

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 i255/i360 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 i555 Pro multi-tank. It can supply more than 600 litres of 40 °C.

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



Find a CTC distributor in your country
www.ctc-heating.com

Compatible control units for CTC EcoPart 406-417

- refer to individual product sheets for more detailed information



CTC EcoLogic L/M

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.

CTC EcoLogic L/M automatically handles the connection/disconnection of the existing boiler, and prioritises hot water production or heating.

L: Able to control up to ten CTC heat pumps and four heating systems.

M: Able to control two CTC heat pumps in two heating systems.



CTC EcoLogic S EP

A simpler type of heat pump control for connecting a heat pump to an existing heating system.

CTC EcoVent i360F Only for CTC EcoPart 406-412

Indoor module with ultra-efficient hot water heating and integrated exhaust air ventilation.

Extremely well-insulated with heat exchanger. Factory-fitted charge pump and installation package.

A new concept for houses with exhaust air heating. A complete indoor module with heat pump control and integrated ventilation, which, when used in combination with an air-to-water heat pump, makes your property significantly more energy efficient, smarter, and quieter.



CTC EcoZenith i360 Only for CTC EcoPart 406-412

Indoor module with ultra-efficient water heating. Extremely well-insulated with heat exchanger. Factory-fitted charge pump and installation package.

Low: 1.67 m Top connection.

High: 1.92 m Bottom connection.



CTC EcoZenith i555 Pro

All-in-one tank with built-in intelligent control that can control all components in one or multiple heating circuits.

It is also able to control many different types of heat pumps and select which is to be used for optimal savings.

Only 1.70 m tall with DHW capacity of more than 600 litres.



CTC EcoZenith i255 Only for CTC EcoPart 406-412

Indoor module with EnergyFlex. Flexible system tank with heat pump control and two hot water coils, including installation kit and charge pump.

Low: 1.65 m Top connection.

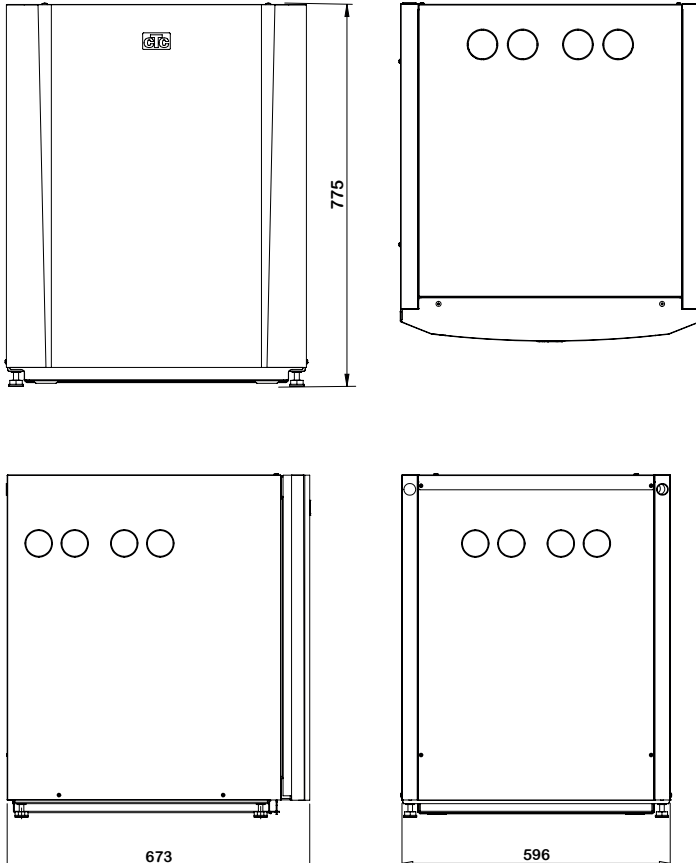
High: 1.90 m Top connection.



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 also has a factory fitted charge pump.

Compatible control units:

CTC EcoLogic, CTC Basic Control

Compatible indoor modules:

406-412: CTC EcoZenith i255/i360, CTC EcoVent i360F

406-417: CTC EcoZenith i555 Pro

Connection

Brine:

Ø 28 mm.

