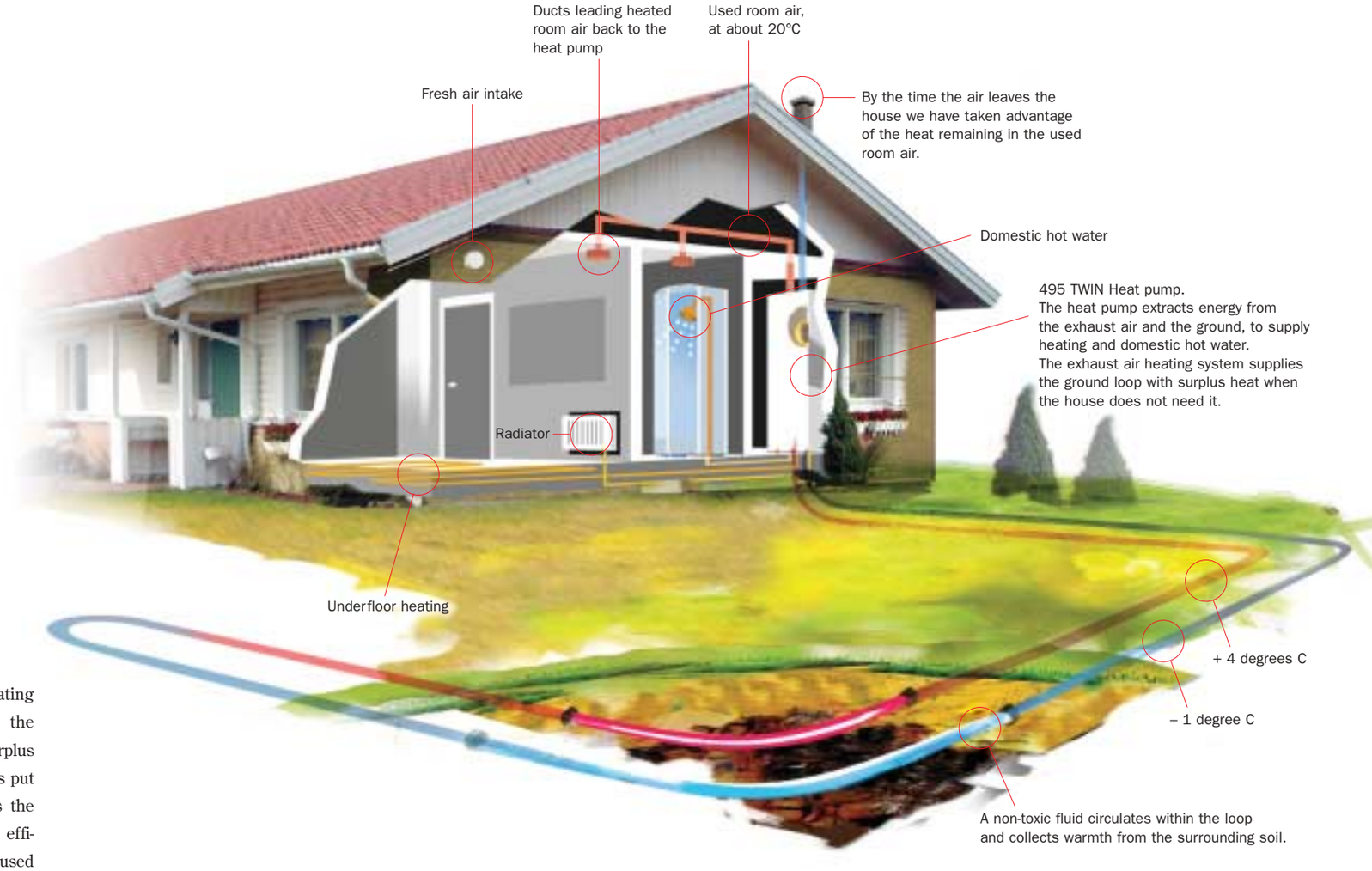
At IVT we are not just satisfied with the savings offered by a traditional exhaust air heat pump. Bearing in mind the steady increase in energy prices, we have developed a unique combination of an exhaust air and soil-based heating system. This doubles the heating power and thereby greatly increases savings.

MAXIMUM USE OF AVAILABLE ENERGY

There is optimal use of the heating obtained from exhaust air. When the house doesn't need heating, the surplus heat obtained from the exhaust air is put into the ground loop. This makes the ground heating method even more efficient and all the room heating air is used to generate new heat. If you have an old exhaust air heat pump you can exchange it for an IVT 495 TWIN and increase your savings.

PERFECT FOR NEW HOUSES

It is most convenient to lay the short loop of ground at the same time as the new plot of land is being marked out and the house foundation dug. The ground loop, only 150 metres long, is laid at a depth of about 90 cm and ends at the location in the house where the IVT 495 TWIN is to be positioned. It is also possible to choose ground heating by drilling an energy well.



