



# Thermia Heat Pumps
## Accessory catalogue

Dear Thermia Customer,

We thank you for the confidence that you have shown in us by choosing a Thermia heating solution. As we have every confidence in the quality of our products, we are sure that you will enjoy using our heat pump and you will benefit from it for many years to come.

To make your Thermia experience even better, we suggest that you have a look at our wide range of accessories, which we have tried to organize in the best possible way for you in the current catalogue.

Thermia Accessories are meant to provide high quality commissioning and create a tailor-made system, specifically designed for your needs. Choosing a Thermia accessory, you can always rely on a product of high quality, durability and functionality. In addition, all our accessories are tested and proven in real heating applications.

Therefore, you can be sure a Thermia accessory will make your heating system solution even more efficient and easier to use.

**How to make use of the Accessory Catalogue?**

In the current catalogue, we have tried to organize the wide range of Thermia accessories in the most convenient way for you, so you can easily navigate through the pages and be able to choose the most appropriate products for your specific needs.

For your ease, we have divided the accessories we offer into different categories, so you can find the ones you need faster. On each page you will find useful information about each accessory item, including the code number, images, drawings, types of application, as well as other important specifications for the particular product.

It might occur that a new accessory is being tried and tested to be introduced, so if you have any concerns or queries please do not hesitate to contact our resellers in your own country or us directly.

Should you have anything to share about our accessory catalogue or any recommendations that you think could improve the content and make your daily work easier and more efficient, please contact us directly or through any of our sales representatives.

We hope you find our catalogue a valuable tool and you enjoy using it,

Thermia Team

Choosing a Thermia heating solution is one of the best choices you can make for your home as you get an efficient and durable solution of the utmost quality. Moreover by adding some Thermia accessories you can benefit from a customized complete climate solution, that is very easy to use and maintain.

Here is what some of our installers have to share about our brand and products:



"It is a pleasure to work for Thermia as they have some of the best heating solutions on the market and in addition – a professional team, you can always rely on. Choosing a Thermia Heat Pump is one of the best choices you can make as you get a top quality solution that can serve you for many years to come."

"If you decide to go for a Thermia heating solution, you will never regret it. All the products and accessories on offer from Thermia are of high efficiency and durability and are also very easy to use and maintain. You can always rely on professional support before, during and after purchase."

Andreas Kiiveri,
Värme & Kylteknik i Arvika AB

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# The family counts on savings of at least 3 200 Euro annually.



*"The family contacted many different sales representatives. All the sales representatives made similar saving calculations but Thermia gave us the best price. Besides, they were the best in answering our questions. After we'd made up our minds, everything went really quickly and smoothly. We always knew when they'd be coming, and they really followed the time schedule. When we chose Thermia, it took less than three weeks for everything to be installed and ready for use.We're extremely happy and we're looking forward to our long relation with our geothermal heat pump."*

**Helena Wigren**

Type of building: One-storey house with a furnished cellar, built 1969; Living area: 127 $m^2$ plus 153 $m^2$ of additional space; City: Örebro; Household: two adults, four teenagers and one 12-year-old; Heat pump was installed: March 2009; Heat source: geothermal heating; Type of heat pump: Diplomat Optimum G2; Previous heating: electrical, with water as a medium, over 50 000 SEK/year

Read full story article on **www.thermia.com**

# 1 Ground source heat pumps
## – a smarter use of energy

A ground source heat pump is an environmentally friendly heating solution that guarantees you perfect indoor climate all year long and additionally, reduces the energy costs effectively.

Should you add a few Thermia accessories to it, you can make your customer's ground source heat pump even more efficient and so easy to use and maintain!

Have a look at our range of relevant accessories, discover what they can do for you and for your customers and choose the most appropriate for your specific needs.


Room thermostat ..... 10
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# Room thermostat

## Room sensors to control room temperature with alarm indicator



**Code number**

086U6003

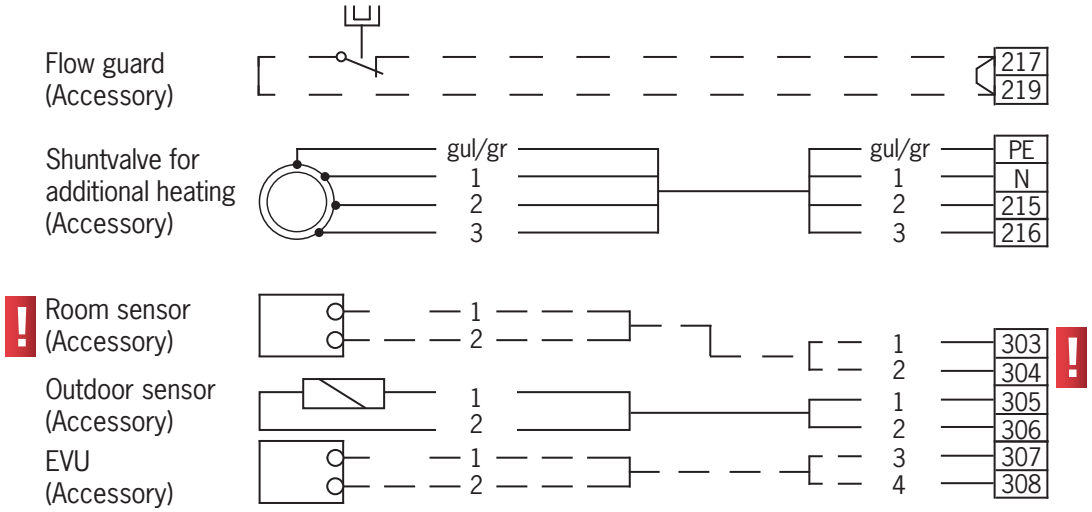
| Heat pumps |
|---|
| Diplomat Optimum G2/G3 |
| Diplomat Optimum |
| Diplomat |
| Atria Optimum |
| Atria |
| Solid |
| Solid Eco |



The heat pump system can be equipped with a room temperature sensor as an option. In normal operation, the set room temperature (for example 20.0 C). A button shows the set value with flashing numerals and then change can be made with the + or - buttons.

The outdoor temperature is displayed for 10 seconds on both keys being pressed at the same time. If an alarm has been triggered, an A shows in the display.

The sensor is wall-mounted. It should be installed by a qualified electrician.



# Room thermostat

**Code number**

086L3937

**Heat pumps**

Inverter

Mega




An active room sensor will help the heat pump to adjust the supply line temperature in situations where the indoor temperature changes as a result of unmonitored heat sources, such as separate firewood place or high solar radiation.

The Genesis Room sensor is showing the actual room temperature, and after pressing button, also desired temperature. The room sensor may also be activated and de-activated by pressing button.

Installation should be made with pair-twisted 4-membered cable (for Modbus communication and 24V AC supply that is available in the heat pump).

The room sensor is delivered with a short instruction (English and Swedish) for installation and use.

New software needed for room sensor will be made available at delivery start. Heat pumps with earlier software versions than 2.01.000 will need a software update to support the room sensor.

# Expansion card

The accessory is designed to gain access to additional features like cooling, pool heating 2nd heat curve or reducing power of auxiliary heater.

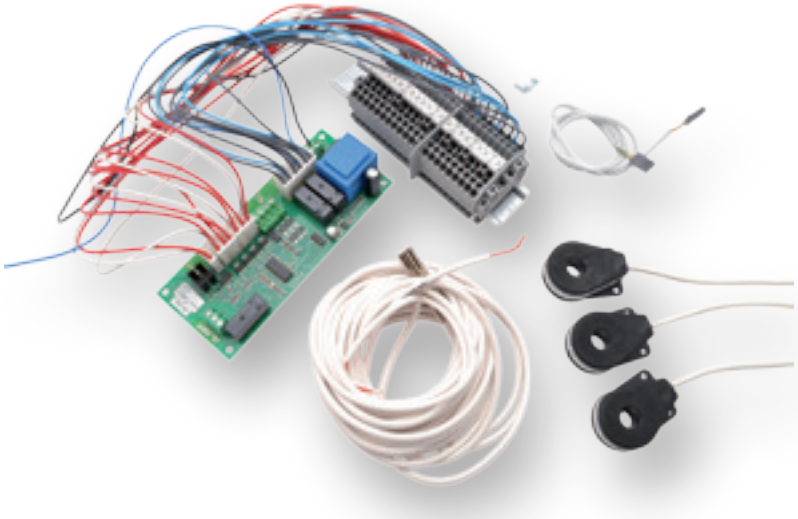


**Code number**

086U6009

| Heat pumps |
|---|
| Diplomat Optimum G2/G3 |
| Diplomat Optimum |
| Diplomat |
| Atria Optimum |
| Atria |
| Solid |
| Solid Eco |

| Application |
|---|
| Cooling (Passive/Active) |
| Shountgroup |
| Swimming pool |
| Power limiter |



The expansion card is an accessory, which, when connected to the heat pump, provides the following extra functions.

**Power limiter**
Allows reducing the auxiliary heater to a power corresponding to the maximum available start current. (To use the function power monitor as needed refer to 3 the piece toroidal transformers.)

**Cooling**
The heat pump can be used to produce cooling in summer. Either by passive cooling (cold retrieved from the borehole) or a combination of passive and active cooling (cooling produced by the heat pump compressor). Heat pump can produce cooling only in “heat stop mode“.

**Shunt**
Used when the heating system needs to settle into a second temperature level, eg when you combine radiators with wet floor heating or when a shunt group is controlled by a separate heating curve (curve 2).

**Swimming pool**
Used to control the temperature in a swimming pool. Temperature controlled by a separate sensor regardless of the heating system and hot water.

**External alarm output**
Used for external alarm monitoring. Provides a floating (can be powered by max 230V) output signal at all alarms.

**0-10V output**
For future use.

# Relay kit for control of external brine / circulation pump

**Code number**

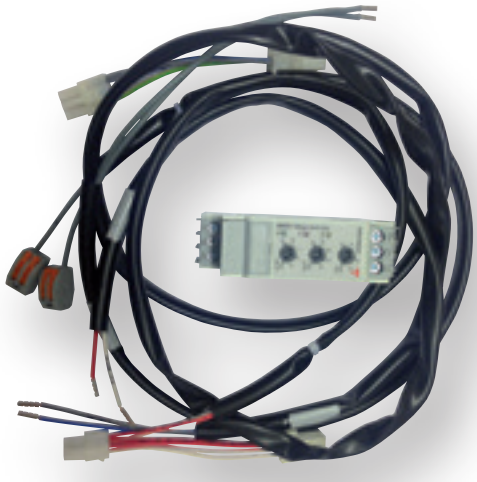
086L0937

**Heat pumps**

- Diplomat Optimum G2/G3
- Diplomat Optimum
- Diplomat

**Application**

Hot water circulation



The relay kit is intended to control external brine pumps and similar (on/off) and is to be used on heat pumps with 0-10V controlled circulation pumps. The relay closes between 3-10V (configurable).

The relay kit is for Diplomat Optimum (including Duo and G2/G3 models) and is suitable for example in ground water applications.

The relay kit consists of:
- Relay
- Cabling (with connectors)
- Instruction manual (Swedish and English)

# Thermia online - control and monitor your heat pump online



**Code number**

086L1898

**Heat pumps**

- Diplomat Optimum G2/G3
- Diplomat Optimum
- Diplomat
- Atria Optimum
- Atria
- Solid
- Solid Eco

**Application**

Remote control



With the Thermia Online accessory, you can control and monitor your heat pump from any smartphone, computer or tablet, wherever you are in the world. For example, you can lower the temperature when you are on holiday, and increase it for when you come back. If you come home earlier than expected; no problem – using Online, you can easily ensure that your house is warm and comfortable whenever you need it to be.

At any time of day, you can use Online to check that your heating system is working properly and what temperature your home is at. If anything unexpected comes up and needs to be fixed, you – or your installation engineer, where agreed – will immediately receive this information via Online. You can also control and monitor several locations if you need to; for example, if you have a holiday cottage with a heat pump or have relatives who need assistance.

Thermia Online connects the heat pump to your existing home broadband. If there is no internet connection available, it is possible to connect using a mobile 3G/4G modem (provided by your local mobile service provider). The Online app is available for both Android and iPhone.

# Link 2.1

With Thermia Link connected to your heat pump,
you can control the temperature in every room of the house.

**Code number**

086L2379

| Heat pumps |
|---|
| Diplomat Optimum G2/G3 |
| Diplomat Optimum |
| Diplomat |
| Atria Optimum |
| Atria |
| Solid |
| Solid Eco |

| Application |
|---|
| Link |
| living by Danfoss – radiator and floor heating thermostats |



With Thermia Link connected to your heat pump, you can control the temperature in every room of the house – and you can locate the control panel anywhere in the house. Thermia Link communicates wirelessly with the heat pump and the house's other heating systems. The operation of the heat pump is optimized continuously, further reducing your heating costs.

Using the control unit touchscreen it's easy to set the temperature in every room. You can also create weekly timetables for the different rooms, with different temperatures at different times. For instance you can let Thermia Link reduce the temperature at night, or in the middle of the day when no one is home.

Thermia Link connects every part of the heating system, and continuously sends information to the heat pump about the house's current heating requirements. This enables the heat pump to optimize operation in exact accordance with current conditions, which minimizes energy consumption.

# Link 2.1 & Online in one package

With Thermia Link connected to your heat pump,
you can control the temperature in every room of the house.
With Thermia online - control and monitor your heat pump online



**Code number**

086L2946

| Heat pumps |
|---|
| Diplomat Optimum G2/G3 |
| Diplomat Optimum |
| Diplomat |
| Atria Optimum |
| Atria |
| Solid |
| Solid Eco |

| Application |
|---|
| Link |
| living by Danfoss – radiator and floor heating thermostats |
| Remote control |



**Thermia Link**
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**Thermia Online**
With the Thermia Online accessory, you can control and monitor your heat pump from any smartphone, computer or tablet, wherever you are in the world. For example, you can lower the temperature when you are on holiday, and increase it for when you come back. If you come home earlier than expected; no problem – using Online, you can easily ensure that your house is warm and comfortable whenever you need it to be.

At any time of day, you can use Online to check that your heating system is working properly and what temperature your home is at. If anything unexpected comes up and needs to be fixed, you – or your installation engineer, where agreed – will immediately receive this information via Online. You can also control and monitor several locations if you need to; for example, if you have a holiday cottage with a heat pump or have relatives who need assistance.

Thermia Online connects the heat pump to your existing home broadband. If there is no internet connection available, it is possible to connect using a mobile 3G/4G modem (provided by your local mobile service provider). The Online app is available for both Android and iPhone.

# Hot water circulation kit

**Code number**

086L2260

**Heat pumps**

- Inverter
- Diplomat Optimum G2/G3
- Diplomat Optimum
- Diplomat

**Application**

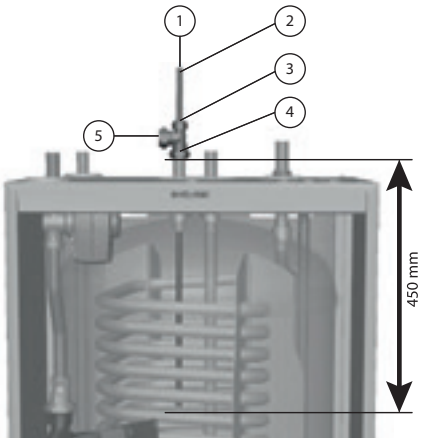
Hot water circulation



This solution is to be used in such cases when hot water is needed to appear quicker to the tapping point, according to the statutory requirements. It is normal that this accessory is to be used if you have a long distance between the heat pump and the tapping point. It can take a long time before the hot water reaches the tapping point for instance to the bathroom, kitchen or to the washer room.

Hot water circulation kit can be used in all domestic heat pumps from Thermia except Atria Optimum due to the hot water sensor being mounted with a similar solution.

| Hot water circulation kit includes the following parts: |
|---|
| 1 piece of a 450 (mm) stainless steel pipe with a dimension of 12 (mm) |
| 1 piece of a T-pipe 22x22x15 (mm) |
| 1 piece of a reduction 15x12 (mm) to fit inside the T-pipe |
| 1 installer manual, |




1. Hot water return
2. Pipe Ø12
3. Reduction 15/12
4. 3-way compression fittings 22x22x15
5. Hot water output

# Heat pump gives more time for the family




When the Carlsson family moved in to their new house, they were using an oil boiler and a pellet stove to heat the house.
The boiler was singing its swan song and the pellet stove required a lot of attention. After they had changed to an air/water heat pump, Daddy Mattias could spend more time with his family up in the house instead of attending to the boiler in the basement.

Type of building: 1.5 storeys with a furnished cellar, built 1960; Living area: 112 $m^2$, plus 148 $m^2$ of additional space; City: Laholm; Household: four people; Heat pump installed in: September 2012; Type of heat pump: Thermia Atec air heat pump; Previous heating: oil boiler and pellet stove

Read full story article on **www.thermia.com**

# 2 Air source heat pumps
## – use cold air for heating

With a Thermia air/water heat pump you retrieve the energy directly from the surrounding air. Thus, you get a reliable and cost efficient heating solution, providing great comfort in your home for many years to come.

Should you add a few Thermia accessories to it, you can make your air source heat pump even more efficient and so easy to use and maintain!

Have a look at our range of relevant accessories, discover what they can do for you and for your customers and choose the most appropriate for your specific needs.


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# Room sensor Modbus

## Room sensors to control the room temperature with alarm indicator



**Code number**

086U9563

**Heat pumps**

Atec



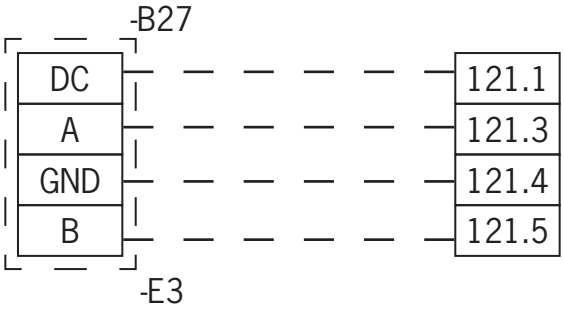
Room sensor Modbus is an accessory to the Thermia Atec. If the room temperature drops or risees, the room sensor detects this and compensates the flow temperature to the radiators or floor heating to maintain the desired temperature in the room.

If you have an external heat source in addition to the heat pump installed in the house, the room sensor is an energy saving solution.

The room sensor also shows if the alarm occurs on the heat pump.

The room sensor can display the following information in the display window:

- Actual room temperature
- Desired room temperature
- Actual outdoor temperature
- Alarm from control center



# Expansion card

The accessory is designed to gain access to additional features like cooling, pool heating 2nd heat curve or reducing the power of the auxiliary heater.

**Code number**

086L0636

**Heat pumps**

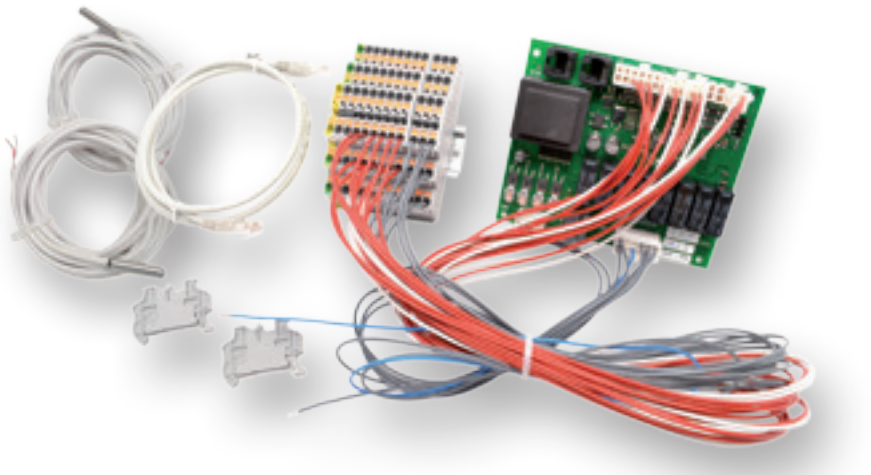
Atec

**Application**

Shountgroup

Swimming pool

Power limiter



The expansion card is an accessory for customers who wish to extend the functionality of the heat pump. An expansion card and accompanying terminal block must be installed in order to connect additional equipment.

**Power limiter**
Allows reducing the auxiliary heater to a power corresponding to the maximum available start current. (To use the function power monitor as needed refer to 3 the piece toroidal transformers.)

086U2793



**Shunt**
Used when the heating system needs to settle into a second temperature level, eg when you combine radiators with wet floor heating or when a shunt group is controlled by a separate heating curve (curve 2).

**Swimming pool**
Used to control the temperature in a swimming pool. Temperature controlled by a separate sensor regardless of the heating system and hot water.

**External alarm output**
Used for external alarm monitoring. Provides a floating (can be powered by max 230V) output signal at all alarms.

**0-10V output**
For future use.

The expansion card and terminal block consists of the following components: Expansion card, Terminal block, Communications cable, Four PCB supports, Two terminal block supports, Two sensors.

# Twin kit Atec

Twin kit Atec allows the connecting of two heat pumps to one control unit.



**Code number**

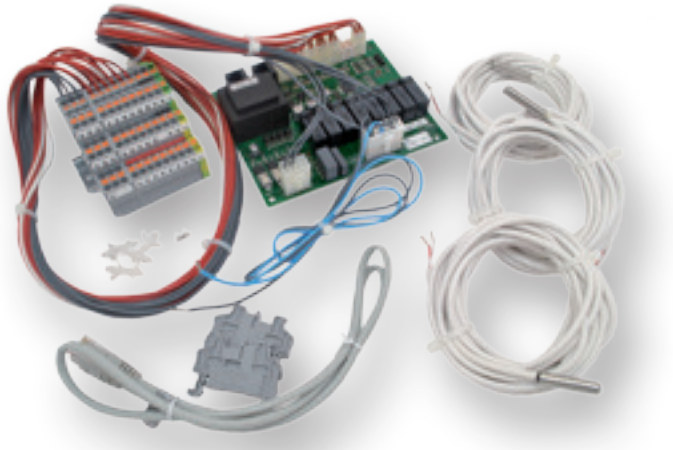
086L1370

**Heat pumps**

Atec

**Application**

Cascading option



A Twin kit unit means that an existing heat pump (Master), consisting of an external unit and an internal unit, can have an external unit (Slave) added. The installation includes the pipes and electrical installation, plus necessary settings in the control system.

