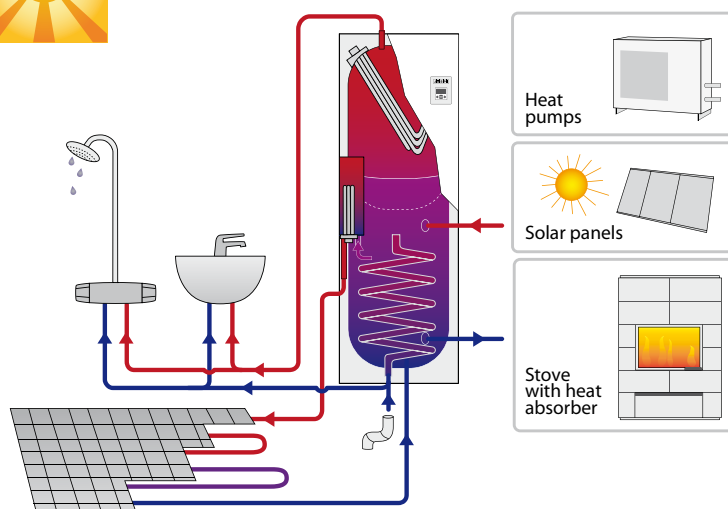




# Jäspi Ecowatti

The new generation  
hybrid heating system



## JÄSPI ECOWATTI 13 kW

**A combined electrical boiler and water heater system  
for hydronic heating systems**

The popular electrical boiler Jäspi Tehowatti has been joined by a new version that has been designed to utilize external heat sources for hydronic heating systems and to produce DWH. Jäspi Ecowatti utilizes the heating energy from external heating sources, and if this/these is not enough the boiler will automatically connect the electrical immersion heating element to support the heating.

The boiler is completely automatically equipped with effect surveillance. The boiler is fully automated with outdoor sensor, a power monitor equipped with automatics. Ecowatti can be connected to a ground source or air/water heat pump, stoves fitted with a heat absorber, solar panels or other temporary or secondary source of heat. Ecowatti ensures that the hot water return is sufficient, and that heating inlet water temperature is correct. In Ecowatti you will find a combination of a complex and diverse heating opportunities and adequate DWH one single small package.

**Start economically with  
electricity and complement  
later with sources of  
renewable energy!**

The module shaped Ecowatti is delivered ready from factory for installation. Ecowatti consists of two separate containers, which the lower is a buffer tank for the external energy source, and the upper is DHW-tank. The DHW is taken into the DHW tank through a copper coil located in the lower tank. This way the DHW is always preheated by the help of the external heat source. The DHW can be heated up more with the electrical immersion heating elements that is mounted in the DHW tank to desired temperature. The heating automatics uses the energy in the buffer tank, and if it is not enough the immersion heating element will step by step increase the temperature until the heating power is sufficient.

Jäspi Ecowatti is a completely Finnish product in which one has combined the usage of the best possible materials together with Kaukora Oy:s over thirty years experience in development and manufacturing of heating systems.

**[www.kaukora.fi](http://www.kaukora.fi)**

## TECHNICAL DATA:

- » Easy to use and a versatile digital control unit
- » The automatics can control three different external heat sources simultaneously
- » Able to control two separate heating circuits simultaneously
- » Freon free polyurethane isolation
- » 7-step regulation automatics of the electrical heating effect
- » Energy efficient circulation pump
- » Easy installation due to openable side and front plates

» Three different operation modes: Eco | Eco + additional heat source | Electricity

» It is possible to dock three different energy sources parallel to the Ecowatti

» Different options that can be combined could be i.e.:

