



CTC EcoPart 406-417

Compact heat pump for ground source, lake and geothermal heating



A series of ultra-efficient, compact 6-17 kW heat pumps able to meet the heating requirements of houses or small industrial premises.

CTC EcoPart is a compact heat pump with same level of performance as CTC EcoHeat, but without control and water heating. Innovative technology makes the heat pump highly efficient and provides savings of up to 80%. CTC EcoPart can produce 65 °C water. This provides you with more bathwater and warmer radiators. Ideal for properties with high primary flow temperatures.

CTC EcoPart is flexible and is designed to be connected to new or existing systems. Ground, bedrock and lakes are used as heat sources. The brine system can easily be connected to the right, left, top or rear of the heat pump.

If your ceiling height is low and a normal heat pump is too tall, CTC EcoPart 406-412 and the CTC EcoZenith i250/i350 L indoor module are ideal. The combined function of the products results in a complete heat pump with hot water and control.

If you have extra hot water requirements, you can connect CTC EcoPart to the CTC EcoZenith i550 Pro multi-tank. It can supply more than 600 litres of 40 °C hot water, enough for 15 shower-loving teenagers.

If you would prefer to connect CTC EcoPart 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

- Ultra-efficient heat pump without control and water heating
- Up to 10 heat pumps can be operated simultaneously
- Available in six sizes: 6-17 kW
- Perfect for spaces with low ceiling heights
- Quiet scroll compressor – low noise levels
- Soft-start function
- Simple to integrate with existing installations
- Flexible connection – the brine system can easily be connected to the right, left, top or rear

**ENERGY
FLEX**

Find a CTC distributor in your country
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: 1,657 mm top connection

High: 1,905 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: 1,652 mm top connection

High: 1,886 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

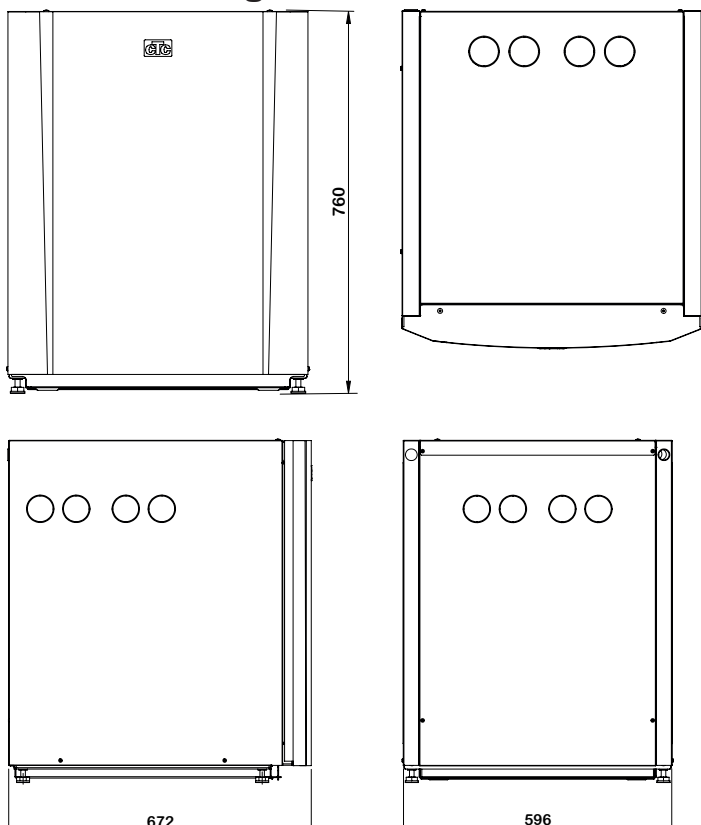
Intelligent multi-tank with EnergyFlex. All-in-one tank able to control three heat pumps in three different heating systems, with integrated solar control and two hot water coils.