When a Twin kit is used in a heating system, two outdoor units (Master and Slave) are communicating with each other and sharing the same control unit (installed indoors). The software in the control unit is prepared for master/slave operation and is automatically activated during the commissioning and start up procedure.

Accessories for the Twin kit installation are supplied in an enclosed cardboard box:

- Expansion card Cable harness, expansion card
- Block, expansion card
- RJ-45 communication cable, 1,000 mm
- Circuit board support (4 pieces)
- Supply line sensor 110
- Return line sensor 111
- System supply line sensor
- Installation instructions for expansion card and terminal block
- Installation instructions for Twin kit
- Rivets

# Thermia online - control and monitor your heat pump online

**Code number**

086L1899

**Heat pumps**

Atec

**Application**

Remote control



With the Thermia Online accessory, you can control and monitor your heat pump from any smartphone, computer or tablet, wherever you are in the world. For example, you can lower the temperature when you are on holiday, and increase it for when you come back. If you come home earlier than expected; no problem – using Online, you can easily ensure that your house is warm and comfortable whenever you need it to be.

At any time of day, you can use Online to check that your heating system is working properly and what temperature your home is at. If anything unexpected comes up and needs to be fixed, you – or your installation engineer, where agreed – will immediately receive this information via Online. You can also control and monitor several locations if you need to; for example, if you have a holiday cottage with a heat pump or have relatives who need assistance.

Thermia Online connects the heat pump to your existing home broadband. If there is no internet connection available, it is possible to connect using a mobile 3G/4G modem (provided by your local mobile service provider). The Online app is available for both Android and iPhone.

# Link 2.1

With Thermia Link connected to your heat pump, you can control the temperature in every room of the house.



**Code number**

086L2380

**Heat pumps**

Atec

**Application**

Link

living by Danfoss – radiator and floor heating thermostats



With Thermia Link connected to your heat pump, you can control the temperature in every room of the house – and you can locate the control panel anywhere in the house. Thermia Link communicates wirelessly with the heat pump and the house's other heating systems. The operation of the heat pump is optimized continuously, further reducing your heating costs.

Using the control unit touchscreen it's easy to set the temperature in every room. You can also create weekly timetables for the different rooms, with different temperatures at different times. For instance you can let Thermia Link reduce the temperature at night, or in the middle of the day when no one is home.

Thermia Link connects every part of the heating system, and continuously sends information to the heat pump about the house's current heating requirements. This enables the heat pump to optimize operation in exact accordance with current conditions, which minimizes energy consumption.

# Link 2.1 & Online in one package

With Thermia Link connected to your heat pump, you can control the temperature in every room of the house.
With Thermia online - control and monitor your heat pump online.

**Code number**

086L2947

**Heat pumps**

Atec

**Application**

Link

living by Danfoss – radiator and floor heating thermostats

Remote control



**Thermia Link**
With Thermia Link connected to your heat pump, you can control the temperature in every room of the house – and you can locate the control panel anywhere in the house. Thermia Link communicates wirelessly with the heat pump and the house's other heating systems. The operation of the heat pump is optimized continuously, further reducing your heating costs.

Using the control unit touchscreen it's easy to set the temperature in every room. You can also create weekly timetables for the different rooms, with different temperatures at different times. For instance you can let Thermia Link reduce the temperature at night, or in the middle of the day when no one is home.

Thermia Link connects every part of the heating system, and continuously sends information to the heat pump about the house's current heating requirements. This enables the heat pump to optimize operation in exact accordance with current conditions, which minimizes energy consumption.

**Thermia Online**
With the Thermia Online accessory, you can control and monitor your heat pump from any smartphone, computer or tablet, wherever you are in the world. For example, you can lower the temperature when you are on holiday, and increase it for when you come back. If you come home earlier than expected; no problem – using Online, you can easily ensure that your house is warm and comfortable whenever you need it to be.

At any time of day, you can use Online to check that your heating system is working properly and what temperature your home is at. If anything unexpected comes up and needs to be fixed, you – or your installation engineer, where agreed – will immediately receive this information via Online. You can also control and monitor several locations if you need to; for example, if you have a holiday cottage with a heat pump or have relatives who need assistance.

Thermia Online connects the heat pump to your existing home broadband. If there is no internet connection available, it is possible to connect using a mobile 3G/4G modem (provided by your local mobile service provider). The Online app is available for both Android and iPhone.

# The dew point sensor kit

The dew point sensor kit is used to indicate any condensation in the pipe system during cooling production.



**Code number**

086L0635

**Heat pumps**

Atec

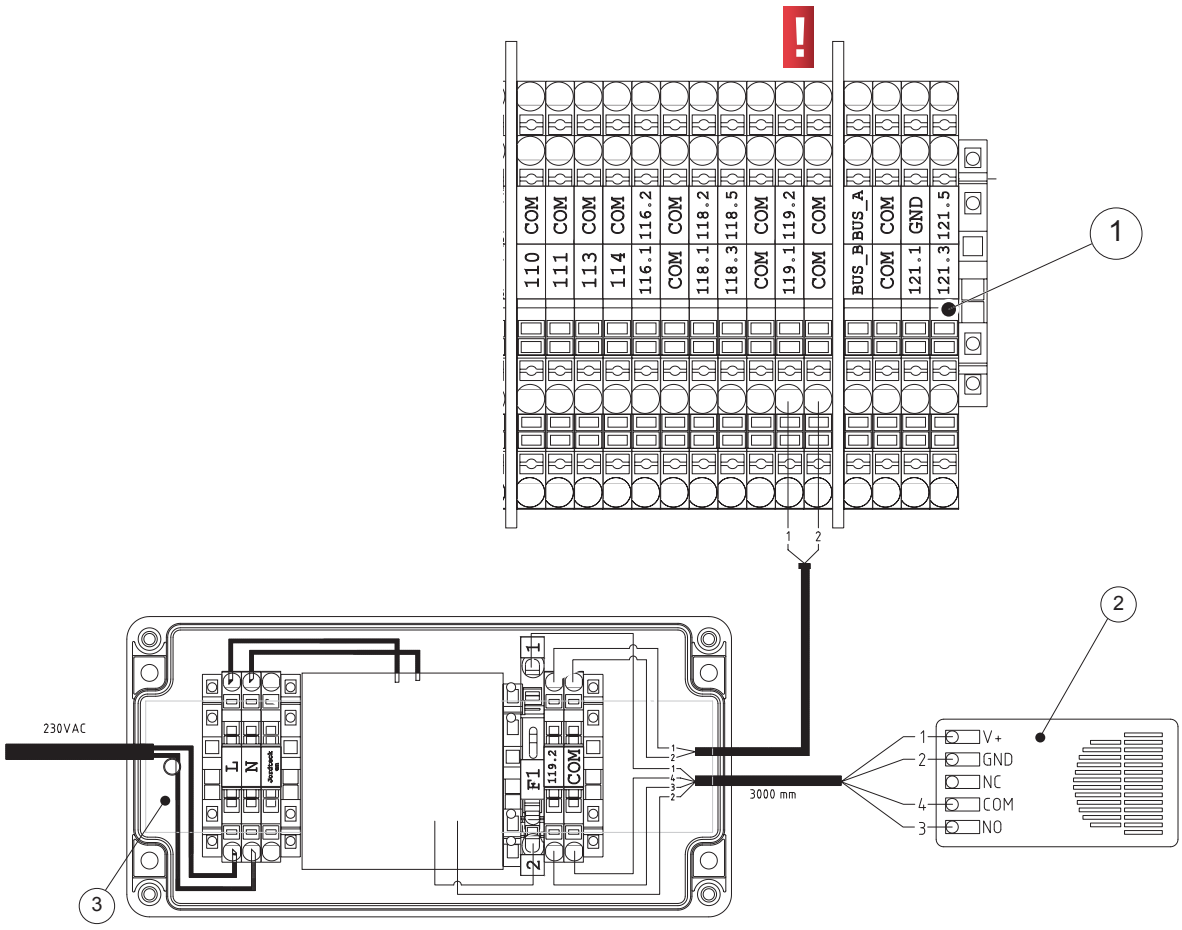
**Application**

Cooling



The dew point sensor kit is used to indicate any condensation in the supply line to the heating system early on. Condensation occurs in combination with cooling production.

The dew point sensor is placed on the supply line and is connected to the control unit's electrical cabinet.



# Intermediate Heat exchanger

## Kit which supports antifreeze protection (recommended at Atec)

**Code number**

086L0767
086L0768
086L0769

**Heat pumps**

Atec

**Application**

Antifreez protection

**Associated accessories**

- 086L0455: page 47
- 086L0627: page 48



086L0767 Intermediate Heat exchanger kit 6 kW
086L0768 Intermediate Heat exchanger kit 9 – 16 kW
086L0769 Intermediate Heat exchanger kit 18 kW

For the intermediate heat exchanger we recommend the following circulation pumps which connect with a separate electricity supply, the settings on the circulation pumps depend on the range between the heat pump unit and the heat exchanger, see the table below.

086L0455 Wilo Stratos Pico 25/1-6
086L0627 Wilo Stratos Para 25/1-11

The package includes:
- Intermediate heat exchanger
- Insulation
- Wallbracket

| | Atec 6 | Atec 9 | Atec 11 | Atec 13 | Atec 16 | Atec 18 |
|---|---|---|---|---|---|---|
| | Stratos Pico 25/1-6 | | Stratos Para 25/1-11 | | | |
| Distance (m) | Pump setting | | Pump setting | | | |
| 20 | 1 | 1 | 2 | 2 | 2 | 3 |
| 10 | 1 | 1 | 2 | 2 | 2 | 2 |
| 8 | 1 | 1 | 1 | 1 | 1 | 2 |
| 6 | 1 | 1 | 1 | 1 | 1 | 2 |
| 4 | 1 | 1 | 1 | 1 | 1 | 1 |

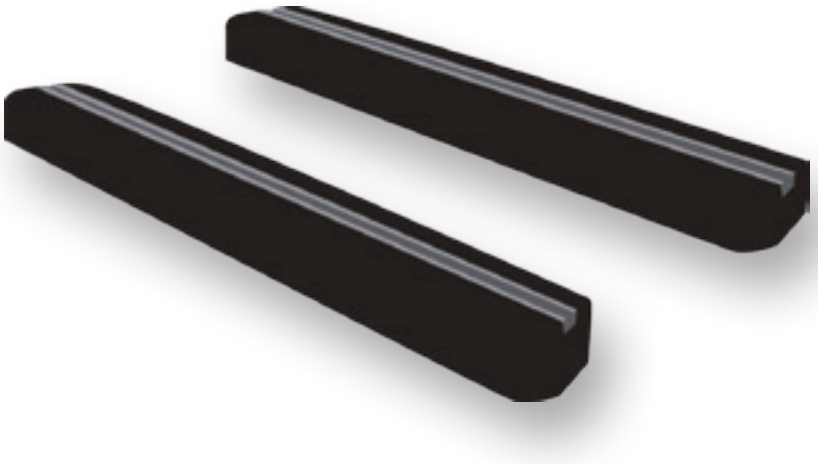
# Fix-it Foot

## A foot system for the outdoor unit Atec and Atria Optimum



| Code number |
| --- |
| 086L2030 |

| Heat pumps |
| --- |
| Atec |
| Atria Optimum |
| Atria |



Fix-it Foot is a foot system for the outdoor unit for Atec or Atria Optimum.

The outdoor unit can be pushed back and forth on two feet and be fixed on the unit with four bolts which will be delivered with the package.
The feet can be placed directly on cement flag stones or buried in a single bed or gravel.

The complete package contains: 2 two feet 2 fixing nut and bolts and tile.

# Heated drip tray

For Atria outdoor unit manufactured between 2006 and 2012.

**Code number**

086L1042

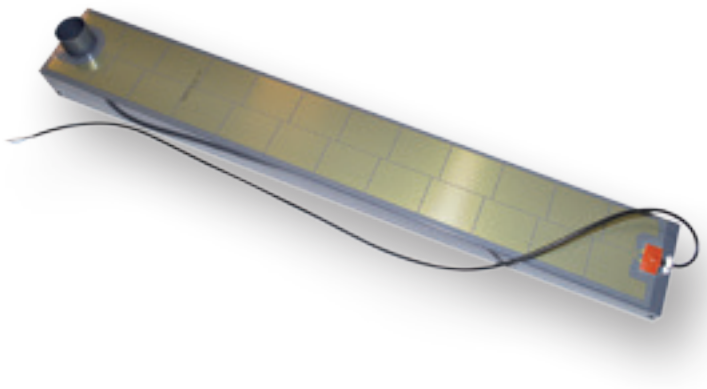
**Heat pumps**

Atria Optimum

Atria

**Application**

Defrosting



The drip tray accessory is used to collect the water from the outdoor unit's heat exchanger during defrosting and transport it to a suitable location.
In order to avoi water freezing in the drip tray, it is equiped with an electric coil (200 W).

# 3 Other accessories

Under this category you will find a range of additional accessories, manufactured by Thermia or other top quality partnering producers that can find application for all models of Thermia heat pumps.

Have a look at our range of additional accessories, discover what they can do for you and for your customers and choose the most appropriate for your specific needs.


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# Rubber Compensator

## Extra protection - sound not transferred to the heating system



| Code number |
|---|
| 086L2339 |
| 086L3260 |
| 086L3261 |

| Heat pumps |
|---|
| Inverter |
| Diplomat Optimum G2/G3 |
| Diplomat Optimum |
| Diplomat |
| Atec |
| Atria Optimum |
| Atria |
| Solid |
| Solid Eco |
| Robust |
| Robust Eco |
| Mega |

| Application |
|---|
| Flexible hose – heating system |



**Accessory to reduce high frequency noise from heating systems**

In most installations the flexible hoses supplied together with the heat pump is sufficient to ensure that no annoying sound will be transferred to the heating system. In rare and special installations it may however, despite flexible hoses being fitted, occur that high frequent noise may be transferred from the heat pump to the heating system. For these installations we recommend rubber compensators.

The accessory is primary intended to reduce high frequency/light sounds that may be described as singing/ringing/whistling sounds from in the heating system. When needed, the rubber compensators are normally fitted in pairs (one on the supply line and one on the return line). The connection points are galvanized.

- 086L2339: DN (mm) 25
- 086L3260: DN (mm) 40
- 086L3261: DN (mm) 50

# Flexible hose DN20
## For heating system

**Code number**

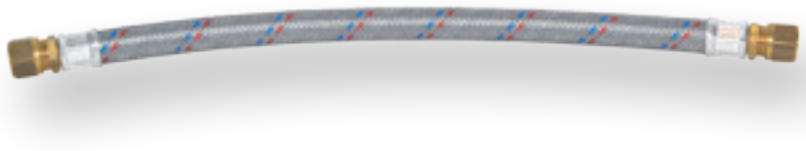
086U6015

**Heat pumps**

- Diplomat Optimum G2/G3
- Diplomat Optimum
- Diplomat
- Atec
- Atria Optimum
- Atria

**Application**

Flexible hose
– heating system



For heating system
22 mm Compression fitting EZZE KRK
Lemgth: 600 mm

Flexible hoses are used for all pipe connections to avoid the transmission of vibrations.

# Flexible hose DN25
## For heating system



**Code number**

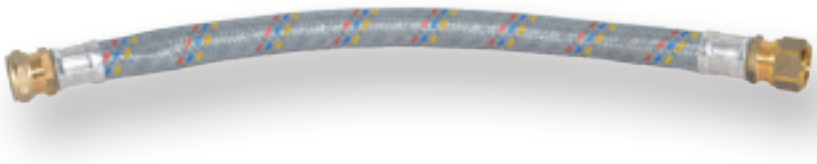
086U6000

**Heat pumps**

- Inverter
- Diplomat Optimum G2/G3
- Diplomat Optimum
- Diplomat
- Atec
- Atria Optimum
- Atria

**Application**

Flexible hose
– heating system



For heating system
28 mm Compressions fitting EZZE KRK
28 mm Compression fitting Conex
Length: 600 mm

Flexible hoses are used for all pipe connections to avoid the transmission of vibrations.

# Flexible hose DN32
## For heating system

**Code number**

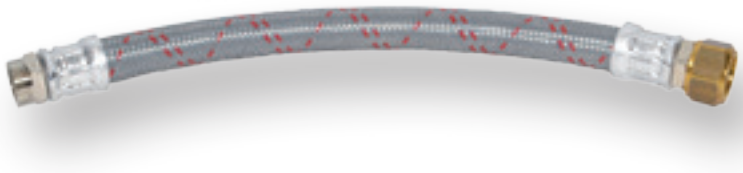
086U6001

**Heat pumps**

- Robust
- Robust Eco
- Solid
- Solid Eco
- Mega

**Application**

Flexible hose
– heating system



For heating system
35 mm Compressions fitting EZZE KRK
1 ¼" Extrenal thread
Length: 620 mm

Flexible hoses are used for all pipe connections to avoid the transmission of vibrations.

# Rubber hose DN25
## For brine system



**Code number**

086U6012

**Heat pumps**

- Inverter
- Diplomat Optimum G2/G3
- Diplomat Optimum
- Diplomat
- Atec
- Atria Optimum
- Atria

**Application**

Rubber Hose – brine circuit



For brine system
28 mm Connection for press fittings
Length: 671 mm

# Flexible metal hose

## Flexible hose for installation of the outdoor unit Atec

**Code number**

086L0586

**Heat pumps**

Atec

**Application**

Flexible hose – from the outdoor unit to the house



Length: 1000 mm
Connections: 28 x 28 mm, press fittings

Flexible hoses are used for all pipe connections to avoid the transmission of vibrations.

# Flexible hose DN40
## For heating system



**Code number**

086L3433

**Heat pumps**

- Solid
- Solid Eco
- Robust
- Robust Eco
- Mega

**Application**

Flexible hose
– heating system



For heating system
42 mm Compressions fitting EZZE KRK
1 ½" External tread
Length: 820 mm

Flexible hoses are used for all pipe connections to avoid the transmission of vibrations.

# Rubber hose DN32
## For brine system

**Code number**

086L3435

**Heat pumps**

- Solid
- Solid Eco
- Robust
- Robust Eco
- Mega

**Application**

Rubber Hose – brine circuit



For brine system
35 mm Compression fitting EZZE KRK
1 ¼" External tread
Length: 620 mm

# Rubber hose DN40
## For brine system



**Code number**

086L3436

**Heat pumps**

- Solid
- Solid Eco
- Robust
- Robust Eco
- Mega

**Application**

Rubber Hose – brine circuit



For brine system
42 mm Compression fitting EZZE KRK
1 ½" External tread
Length: 820 mm

# Rubber hose DN50
## For brine system

**Code number**

086L3437

**Heat pumps**

- Solid
- Solid Eco
- Robust
- Robust Eco
- Mega

**Application**

Rubber Hose – brine circuit



For brine system
54 mm Compression fitting EZZE KRK
2” External tread
Length: 820 mm

# Filling device for brine with insulation



| Code number |
| --- |
| 086L0403 |
| 086L0404 |
| 086L1438 |
| 086L1439 |

| Application |
| --- |
| Filling device |

| Associated accessories |
| --- |
| 086L0400 page 43 |
| 086L0401 page 43 |
| 086L0402 page 43 |



086L0403: DN 25 ext. thread
086L0404: DN 32 ext. thread

Filling device insulation:
086L1438: DN 25
086L1439: DN 32

# Shut off valve, Dirt strainer, O-ring



| Code number |
|---|
| 086L0400 |
| 086L0401 |
| 086L0402 |
| 086L3431 |
| 086L3432 |
| 086L0424 |
| 086L0425 |
| 086L0426 |
| 086L1444 |
| 086L1445 |

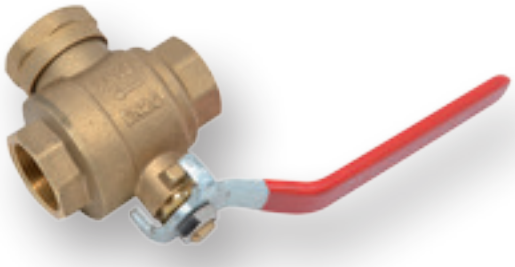
**Application**

Shut off valve with dirt strainer

**Associated accessories**

086L0403 page 42

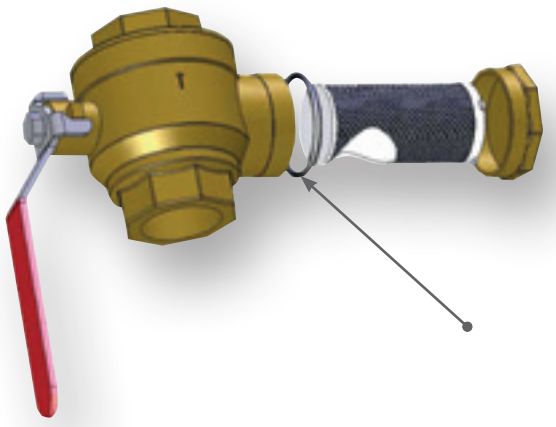
086L0404 page 42



**Shut off valve**
086L0400: DN 20
086L0401: DN 25
086L0402: DN 32
086L3431: DN 40
086L3432: DN 50



**Dirt strainer**
086L0424: DN 20
086L0425: DN 25
086L0426: DN 32



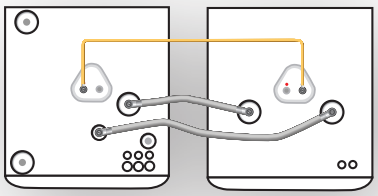
**O-ring**
086L1444: O-ring DN25
086L1445: O-ring DN32

# Connector

## Connecting a heat pump with integrated water heater with a separate MBH 200 / 300 water heater



| Code number |
|---|
| 086U3724 |
| 086U7402 |



| Heat pumps |
|---|
| Diplomat Optimum G2/G3 |
| Diplomat Optimum |
| Diplomat |

Connector makes it easy to connect a heat pump with a separate MBH water heater to maintain a large hot water volume.
Both hot water heaters in the heat pump and MBH are connected in series so that the MBH water heater is the primary heater
and the built-in heater in the heat pump acts as a secondary heater. Most of the important hoses, pipes and connectors are included in
Connector installation kit. Some pipes must, however, must be fabricated at the installation site by the installer.

