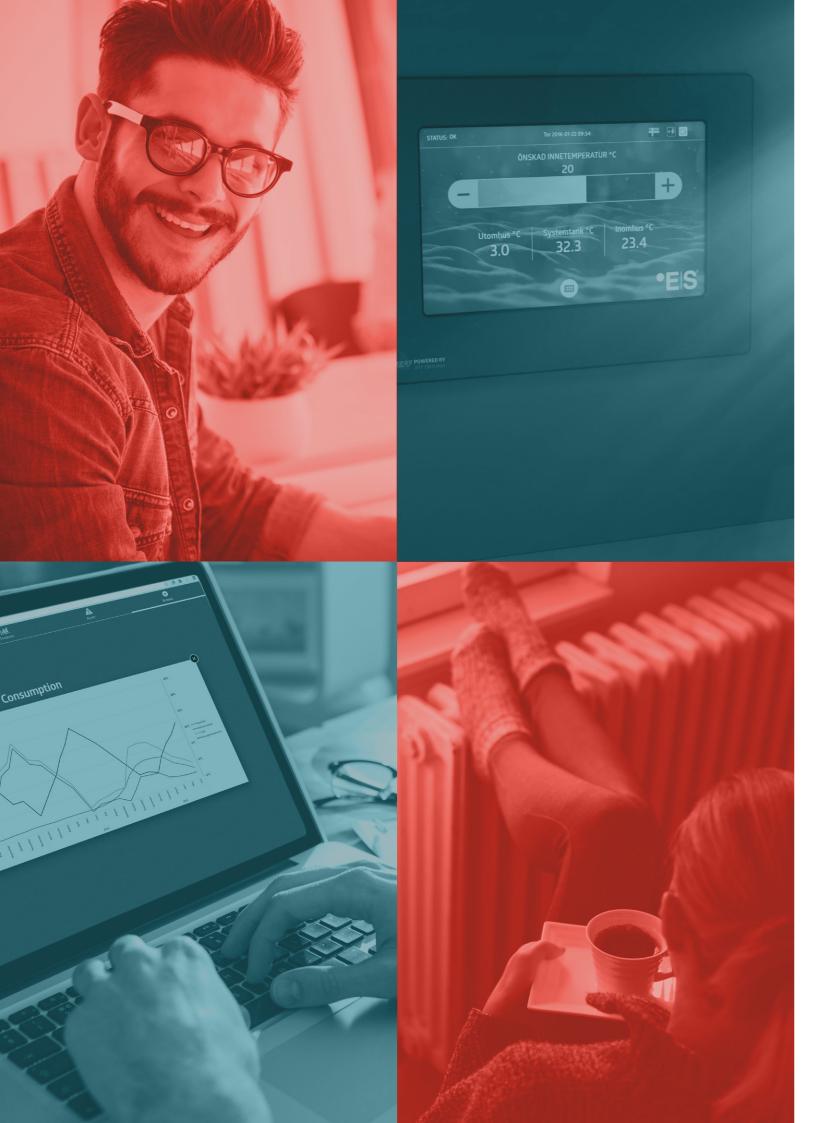
*ES NordFlex

Modular heating system.
Warm regards from Sweden.





Don't waste energy on your heating system.

E|S NordFlex is an efficient, open and future-proof heating system, which offers maximum energy efficiency. The system is as appropriate for modernizing your current heating system, as for new installations.

With the E|S NordFlex the property owner gets a good overview and control of the indoor climate. So, where would you like to put you energy?

- Module based heat pump system for heating, hot domestic water and cooling
- Developed for small and midsize properties
- Compatible to the current heating system and all different kinds of additive heating sources
- Appropriate for new installations
- Controlled and supervised on the web



A complete and reliable system. Heating, domestic hot water and cooling

Design your own heating system. For your needs.

With the E|S NordFlex you can create an individual designed heating system which makes your property's energy supply much more efficient. The system is compatible with other heating sources, whether the source is electric, oil, firewood, pellet or district heating.