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.:
CTC Basic Control	Digital thermostat control. Used with tanks or when replacing older CTC EcoPart heat pumps	587893301
CTC Basic Display 1 m	Digital display. Used for servicing and naming of heat pumps	586043401
CTC Basic Display 2.5 m	Digital display. Used for servicing and naming of heat pumps	586043402
Communication cable 10 m	For when the control unit and heat pump are far apart (more than 5m)	586041401
CTC Charge pump 25/70-130	Suitable for CTC EcoPart 406-408	587477303
CTC Charge pump 25/75-130	Suitable for CTC EcoPart 410-412	587477302
CTC Charge pump 25/85-130	Suitable for CTC EcoPart 414-417 (factory-fitted in LEP)	587477301
Safety pressure switch	Provides a warning in the event of low brine pressure	585991301R
CTC Converter 2.0	Enables CTC EcoPart to be combined with V3 control unit	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 (406-412)

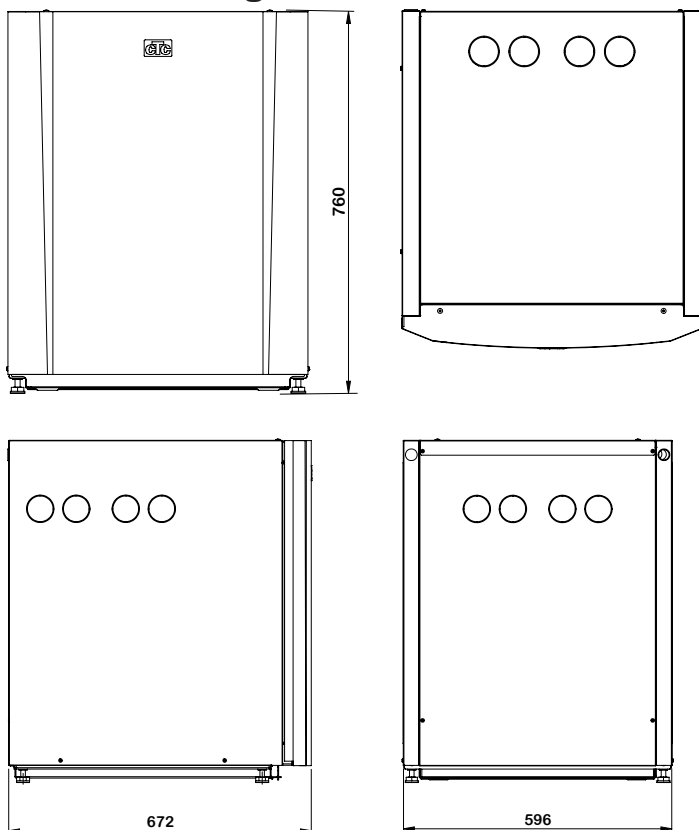
Ø 28 mm (414-417)

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 ¹⁾		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
Ingress Protection (IP)		IP X1					
Nominal heating output (P _{designh}) @ 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 _{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	4.8/3.7
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	4.7/3.6
Refrigerant quantity (R407C, GWP1774)	kg	1.9	1.9	1.9	2.3	2.7	2.7
CO ₂ equivalent	tonnes	3.370	3.370	3.370	4.080	4.790	4.790
Sound power L _{WA} in accordance with EN 12102	dB(A)	43.0	42.5	48.5	50.3	53.0	55.5

¹⁾ The stated efficiency of the heating system applies together with the control unit CTC EcoLogic. Ecodesign data scale: A+++ to G

Energy labelling stickers and data sheets can be downloaded from 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.

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 (406-412)

Heating medium pump: Ø 28 mm (414)

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 ¹⁾		A+++ / A++				
Energy efficiency class @ 35/55 °C		A++ / A++				
Rated current	A	14.0	19.5	21.6	27.1	33.2
Ingress Protection (IP)		IP X1				
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 ₂ equivalent	tonnes	3.370	3.370	3.370	4.080	4.790
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