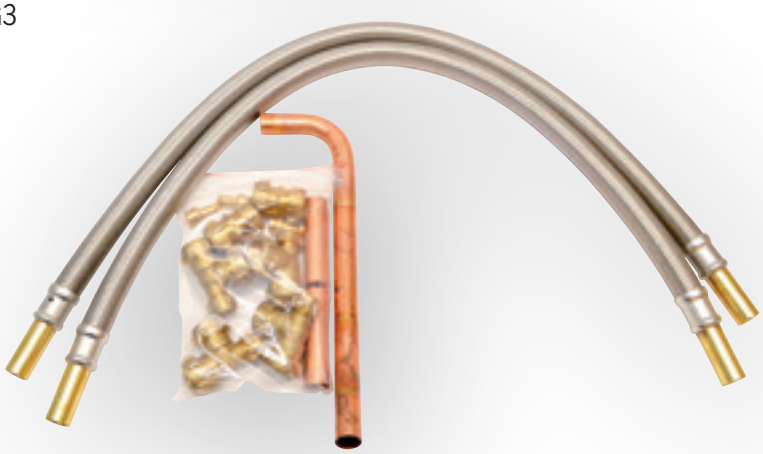
Elements included in connector installation kit:
086U3724 applies to Diplomat Optimum:

- 3-way clamp ring connection,
- Bleed screw 15
- Replacement pipe, copper
- Reducer 28/22
- Straight clamp ring connector, 22x22
- Copper pipe, 22
- Seal washer
- Flexible hose
- Installation instructions,



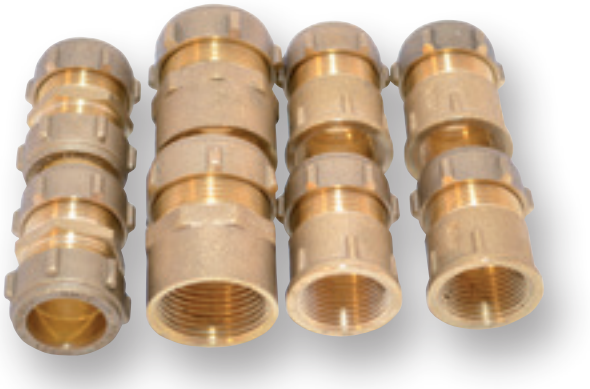
086U7402 applies to Diplomat Optimum G2/G3 (with HGW technology):

- 3-way clamp ring connection,22x22x15
- Bleed screw 15
- Replacement pipe, 22 copper
- Straight clamp ring connector, 22x22
- Copper pipe, 22
- Seal washer
- Flexible hose
- Installation instructions,



# Connection kits

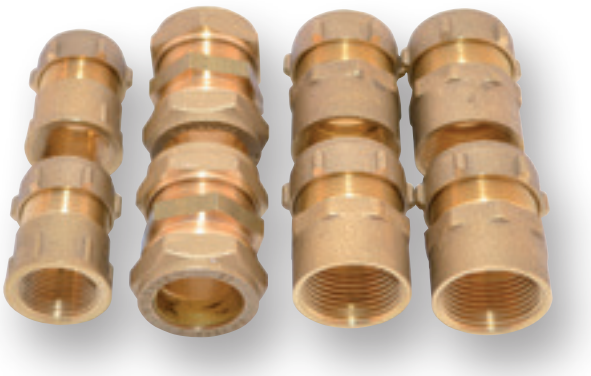
| Code number |
| --- |
| 086U5669 |
| 086U5670 |



Connection kit contains compression fitting connections to be used instead of press fittings.

086U5669 Connection kit 4-10 kW

- 2 pcs 22mm compression fitting and DN20 internal thread for the tap water pipes
- 2 pcs 22mm straight compression fitting to connect the heating circuit flexible hoses to the heat pump
- 2 pcs 22mm compression fitting and DN20 internal thread for connecting the flexible hoses to the heating circuit
- 2 pcs 28mm compression fitting and DN25 internal thread for the brine hoses



086U5670 Connection kit 12-16 kW

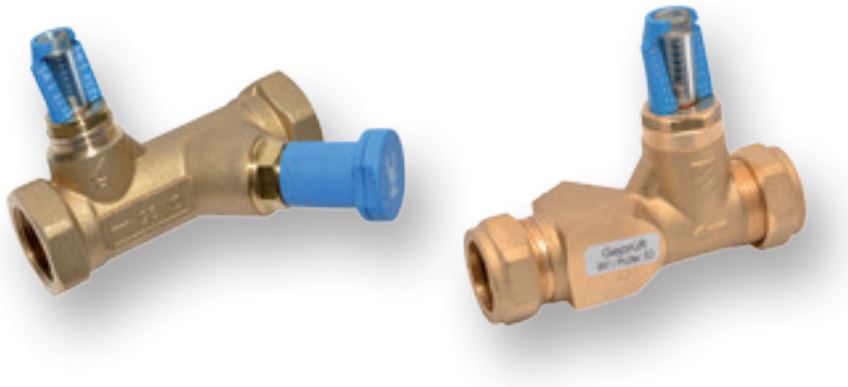
- 2 pcs 22mm compression fitting and DN20 internal thread for the tap water pipes
- 2 pcs 28mm straight compression fitting to connect the heating circuit flexible hoses to the heat pump
- 2 pcs 28mm compression fitting and DN25 internal thread for connecting the flexible hoses to the heating circuit
- 2 pcs 28mm compression fitting and DN25 internal thread for the brine hoses

# Flow Adjustment Valve



| Code number |
|---|
| 086U3756 |
| 086U3757 |
| 086U3758 |
| 086U3759 |
| 086L3440 |
| 086L3441 |

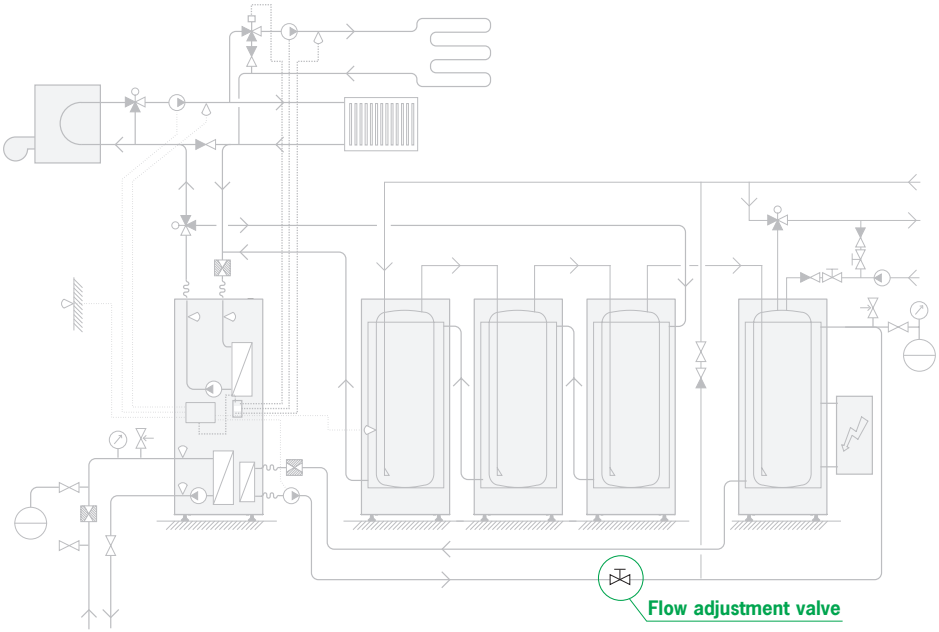
| Application |
|---|
| Flow Adjustment Valve |



The flow adjustment valve is used to adjust the water flow through the hot gas circuit to a suitable low level to optimize the heat pump's efficiency. The valve that is to be selected is calculated by max 20% of the nominal condenser flow on the heat pump.

086U3756: flow adjustment valve 5-50 l/min.
Anslutning = DN 25 internal thread
086U3757: flow adjustment valve 2-16 l/min. Connection = 22 mm clamp ring connection
086U3758: flow adjustment valve 4-36 l/min. Connection = 22 mm clamp ring connection
086U3759: flow adjustment valve 10-80 l/min.
connection = DN 32 internal thread
086L3440: flow adjustment valve DN 40, 15-120 liters
086L3441: flow adjustment valve DN 50, 20-200 liters

## SYSTEM OVERVIEW



# Circulation Pump kit Wilo Stratos Pico 25/1-6

**Code number**

086L0455

**Heat pumps**

- Inverter
- Diplomat Optimum G2/G3
- Diplomat Optimum
- Diplomat
- Atec
- Atria Optimum
- Atria

**Application**

- Antifreez protection
- Circulation Pump kit

**Associated accessories**

- 086L0767 page 27
- 086L0768 page 27
- 086L0769 page 27




- Shut off valve 28 mm
- Gasket
- Recommendation for Atec when using intermediate heat exchanger

# Circulation Pump kit Wilo Para 25/1-11



**Code number**

086L0627

**Heat pumps**

- Inverter
- Diplomat Optimum G2/G3
- Diplomat Optimum
- Diplomat
- Atec
- Atria Optimum
- Atria

**Application**

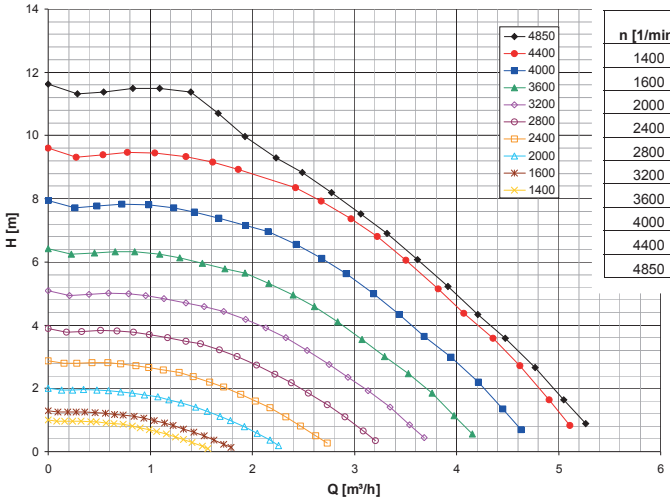
- Antifreez protection
- Circulation Pump kit

**Associated accessories**

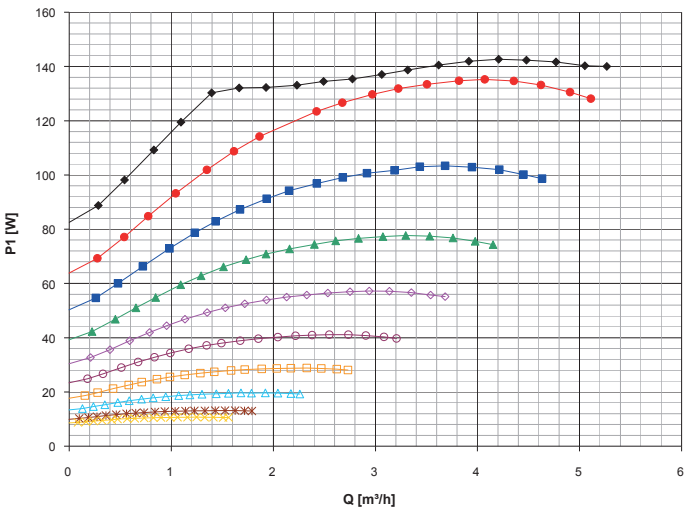
- 086L0767 page 25
- 086L0768 page 25
- 086L0769 page 25



- Shut off valve 28 mm
- Gasket
- Recommendation for Atec when using intermediate heat exchanger




| n [1/min] | U_in [V] |
|---|---|
| 1400 | 3,00 |
| 1600 | 3,41 |
| 2000 | 4,22 |
| 2400 | 5,03 |
| 2800 | 5,84 |
| 3200 | 6,65 |
| 3600 | 7,46 |
| 4000 | 8,28 |
| 4400 | 9,09 |
| 4850 | 10,00 |



# Circulation Pump kit Wilo Para 25/1-7

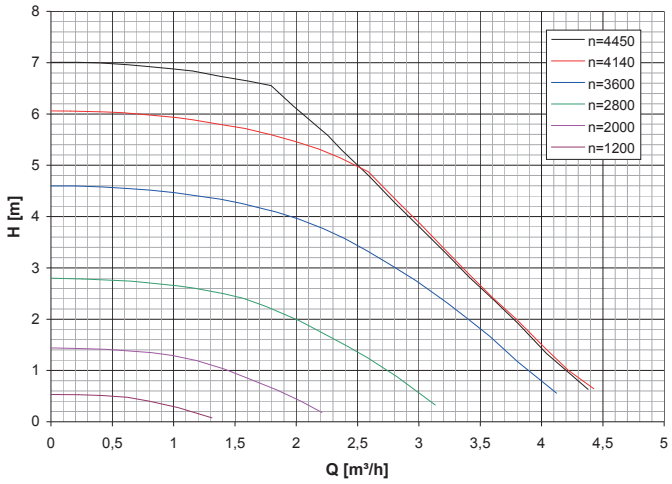
## Code number

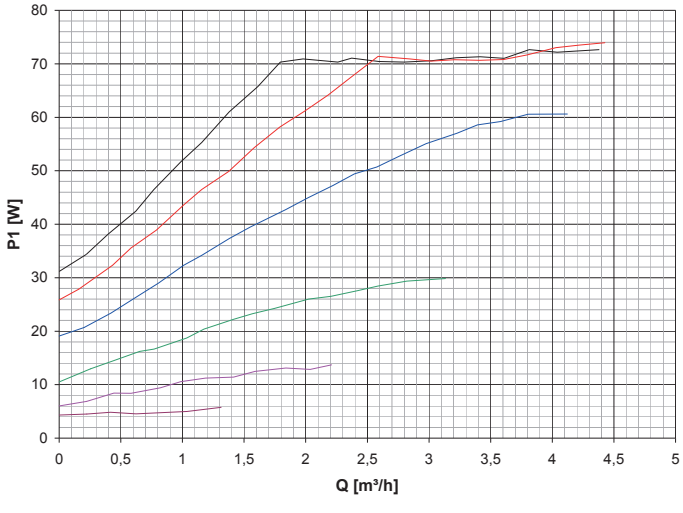
086L0626

## Application

Circulation Pump kit





# ESBE Shunt valves



| Code number |
|---|
| 086U5232 |
| 086U5265 |
| 086U5266 |
| 086U5267 |
| 086U5268 |

**Application**

Shunt valves and valve actuators

**Associated accessories**

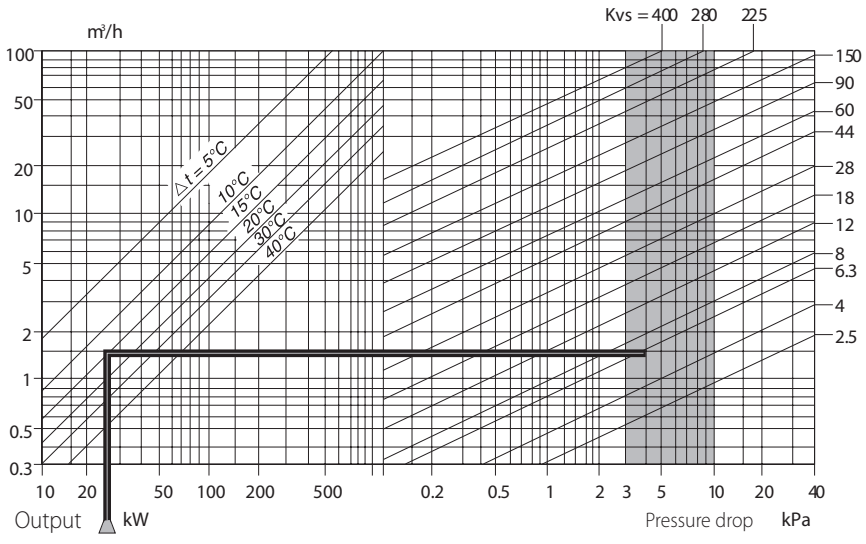
086L3146 page 52
086U5269 page 52
086U5270 page 52
086U5271 page 52
086U5272 page 52



ESBE shunt valves are used partly as exchange or distribution valves to control the water flow when using external heat sources, for example, oil-fired boilers (shunt valve in the system image on the previous page). They are also used to control the flow to the sub-shunt groups, i.e. additions to the heating system, and regulate heating or cooling in the radiator, floor heating systems or other similar applications.

086U5265: 3-way shunt valve VRG 131 DN20-KVS 6,3
086U5266: 3-way shunt valve VRG 131 DN25-KVS 10
086U5267: 3-way shunt valve VRG 131 DN32-KVS 16
086U5268: 3-way shunt valve VRG 131 DN40-KVS 25
086U5232: 3-way shunt valve VRG 131 DN50-KVS 40

Dimensioning the shunt valve for boiler installations:

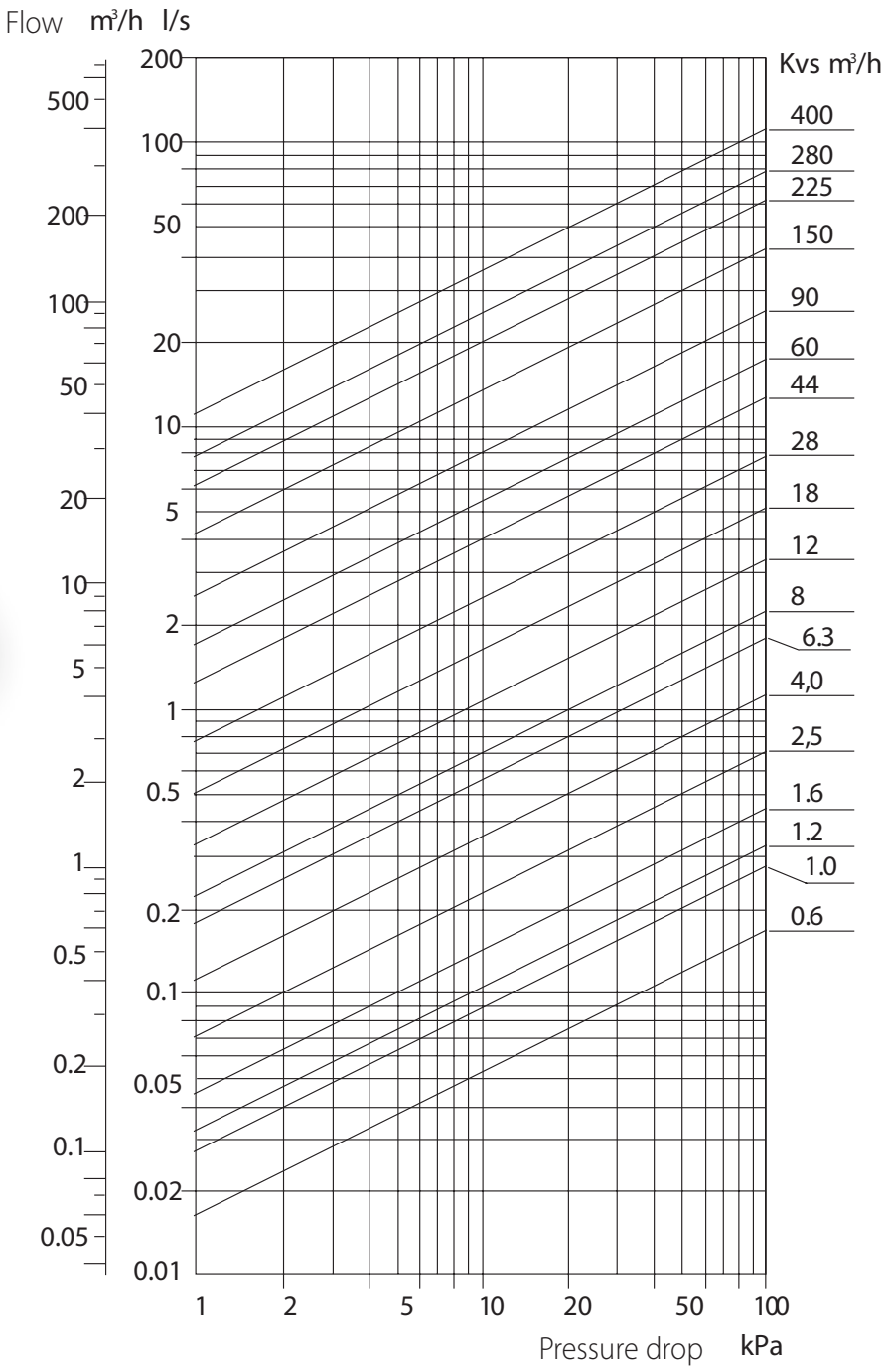


# ESBE Shunt valves

| Code number |
| --- |
| 086U5232 |
| 086U5265 |
| 086U5266 |
| 086U5267 |
| 086U5268 |



Pressure drop chart



# ESBE valve actuators

Valve actuator that is used to control ESBE shunt valves.



| Code number |
|---|
| 086L3146 |
| 086U5269 |
| 086U5270 |
| 086U5271 |
| 086U5272 |
| 086U3797 |

**Application**

Shunt valves and valve actuators

**Associated accessories**

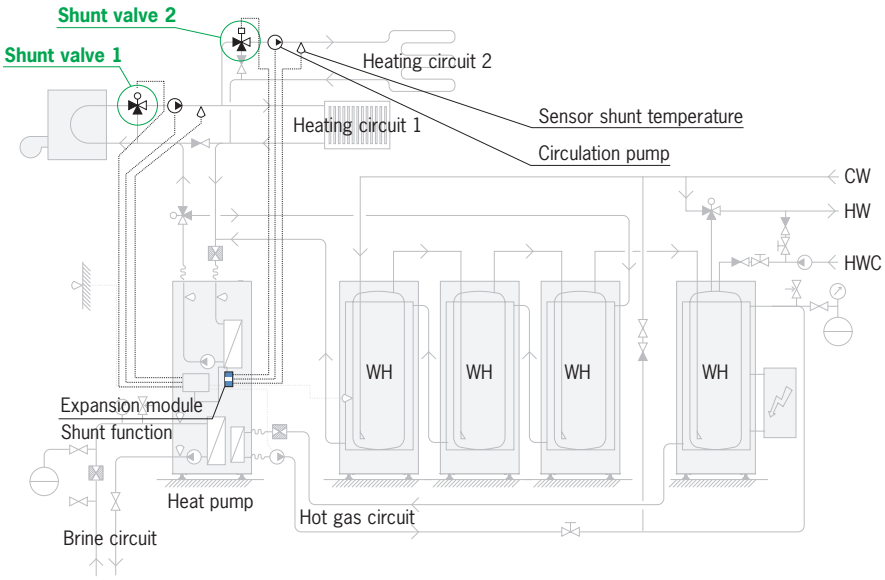
086U5265 page 50
086U5266 page 50
086U5267 page 50
086U5268 page 50



Valve actuator that is used to control ESBE shunt valves. Proportional or 3 or 2 step control signal. Manual control also possible. The actuator is supplied with an adapter for connection to the shunt valve, as well as a 1.5 m connection cable. The actuator is installed on the valve using an adapter. Installation instructions supplied with the valve on delivery.