WONDERFUL LIVING COMFORT

With the IVT 495 TWIN, the air in your house is changed about 12 times per day. This means that the house is always well ventilated without needing to open the windows, and that the indoor environment stays fresh and healthy.

STAINLESS STEEL CYLINDER

To increase overall operating reliability we have chosen to build in a stainless steel hot water cylinder. This is well insulated to minimise heat losses and is completely maintenance-free.

TECHNICALLY PERFECT IN EVERY DETAIL

Central control

The IVT 495 TWIN uses a newly-developed control centre, the Rego 400. This uses very advanced technology to precisely measure and control the heating and comfort in your house.

Initial settings are made by our installation engineers. You can very easily make changes afterwards. By using two buttons and a knob you simply switch to different windows to make settings or read existing values.

A two-row digital display shows in plain language what is happening, and lets you read all the relevant values.

Four indicator lamps are included that clearly show the heat pump operation.

The microprocessor uses the latest on-board programming technology

Extra domestic hot water can be needed when the family comes to stay. You can simply programme the controller to do this when required.

You can choose an economy mode for optimal savings.

Holiday function. Set the heat pump to a "save mode" while you are away.

Available in Graphite, Stainless steel, White and Red. Compact format.

The IVT 495 TWIN system is technically developed to ensure maximum savings, long life, easy operation and simple installation. Everything is assembled and tested at the factory to ensure optimal performance. It can be connected to all types of water-based heating systems.

EASY SETTING

A clear control panel makes it easy to manage the household heating system. All values are shown on a digital display and energy consumption can be easily checked.

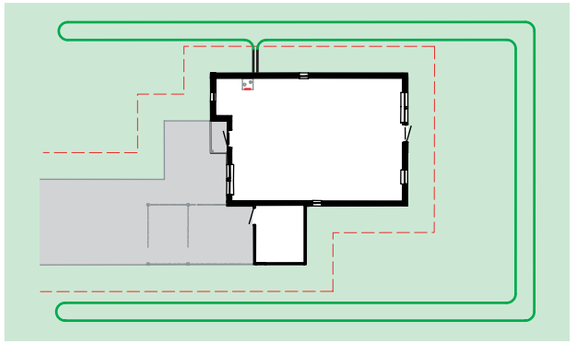
SUMMARY OF ADVANTAGES

- Heating and domestic hot water from exhaust air, and from your own garden.
- Double the amount of power compared to traditional exhaust air heat pumps.
- Good indoor climate – air changed every hour.
- Complete solution, including products, planning, installation, commissioning and fine tuning.
- Easy to install – only 150 m of ground loop.
- Computerised control centre to manage the heating automatically regardless of the outdoor temperature.
- A secure future solution. Low cost heating even if energy prices rise.
- IVT has the necessary resources to provide the best support and maximum security.

IVT 495 TWIN TECHNICAL DATA

Produced heating power at 0°C/45°C	kW	4.0 *)
Additional electrical power at 0°C/45°C	kW	1.4 *)
Nominal flow heating system	l/s	0.30
Min. flow, heating system	l/s	0
Nominal flow coolant media system	l/s	0.22
Nominal flow exhaust air	m³/h	220
Min. and max. flows, exhaust air flows	m³/h	120-270
Permitted external pressure drop in heating system	kPa	38
Permitted external pressure drop in cold water system	kPa	22
Max. hose length	m	400
Additional electrical heater	kW	9 or 13.5
Electrical connection		400V, N 3-phase
Fuse, 9 kW electrical power	A	20
Fuse, 13,5 kW electrical power	A	25
Compressor type		Scroll
Built-in heating system pump		Yes
Built-in brine system pump		Yes
Built-in hot water cylinder		Stainless steel, 163 litres
Highest outgoing heating system temperature	°C	60
Lowest incoming brine system temperature	°C	-5
Refrigerant R134a	kg	1,5
Heating system connection	mm	22
Brine connection	mm	22
Waste water connection	mm	32
Exhaust air connection	mm	125
Size, height x width x depth	mm	2090 x 600 x 615
Weight	kg	195
Weight with water	kg	415
Max. working pressure, heating system	bar	1,5
Max. working pressure, coolant media	bar	4,0
Max. working pressure, domestic hot water	bar	9
Overheating protection	°C	95
Expansion vessel	litres	12
Control unit		Rego 400
Soil ground collector	m	150
Vertical ground collector alternative	m	50

*) The power values assume outgoing heating at 45°C and incoming cold water at 0°C at the nominal flow rate.
Circulation pump calculations are in accordance with the European standard, EN 255



Minimum distance between hose loop and house 1.5 m. Minimum 0.5 m from neighbouring land.

IVT leads in development

IVT is Scandinavia's leading manufacturer of heat pumps. We offer complete and attractive systems for all kinds of house and property. Our product range includes heat pumps that collect heat from soil, rocks, water, exhaust air and outside air. Our determined investment in heat pump technology research and development has brought about remarkable results in several independent tests.

IVT
HEAT PUMPS

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