You will get a modern system including heating, domestic hot water and an active cooling function, with a capacity up to 140 kW. The installation of the E|S NordFlex is simple, you can monitor the whole system on the web, and you can always complete if your needs would change in the future. It demands minimal maintenance and helps you save money, year after year.

Complete an existing system or install a new one?

E|S NordFlex reduces your energy consumption, weather you wish to complete an existing system or if you are looking for a new heating system.

Payback in 4 years

E|S NordFlex has gone through several studies, tests and evaluations. Both in lab, where all possible ways and cases of operation have been tested, and through long term studies of installed systems in actual operation environment. The results show that a payback time within four years is possible in many cases, regarding the original heating source.

COST EFFICIENT AND ENVIRONMENTALLY FRIENDLY

No waste of energy

SCALABLE IN MODULES

- Capacity on demand

FLEXIBLE AND COMPATIBLE

- suits all kinds of heating sources

•ES NordFlex Your current Modernizes your heating system heating system The graph shows an example of the energy saving when modernizing your current heating system. EIS NordFlex is developed to be compatible to an existing heating system, regardless what heating source. Reduced energy consumption by up to **EXISTING SAVING HEAT SOURCE E|S NordFlex** 20kW 20kW 20kW **EXISTING HEAT SOURCE ENERGY DEMAND** ENERGY DEMAND

Less energy
Correctly dimensioned heat pumps

can reduce the cost to a fraction of the

original heat source.

Capacity for your demands

 Your property's demand for heating is ensured by the right amount of modules with inverter controlled (variable speed) heat pumps, which automatically generates the right effect at the current outdoor temperature.

Compatible with all types of additional heating source

- Supports for example district heating, electricity, oil, or different types of solid fuel.
- Supports additive for district heating without raising the return temperature.

Secures domestic hot water

- Production of hot domestic water is in priority.
- Circulation of hot domestic water follows the recommendation from EIS NordFlex

Active cooling function

 Cater for active cooling in parts of, or in the whole property, at the same time as the system produces heating and hot domestic water.

Ensures comfort

- Possibly to control up to four groups of mixing circuits.
- Supports wireless sensors.

Split-system with complete winter equipment

- Efficient and secure in cold climate.
- The heat exchange for the property's heating system is done indoors, only the refrigerant circulates outdoors.

Simple projection and installation

• Efficient design work with two complete flowcharts

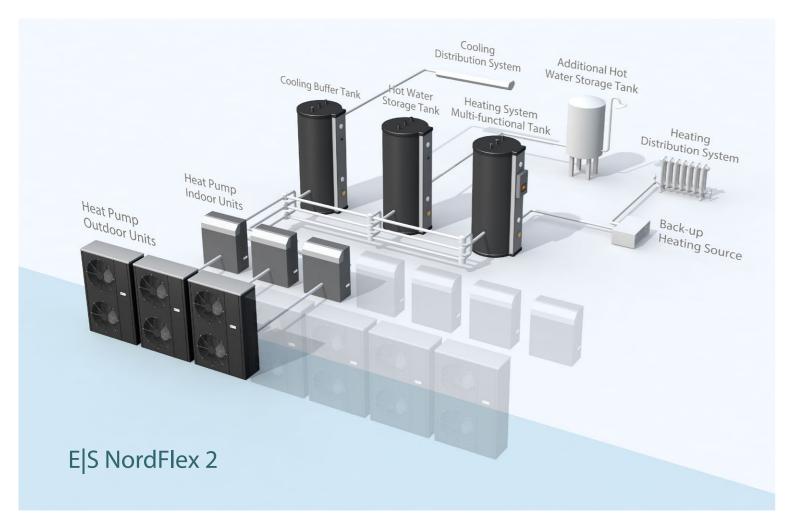
Additive when needed Customize your system

In this modernized heating system, the orig-

inal or the completing heat source is used

only when the consumption peaks.

The system is based on heat pump modules and possible to customize according to your needs. It can also be supplemented whenever your needs change.