086L3146: 3-Point 230 Volt 120 Sec ARA661
086U5269: 3-Point 24 Volt 240 Sec ARA 673
086U5270: 3-Point 230 Volt 240 Sec ARA 671
086U5271: 2-Point 230 Volt 15 Sec ARA 635
086U5272: 2-Point 24 Volt 45-120 Sec (0-10 Volt) ARA 659
086U3797: 2-Point Motor 97 230 Volt 15 Sec

## SYSTEM OVERVIEW



# Reversing valve kit DN40/DN50

**Code number**

086L3426

086L3427

**Heat pumps**

Mega

**Application**

Shunt valves and valve actuators



086L3426: Reversing valve kit DN40 + 230V 15S MOTOR
086L3427: Reversing valve kit DN50 + 230V 15S MOTOR

# Control valve (2-way) VVG 44



**Code number**

086U3730

086U3731

**Heat pumps**

Robust

Robust Eco

Mega

**Application**

Shunt valves and valve actuators

**Associated accessories**

086U4837 page 55



086U3730: Control valve VVG 44.25-10 (2-way). For charge output up to 110 kW.
086U3731: Control valve VVG 44.32-16 (2-way). For charge output 110-180 kW.

# Electronic Valve Actuator SQS 65.5 (35 Sec)
## For WCS function (hot water charging)

**Code number**

086U4837

**Heat pumps**

Robust

Robust Eco

Mega

**Application**

Shunt valves and valve actuators

**Associated accessories**

086U3730 page 54

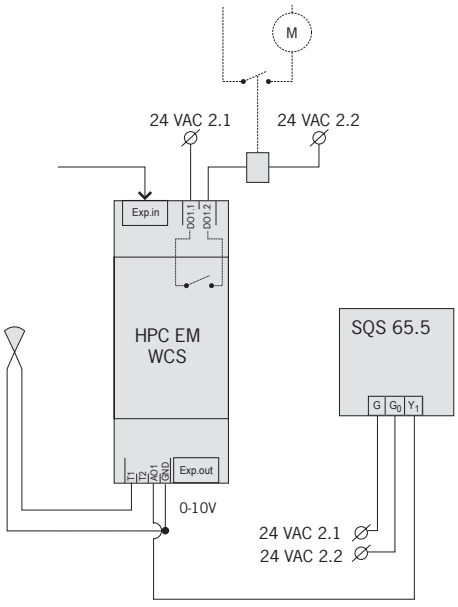
086U3731 page 54



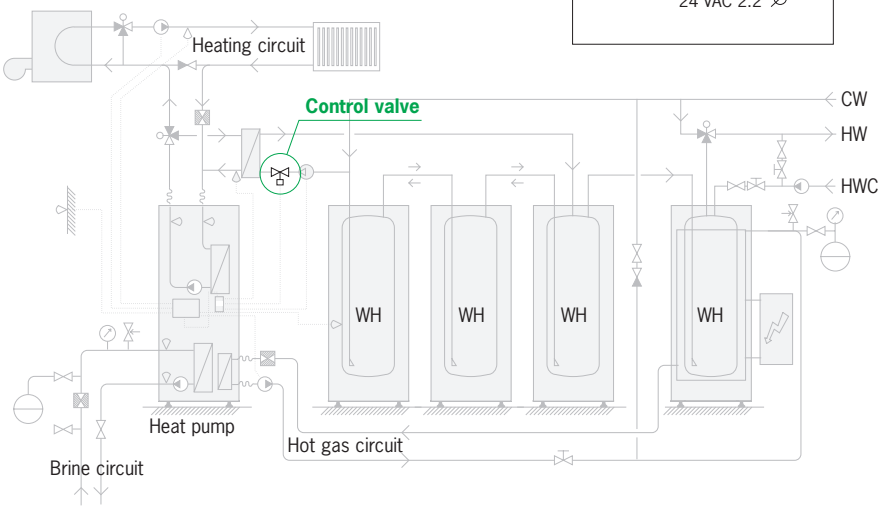
The valve actuator controls the valve that opens the flow through the heat exchanger for hot water heating. The motor has a 35 second set-up time, DC 0-10 V control signal, AC 24 V supply voltage and mode indication. Manual setting is possible.

Screw the actuator directly onto the valve in the vertical to horizontal position. No adjustments necessary.

Electrical connection
Analogue output 0-10V, AO1:
Signal to control valve
Digital output 24 VAC 2.1, DO1.1:
Signal to charge pump
Digital output 24 VAC 2.2, DO1.2:
Signal to charge pump




### SYSTEM OVERVIEW



# 3-way valve with actuator LK



**Code number**

086U7999

**Heat pumps**

- Diplomat Optimum G2/G3
- Diplomat Optimum
- Diplomat
- Atec
- Atria Optimum
- Atria

**Application**

- Shunt valves and valve actuators
- Swimming pool

**Associated accessories**

086U3754 page 59



Motor LK 8 Sec 230 V
Three-way valve 28 mm
Reduction 28/22 mm

# The brine temperature regulation kit

The constant set for the brine is used to make sure that brine temperature is not too high.

**Code number**

086U9610

**Application**

Shunt valves and valve actuators



# Passive and active cooling module



| Code number |
| --- |
| 086L3856 |
| 086L3857 |

| Heat pumps |
| --- |
| Diplomat Optimum G2/G3 |
| Diplomat Optimum |
| Diplomat |
| Atria Optimum |
| Atria |

| Application |
| --- |
| Cooling |



The Thermia Cooling Module enables your heat pump to deliver cooling to your home.

086L3856: **Cooling module Passive Optimum**
The cooling module works with passive cooling – also known as free cooling – which is ideal in homes that only occasionally require cooling or if you want a cooler temperature in just a few specific rooms. By circulating the cool liquid in the collector loop (in the drill hole, ground or lake), cooling is created at a very low cost.

The Thermia Passive Cooling Module is included as standard in Thermia Comfort Optimum. All other Thermia heat pumps are compatible with the Module, except for pumps in the Atria series.

Optimum module is equipped with low energy circulation pumps.

086L3857: **Cooling module Passive Optimum**
Cooling is produced in two steps. The first is called passive cooling and is fully sufficient for many applications. When passive cooling is not enough to keep the temperature down, step two, or active cooling, is activated. In step two, the heat pump compressor is used to produce cooling and this lowers the temperature in the house's cooling/heating loop even more.

Optimum module is equipped with low energy circulation pumps.

# Swimming pool control kit

**Code number**

086U3754

**Heat pumps**

- Diplomat Optimum G2/G3
- Diplomat Optimum
- Diplomat
- Atria Optimum
- Atria
- Solid
- Solid Eco

**Application**

Pool



Contains:

- Expansion card
- 3-way valve LK 28 mm

# Vent - exhaust air module



**Code number**

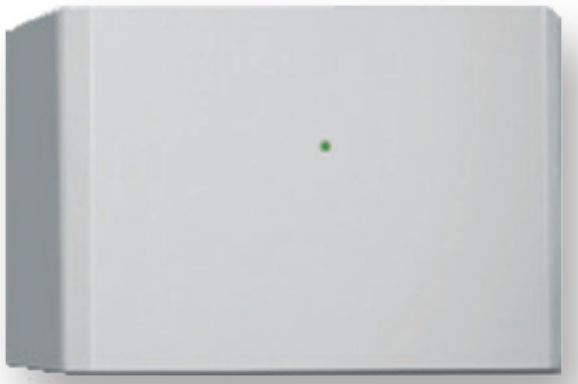
086U5122

**Heat pumps**

- Inverter
- Diplomat Optimum G2/G3
- Diplomat Optimum
- Diplomat
- Atria Optimum
- Atria

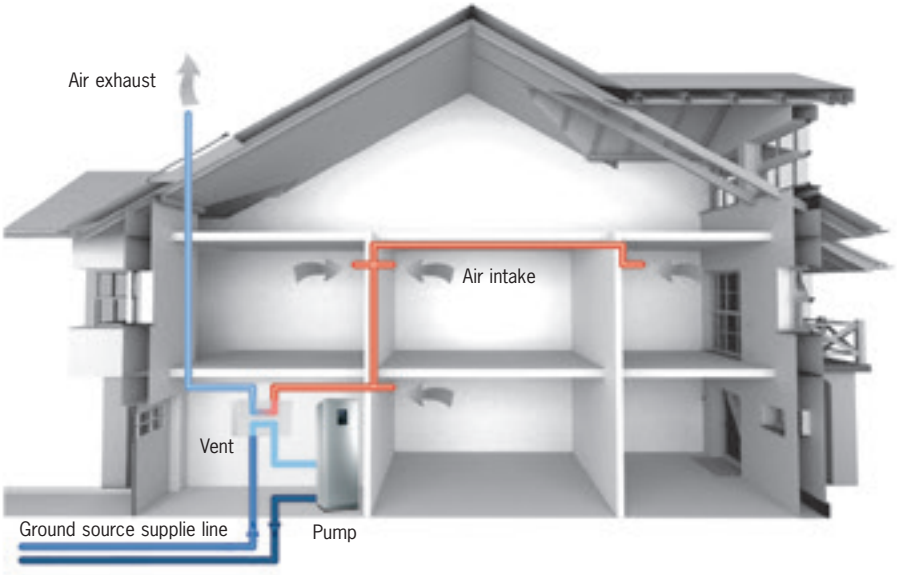
**Application**

Exhaust air



The Thermia Vent is an exhaust air module – it uses the house's exhaust air to heat the coolant to your heat pump. This means that heat is recycled instead of being wasted and that the pump's COP increases.

The Thermia Vent has been designed for installation on the wall next to your heat pump or elsewhere in your home.



# Flow guard is UR 3K-025 230V

**Code number**

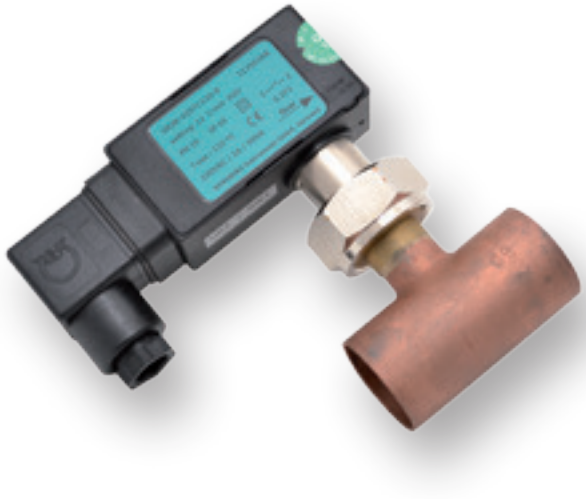
086U2441

**Heat pumps**

- Inverter
- Diplomat Optimum G2/G3
- Diplomat Optimum
- Diplomat
- Atria Optimum
- Atria

**Application**

Flow guard



Solder 28 mm

The flow guard is used for ground water or lake water systems and ensures that there is a sufficiently large flow through the heat exchanger. It protects the exchanger against freezing.

# Flow guard is UR 32CTNR 230V



**Code number**

086U3809

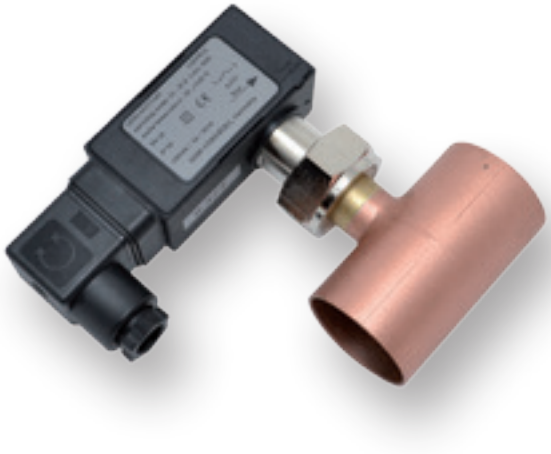
**Heat pumps**

Solid

Solide Eco

**Application**

Flow guard



Solder 32 mm

The flow guard is used for ground water or lake water systems and ensures that there is a sufficiently large flow through the heat exchanger. It protects the exchanger against freezing.

# An electronic flow guard

**Code number**

086U6002

086U3368

**Heat pumps**

Robust

Robust Eco

**Application**

Flow guard



The flow guard is an electronic guard that does not contain any moving parts. It is used for ground water or lake water systems and ensures that there is a sufficiently large flow through the heat exchanger.

086U6002: Flow guard kit ZZ7009
086U3368: Flow guard kit ZZ7017

**Electrical connection**
The flow guard is connected using the connection cable to the heat pump's control computer. The three-core connection cable is connected as follows:

- Brown cable, positive terminal (+), connected to terminal block 147
- Blue cable, negative terminal (-), connected to terminal block 148
- Black cable, signal in, connected to terminal block 124

# Electric boiler Mini 3/6/9 kW



| Code number |
| --- |
| 086L3461 |
| 086L3462 |
| 086L3463 |

**Application**

Auxiliary heater for external mounting



The purpose of the electric boiler Mini is to be an additional heater together with a heat pump or together with another heating system. Mini is created for a maximum system pressure of 3 bar and should be used with thermostat control box K11.

086U3461: Auxiliary heater Mini 3 kW cpl with control box
086U3462: Auxiliary heater Mini 6 kW cpl with control box
086U3463: Auxiliary heater Mini 9 kW cpl with control box
086U2784: K11 Control box

# Additional auxiliary heater with control box

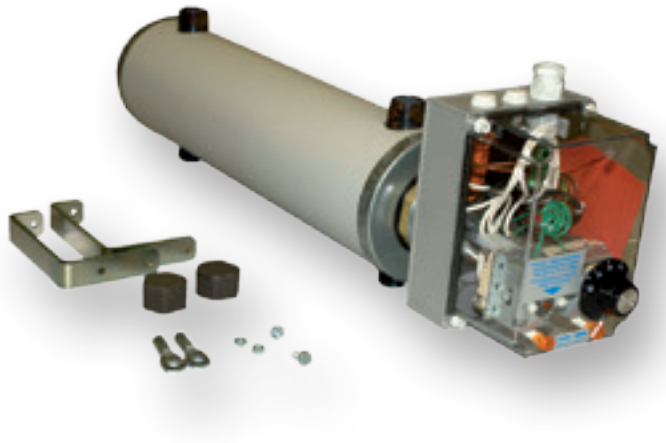
**Code number**

086U8504

086U8668

**Application**

Auxiliary heater for external mounting



086U8504: auxiliary heater 400 V 9 kW
086U8668: auxiliary heater 230 V 4,5 kW

An auxiliary heater for easy installation towards an existing heating system as an additional heater. To secure water circulation a circulation pump needs to be installed.

# Auxiliary heater 2” with control box K11



| Code number |
| --- |
| 086U3645 |
| 086U3646 |
| 086U3647 |

**Application**

Auxiliary heater for external mounting




086U3645: 3 kW 2” Length = 280 mm
086U3646: 6 kW 2” Length = 410 mm
086U3647: 9 kW 2” Length = 410 mm

Control box K11 works in 3 steps: 100% / 50% / 0%. These steps can’t be adjusted. If the temperature is over 98°C the electric control box will shut off. Reset can only be made be after the temperature has fallen below 80°C

# Auxiliary heater (flange) with control box K11

| Code number |
| --- |
| 086U3640 |
| 086U3641 |
| 086U3642 |
| 086U3643 |
| 086U3644 |




**Application**

Auxiliary heater for external mounting

086U3640: Flange 3 kW Length = 320 mm
086U3641: Flange 4,5 kW w Length = 320 mm
086U3642: Flange 5,25 kW Length = 320 mm
086U3643: Flange 7,5 kW Length = 320 mm
086U3644: Flange 9 kW Length = 320 mm

Control box K11 works in 3 steps:
100% / 50% / 0% These steps can't be adjusted.
If the temperature is over 98°C the electric control box will shut off.
Reset can only be made be after the temperature has fallen below 80°C

# Additional auxiliary heater heater 3 kW



**Code number**

086L2340

**Heat pumps**

Diplomat Optimum G2/G3

Diplomat Optimum

Diplomat

**Application**

Auxiliary heater for Diplomat heat pumps



Electric boiler used to meet BBR (Boverkets Byggregler – Swedish building regulations) demands on Diplomat series. This auxiliary heater has 1/2/3 kW and replaces the original mounted heater. Note, at lower auxiliary heater capacity the heat pump will require more time for a pasteurisation cycle (Legionella prevention).

# Magnetite filter for heating installations

## In-line system filter to remove contaminants from central heating system.

| Code number |
|---|
| 086L3231 |
| 086L3232 |
| 086L3894 |
| 086L3895 |
| 086L3896 |

| Heat pumps |
|---|
| Inverter |
| Diplomat Optimum G2/G3 |
| Diplomat Optimum |
| Diplomat |
| Atec |
| Atria Optimum |
| Atria |
| Solid |
| Solid Eco |
| Robust |
| Robust Eco |
| Mega |

| Application |
|---|
| Installation accessory |






Fernox TF1 magnetite filters:
086L3231: Fernox TF1 filter Ø22
086L3232: Fernox TF1 filter Ø28
086L3894 Magnetite filter 1 1/4”
086L3895 Magnetite filter 1 1/2”
086L3896 Magnetite filter 2”

Deposits and debris from e.g. magnetite may affect the performance and efficiency of the heating system over time. Problems related to valves, circulation pumps and deposits in heat exchangers may often be related to magnetite. Installation of magnetite filters have by experience been found to be an efficient action against magnetite in heating systems. Fernox TF1 Total filter is an appreciated high quality filter intended to be installed on the return line from the heating system in a location where the customer can drain out the debris from the filter when needed, according to recommendations from the installer. In many heating systems the frequency needed for draining the filter will decrease some weeks after start up.

Fernox TF1 is delivered complete with shut off valves, and is available for connection to either 22 mm or 28 mm pipes. The filter does not contain a mesh strainer.

Magnetite filter for light commercial installations (Mega, Robust Eco/Solid Eco)
A magnetite filter contributes to:
- Maintain the heat pumps performance by reducing scaling in the heat exchanger.
- Increased reliability.
- Increased life time for valves and circulation pumps.

The magnetite filter is of Flamco vent clean smart type.
The filter has built in bleeding and is of partial flow type.

Flow resistance chart from www.fernox.com



# Stand



**Code number**

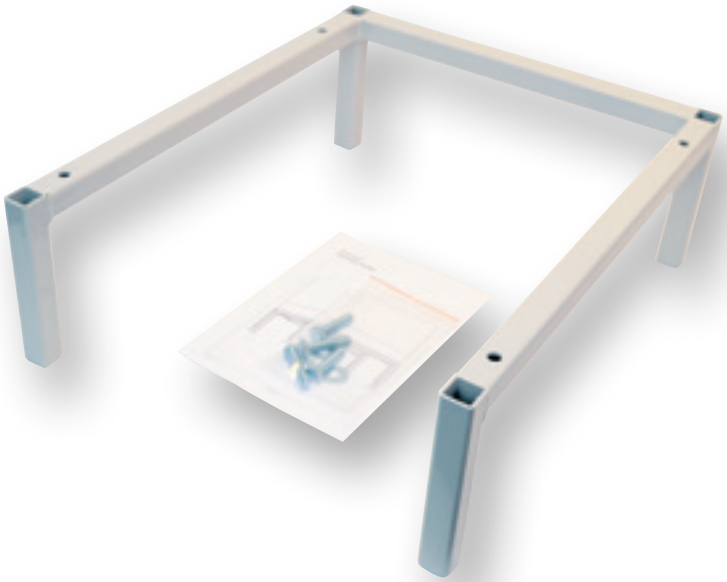
086L2310

**Heat pumps**

- Inverter
- Diplomat Optimum G2/G3
- Diplomat Optimum
- Diplomat
- Atria Optimum
- Atria

**Application**

Installation accessory



The stand is used when you want the tank and the heat pump installed at the same height

# Filling and mixing vessel 100 Litres

**Code number**

086U5633

**Application**

Installation accessory





Filling and mixing vessels for the brine, 100 litres (pump 1 phase 230 Volts)

# Top box (18 liters) Expansion vessel kit



| Code number |
|---|
| 086L2866 |
| 086L2867 |

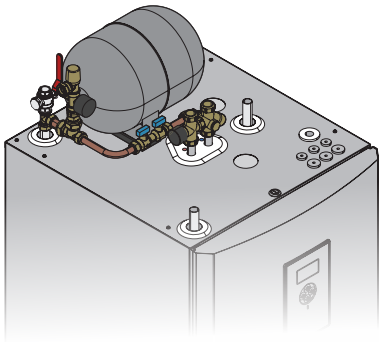
| Heat pumps |
|---|
| Inverter |
| Diplomat Optimum G2/G3 |
| Diplomat Optimum |
| Diplomat |
| Atec (at Total indoor kit) |
| Atria Optimum |
| Atria |



086L2866: Expansion vessel kit 18 liters, 22 mm
086L2867: Expansion vessel kit 18 liters, 28 mm

This new expansion vessel kit on 18 liters has been developed for the installer to shorting the installation time.
This kit can be placed on top or at the left or right side of the heat pump.
Top box suitable for all heat pumps with an integrated water heater.
The installation vessel kit package contains:

1 pcs expansion vessel, 18 liter
1 pcs mixing valve for hot and cold water
1 pcs safety valve on 10 bar
1 pcs safety valve on 2,5 bar
1 pcs filling valve with manometer
1 pcs of twin valves
pipes and parts



# Volume tank 50 litres

**Code number**

086U1814

**Application**

Installation accessory



Volume tank 50 litres to have extra heating volume and to decrease sound in the heating system.