- Heat pump / heat pumps
- Solar panels
- Fireplace with heat absorber



Installation space in Ecowatti

## STANDARD DELIVERY CONTAINS:

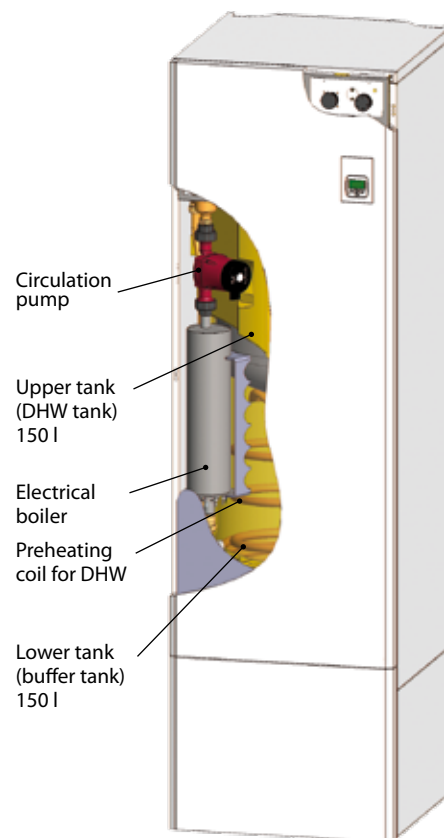
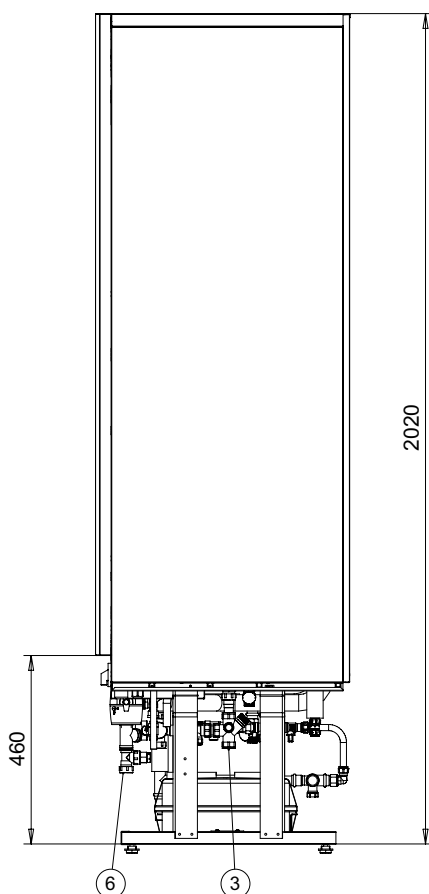
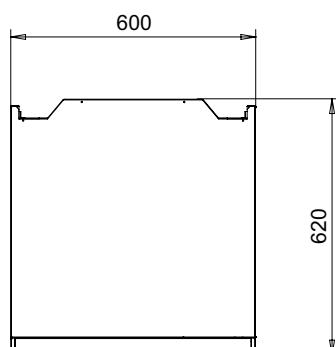
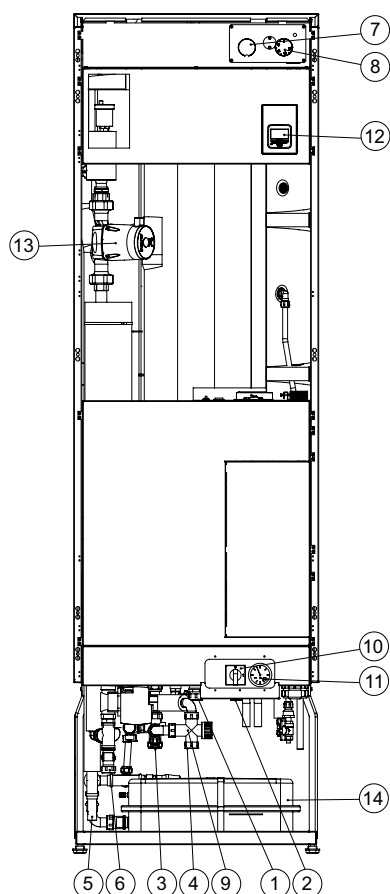
### Water heater

- Valve group

### Electrical boiler

- Circulation pump R 2/4" Grundfors Alpha2 L
- Expansion tank 18 l
- Automatic deaerator
- Safety valve R 1/2" 2.5 bar
- Drainage shut-off R1/2"
- Current transformers (3 pcs)
- Outdoor sensor
- Filling group

Room sensor and sun collector system are optional equipment.