A complete system. Developed by Swedish engineers.

Impressive Swedish engineering

E|S NordFlex is developed by Swedish engineers specialized in energy efficiency. Their combined knowledge in the heat pump- and energy technology, and building automation contributes to:

- the heating system's high energy efficiency
- the heating system's possibility to generate domestic hot water, cooling and heating parallel, alternately or on demand.
- making the system compatible to any other additional heating source.

Intelligent automatic gives the best efficiency

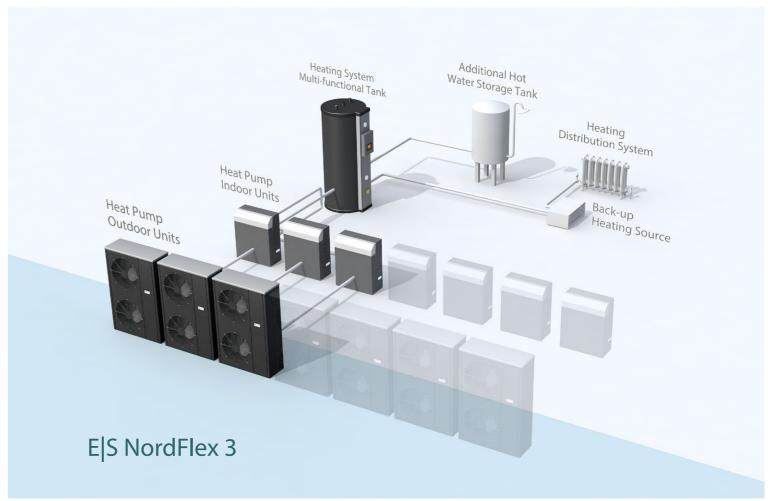
A secure, stable and efficient climate control regulates more than just the economic and efficient operation of the heat pumps in the system. An intelligent automatic and steering also operates an efficient and correct control of additional heating, controlling motorized valves, and climate control in up to four mixing circuits. The system controls the heat pumps' effect to provide the property's heating demand as efficient as possible. E|S NordFlex is a system based on over 40 years of united experience of heat pumps and climate control.

Our knowledge is included

Complete flowcharts from different system cases enables the heat pump's efficiency, completely or partially, parallel or alternately, to be producing heating, domestic hot water and active cooling.

The control system ensures optimum effect

Using mixing valves, controlled by the control system, it is ensured that the optimum amount of heat pumps is installed. With this method the system will be correctly



A SIMPLE INSTALLATION. IN TWO DIFFERENT WAYS.

E|S NordFlex 2 offers complex but flexible configurations of heating, hot domestic water and cooling, based on a specific need. Support for necessary mixing valves is standard in the control system. An excellent choice for office property, as well as for residential with demand for combined heating and cooling.

E|S NordFlex 3 is system case with focus on efficient producing of energy for property heating and for preheating of hot domestic water, without the cooling function. An excellent choice for all kinds of properties, from warehouses to residential without demand for cooling.

dimensioned to fulfill the demand for heating, domestic hot water and cooling. E|S NordFlex 2 is suitable for properties with demand for both heating and cooling, or with a high consumption of hot domestic water, such as residential buildings, offices and stores.

If the active cooling function is not desirable, the system can easily be configured to switch between, or parallel deliver, the right quantity of domestic hot water and heating.

Smart and simple system configurations

E|S NordFlex 3 offers less advanced configurations, but is an excellent and much cost efficient system choice is such cases when the main task is to deliver hating to the property's water borne system. The heat pumps' effect are controlled and adjusted to fulfill the property's heating demand as efficient as possible.

The favorable efficiency of the system also makes it possible to use it for heating the hot domestic water.

Both E|S NordFlex 2 and E|S NordFlex 3 are of course compatible and adjustable to be configured to the original heating source. The original heating source can work as a back up to the heating system when the demand rises, and can also handle the system's peak load on the coldest days of the year.

E|S NordFlex gives most saved energy per invested Euro.