# External fuse kit



**Code number**

086U9685

**Heat pumps**

- Inverter
- Diplomat Optimum G2/G3
- Diplomat Optimum
- Diplomat
- Atec
- Atria Optimum
- Atria

**Application**

Installation accessory



Fuse kit for mounting the external component. 3 amp fuse for "DIN mounting"

# Network cable 10 m

**Code number**

086U4841



**Heat pumps**

- Inverter
- Robust
- Robust Eco
- Mega

**Application**

Installation accessory

# Modular cables and conductor joint



| Code number |
| --- |
| 086U4227 |
| 086U4228 |
| 086U4229 |
| 086U6414 |
| 086U4230 |

| Heat pumps |
| --- |
| Robust |
| Robust Eco |

| Application |
| --- |
| Installation accessory |



The modular cable is a cable that joins the various units. Connections can be made between several heat pumps or between different accessory modules internally in the heat pump. Conductor joint to connect and extend two or more modular cables.

**Modular cable**
086U4227: Modular cable 30 cm
086U4228: Modular cable 110 cm
086U4229: Modular cable 10 cm
086U6414: Modular cable 500 cm



**Conductor joint**
086U4230

# Aermec UL - fan convector

**Code number**

086U1878
086U1879
086U1880
086U1881

**Application**

Fan convector

**Associated accessories**

086U1877 page 79



The Thermia Aermec UL is a fan convector that helps you maintain an even and comfortable indoor temperature all year round. Explained in rather simple terms, the fan convector is a “heater” that blows hot or cold air, depending on your needs at the time.

086U1878: AERMEC UL11
086U1879: AERMEC UL16
086U1880: AERMEC UL26
086U1881: AERMEC UL36

# Aermec HL - fan convector



| Code number |
| --- |
| 086U1882 |
| 086U1883 |
| 086U1884 |
| 086U1885 |

**Application**

Fan convector

**Associated accessories**

086U1876 page 79



The Thermia Aermec HL is a fan convector that effectively helps you maintain an even and comfortable indoor temperature all year round. Explained in rather simple terms, the fan convector is a “heater” that can blow hot and cold air.

The built-in fan is speed-controlled and adjusts its speed automatically to the current requirements. This guarantees minimum energy consumption, high efficiency and precise control of the indoor temperature.

The Thermia Aermec HL fan convector has a built in room temperature sensor and supply line temperature sensor, also featuring an adjustable air delivery louver.

086U1882: AERMEC HL11
086U1883: AERMEC HL16
086U1884: AERMEC HL26
086U1885: AERMEC HL36

# Foot to HL / UL

| Code number |
| --- |
| 086U1876 |
| 086U1877 |

**Application**

Fan convector



086U1876 foot to HL
086U1877 foot to UL

# Strömstad Village has chosen its way



Public housing Strömstadsbyggen has chosen its method for heating their facilities. The heat pumps from Thermia have won.

*"With heat pump technology we have one of the lowest heating costs per square meter in Sweden. We know that many other facilities are watching us with great interest, and I'll be more than happy if they decide to follow us, says Sven-Erik Adolfsson."*

**Sven-Erik Adolfsson**

Read full story article on **www.thermia.com**

# 4 Commercial ground source heat pumps
## – the natural choice for larger properties

Thermia has long experience in developing and manufacturing large capacity heat pumps. Residential, schools, industries, retail premises, churches; our solutions can be adapted for all types of buildings.

Investing in a commercial heat pump for your property pays for itself very quickly which benefits your economy and the environment.

With our several accessories for commercial heat pumps, you can optimize even more the operation and efficiency of your large capacity heating solution.


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HPC EM - expansion module: Water Charge System function ..... 83
HPC EM - expansion module: Tap Water Control Function ..... 84
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# Room sensor

## Room sensors for commercial heat pumps manufactured since 2008



| Code number |
| --- |
| 086U3354 |

| Heat pumps |
| --- |
| Robust |
| Robust Eco |



The room sensor is an active wall mounted sensor for room temperature.
Electrical connection 24VAC supply voltage.

The room sensor is connected to WM HPC, analogue input 0-10V, AI1.
Measurement range: Temperature: 0 - 50°C.

# HPC EM - expansion module: Water Charge System function

## Code number

086U3395

## Heat pumps

Robust

Robust Eco

## Application

Shunt (extra shunt group heating / cooling)

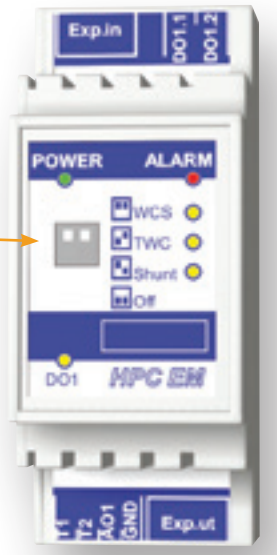
TWC (Tap Water Control)

WCS (Water Charging System)

## Associated accessories

- 086U3364: page 94
  - 086U3730: page 54
  - 086U3731: page 54
  - 086U4837: page 55
  - 086U4227: page 77
  - 086U4228: page 77
  - 086U4229: page 77

The expansion module in WCS function mode manages hot water charging for hot water heaters. The WCS function is achieved by moving the switch to the side. See below figure.



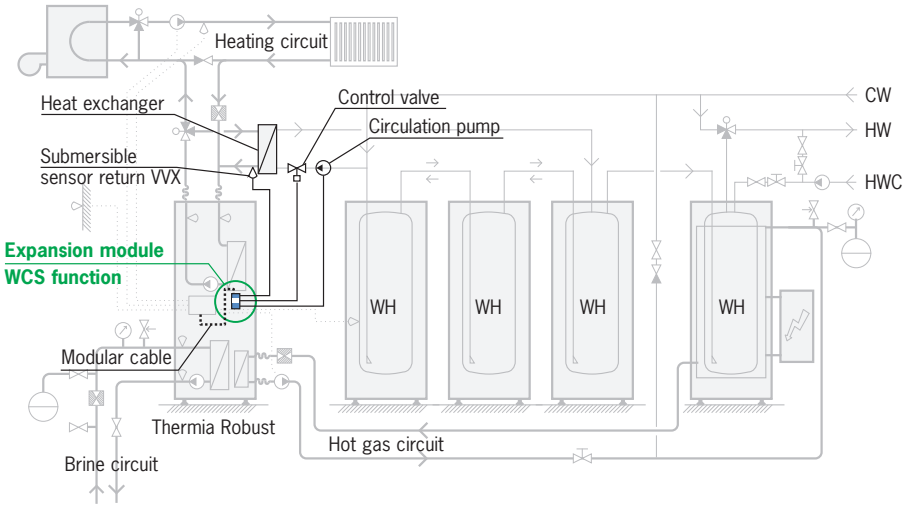

**Associated accessories**
Submersible sensor return VVX,
Thermokon-Danelko AKF1004140,
part no. 086U3364

One of the following modular cables:
Modular cable 0.3 m, part no. 086U4227
Modular cable 1.1 m, part no. 086U4228
Modular cable 10.0 m, part no. 086U4229

**Electrical connection WCS**
Temperature input, T1: Submersible sensor, return VVX
Temperature input, T2: -
Analogue output 0-10V, AO1: Signal to control valve
Relay, DO1: Signal to circulation pump, (potential free connection, max 6A)

**Other accessories**
Control valve VVL (2-way), heat exchanger (tap water exchanger), circulation pump.
086U3730, 086U3731, 086U4837.

## SYSTEM OVERVIEW



# HPC EM - expansion module: Tap Water Control Function



**Code number**

086U3395

**Heat pumps**

Robust

Robust Eco

**Application**

Shunt (extra shunt group heating / cooling)

TWC (Tap Water Control)

WCS (Water Charging System)

**Associated accessories**

- 086U3365: page 95
  - 086U4227: page 77
  - 086U4228: page 77
  - 086U4229: page 77

The expansion module in TWC function mode ensures that outgoing tap water and hot water circulation maintain sufficiently high temperatures as to prevent Legionella bacteria.

The TWC function is achieved by moving the switch to the side. See below figure.

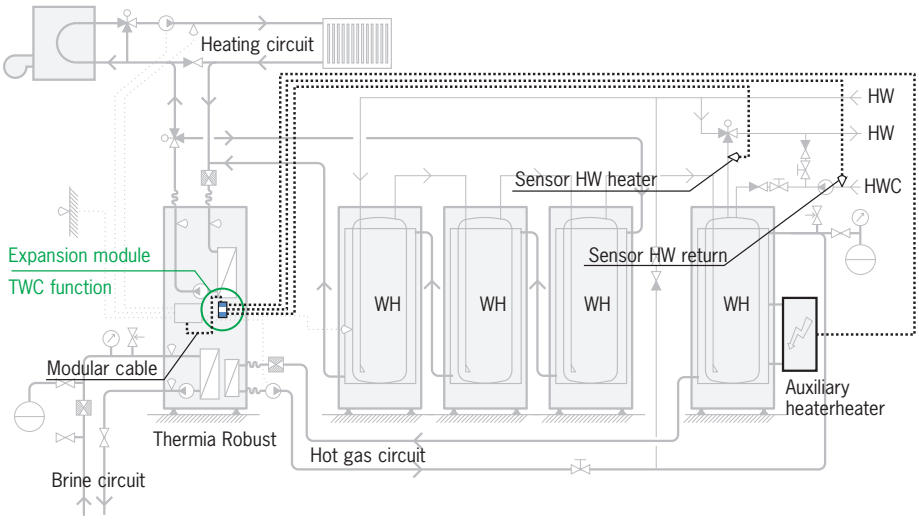



**Associated accessories**
2 x PT1000 strap on sensors with 2 m cable, part no. 086U3365 (regards 1 x sensor)
One of the following modular cables:
Modular cable 0.3 m, part no. 086U4227
Modular cable 1.1 m, part no. 086U4228
Modular cable 10.0 m, part no. 086U4229

**Electrical connection TWC**
Temperature input, T1: Sensor, HW heater
Temperature input, T2: Sensor, HW return
Analogue output 0-10V, AO1: -
Relay, DO1: Signal to immersion heater, hot water (potential free connection, max 6A)

**Other accessories**
Shunt valve, circulation pump.

**SYSTEM OVERVIEW**



# HPC EM - expansion module: Shunt Function

**Code number**

086U3395

**Heat pumps**

Robust

Robust Eco

**Application**

Shunt (extra shunt group heating / cooling)

TWC (Tap Water Control)

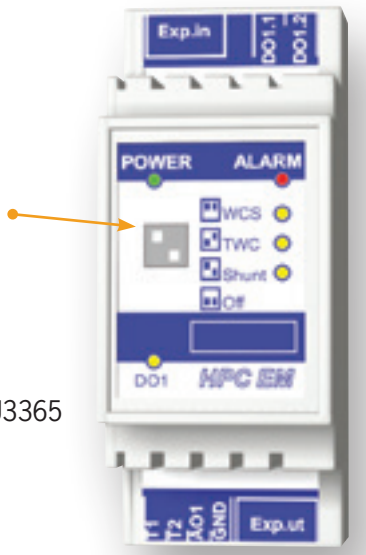
WCS (Water Charging System)

**Associated accessories**

- 086U3365: page 95
  - 086U4227: page 77
  - 086U4228: page 77
  - 086U4229: page 77

The expansion module in the Shunt function mode maintains the desired temperature for another heating circuit.

The Shunt function is achieved by moving the switch to the side. See below figure.

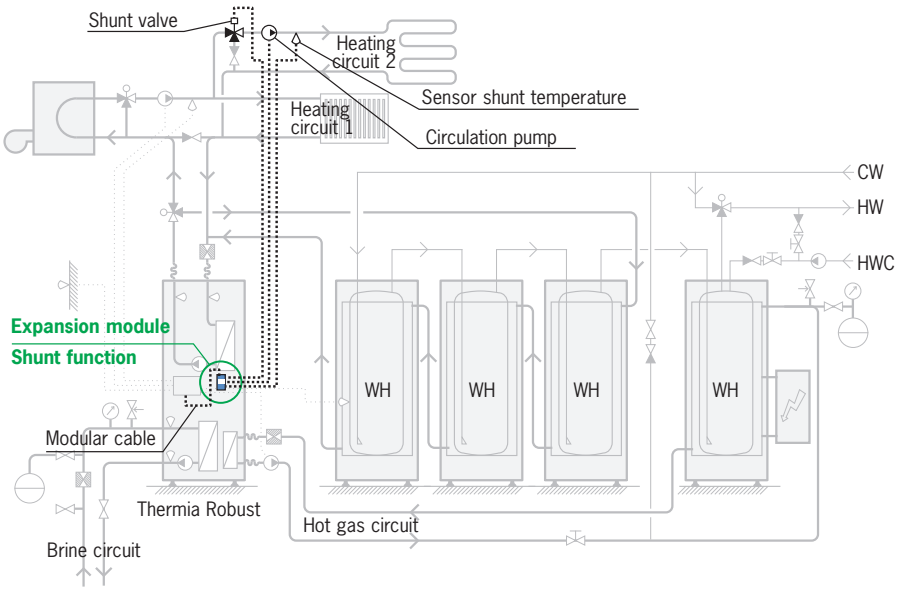



**Associated accessories**
1 x PT1000 strap on sensor part no. 086U3365
One of the following modular cables:
Modular cable 0.3 m, part no. 086U4227
Modular cable 1.1 m, part no. 086U4228
Modular cable 10.0 m, part no. 086U4229

**Electrical connection Shunt function**
Temperature input, T1: Sensor, shunt temperature
Temperature input, T2: -
Analogue output 0-10V, AO1: Signal to shunt valve
Relay, DO1: Signal to circulation pump, (potential free connection, max 6A)

**Other accessories**
Shunt valve, circulation pump.

## SYSTEM OVERVIEW



# HPC CM - Cooling Module



**Code number**

086U3394

**Heat pumps**

Robust

Robust Eco

**Application**

Cooling

**Associated accessories**

- 086U3365: page 95
- 086U3396: page 96
  - 086U4227: page 77
  - 086U4228: page 77
  - 086U4229: page 77




Passive cooling means that coolant circulates through the bore hole and the coolant tank without any heat pump starting.

Only circulation pumps for coolant transfer are used. The heat from the coolant tank is transported down into the rock. A condition for passive cooling to work is that the coolant is colder than the coolant tank.

Active cooling means that a heat pump starts which then lowers the temperature of the coolant before it enters the coolant tank. If the integral continues to rise, more heat pumps start. The valve for active cooling shifts position and disconnects from the borehole. The coolant therefore only circulates through the cooling tank and heat pump so that all of the cooling produced can be used.

An extra function that can be activated in the cooling module is dew point control. This function is not necessary, but if it is to be activated more information can be found under the accessory Dew point sensor.

**Associated accessories**
4 x PT1000 strap on sensors with 2 m cable, part no. 086U3365 (regards 1 x sensor)
One of the following modular cables:
Modular cable 0.3 m, part no. 086U4227
Modular cable 1.1 m, part no. 086U4228
Modular cable 10.0 m, part no. 086U4229
Dew point sensor for wall mounting, part no. 086U3396 (if the dew point function is to be used)

**Electrical connection**
Temperature input, T1: Sensor, cooling tank
Temperature input, T2: Sensor, coolant cooler
Temperature input, T3: Sensor, output cooling tank
Temperature input, T4: Sensor, cooling circuit
Analogue input 0-10V, AI1: Signal from dew point sensor, room temperature 0 - 50°C
Analogue input 0-10V, AI2: Signal from dew point sensors, rel. Humidity 0 - 100%
Analogue output 0-10V, AO1: Signal to control valve cooling circuit
Analogue output 0-10V, AO2: Signal to cooling fans

# HPC CM - Cooling Module

**Code number**

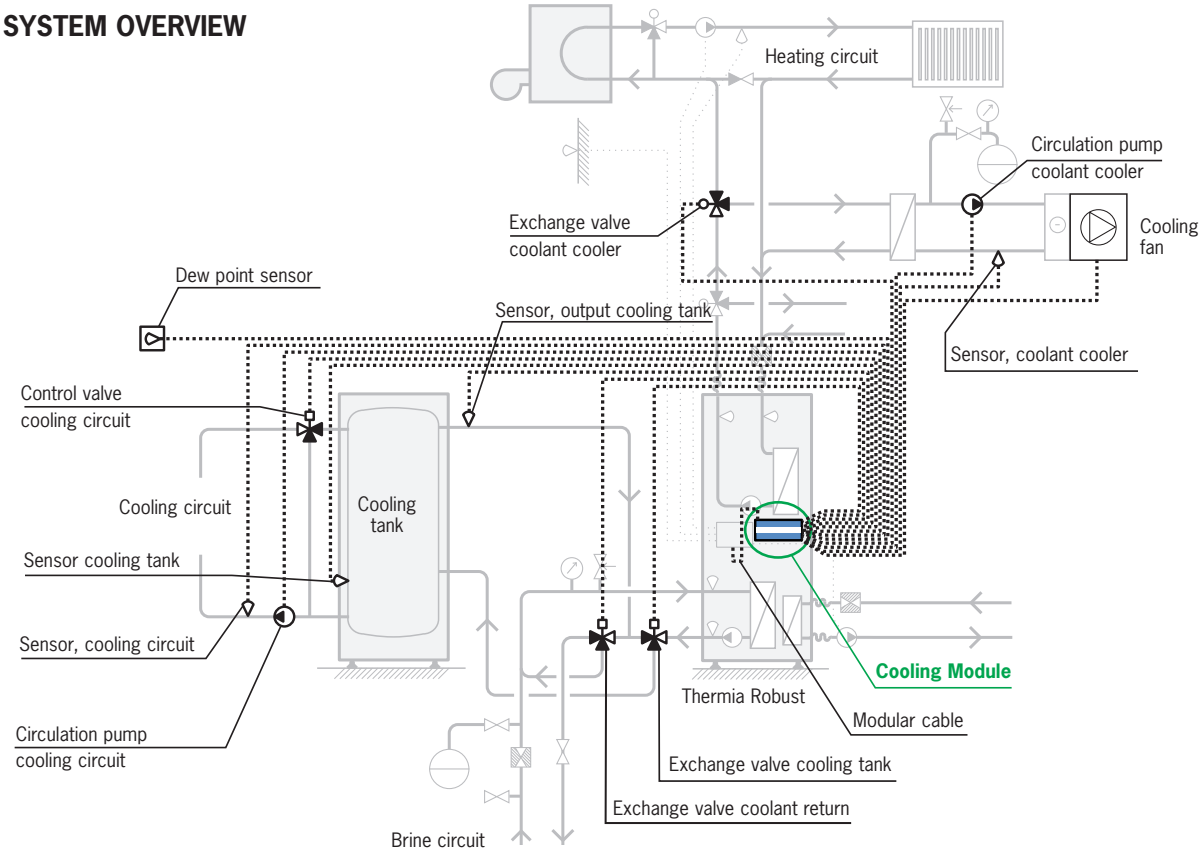
086U3394




Relay 24VAC, DO1: Signal to exchange valve, cooling tank (passive cooling)
Relay 24VAC, DO2: Signal to exchange valve, coolant return (active cooling)
Relay 24VAC, DO3: Signal to circulation pump coolant cooler
Relay 24VAC, DO4: Signal to exchange valve, coolant cooler
Relay 24VAC, DO5: Signal to circulation pump, cooling circuit

Other accessories
Control valve, exchange valves, circulation pumps.

## SYSTEM OVERVIEW



# EM Modul - control cabinet



**Code number**

086L3443

**Heat pumps**

Mega

**Applications**

TWC (Tap Water Control)

Shunt (extra shunt group heating)

WCS (Water Charging System)



EM module is an additional accessory for Mega to control TWC (tap water control) or WCS (water charging system) or extra shunt groups.

# Soft start - used to limit the current when the heat pump is started

**Code number**

086L1516

086L3629

**Heat pumps**

- Solid
- Solid Eco
- Robust
- Robust Eco



Used to limit the current when the heat pump is started. Soft start distributes the current consumption for a few seconds and enables the heat pump to start slower, to prevent peaks in current in the electrical network.



The soft starter handles larger fluctuations that can appear in some electrical grids.

The soft starter shall be used in Robust 42/ Robust Eco 42 and Solid 42/ Solid Eco 42. This soft starter is also suitable for the smaller sizes in applications where an over dimensioned soft starter is required.

