



# CTC EcoPart 406-417

Compact heat pump for ground source, lake and geothermal heating



**CTC EcoPart is a compact heat pump that satisfies the heating needs of houses, properties or small industrial premises.**

**CTC EcoPart 400 is an ultra-efficient heat pump with the same performance as CTC EcoHeat 400, but without water heating and regulation.**

Thanks to a refrigerant circuit breakthrough and a highly efficient compressor, CTC EcoPart 400 can produce water at 65 °C. This provides you with more bathwater and warmer radiators. Ideal for properties with high primary flow temperatures.

CTC EcoPart 400 is flexible and is designed to be connected to new or existing systems. Ground source, geothermal or lake heat is used as the heat source. The brine system can easily be connected to the right, left, top or rear.

If there is a low ceiling and a normal heat pump is too tall, CTC EcoPart 406-412 are ideal for installation with the CTC EcoZenith i350 L indoor module, which has a height of 1,666 mm. The combined function of the products results in a complete heat pump with hot water and regulation. If your hot water requirements are greater than most, you can connect CTC EcoPart 400 to the CTC EcoZenith i550 Pro multi-tank. It can hold more than 600 litres of 40 °C hot water, enough for 15 shower-loving teenagers.

If you would like to connect CTC EcoPart 400 to your existing system, just add the CTC EcoLogic Pro/Family control module. For particularly large energy requirements, up to ten heat pumps can be run together.

All CTC heat pumps and boilers are designed, developed and manufactured in our factory in Ljungby. This gives us total control of all stages of the production process – from manufacturing to delivery of the finished product.

## Benefits

- For houses and buildings
- 65 °C primary flow temperature
- Available in six sizes: 6, 8, 10, 12, 14 and 17 kW
- Solution for basements with low ceiling heights
- Quiet scroll compressor
- Soft-start function
- Savings of up to 85 %
- Flexible connection



Find a CTC distributor in your country  
[www.ctc-heating.com](http://www.ctc-heating.com)

## Compatible control units for CTC EcoPart 406-417 – refer to the respective product's data sheet for more detailed information



### CTC EcoZenith i350 L/H\*

Indoor module with ultra-efficient water heating. Extremely well insulated with heat exchanger, factory-fitted charge pump and installation kit.

**Low:** 1,666 mm top connection

**High:** 1,924 mm bottom connection

### CTC EcoZenith i250 L/H\*

Indoor module with EnergyFlex. Flexible system tank with heat pump regulation and two hot water coils (charge pump included).

**Low:** 1,654 mm top connection

**High:** 1,904 mm top connection

\*Only for CTC EcoPart 406-412

### CTC EcoLogic Pro/Family

EnergyFlex heating system control. A unique control system that monitors and controls CTC's heat pumps, solar panels, external additional heat sources, additional tanks, pools, passive cooling, etc.

The CTC EcoLogic Pro/Family automatically handles the connection/disconnection of the existing boiler and prioritises hot water production or heating.

**Pro:** Able to control ten CTC heat pumps in four heating systems.

**Family:** Can control two CTC heat pumps in two heating systems.



### CTC EcoZenith i550 Pro

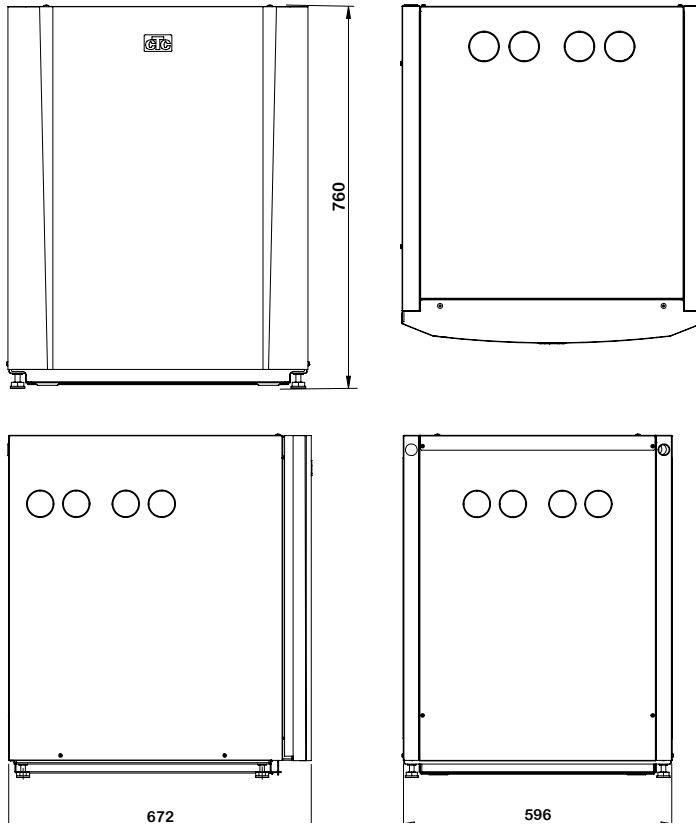
Intelligent multi-tank with EnergyFlex. All-in-one tank able to control three heat pumps in three different heating systems, with integrated solar control and two hot water coils.