## PARTS

- |                                    |                                      |                             |
|------------------------------------|--------------------------------------|-----------------------------|
| 1. Charging circuit return R 3/4"  | 6. Outlet to heating circuit Ø22     | 12. Control unit            |
| 2. Charging circuit out R 3/4"     | 7. DHW tank main switch              | 13. Circulation pump R 3/4" |
| 3. Cold DW in Ø22                  | 8. DHW tank control                  | 14. Expansion tank 18 l     |
| 4. DHW out Ø22                     | 9. DHW tank safety valve             |                             |
| 5. Return from heating circuit Ø22 | 10. Electrical boiler main switch    |                             |
|                                    | 11. Electrical boiler pressure gauge |                             |

Model Jäspi	Max. effect [kW]		Volume [l]		Weight [kg]	Measurements [mm]			Product code
	El.boiler	DHW	Buffer tank	DHW		K	L	S	
Ecowatti 13	13	4,5	150	150	130	2020	600	620	5058537

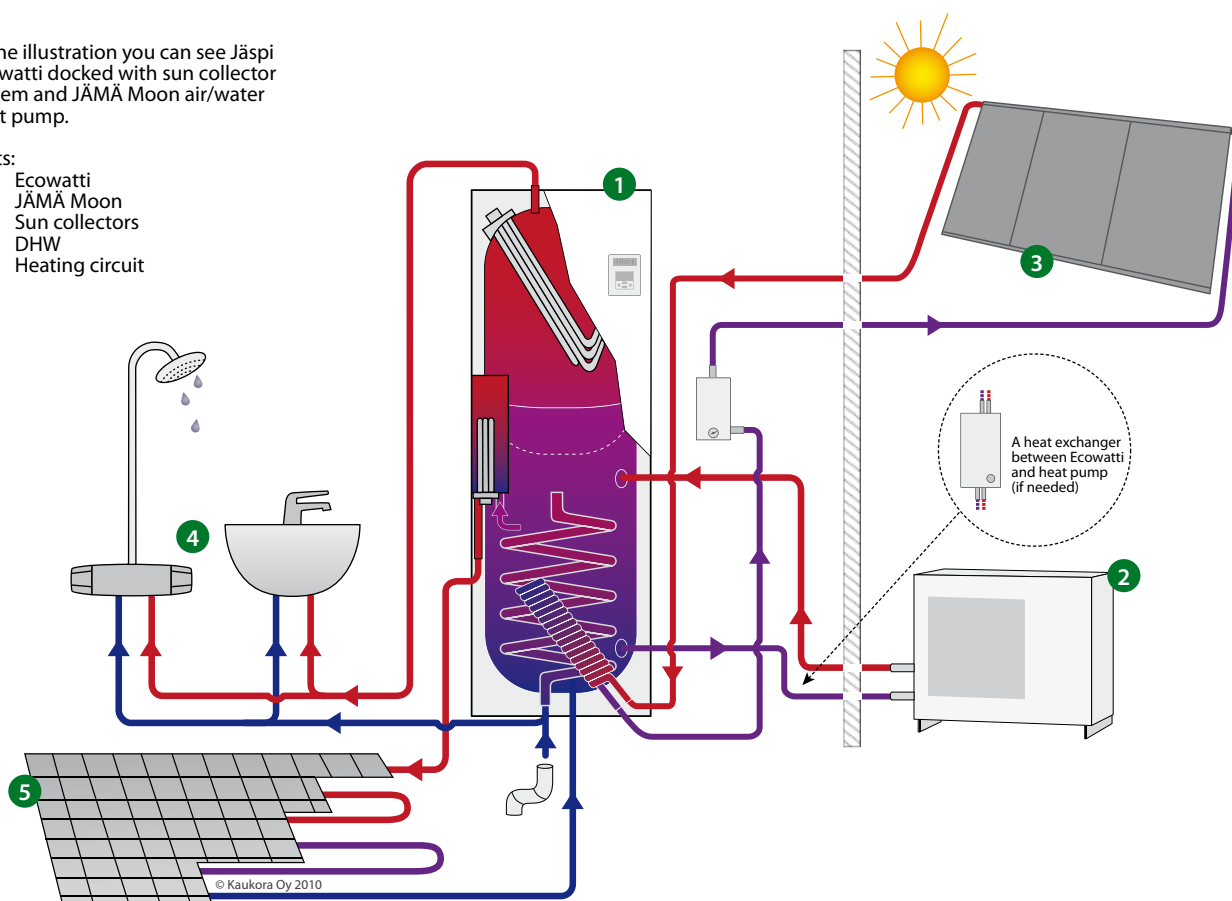
Specifications are subject to change without notice for future improvement.