The kit consists of:
- Soft starter
- Cabling
- Fixture
- Mounting instruction

# A circulation pump for the hot gas circuit



**Code number**

086L3004

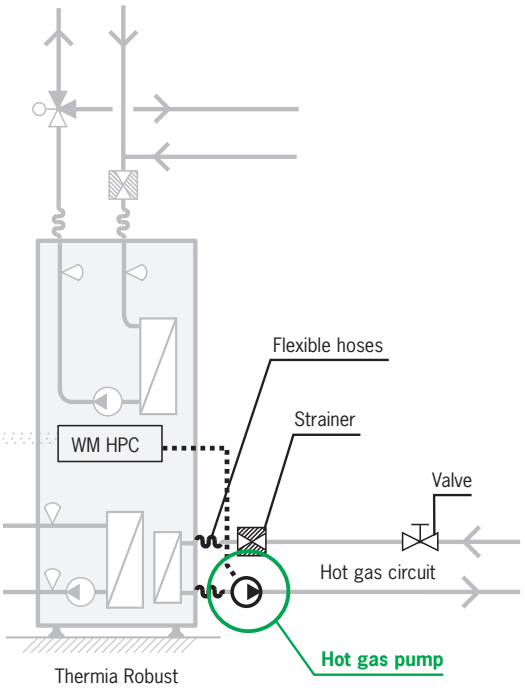
| Heat pumps |
|---|
| Solid |
| Solid Eco |
| Robust |
| Robust Eco |
| Mega |




The hot gas pump is a circulation pump for the hot gas circuit.
Kit contains:

- Pump Wilo Yonos Para GT 15 / 6-130
- Shut off valve 28 mm
- Gasket

## SYSTEM OVERVIEW



# Switching valve for hot water

**Code number**

086U2471

086U9938

**Heat pumps**

- Solid
- Solid Eco
- Robust
- Robust Eco



The exchange valve is of the ball exchange valve type. It is used to control the flow of hot water to either the heating system or hot water heaters depending on the heating demand.

The exchange valve's motor connects to HPC RM, digital output 24 VAC, DO4.

086U2471 - 24 V motor
086U9938 - 230V motor

| Exchange valve DN 32 internal thread: | |
|---|---|
| Valve: | body Brass |
| Ball: | Chromed brass |
| Fluid temperature: | 0°C to 100°C |
| Max. Differential pressure: | 6 bar |
| Seal valve housing: | PTFE |
| O-rings: | EPDM |

| Motor: | 086U2471 | 086U9938 |
|---|---|---|
| Supply voltage: | 24V/50Hz | 230 V/50Hz |
| Output: | 5 VA | 3 VA |
| Rotation time: | 15 seconds | 15 Sek |
| Torque: | 6 Nm | 4 Nm |
| Potential free contact: | 5A/230V | 5A/230V |
| Protection class: | IP54 | IP54 |

# Strap on PT 1000 temperature sensor with 2 m cable



| Code number |
| --- |
| 086U3365 |

| Heat pumps |
| --- |
| Robust |
| Robust Eco |
| Mega |



Strap on sensor used in several places in the system to read the temperature. The sensor lies against the pipe and senses temperatures in the range 0-160°.

# Strap on temperature sensor with connection box PT1000

**Code number**

086U3356

**Heat pumps**

- Robust
- Robust Eco
- Mega



Strap on sensor used in several places in the system to read the temperature. The sensor lies against the pipe and senses temperatures in the range 0-160°.

**Electrical connection**
15-24VDC/24VAC supply voltage. The strap on sensor is connected to WM HPC, Temperature input T1 or T2 and GND.

Technical data - Resistance Table:

| Temperature | Ohm | Temperature | Ohm | Temperature | Ohm |
|---|---|---|---|---|---|
| -40 | 842,7 | 10 | 1039,0 | 60 | 1232,4 |
| -35 | 862,5 | 15 | 1058,5 | 65 | 1251,6 |
| -30 | 882,2 | 20 | 1077,9 | 70 | 1270,7 |
| -25 | 901,9 | 25 | 1097,3 | 75 | 1289,9 |
| -20 | 921,6 | 30 | 1116,7 | 80 | 1309,0 |
| -15 | 941,2 | 35 | 1136,1 | 85 | 1328,0 |
| -10 | 960,8 | 40 | 1155,4 | 90 | 1347,1 |
| -5 | 980,4 | 45 | 1174,7 | 95 | 1366,1 |
| 0 | 1000,0 | 50 | 1194,0 | 100 | 1385,1 |
| 5 | 1019,5 | 55 | 1213,2 | | |

# Submersible sensor PT1000

Submersible sensor used to read the temperature in the return line.



**Code number**

086U3364

**Heat pumps**

- Robust
- Robust Eco
- Mega

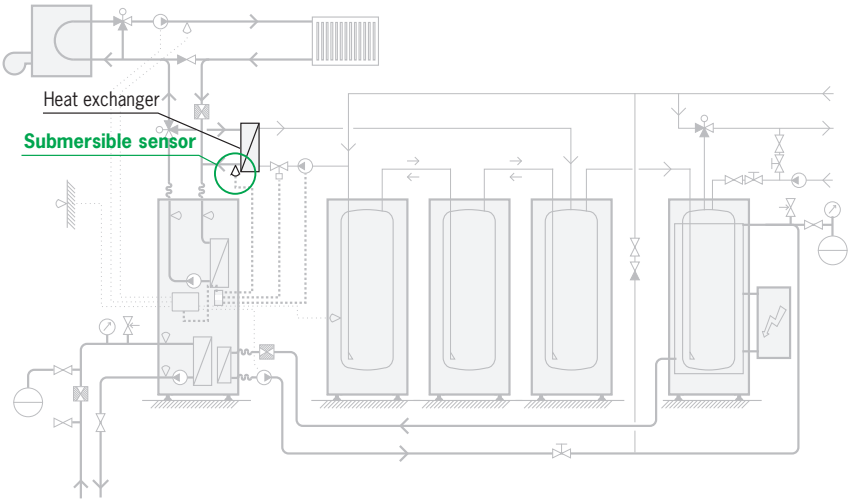
**Application**

WCS (Water Charging System)*



Submersible sensor used to read the temperature in the return line from the heat exchanger, see the system image below.
The sensor is installed inside the pipe and senses temperatures in the range 0-160°.

## SYSTEM OVERVIEW




Technical data - Resistance Table:

| Temperature | Ohm | Temperature | Ohm | Temperature | Ohm |
|---|---|---|---|---|---|
| -40 | 842,7 | 10 | 1039,0 | 60 | 1232,4 |
| -35 | 862,5 | 15 | 1058,5 | 65 | 1251,6 |
| -30 | 882,2 | 20 | 1077,9 | 70 | 1270,7 |
| -25 | 901,9 | 25 | 1097,3 | 75 | 1289,9 |
| -20 | 921,6 | 30 | 1116,7 | 80 | 1309,0 |
| -15 | 941,2 | 35 | 1136,1 | 85 | 1328,0 |
| -10 | 960,8 | 40 | 1155,4 | 90 | 1347,1 |
| -5 | 980,4 | 45 | 1174,7 | 95 | 1366,1 |
| 0 | 1000,0 | 50 | 1194,0 | 100 | 1385,1 |
| 5 | 1019,5 | 55 | 1213,2 | | |

# Hot water sensor PT1000

**Code number**

086U3350

**Heat pumps**

- Robust
- Robust Eco
- Mega



Hot water sensor used to read temperature from the hot water tank.

# Dew Point Sensor



**Code number**

086L3396

**Heat pumps**

Robust

Robust Eco

**Application**

Cooling



Dew point control is an extra function that ensures that condensation precipitation cannot occur in the cooling circuit. If the temperature and humidity reaches the dew point, the supply set point is adjusted upwards. The sensor is wallmounted.

**Electrical connection**
24VAC supply voltage.
The dew point sensor is connected to HPC CM (cooling module) to the inputs AI1 (temperature) and AI2 (humidity).
Measurement range: Rel. humidity: 5 - 95%.
Temperature: 0 - 50°C.

# Terminal block 24 volt circuit

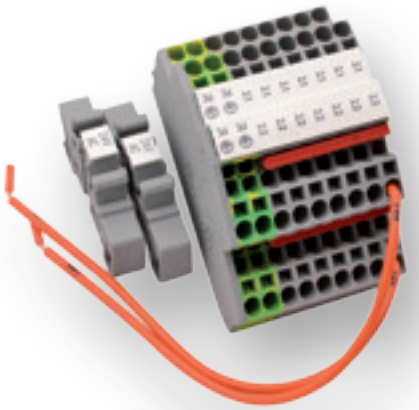
**Code number**

086U5121

**Heat pumps**

Robust

Robust Eco



Terminal block for additional 24V supply

# Router for Web Access



**Code number**

086U4840

**Heat pumps**

- Robust
- Robust Eco
- Mega

**Application**

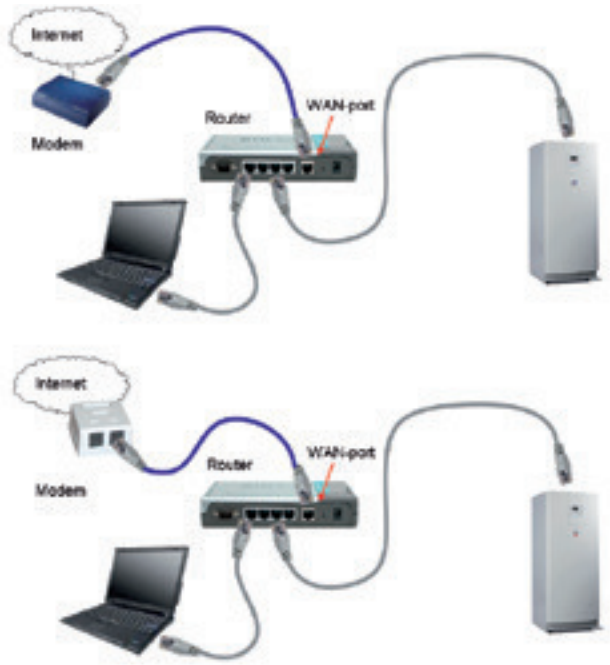
Remote control




Used to connect to the heat pump via the Internet. The router directs the network traffic between the local network where the heat pump is and the Internet. It also limits the amount of incoming traffic from the Internet. The router is pre-configured and ports out 10.0.48.94 and 10.0.48.101 to 10.0.48.109, which means that no settings need to be made on connection.

**Supplied accessories**
10 + 2 metre network cable supplied with router.

**Connection**
The router has a WAN port which is connected to a broadband modem or a broadband socket, see images below. It also has four network sockets for a local network, to which you can connect your heat pumps. If four sockets are not enough, use a switch. The network cable must be connected from the Ethernet socket on WM HPC in the heat pump and to a spare port on the router.



# Moxa converter (RS-232 to RS-422/485)

**Code number**

086U9011

**Heat pumps**

Robust

Robust Eco

**Application**

Communication via Modbus with building management system



Converter moxa
The differences between the RS-232, RS-422, and RS-485 serial interfaces can cause compatibility issues for industrial communication systems. Moxa's serial converter is equipped with intelligent features; the port-powered operation for example, allows devices with different serial interfaces to communicate effortlessly.

Converts RS-232 to RS-422/485 interface. Use if you do not have the opportunity to connect the RS-232, but only the ability to connect RS-422/485 interface.
Can be installed on DIN rail.

**Electrical connections**
RS-232 is connected to the RS-232 connection on the upper side of the WM HPC. If the device mounting inside the control cabinet can be supplied with 24 V at terminal 147 (V +) and 148 (V-).

Delivery consists of:
- Moxa TCC 100
- 9 pin connector for connection to the HPC-WM

# Heat pumps are heating the Mötesplats Alstermo



The Alstermo municipality inhabitants in Småland took over from the municipality the ownership of a preschool, school, sport hall and a library. One of their first steps was to get rid of the oil boilers and to replace them with heat pumps.

The choice was a geothermal heat pump. Bo Jansson and his colleague mapped the offers and focussed on Thermia and its geothermal heat pumps. – *We even visited the manufacturing plant in Arvika in order to see whether Thermia was the right supplier for us, remembers Bo Jansson. Our focus on the heat pump has been an advantage to the environment. $CO_2$ emissions dropped by 125 tons per year, or ca 625 tons in total, after the installation. – Money is important, but it also really feels good to know that we have contributed to a better environment.*

**Bo Jansson**

Read full story article on **www.thermia.com**

# 5 Water heaters and volume tanks
## – new product range for highly efficient heat transfer

Thermia new product range of water heaters with volume tanks was launched in May 2014. The new product range consists of 11 products which have been designed to meet the requests and wishes we have received from the market. This broadens our range of products and enables us to offer our customers a more complete overall solution.


Water heater MBH 200 / MBH 300 ..... 102
Water heater MBH G3 200 / MBH G3 300 ..... 103
Water heater MBH 200 / MBH 300 (Inverter) ..... 104
Water heater MBH Atria 200 RF ..... 105
Volume tank WT-V 100 ..... 106
Volume tank WT-V 200 ..... 107
Volume tank WT-V 300 ..... 108
Volume tank WT-V 500 ..... 109
Volume tank WT-V 1000 ..... 110
Water heater WT-C 500 ..... 111
Water heater WT-C 750 ..... 112
Water heater WT-S 500 ..... 113
Water heater WT-S 1000 ..... 114
Water heater WT-T 300 ..... 115
Water heater WT-T 500 ..... 116

# Water heater MBH 200 / MBH 300

The Thermia MBH is an extremely efficient water heater designed for compatibility with the Thermia heat pumps.



**Code number**

086U5406
086L1337
086U4859

**Heat pumps**

- Diplomat Optimum
- Diplomat
- Atec

**Application**

Water heaters



086U5406: MBH 200 RF
086L1337: MBH 200 H RF
086U4859: MBH 300 RF

The water heater's TWS technology* assures highly efficient heat transfer and better layering of the water than traditional technology. This means your water is heated quicker, less energy is consumed and the hot water lasts longer when using large amounts. The water heater is available in two sizes, 200 and 300 litres, and has a stainless steel tank.

The 200-H version has free space below the heater which can accommodate the underfloor heating centre, for instance.

** TWS = Tap Water Stratificator. Patented heating technique for water heaters, developed by Thermia.*

| MBH | 200 | 200 | 300 |
|---|---|---|---|
| Volume prim | 7 | 7 | 7 |
| Rated pressure, prim (bar) | 1,5 | 1,5 | 1,5 |
| Volume sec. (liters) | 180 | 180 | 286 |
| Rated pressure, sec. (bar) | 10 | 10 | 10 |
| Weight (kg) | 84,5 | 92 | 103 |
| Weight, filled (kg) | 268 | 272 | 386 |
| Height (mm) | 1528 (±10) | 1845 (±10) | 1528 (±10) |
| Dimension (mm) | 596 x 690 | 596 x 690 | 596 x 690 |

# Water heater MBH G3 200 / MBH G3 300

The Thermia MBH is an extremely efficient water heater designed for compatibility with the Thermia heat pumps.

**Code number**

086U9517
086L1340
086U9518

**Heat pumps**

Diplomat Optimum G2/G3

**Application**

Water heaters



086U9517: MBH G3 200 RF
086L1340: MBH G3 200 H RF
086U9518: MBH G3 300 RF

The water heater's TWS technology* assures highly efficient heat transfer and better layering of the water than traditional technology. This means your water is heated quicker, less energy is consumed and the hot water lasts longer when using large amounts. The water heater is available in two sizes, 200 and 300 litres, and has a stainless steel tank.

The 200-H version has free space below the heater which can accommodate the underfloor heating centre, for instance.

** TWS = Tap Water Stratificator. Patented heating technique for water heaters, developed by Thermia.*

| MBH | 200 | 200 H | 300 |
|---|---|---|---|
| Volume prim | 7 | 7 | 7 |
| Rated pressure, prim (bar) | 1,5 | 1,5 | 1,5 |
| Volume sec. (liters) | 180 | 180 | 286 |
| Rated pressure, sec. (bar) | 10 | 10 | 10 |
| Weight (kg) | 84,5 | 92 | 103 |
| Weight, filled (kg) | 268 | 272 | 386 |
| Height (mm) | 1528 (±10) | 1845 (±10) | 1528 (±10) |
| Dimension (mm) | 596 x 690 | 596 x 690 | 596 x 690 |

# Water heater MBH 200 / MBH 300 (Inverter)

The Thermia MBH is an extremely efficient water heater designed for compatibility with the Thermia heat pumps.



**Code number**

086L3684

086L3689

**Heat pumps**

Inverter

**Application**

Water heaters



MBH 200/300 Inverter design is equipped with PT1000 temperature sensors

086L3684: MBH 200 Inverter Design
086L3689: MBH 300 Inverter Design

The water heater's TWS technology* assures highly efficient heat transfer and better layering of the water than traditional technology. This means your water is heated quicker, less energy is consumed and the hot water lasts longer when using large amounts. The water heater is available in two sizes, 200 and 300 litres, and has a stainless steel tank.

The 200-H version has free space below the heater which can accommodate the underfloor heating centre, for instance.

** TWS = Tap Water Stratificator. Patented heating technique for water heaters, developed by Thermia.*

| MBH | 200 | 200 H | 300 |
|---|---|---|---|
| Volume prim | 7 | 7 | 7 |
| Rated pressure, prim (bar) | 1,5 | 1,5 | 1,5 |
| Volume sec. (liters) | 180 | 180 | 286 |
| Rated pressure, sec. (bar) | 10 | 10 | 10 |
| Weight (kg) | 84,5 | 92 | 103 |
| Weight, filled (kg) | 268 | 272 | 386 |
| Height (mm) | 1528 (±10) | 1845 (±10) | 1528 (±10) |
| Dimension (mm) | 596 x 690 | 596 x 690 | 596 x 690 |

# Water heater MBH Atria 200 RF

Thermia MBH is a dedicated water heater to Atria / Atria Optimum, besides domestic hot water it provides a defrosting function for the outdoor unit.

**Code number**

086U5210

**Heat pumps**

Atria Optimum

Atria

**Application**

Water heaters



MBH Atria is hot water tank with a double jacket. During defrosting the shunt valve in the heat pump opens so that warm brine from the double jacket tank is mixed with the cold brine circulating to the outdoor unit. The brine, heated to 15°C, melts the ice layer on the coil.

The water heater's TWS technology* assures highly efficient heat transfer and better layering of the water than traditional technology. This means your water is heated quicker, less energy is consumed and the hot water lasts longer when using large amounts. The water heater is available in 200 and has a stainless steel tank.

** TWS = Tap Water Stratificator. Patented heating technique for water heaters, developed by Thermia.*

| MBH | 200 |
|---|---|
| Volume prim | 7 |
| Rated pressure, prim | 1,5 bar |
| Volume sec. | 180 liters |
| Rated pressure, sec. | 10 bar |
| Weight | 84,5 kg |
| Weight, filled (kg) | 268 kg |
| Height | 1528 (±10) mm |
| Dimension | 596 x 690 mm |

# Volume tank WT-V 100

## WT-V a volume tank especially designed for heat pump operation



**Code number**

086L3070

**Heat pumps**

- Inverter
- Diplomat Optimum G2/G3
- Diplomat Optimum
- Diplomat
- Atec
- Atria Optimum
- Atria

**Application**

- Volume tanks

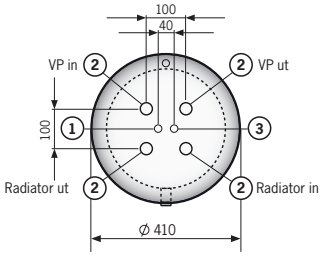


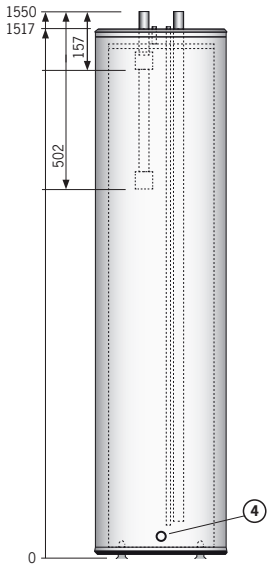


| WT-V | 100 |
|---|---|
| Volume hot water accumulator | 102 liters |
| Test pressure | 4,3 bar |
| Working pressure | 3 bar |
| Rated temperature | 100 °C |
| Weight | 44 kg |
| Height (mm) | 1550 mm |
| Diameter | ø 410 mm |
| Connections | 4 |

Thermia WT-V 100 is a 100-litre volume tank especially designed for heat pump operation. It can be used for volume boost, flow equalisation and reducing potential clicking in the heating system.

WT-V 100 consists of one insulated steel container with four connections at the top for various operating alternatives, which make it extra easy to adapt to various types of heating systems.




1. Expansion/Venting, 1/8" int.
2. Connections (4x), DN 25 int.
3. Sensor connection, ø9
4. Drainage, DN20 int.

# Volume tank WT-V 200

## WT-V a volume tank especially designed for heat pump operation

**Code number**

086L3071

**Heat pumps**

- Inverter
- Diplomat Optimum G2/G3
- Diplomat Optimum
- Diplomat
- Atec
- Atria Optimum
- Atria
- Solid
- Solid Eco
- Robust
- Robust Eco
- Mega

**Application**

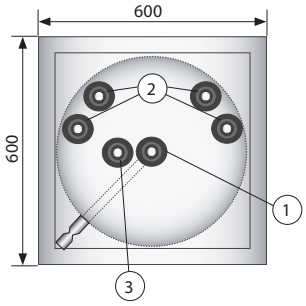
- Volume tanks

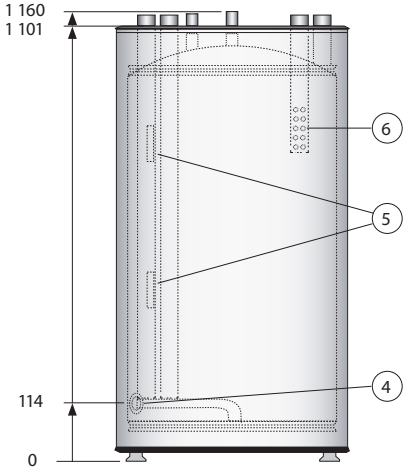


| WT-V | 200 |
|---|---|
| Volume hot water accumulator | 200 liters |
| Test pressure | 4,3 bar |
| Working pressure | 3 bar |
| Rated temperature | 100 °C |
| Weight | 60 kg |
| Height | 1160 mm |
| Width | 600 mm |
| Depth | 600 mm |
| Connections | 4 |

Thermia WT-V 200 is a 200-litre volume tank especially designed for heat pump operation. It can be used for volume boost, flow equalisation and reducing potential clicking in the heating system.