CTC EcoZenith i550 Pro has a hot water capacity of more than 600 litres, but is only 1,700 mm tall, which means it can be installed in rooms with low ceiling heights.

## Accessories

		CTC no.:
<b>CTC Basic Control</b>	Digital thermostat control. Used with tanks or when replacing older CTC EcoPart heat pumps	587893301
<b>CTC Basic Display 1 m</b>	Digital display. Used for servicing and naming of heat pumps	586043401
<b>CTC Basic Display 2.5 m</b>	Digital display. Used for servicing and naming of heat pumps	586043402
<b>Communication cable 10 m</b>	For when the control unit and heat pump are far apart	586041401
<b>CTC Charge pump 25/7-130</b>	Suitable for CTC EcoPart 406-408	586396303
<b>CTC Charge pump 25/7.5-130</b>	Suitable for CTC EcoPart 410-412	586396302
<b>CTC Charge pump 25/8.5-130</b>	Suitable for CTC EcoPart 414-417 (factory-fitted in EcoPart 414-417 LEP)	586396301
<b>Safety pressure switch</b>	Provides a warning in the event of low brine pressure	585991301R
<b>CTC Converter 2.0</b>	Enables CTC EcoPart to be combined with CTC products in model version 3	585821303

## Dimensions diagram



**Included in the delivery:**  
Heat pump and manual.

### Packaging includes:

Communication cable (5 m), filler manifold, safety valve, brine vessel (only 406-412), factory-fitted brine pump on all models. CTC EcoPart 414/417 LEP also has a factory-fitted charge pump.

### Compatible control units:

CTC EcoLogic Pro/Family, CTC Basic Control

### Compatible indoor modules:

CTC EcoZenith i250\*/i350\*/i550 Pro

\*Only for CTC EcoPart 406-412

### Connection

Brine:

Ø 28 mm.

Heating medium pump:

Ø 22 mm (402-412)

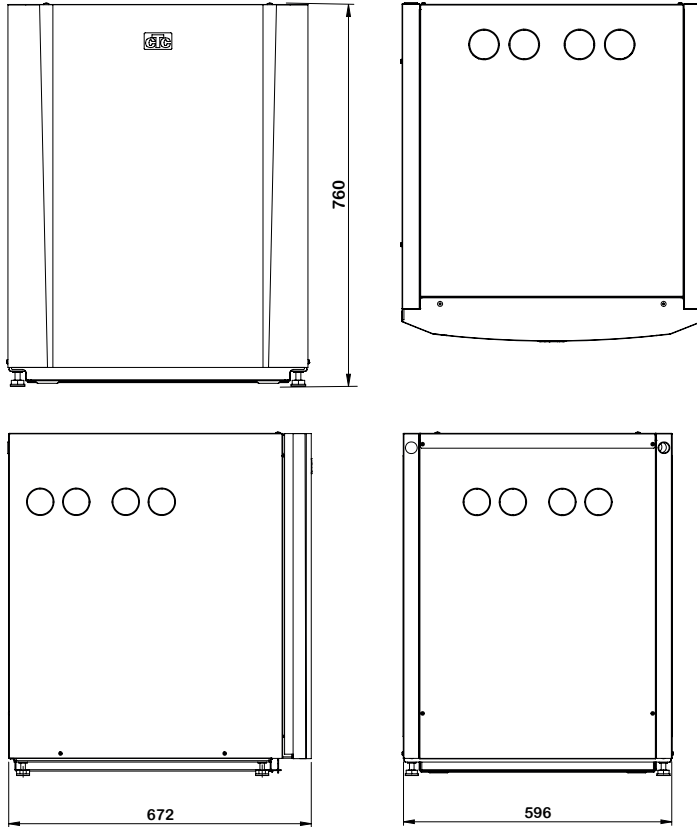
Ø 28 mm (414-417)