## OPTIONAL EQUIPMENT FOR JÄSPI ECOWATTI

In the illustration you can see Jäspi Ecowatti docked with sun collector system and JÄMÄ Moon air/water heat pump.

Parts:

1. Ecowatti
2. JÄMÄ Moon
3. Sun collectors
4. DHW
5. Heating circuit

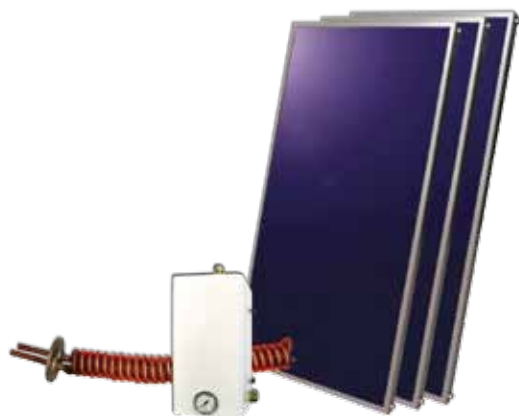


### ECOWATTI AND SUN

The free energy from the sun makes it possible to save money on heating of domestic water during the summer months.

**Appropriate sun collector package to be connected to Ecowatti may be i.e. Jäspi Solar 3 EW PAK.** The pack contains, among others, sun collectors ( 3 pcs, approx. 6 m<sup>2</sup>), pump unit, expansion tank, sun coil, heat transfer liquid and roof mounting kit.

A sun collector system is a completely separate system and can easily be connected later on:

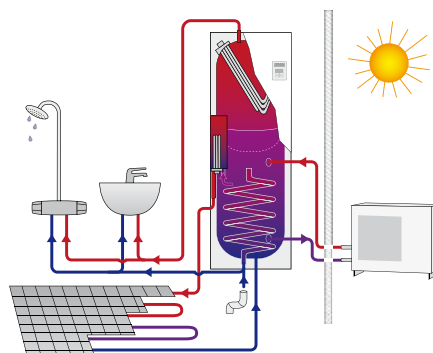


Sun collectors; loading automatics and sun coil



### ECOWATTI AND AIR/WATER HEAT PUMP

**Air/water heat pump ( i.e. JÄMÄ Moon 6 or 8 kW) docked together with Jäspi Ecowatti** is an energy efficient and environmentally friendly heating option. This combination will efficiently heat the real estate and the DHW. Ecowatti works as the indoor unit in a system with an air/water heat pump.