Thermia WT-V 200 consists of one insulated steel container with four connections at the top, for various operating alternatives, which makes it extra easy to adapt to various types of heating systems.




1. Expansion/Venting, DN25 int.
2. Connections (4x), DN32 int.
3. Temperature sensor conn. DN20 int.
4. Drainage, DN20 int.
5. Temperature sensor pipe (2x), ø9 int.
6. Diffuser

# Volume tank WT-V 300

## WT-V a volume tank especially designed for heat pump operation



**Code number**

086L3072

**Heat pumps**

- Inverter
- Diplomat Optimum G2/G3
- Diplomat Optimum
- Diplomat
- Atec
- Atria Optimum
- Atria
- Solid
- Solid Eco
- Robust
- Robust Eco
- Mega

**Application**

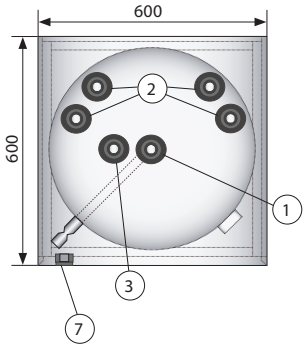
- Volume tanks

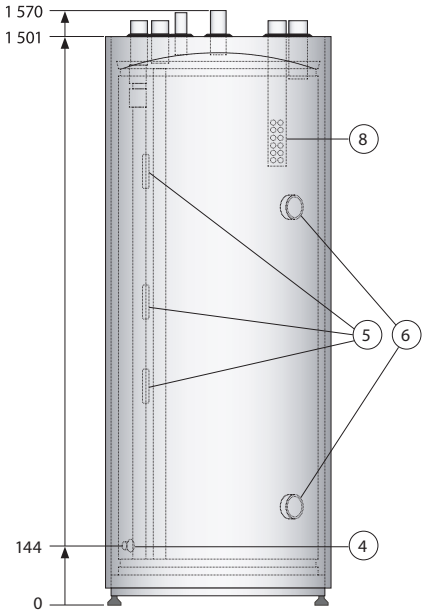


| WT-V | 300 |
|---|---|
| Volume hot water accumulator | 300 liters |
| Test pressure | 4,3 bar |
| Working pressure | 3 bar |
| Rated temperature | 100 °C |
| Weight | 72 kg |
| Height | 1570 mm |
| Width | 600 mm |
| Depth | 600 mm |
| Connections | 4 |

Thermia WT-V 300 is a 300-litre volume tank especially designed for heat pump operation. It can be used for volume boost, flow equalisation and reducing potential clicking in the heating system.

Thermia WT-V 300 consists of one insulated steel container with four connections at the top, for various operating alternatives, which makes it extra easy to adapt to various types of heating systems. It can also be used to connect the electric heating element.




1. Expansion/Venting, DN25 int.
2. Connections (4x), DN32 int.
3. Temperature sensor conn. DN20 int.
4. Drainage, DN20 int.
5. Temperature sensor pipe (3x), ø9 int.
6. Immersion heater conn. (2x) DN50 int.
7. Drainage valve, DN15
8. Diffuser

# Volume tank WT-V 500

## WT-V a volume tank especially designed for heat pump operation

**Code number**

086L3073

**Heat pumps**

- Inverter
- Diplomat Optimum G2/G3
- Diplomat Optimum
- Diplomat
- Atec
- Atria Optimum
- Atria
- Solid
- Solid Eco
- Robust
- Robust Eco
- Mega

**Application**

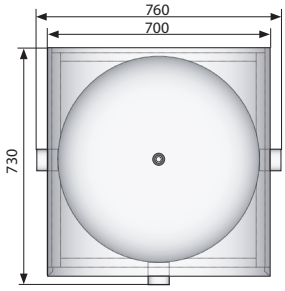
- Volume tanks

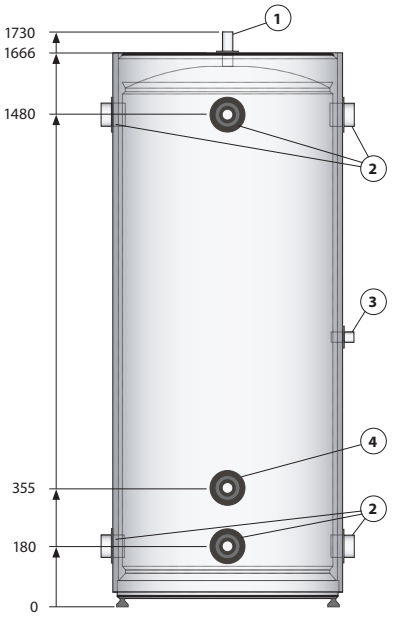


| WT-V | 500 |
|---|---|
| Volume hot water accumulator | 500 liters |
| Test pressure | 4,3 bar |
| Working pressure | 3 bar |
| Rated temperature | 100 °C |
| Weight | 96 kg |
| Height | 1730 mm |
| Width | 700 mm |
| Depth | 700 mm |
| Connections | 6 |

Thermia WT-V 500 is a 500-litre volume tank especially designed for heat pump operation. It can be used for volume boost, flow equalisation and reducing potential clicking in the heating system.

Thermia WT-V 500 consists of one insulated steel container with six connections, providing various installation options, which makes it extra easy to adapt to all types of heating systems. It can also be used to connect the electric heating element.




1. Expansion/Venting, DN25 ext.
2. Connections (6x), DN50 int.
3. Temperature sensor conn. DN20
4. Immersion heater conn. DN50 int

# Volume tank WT-V 1000

## WT-V a volume tank especially designed for heat pump operation



**Code number**

086L3074

**Heat pumps**

- Solid
- Solid Eco
- Robust
- Robust Eco
- Mega

**Application**

- Volume tanks

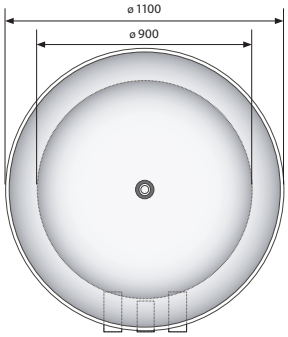


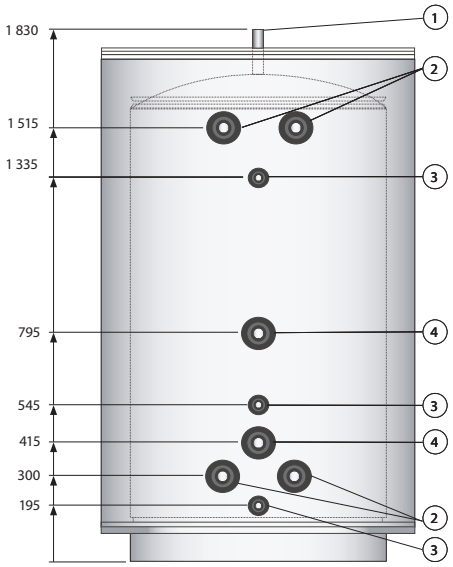
| WT-V | 1000 |
|---|---|
| Volume hot water accumulator | 1000 liters |
| Test pressure | 4,3 bar |
| Working pressure | 3 bar |
| Rated temperature | 100 °C |
| Weight | 113 kg |
| Height | 1830 mm |
| Diameter with insulation | ø 1100 mm |
| Diameter without insulation | ø 900 mm |
| Connections | 6 |

Thermia WT-V 1000 is a 1000-litre volume tank especially designed for heat pump operation. It can be used for volume boost, flow equalisation and reducing potential clicking in the heating system.

Thermia WT-V 1000 consists of one insulated steel container with six connections, with two sockets which can be used to connect the electric heating element. A number of connection options make it extremely easy to adapt to different kinds of heating systems.

By removing the insulation, the diameter can be reduced to 900 mm, which facilitates transportation through narrow passages.




1. Expansion/Venting, DN25 ext.
2. Connections (6x), DN50
3. Temperature sensor conn. DN20
4. Immersion heater conn. DN50 int.

# Water heater WT-C 500

## WT-C a coil water heater for effective heating of domestic hot water

**Code number**

086L3076

**Heat pumps**

- Inverter
- Diplomat Optimum G2/G3
- Diplomat Optimum
- Diplomat
- Atec
- Atria Optimum
- Atria
- Solid
- Solid Eco
- Robust
- Robust Eco
- Mega

**Application**

- Water heaters

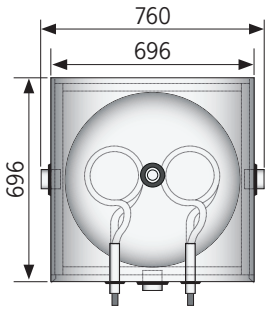


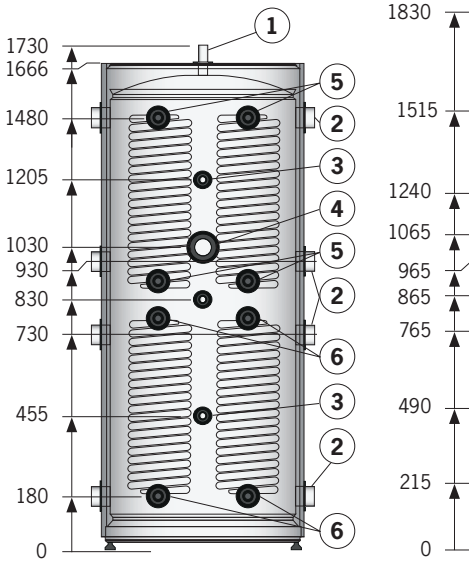
| WT-C | 500 |
|---|---|
| Corrosion protection, coil copper | |
| Volume hot water accumulator | 500 liters |
| Length, coil (m) | 4 x 12 |
| Working pressure | 3 bar |
| Test pressure | 4,3 bar |
| Max. pressure, coil | 10 bar |
| Rated temperature | 100 °C |
| Immersion heater, max. output* | 9 kW |
| Max. immersion heater length | 670 mm |
| Weight | 142 kg |
| Height | 1730 mm |
| Width | 696 mm |
| Depth | 696 mm |
| Required ceiling height for tilting: | min. 1840 mm |

** – optional*

Thermia WT-C is a coil water heater which provides effective heating of tap water. It is available in 500 litre sizes and can be cascade-connected where there is high demand for hot tap water. Tap water is heated using cam flange coils via direct exchange with the radiator water.

WT-C 500 contains four coils (each coil measures 12 metres in length). The WT-C 500 is able to supply water required for up to 10 apartments.




1. Expansion/Venting, DN25 ext.
2. Connections (8x), DN50 int.
3. Temperature sensor conn. DN20 int.
4. Immersion heater conn. DN50 int.
5. Hot water coil (2x12m), Ø22
6. Preheat coil/Hot water coil (2x12m), Ø22

# Water heater WT-C 750

## WT-C a coil water heater for effective heating of domestic hot water



**Code number**

086L3077

**Heat pumps**

- Solid
- Solid Eco
- Robust
- Robust Eco
- Mega

**Application**

- Water heaters

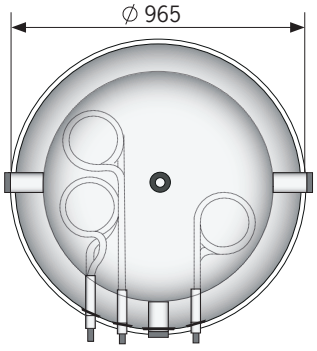


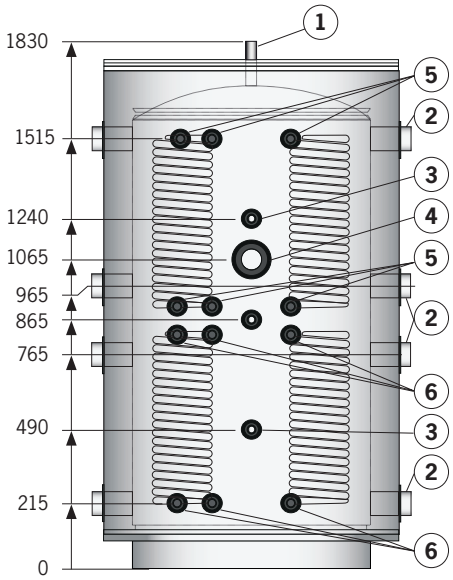
| WT-C | 750 |
|---|---|
| Corrosion protection, coil copper | |
| Volume hot water accumulator | 750 liters |
| Length, coil | 6 x 12 m |
| Working pressure | 3 bar |
| Test pressure | 4,3 bar |
| Max. pressure, coil | 10 bar |
| Rated temperature | 100 °C |
| Immersion heater, max. output* | 2x9 kW |
| Max. immersion heater length | 850 mm |
| Weight | 157 kg |
| Height | 1830 mm |
| Width | 965 mm |
| Depth | 965 mm |
| Required ceiling height for tilting: | min. 2085 mm |

** – optional*

Thermia WT-C is a coil water heater which provides effective heating of tap water. It is available in 750 litre sizes and can be cascade-connected where there is high demand for hot tap water. Tap water is heated using cam flange coils via direct exchange with the radiator water.

WT-C 750 contains six coils (each coil measures 12 metres in length). The WT-C 750 is able to supply water required for up to 15 apartments.




1. Expansion/Venting, DN25 ext.
2. Connections (8x), DN50 int.
3. Temperature sensor conn. DN20 int.
4. Immersion heater conn. DN50 int.
5. Hot water coil (3x12m), Ø22
6. Preheat coil/Hot water coil (3x12m), Ø22

# Water heater WT-S 500

WT-C is a stainless steel hot water heater for large hot water requirements

**Code number**

086L3079

**Heat pumps**

- Robust
- Robust Eco
- Mega

**Application**

- Water heaters



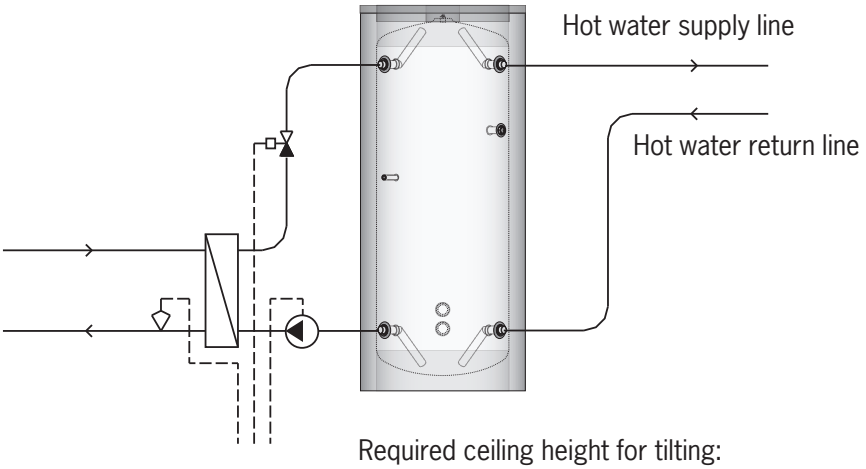
| WT-S | 500 |
|---|---|
| Volume hot water accumulator | 500 liters |
| Test pressure | 14,3 bar |
| Working pressure | 10 bar |
| Rated temperature | 95 °C |
| Weight | 63 kg |
| Height | 1850 |
| Dimension | Ø 734 mm |
| Insulation | EPS |
| Insulation | 50 mm |
| Heat loss DIN44532 | 3,09 kWh/24h |
| Immersion heater, max. output* | 9 kW |
| Max. immersion heater length | 640 mm |

** – optional*

Thermia WT-S is a single-coated, non-corrosive water heater which effectively heats tap water using a heat pump or other heat source. The water is heated using heat exchangers or an electric heating element.

The WT-S is the perfect solution for any heat pump and high hot water demand combination. The water heater's non-corrosive, tempered design makes it extra corrosion-proof, with no cathodic protection required in the tank.

Thermia WT-S has an outlet for an immersion heater and HWC (hot water circulation). It can be cascade-connected if greater volumes are required.




Required ceiling height for tilting:
min. 1960 mm

# Water heater WT-S 1000

WT-C is a stainless steel hot water heater for large hot water requirements



**Code number**

086L3080

**Heat pumps**

- Robust
- Robust Eco
- Mega

**Application**

- Water heaters



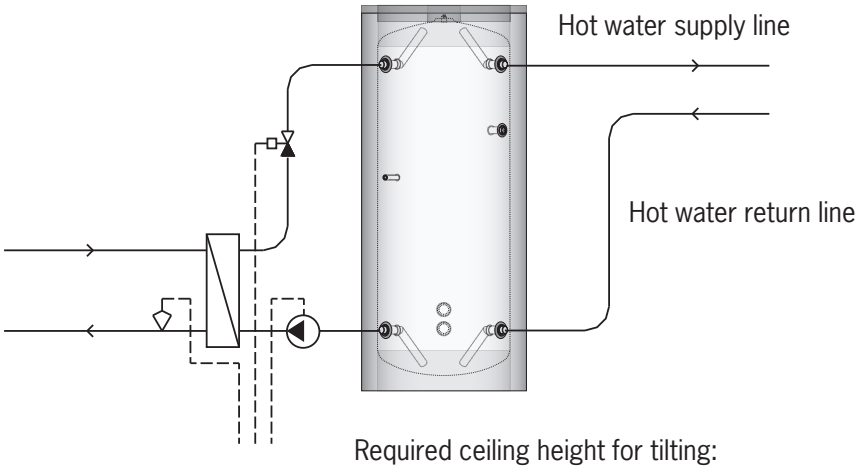
| WT-S | 1000 |
|---|---|
| Volume hot water accumulator | 1000 liters |
| Test pressure | 14,3 bar |
| Working pressure | 10 bar |
| Rated temperature | 95 °C |
| Weight | 95 kg |
| Height | 2295 mm |
| Dimension | Ø 990 mm |
| Insulation | Softfoam |
| Insulation | 100 mm |
| Heat loss DIN44532 | 3,84 kWh/24h |
| Immersion heater, max. output* | 2x9 kW |
| Max. immersion heater length | 850 mm |

** – optional*

Thermia WT-S is a single-coated, non-corrosive water heater which effectively heats tap water using a heat pump or other heat source. The water is heated using heat exchangers or an electric heating element.

The WT-S is the perfect solution for any heat pump and high hot water demand combination. The water heater's non-corrosive, tempered design makes it extra corrosion-proof, with no cathodic protection required in the tank.

Thermia WT-S has an outlet for an immersion heater and HWC (hot water circulation). It can be cascade-connected if greater volumes are required.




Required ceiling height for tilting:
min. 2500 mm

# Water heater WT-T 300

## WT-T is a stainless steel hot water heater with a TWS coil

**Code number**

086L3082

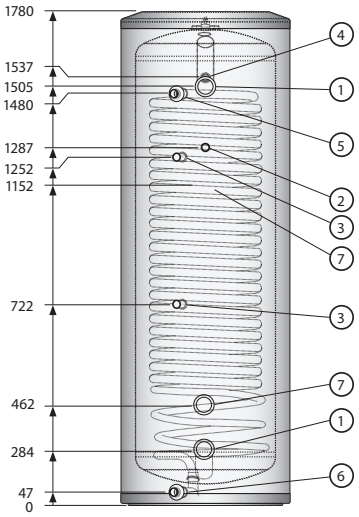
**Heat pumps**

- Inverter
- Diplomat Optimum G2/G3
- Diplomat Optimum
- Diplomat
- Atec
- Solid
- Solid Eco
- Robust
- Robust Eco
- Mega

**Application**

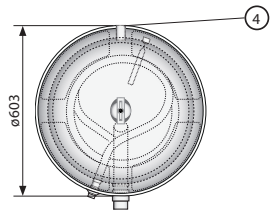
- Water heaters






| WT-T | 300 |
|---|---|
| Volume hot water accumulator | 300 liters |
| Test pressure | 14,3 bar |
| Working pressure | 10 bar |
| Max. pressure, coil | 10 bar |
| Rated temperature | 95 °C |
| Weight | 63 kg |
| Height | 1780 mm |
| Dimension | Ø 603 mm |
| Insulation | EPS |
| Insulation | 50 mm |
| Heat loss DIN44532 | 2,28 kWh/24h |
| Heating surface | 2,9 m² |
| Length, coil | 30 m |
| Hot water flow | 2/3 m³/h |
| Pressure loss | 132/276 mbar |
| Immersion heater, max. output* | 6 kW |
| Max. immersion heater length | 460 mm |

** – optional*




1. Connections (2x), DN50 int.
2. Circulation, DN25 int.
3. Temperature sensor conn. DN15 int.
4. Temperature sensor conn. DN15 int. (located on the “backside”)
5. Coil supply, DN25 int.
6. Coil return, DN25 int.
7. Immersion heater conn. DN50 int.

Thermia WT-T is a water heater with a TWS coil providing highly effective heating of hot tap water. The water heater’s non-corrosive, tempered design makes it extra corrosion-proof, with no cathodic protection required in the tank. The heater’s TWS technology* provides extremely effective heat transfer and enables better water stratification than traditional technology. Hot water production using hot gas converters means even greater benefits are reaped from the TWS technology.

Thermia WT-T has a socket for the electric heating element and hot water circulation. This is a useful closure device in building solutions as it ensures that the temperature of running hot tap water is correct. Thermia WT-T can be cascade-connected if demand is high.