Highest energy efficiency

Scandinavian design. For Nordic climate.

E|S NordFlex is completely developed for a Nordic climate. The details in stainless steel and the discrete color is in harmony with a stylish Scandinavian design. The system is including heat pumps (Air/Water), multifunctional tanks and a control module. The components are manufactured by some of the well-known European producers – Grundfos, Swep, Sika, Carel and Panasonic. Because the inside is as important as the outside.

Efficiency in world top class!

The energy efficiency of the heat pumps and the optimized climate control system maximize the annual efficiency.

Robust stainless steel construction



Maximum equipped tanks

The multifunctional tanks are equipped with pipes for domestic hot water and solar heating. Having this flexible function, the tanks can be used in a cost efficient heating system, including hot domestic water, property heating and cooling function.

The multifunctional tanks have a PU-insulation, which provides a high degree of isolation. They store the energy from the heating system very efficient, leading to lower consumption cost for heating and hot domestic water.



Indoor unit – stylish and easy to place

Through a high efficient circulation pump and plate heat exchanger optimum heat exchange, from the high temperate gas to the water in the property's heating system, is ensured. The indoor unit is compact and easy to place even if the space is limited.

A heat pump with nano-coated evaporator

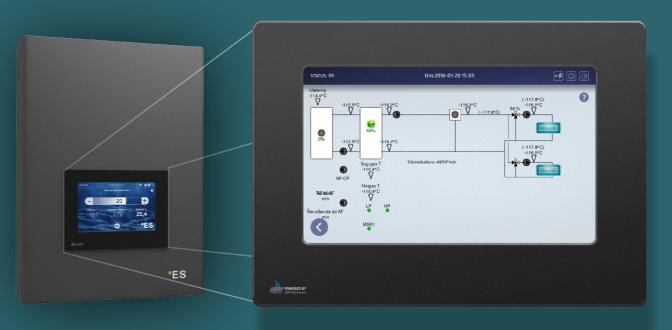
The outdoor unit has one of the most advanced and reliable variable speed compressor available on the market. Whether 1-phase or 3-phase, you will always get an efficient and quality inverter controlled compressor. The outdoor unit contains the compressor and all other components to ensure a reliable operation down to as cold

as -25 degree Celsius. The system is defrosted by a nano-coated evaporator, which works on-demand and has a self-learning control. The high temperate gas is led from the outdoor unit to the heat exchanger in the indoor unit. One huge advantage with this split-system is that no water is led outdoors, which means no risk for freezing.



The system is easily controlled by web and smartphone.

Even when you are not in your property you can manage the heating system – just use the web or your smartphone. The control system is developed by Jeff Electronics AB, who are specialized on user-friendly control systems. Jeff are in a leading position in this market.



A clear and user-friendly interface makes it easy to monitor and control the system from the display on the control cabinet, from a smartphone or from the web. You can control both function and efficiency in real time and customize the system when the demand changes.



Simple and effective installation.

Prepared project planning documents

Together with our partners we have developed a complete system which contains more than just heat pumps and controlling. The system also offers simple, but complete, flowcharts and tools for calculating the heat pump effect needed, and also tools for configuration possibilities for heating, hot domestic water and cooling.

Thanks to two complete system cases, E|S NordFlex 2 and E|S NordFlex 3, it is easy to calculate the material consumption and to get an overview how the system can be built. This makes both the calculation of the cost and the actual installation work much easier. Additional costs for project planning are also minimized.

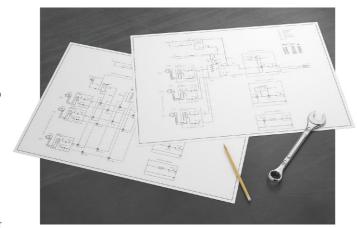
- Simplifying the installation
- Facilitating cost calculations
- Streamlines the project planning

The project planning document contains calculations of pipe dimensions to ensure a correct installation and a system dimensioned for the flows demanded.