Heating medium pump:

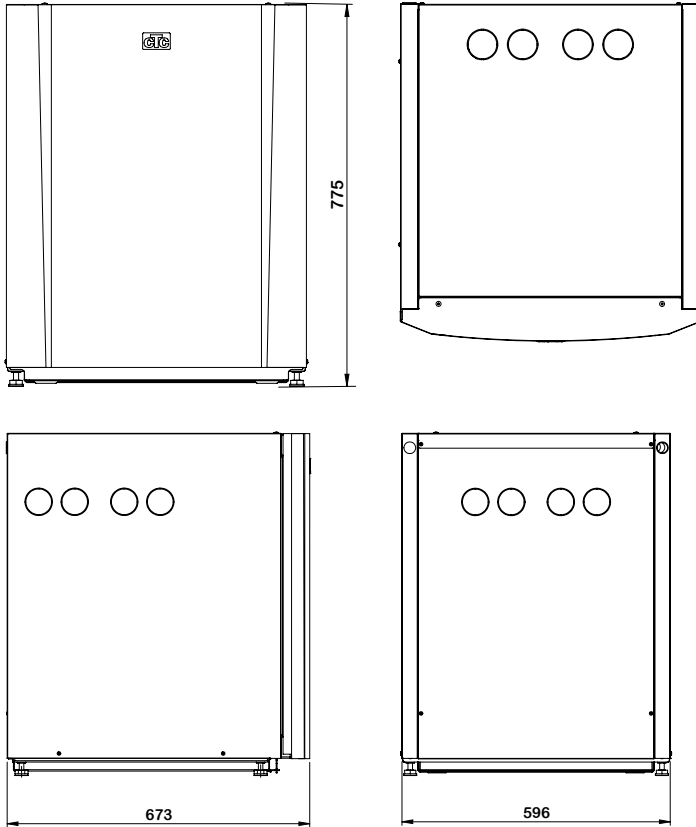
Ø 22 mm (406-412)

Ø 28 mm (414-417)

Technical data 3x400V		406	408	410	412	414	417
CTC no.		585700001	585700002	585700003	585700004	585700035	585700036
Weight	kg	148	145	151	165	171	172
Dimensions (depth x width x height)	mm	673 x 596 x 775					
Electrical Data, connection		400V 3N~ 50Hz					
Package efficiency class: W35/W55 with CTC EcoLogic (A+++ à G)		A+++/A++	A+++/A++	A+++/A++	A+++/A++	A+++/A++	A+++/A++
Energy efficiency class: W35/W55 (A+++ à D)		A+++/A++	A+++/A++	A+++/A++	A+++/A++	A+++/A++	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					
Specified output: W35 & B0/5 (EN14511)	kW	5.90/6.81	8.19/9.44	9.97/11.42	11.75/13.53	14.47/16.48	16.24/19.25
Input power: W35 & B0/5 (EN14511)	kW	1.29/1.30	1.79/1.88	2.17/2.20	2.55/2.65	3.19/3.21	3.72/3.83
COP: W35 & B0/5 (EN14511)		4.57/5.24	4.58/5.02	4.60/5.20	4.60/5.11	4.54/5.13	4.36/5.02
SCOP cold/moderate climate: W35 (EN14825, P _{designh})		4.8/4.7	4.8/4.7	4.8/4.7	4.8/4.8	4.6/4.6	4.8/4.7
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	4.789	4.789
Sound power L _{WA} B0/W35 (EN 12102)	dB(A)	43	46	49	50	53	56
Sound pressure L _{PA} B0/W35 (EN 12102)	dB(A)	38	41	44	45	48	51

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 i255*/i360*/i555 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 1x230V		406	408	410	412	414
CTC no.		585700011	585700012	585700013	585700014	585700015
Weight	kg	150	146	152	166	167
Dimensions (depth x width x height)	mm	673 x 596 x 775				
Electrical Data, connection		230V 1N~ 50 Hz				
Package efficiency class: W35/W55 with CTC EcoLogic (A+++ à G)		A+++/A++	A+++/A++	A+++/A++	A+++/A++	A+++/A++
Energy efficiency class: W35/W55 (A+++ à D)		A+++/A++	A+++/A++	A+++/A++	A+++/A++	A++/A++
Rated current	A	14.0	19.5	21.6	27.1	33.2
Group fuse	A	16	20	25	32	35
Ingress Protection (IP)		IP X1				
Specified output: W35 & B0/5 (EN14511)	kW	5.90/6.81	8.19/9.44	9.97/11.42	11.75/13.53	14.47/16.48
Input power: W35 & B0/5 (EN14511)	kW	1.29/1.30	1.79/1.88	2.17/2.20	2.55/2.65	3.19/3.21
COP: W35 & B0/5 (EN14511)		4.57/5.24	4.58/5.02	4.60/5.20	4.60/5.11	4.54/5.13
SCOP cold/moderate climate: W35 (EN14825, P _{designh})		4.8/4.7	4.8/4.7	4.8/4.7	4.8/4.8	4.6/4.6
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	4.789
Sound power L _{WA} B0/W35 (EN 12102)	dB(A)	43	46	49	50	53
Sound pressure L _{PA} B0/W35 (EN 12102)	dB(A)	38	41	44	45	48

Energy labelling stickers and data sheets can be downloaded from www.ctc-heating.com/Ecodesign