Can be used with heat pumps with a hot gas circuit and with Atec 16 and 18

** TWS = Tap Water Stratificator. Patented heating technology for hot water production, developed by Thermia.*

# Water heater WT-T 500

## WT-T is a stainless steel hot water heater with a TWS coil



**Code number**

086L3083

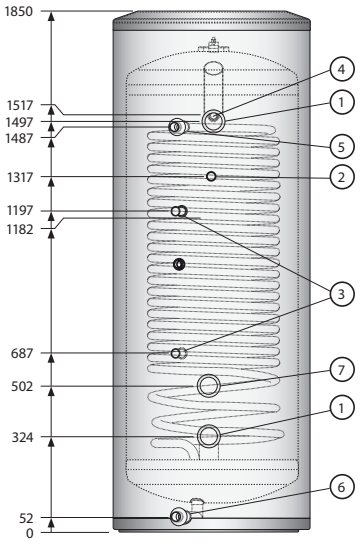
**Heat pumps**

- Inverter
- Diplomat Optimum G2/G3
- Diplomat Optimum
- Diplomat
- Atec
- Solid
- Solid Eco
- Robust
- Robust Eco
- Mega

**Application**

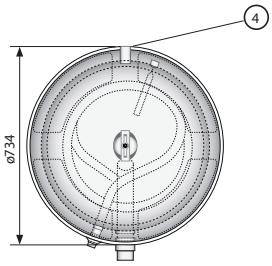
- Water heaters






| WT-T | 500 |
|---|---|
| Volume hot water accumulator | 500 liters |
| Test pressure | 14,3 bar |
| Working pressure | 10 bar |
| Max. pressure, coil | 10 bar |
| Rated temperature | 95 °C |
| Weight | 88 kg |
| Height | 1850 mm |
| Dimension | Ø 734 mm |
| Insulation | EPS |
| Insulation | 50 mm |
| Heat loss DIN44532 | 3,09 kWh/24h |
| Heating surface | 3,7 m² |
| Length, coil | 30 m |
| Hot water flow | 2/3 m³/h |
| Pressure loss | 165/342 mbar |
| Immersion heater, max. output* | 9 kW |
| Max. immersion heater length | 570 mm |

** – optional*




1. Connections (2x), DN50 int.
2. Circulation, DN25 int.
3. Temperature sensor conn. DN15 int.
4. Temperature sensor conn. DN15 int. (located on the “backside”)
5. Coil supply, DN25 int.
6. Coil return, DN25 int.
7. Immersion heater conn. DN50 int.

Thermia WT-T is a water heater with a TWS coil providing highly effective heating of hot tap water. The water heater’s non-corrosive, tempered design makes it extra corrosion-proof, with no cathodic protection required in the tank. The heater’s TWS technology* provides extremely effective heat transfer and enables better water stratification than traditional technology. Hot water production using hot gas converters means even greater benefits are reaped from the TWS technology.

Thermia WT-T has a socket for the electric heating element and hot water circulation. This is a useful closure device in building solutions as it ensures that the temperature of running hot tap water is correct. Thermia WT-T can be cascade-connected if demand is high.

Can be used with heat pumps with a hot gas circuit and with Atec 16 and 18

** TWS = Tap Water Stratificator. Patented heating technology for hot water production, developed by Thermia.*

# **C. Glossary** - order according to the chapters

| Product name | Product code | Thermia Product range | | | | | | | | | | | | | Page |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Inverter | Diplomat Optimum G3 | Diplomat Optimum G2 | Diplomat Optimum | Diplomat | Atec | Atria Optimum | Atria | Solid | Solid Eco | Robust | Robust Eco | Mega | |
| Room thermostat | 086U6003 | | ● | ● | ● | ● | | ● | ● | ● | ● | | | | 10 |
| Room thermostat | 086L3937 | ● | | | | | | | | | | | | ● | 11 |
| Expansion card | 086U6009 | | ● | ● | ● | ● | | ● | ● | ● | ● | | | | 12 |
| Relay kit for control of external brine / circulation pump | 086L0937 | | ● | ● | ● | ● | | | | | | | | | 13 |
| Thermia online - control and monitor your heat pump online | 086L1898 | | ● | ● | ● | ● | | ● | ● | ● | ● | | | | 14 |
| Link 2.1 | 086L2379 | | ● | ● | ● | ● | | ● | ● | ● | ● | | | | 15 |
| Link 2.1 & Online in one package | 086L2946 | | ● | ● | ● | ● | | ● | ● | ● | ● | | | | 16 |
| Hot water circulation kit | 086L2260 | ● | ● | ● | ● | ● | | | | | | | | | 17 |
| Room sensor Modbus | 086U9563 | | | | | | ● | | | | | | | | 20 |
| Expansion card | 086L0636 | | | | | | ● | | | | | | | | 21 |
| Twin kit Atec | 086L1370 | | | | | | ● | | | | | | | | 22 |
| Thermia online - control and monitor your heat pump online | 086L1899 | | | | | | ● | | | | | | | | 23 |
| Link 2.1 | 086L2380 | | | | | | ● | | | | | | | | 24 |
| Link 2.1 & Online in one package | 086L2947 | | | | | | ● | | | | | | | | 25 |
| The dew point sensor kit | 086L0635 | | | | | | ● | | | | | | | | 26 |
| Intermediate Heat exchanger | 086L0767 | | | | | | ● | | | | | | | | 27 |
| Intermediate Heat exchanger | 086L0768 | | | | | | ● | | | | | | | | 27 |
| Intermediate Heat exchanger | 086L0769 | | | | | | ● | | | | | | | | 27 |
| Fix-it Foot | 086L2030 | | | | | | ● | ● | ● | | | | | | 28 |
| Heated drip tray | 086L1042 | | | | | | | ● | ● | | | | | | 29 |
| Rubber Compensator | 086L2339 | ● | ● | ● | ● | ● | ● | ● | ● | | | | | | 32 |
| Rubber Compensator | 086L3260 | | | | | | | | | ● | ● | ● | ● | ● | 32 |
| Rubber Compensator | 086L3261 | | | | | | | | | ● | ● | ● | ● | ● | 32 |
| Flexible hose DN20 | 086U6015 | | ● | ● | ● | ● | ● | ● | | | | | | | 33 |
| Flexible hose DN25 | 086U6000 | ● | ● | ● | ● | ● | ● | ● | | | | | | | 34 |
| Flexible hose DN32 | 086U6001 | | | | | | | | | ● | ● | ● | ● | ● | 35 |
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# Air source heat pump

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# Ground source heat pump

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| Volume tank WT-V 100 | 086U3726 | ● | 106 |
| Volume tank WT-V 200 | 086L3071 | ● | 107 |
| Volume tank WT-V 300 | 086L3072 | ● | 108 |
| Volume tank WT-V 500 | 086L3073 | ● | 109 |
| Water heater WT-C 500 | 086L3076 | ● | 111 |
| Water heater WT-T 300 | 086L3082 | ● | 115 |
| Water heater WT-T 500 | 086L3083 | ● | 116 |



# Thermia Diplomat G3 / G2
# Ground source heat pump

| Product name | Product code | Thermia Product range: Diplomat Optimum G3 | Thermia Product range: Diplomat Optimum G2 | Page |
|---|---|---|---|---|
| Room thermostat | 086U6003 | ● | ● | 10 |
| Expansion card | 086U6009 | ● | ● | 12 |
| Relay kit for control of external brine / circulation pump | 086L0937 | ● | ● | 13 |
| Thermia online - control and monitor your heat pump online | 086L1898 | ● | ● | 14 |
| Link 2.1 | 086L2379 | ● | ● | 15 |
| Link 2.1 & Online in one package | 086L2946 | ● | ● | 16 |
| Hot water circulation kit | 086L2260 | ● | ● | 17 |
| Rubber Compensator | 086L2339 | ● | ● | 32 |
| Flexible hose DN20 | 086U6015 | ● | ● | 33 |
| Flexible hose DN25 | 086U6000 | ● | ● | 34 |
| Rubber hose DN25 | 086U6012 | ● | ● | 36 |
| Connector | 086U3724 | ● | ● | 44 |
| Connector | 086U7402 | ● | ● | 44 |
| Circulation Pump kit Wilo Stratos Pico 25/1-6 | 086L0455 | ● | ● | 47 |
| Circulation Pump kit Wilo Para 25/1-11 | 086L0627 | ● | ● | 48 |
| 3-way valve with actuator LK | 086U7999 | ● | ● | 56 |
| Passive and active cooling module | 086L3856 | ● | ● | 58 |
| Passive and active cooling module | 086L3857 | ● | ● | 58 |
| Swimming pool control kit | 086U3754 | ● | ● | 59 |
| Vent - exhaust air module | 086U5122 | ● | ● | 60 |
| Flow guard is UR 3K-025 230V | 086U2441 | ● | ● | 61 |
| Additional auxiliary heater heater 3 kW | 086L2340 | ● | ● | 68 |
| Magnetite filter for heating installations | 086L3231 | ● | ● | 69 |
| Magnetite filter for heating installations | 086L3232 | ● | ● | 69 |
| Stand | 086L2310 | ● | ● | 70 |
| Top box (18 liters) Expansion vessel kit | 086L2866 | ● | ● | 72 |
| Top box (18 liters) Expansion vessel kit | 086L2867 | ● | ● | 72 |
| External fuse kit | 086U9685 | ● | ● | 74 |
| Water heater MBH G3 200 / MBH G3 300 | 086L1340 | ● | ● | 103 |
| Water heater MBH G3 200 / MBH G3 300 | 086U9517 | ● | ● | 103 |
| Water heater MBH G3 200 / MBH G3 300 | 086U9518 | ● | ● | 103 |
| Volume tank WT-V 100 | 086U3726 | ● | ● | 106 |
| Volume tank WT-V 200 | 086L3071 | ● | ● | 107 |
| Volume tank WT-V 300 | 086L3072 | ● | ● | 108 |
| Volume tank WT-V 500 | 086L3073 | ● | ● | 109 |
| Water heater WT-C 500 | 086L3076 | ● | ● | 111 |
| Water heater WT-T 300 | 086L3082 | ● | ● | 115 |
| Water heater WT-T 500 | 086L3083 | ● | ● | 116 |



# Thermia Diplomat Optimum / Thermia Diplomat Ground source heat pump

| Product name | Product code | Thermia Product range: Diplomat Optimum | Thermia Product range: Diplomat | Page |
|---|---|---|---|---|
| Room thermostat | 086U6003 | ● | ● | 10 |
| Expansion card | 086U6009 | ● | ● | 12 |
| Relay kit for control of external brine / circulation pump | 086L0937 | ● | ● | 13 |
| Thermia online - control and monitor your heat pump online | 086L1898 | ● | ● | 14 |
| Link 2.1 | 086L2379 | ● | ● | 15 |
| Link 2.1 & Online in one package | 086L2946 | ● | ● | 16 |
| Hot water circulation kit | 086L2260 | ● | ● | 17 |
| Rubber Compensator | 086L2339 | ● | ● | 32 |
| Flexible hose DN20 | 086U6015 | ● | ● | 33 |
| Flexible hose DN25 | 086U6000 | ● | ● | 34 |
| Rubber hose DN25 | 086U6012 | ● | ● | 36 |
| Connector | 086U3724 | ● | ● | 44 |
| Connector | 086U7402 | ● | ● | 44 |
| Circulation Pump kit Wilo Stratos Pico 25/1-6 | 086L0455 | ● | ● | 47 |
| Circulation Pump kit Wilo Para 25/1-11 | 086L0627 | ● | ● | 48 |
| 3-way valve with actuator LK | 086U7999 | ● | ● | 56 |
| Passive and active cooling module | 086L3856 | ● | ● | 58 |
| Passive and active cooling module | 086L3857 | ● | ● | 58 |
| Swimming pool control kit | 086U3754 | ● | ● | 59 |
| Vent - exhaust air module | 086U5122 | ● | ● | 60 |
| Flow guard is UR 3K-025 230V | 086U2441 | ● | ● | 61 |
| Additional auxiliary heater heater 3 kW | 086L2340 | ● | ● | 68 |
| Magnetite filter for heating installations | 086L3231 | ● | ● | 69 |
| Magnetite filter for heating installations | 086L3232 | ● | ● | 69 |
| Stand | 086L2310 | ● | ● | 70 |
| Top box (18 liters) Expansion vessel kit | 086L2866 | ● | ● | 72 |
| Top box (18 liters) Expansion vessel kit | 086L2867 | ● | ● | 72 |
| External fuse kit | 086U9685 | ● | ● | 74 |
| Water heater MBH 200 / MBH 300 | 086L1337 | ● | ● | 102 |
| Water heater MBH 200 / MBH 300 | 086U4859 | ● | ● | 102 |
| Water heater MBH 200 / MBH 300 | 086U5406 | ● | ● | 102 |
| Volume tank WT-V 100 | 086U3726 | ● | ● | 106 |
| Volume tank WT-V 200 | 086L3071 | ● | ● | 107 |
| Volume tank WT-V 300 | 086L3072 | ● | ● | 108 |
| Volume tank WT-V 500 | 086L3073 | ● | ● | 109 |
| Water heater WT-C 500 | 086L3076 | ● | ● | 111 |
| Water heater WT-T 300 | 086L3082 | ● | ● | 115 |
| Water heater WT-T 500 | 086L3083 | ● | ● | 116 |



# Thermia Mega
# Ground source heat pump

| Product name | Product code | Thermia Product range: Mega | Page |
|---|---|---|---|
| Room thermostat | 086L3937 | ● | 11 |
| Rubber Compensator | 086L3260 | ● | 32 |
| Rubber Compensator | 086L3261 | ● | 32 |
| Flexible hose DN32 | 086U6001 | ● | 35 |
| Flexible hose DN40 | 086L3433 | ● | 38 |
| Rubber hose DN32 | 086L3435 | ● | 39 |
| Rubber hose DN40 | 086L3436 | ● | 40 |
| Rubber hose DN50 | 086L3437 | ● | 41 |
| Reversing valve kit DN40/DN50 | 086L3426 | ● | 53 |
| Reversing valve kit DN40/DN50 | 086L3427 | ● | 53 |
| Control valve (2-way) VVG 44 | 086U3730 | ● | 54 |
| Control valve (2-way) VVG 44 | 086U3731 | ● | 54 |
| Electronic Valve Actuator SQS 65.5 (35 Sec) | 086U4837 | ● | 55 |
| Magnetite filter for heating installations | 086L3894 | ● | 69 |
| Magnetite filter for heating installations | 086L3895 | ● | 69 |
| Magnetite filter for heating installations | 086L3896 | ● | 69 |
| Network cable 10 m | 086U4841 | ● | 75 |
| EM Modul - control cabinet | 086L3443 | ● | 88 |
| A circulation pump for the hot gas circuit | 086L3004 | ● | 90 |
| Strap on temperature sensor with 2 m cable | 086U3365 | ● | 92 |
| Strap on temperature sensor with connection box PT1000 | 086U3356 | ● | 93 |
| Submersible sensor PT1000 | 086U3364 | ● | 94 |
| Hot water sensor PT1000 | 086U3350 | ● | 95 |
| Router for Web Access | 086U4840 | ● | 98 |
| Volume tank WT-V 200 | 086L3071 | ● | 107 |
| Volume tank WT-V 300 | 086L3072 | ● | 108 |
| Volume tank WT-V 500 | 086L3073 | ● | 109 |
| Volume tank WT-V 1000 | 086L3074 | ● | 110 |
| Water heater WT-C 500 | 086L3076 | ● | 111 |
| Water heater WT-C 750 | 086L3077 | ● | 112 |
| Water heater WT-S 500 | 086L3079 | ● | 113 |
| Water heater WT-S 1000 | 086L3080 | ● | 114 |
| Water heater WT-T 300 | 086L3082 | ● | 115 |
| Water heater WT-T 500 | 086L3083 | ● | 116 |



# Thermia Robust Eco / Thermia Robust
# Ground source heat pump

| Product name | Product code | Thermia Product range: Robust Eco | Thermia Product range: Robust | Page |
|---|---|---|---|---|
| Rubber Compensator | 086L3260 | ● | ● | 32 |
| Rubber Compensator | 086L3261 | ● | ● | 32 |
| Flexible hose DN32 | 086U6001 | ● | ● | 35 |
| Flexible hose DN40 | 086L3433 | ● | ● | 38 |
| Rubber hose DN32 | 086L3435 | ● | ● | 39 |
| Rubber hose DN40 | 086L3436 | ● | ● | 40 |
| Rubber hose DN50 | 086L3437 | ● | ● | 41 |
| Control valve (2-way) VVG 44 | 086U3730 | ● | ● | 54 |
| Control valve (2-way) VVG 44 | 086U3731 | ● | ● | 54 |
| Electronic Valve Actuator SQS 65.5 (35 Sec) | 086U4837 | ● | ● | 55 |
| Flow guard is UR 32CTNR 230V | 086U3809 | ● | ● | 62 |
| An electronic flow guard | 086U3368 | ● | ● | 63 |
| An electronic flow guard | 086U6002 | ● | ● | 63 |
| Magnetite filter for heating installations | 086L3894 | ● | ● | 69 |
| Magnetite filter for heating installations | 086L3895 | ● | ● | 69 |
| Magnetite filter for heating installations | 086L3896 | ● | ● | 69 |
| Network cable 10 m | 086U4841 | ● | ● | 75 |
| Modular cable | 086U4227 | ● | ● | 76 |
| Modular cable | 086U4228 | ● | ● | 76 |
| Modular cable | 086U4229 | ● | ● | 76 |
| Modular cable | 086U6414 | ● | ● | 76 |
| Conductor joint | 086U4230 | ● | ● | 76 |
| Room sensor | 086U3354 | ● | ● | 82 |
| HPC EM - expansion module: Water Charge System function | 086U3395 | ● | ● | 83 |
| HPC EM - expansion module: Tap Water Control Function | 086U3395 | ● | ● | 84 |
| HPC EM - expansion module: Shunt Function | 086U3395 | ● | ● | 85 |
| HPC CM - Cooling Module | 086U3394 | ● | ● | 86 |
| Soft start - used to limit the current when the heat pump is started | 086L1516 | ● | ● | 89 |
| Soft start - used to limit the current when the heat pump is started | 086L3629 | ● | ● | 89 |
| A circulation pump for the hot gas circuit | 086L3004 | ● | ● | 90 |
| Switching valve for hot water | 086U2471 | ● | ● | 91 |
| Switching valve for hot water | 086U9938 | ● | ● | 91 |
| Strap on temperature sensor with 2 m cable | 086U3365 | ● | ● | 92 |
| Strap on temperature sensor with connection box PT1000 | 086U3356 | ● | ● | 93 |
| Submersible sensor PT1000 | 086U3364 | ● | ● | 94 |
| Hot water sensor PT1000 | 086U3350 | ● | ● | 95 |
| Dew Point Sensor | 086L3396 | ● | ● | 96 |
| Terminal block 24 volt circuit | 086U5121 | ● | ● | 97 |
| Router for Web Access | 086U4840 | ● | ● | 98 |
| Moxa converter (RS-232 to RS-422/485) | 086U9011 | ● | ● | 99 |
| Volume tank WT-V 200 | 086L3071 | ● | ● | 107 |
| Volume tank WT-V 300 | 086L3072 | ● | ● | 108 |
| Volume tank WT-V 500 | 086L3073 | ● | ● | 109 |
| Volume tank WT-V 1000 | 086L3074 | ● | ● | 110 |
| Water heater WT-C 500 | 086L3076 | ● | ● | 111 |
| Water heater WT-C 750 | 086L3077 | ● | ● | 112 |
| Water heater WT-S 500 | 086L3079 | ● | ● | 113 |
| Water heater WT-S 1000 | 086L3080 | ● | ● | 114 |
| Water heater WT-T 300 | 086L3082 | ● | ● | 115 |
| Water heater WT-T 500 | 086L3083 | ● | ● | 116 |



# Thermia Solid Eco / Thermia Solid
# Ground source heat pump

| Product name | Product code | Thermia Product range: Solid Eco | Thermia Product range: Solid | Page |
|---|---|---|---|---|
| Room thermostat | 086U6003 | ● | ● | 10 |
| Expansion card | 086U6009 | ● | ● | 12 |
| Thermia online - control and monitor your heat pump online | 086L1898 | ● | ● | 14 |
| Link 2.1 | 086L2379 | ● | ● | 15 |
| Link 2.1 & Online in one package | 086L2946 | ● | ● | 16 |
| Rubber Compensator | 086L3260 | ● | ● | 32 |
| Rubber Compensator | 086L3261 | ● | ● | 32 |
| Flexible hose DN32 | 086U6001 | ● | ● | 35 |
| Flexible hose DN40 | 086L3433 | ● | ● | 38 |
| Rubber hose DN32 | 086L3435 | ● | ● | 39 |
| Rubber hose DN40 | 086L3436 | ● | ● | 40 |
| Rubber hose DN50 | 086L3437 | ● | ● | 41 |
| Swimming pool control kit | 086U3754 | ● | ● | 59 |
| Flow guard is UR 32CTNR 230V | 086U3809 | ● | ● | 62 |
| Magnetite filter for heating installations | 086L3894 | ● | ● | 69 |
| Magnetite filter for heating installations | 086L3895 | ● | ● | 69 |
| Magnetite filter for heating installations | 086L3896 | ● | ● | 69 |
| Soft start - used to limit the current when the heat pump is started | 086L1516 | ● | ● | 89 |
| Soft start - used to limit the current when the heat pump is started | 086L3629 | ● | ● | 89 |
| A circulation pump for the hot gas circuit | 086L3004 | ● | ● | 90 |
| Switching valve for hot water | 086U2471 | ● | ● | 91 |
| Switching valve for hot water | 086U9938 | ● | ● | 91 |
| Volume tank WT-V 200 | 086L3071 | ● | ● | 107 |
| Volume tank WT-V 300 | 086L3072 | ● | ● | 108 |
| Volume tank WT-V 500 | 086L3073 | ● | ● | 109 |
| Volume tank WT-V 1000 | 086L3074 | ● | ● | 110 |
| Water heater WT-C 500 | 086L3076 | ● | ● | 111 |
| Water heater WT-C 750 | 086L3077 | ● | ● | 112 |
| Water heater WT-T 300 | 086L3082 | ● | ● | 115 |
| Water heater WT-T 500 | 086L3083 | ● | ● | 116 |

# Notes

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# Notes

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