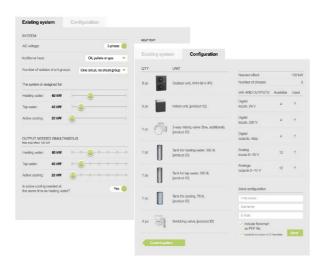
Web-configuration customizes the system

With help from the E|S NordFlex system configurator the intended heat system's demand for heat pumps and tanks is calculated. It will also be ensured that the desirable configuration is within the limitations of the control system. In the configuration the property's energy demand for heating, hot domestic water and cooling is set and defined. The generated result contains a product list of the main components, control system, and a suggestion of system case and a flow chart.

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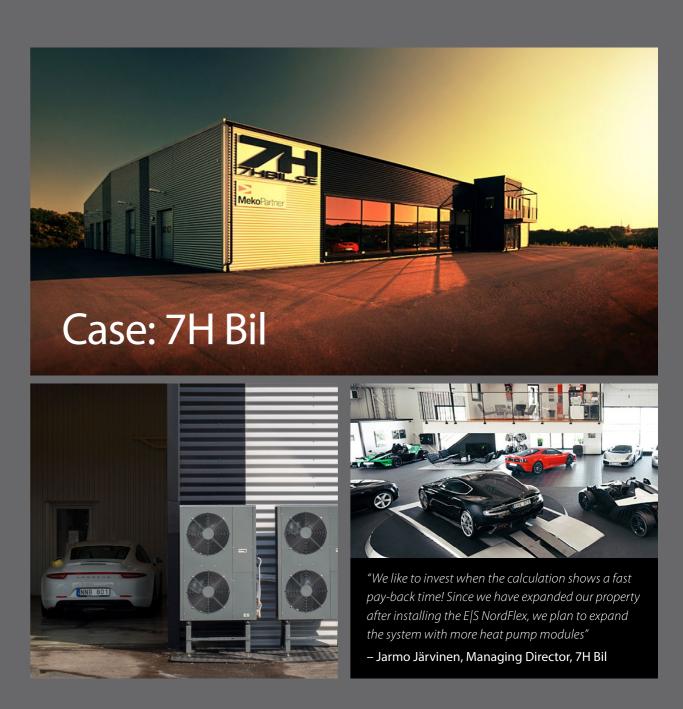






Free support at the installation!

You can always rely on your E|S NordFlex, it will operate the way you want. At the installation and start up process, our specialists are available for configuration help. A safe way for both installer, property owners and us as the supplier of the system.



E|S NordFlex is a total solution which gives the most saved energy per invested Euro"

"By integrating our property heat pumps with a flexible control- and monitoring system from Jeff Electronics AB, we have created a unique, reliable and energy effective heat supply, suitable for big range of properties, from small ones, to bigger commercial properties. In our completed projects, we have documented energy savings up to 70 %. With current energy prices it gives a pay-back time within four years for the complete investment.

The web-based monitoring system is user-friendly and gives a god overview over the heating system. This gives both the property owner and us a safe system in which the system's function and savings can be ensured. Jeff are specialist in control systems and have comprehensive knowledge about the needs in different types of properties. We are specialists in developing price worthy heat pump systems. Through the E|S NordFlex system we have developed a total solution, which we know generates the highest saving for the user, per invested Euro."

Fredrik Sävenstrand, Managing Director, Energy Save Nordic AB

High quality – high demands

To develop high quality products, measurable to the high Scandinavian demands regarding function and effect, also at very low outdoor temperatures, performance testing and certifications are very important tools to us. Our modules are fully tested by independent and certified test institutes, according to current European standards for performance tests, and carry the following certifications:

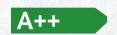














Do you want an offer?

We will gladly help you, for free, to make you an offer how to reduce your heating cost by installing an E|S NordFlex. Go to energysave.se

Energy Save Nordic develop and offer cost effective, smart and flexible products for maximum energy efficiency. We have many years of experience of developing heat pumps for the Nordic market, and today more than 8000 properties have installed our heating system.

E|S Energy Save Nordic AB

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