Technical data 3x400 V		406	408	410	412	414 / LEP	417 / LEP
CTC no.		585700001	585700002	585700003	585700004	585700005/ 585700035	585700006/ 585700036
Weight	kg	145	143	147	153	165 /168	167 /169
Dimensions (width x depth x height)	mm	600x673x760					
Electrical Data, connection		400V 3N~ 50Hz					
Energy efficiency class in Heating system @ 35/55 °C <sup>1)</sup>		A+++ / A++					
Energy efficiency class @ 35/55 °C		A++ / A++					
Rated current	A	5.8	6.5	8.1	9.6	12.2	13.9
Group fuse	A	10	10	10	16	16	16
Protection class	IP	IPX1					
Nominal heating output (P <sub>designh</sub> ) @ moderate climate 35/55 °C	kW	7/6	9/9	11/11	13/12	16/16	19/18
Specified output @ 0/35   0/55 (EN14511)	kW	5.9/5.2	8.2/7.6	10.0/9.3	11.8/11.0	14.5/13.4	16.2/15.9
COP @ 0/35   0/55 (EN14511)		4.57/2.76	4.58/2.99	4.60/2.98	4.60/2.96	4.54/2.95	4.36/3.07
SCOP (P <sub>designh</sub> ) cold climate @ 0/35   0/55 (EN14825)		4.8/3.5	4.8/3.7	4.8/3.7	4.8/3.7	4.6/3.7	4.8/3.7
SCOP (P <sub>designh</sub> ) moderate climate @ 0/35   0/55 (EN14825)		4.7/3.5	4.7/3.6	4.7/3.7	4.7/3.6	4.6/3.6	4.7/3.6
Refrigerant quantity (R407C, GWP1774)	kg	1.9	1.9	1.9	2.3	2.7	2.7
CO <sub>2</sub> equivalent	tonnes	3.370	3.370	3.370	4.080	4.790	4.790
Sound power L <sub>WA</sub> in accordance with EN 12102	dB(A)	43.0	42.5	48.5	50.3	53.0	55.5

<sup>1)</sup> The stated efficiency of the heating system takes into account the product's temperature regulator.

Energy labelling stickers and data sheets can be downloaded from [www.ctc-heating.com/Ecodesign](http://www.ctc-heating.com/Ecodesign)

## Dimensions diagram



### Included in the delivery:

Heat pump and manual.

### Packaging includes:

Communication cable (5 m), filler manifold, safety valve, brine vessel (only 406-412), factory-fitted brine pump on all models. CTC EcoPart 414/417 LEP also has a factory-fitted charge pump.

### Compatible control units:

CTC EcoLogic Pro/Family, CTC Basic Control

### Compatible indoor modules:

CTC EcoZenith i250\*/i350\*/i550 Pro

\*Only for CTC EcoPart 406-412

### Connection

Brine: Ø 28 mm.

Heating medium pump: Ø 22 mm (402-412)

Heating medium pump: Ø 28 mm (414-417)

Technical data 1x230 V		406	408	410	412	414
CTC no.		585700011	585700012	585700013	585700014	585700015
Weight	kg	145	143	147	153	165
Dimensions (width x depth x height)	mm	600 x 673 x 760				
Electrical Data, connection		230V 1N ~ 50 Hz				
Energy efficiency class – Heating system @ 35/55 °C <sup>1)</sup>		A+++ / A++				
Energy efficiency class @ 35/55 °C		A++ / A++				
Rated current	A	14.0	19.5	21.6	27.1	33.2
Protection class	IP	IPX1				
Nominal heating output ( $P_{designH}$ ) @ moderate climate 35/55 °C	kW	7/6	9/9	11/11	13/12	16/16
Specified output @ 0/35   0/55 (EN14511)	kW	5.9/5.2	8.2/7.6	10.0/9.3	11.8/11.0	14.5/13.4
COP @ 0/35   0/55 (EN14511)		4.57/2.76	4.58/2.99	4.60/2.98	4.60/2.96	4.54/2.95
SCOP ( $P_{designH}$ ) cold climate @ 0/35   0/55 (EN14825)		4.8/3.5	4.8/3.7	4.8/3.7	4.8/3.7	4.6/3.7
SCOP ( $P_{designH}$ ) moderate climate @ 0/35   0/55 (EN14825)		4.7/3.5	4.7/3.6	4.7/3.7	4.7/3.6	4.6/3.6
Refrigerant quantity (R407C, GWP1774)	kg	1.9	1.9	1.9	2.3	2.7
CO <sub>2</sub> equivalent	tonnes	3.370	3.370	3.370	4.080	4.790
Sound power $L_{WA}$ in accordance with EN 12102	dB(A)	43.0	42.5	48.5	50.3	53.0

<sup>1)</sup> The stated efficiency of the heating system takes into account the product's temperature regulator.

Energy labelling stickers and data sheets can be downloaded from [www.ctc-heating.com/Ecodesign](http://www.ctc-heating.com/Ecodesign)