JÄMÄ Moon air/water heat pump

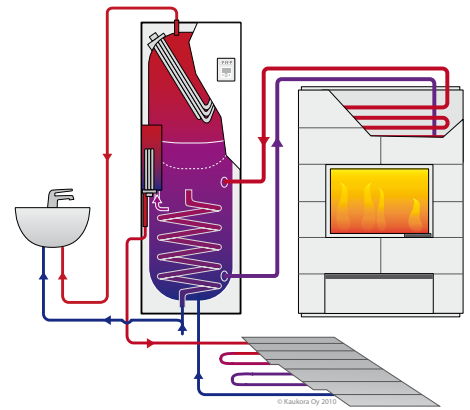
Product codes  
JÄMÄ Moon 6 kW: 5360106  
JÄMÄ Moon 8 kW: 5360107



## ECOWATTI AND STOVE WITH A BUILT-IN HEAT ABSORBER

A stove, with a built-in heat absorber, together with Ecowatti forms a complete heating system. This system enables one to utilize the excess heat from a stove as an energy source for the central heating system. Ecowatti distributes the heat, after raising the temperature with internal electrical immersion heating element, into the hydronic heating system and also ensures that there is always sufficiently DHW.

We recommend Tulikivi Green W10 - a stove with a built-in heat absorber together with Jäspi Ecowatti in a hydronic heating system. This is a well tested combination. The compatibility with other stoves must be checked with your own stove dealer.



In cooperation with:

**TULIKIVI**  
It's such a cold, cold world  
[www.tulikivi.com](http://www.tulikivi.com)



Heat in the winter with wood and in  
the summer with the Sun!  
Electrical immersion heating  
elements ensure sufficient heating.

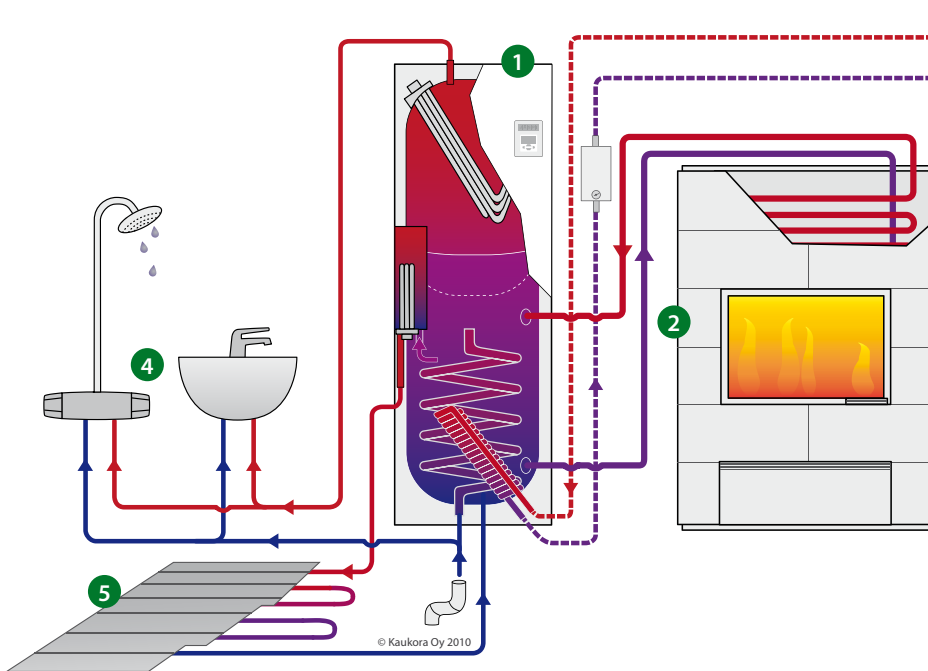


Illustration with Jäspi Ecowatti  
docked with stove with heat absorber and sun collector system. The sun collectors allow you to utilize the free energy from the Sun during the summer.

- Parts:
1. Ecowatti
  2. Stove
  3. Sun collectors
  4. DHW
  5. Heating circuit

System connection examples. Do not use as detailed installation drawings.

For further information about docking please see [www.kaukora.fi](http://www.kaukora.fi) or the user manual for Ecowatti (Also the user manuals for the external heat sources).



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