

CTC EcoHeat 400



Heat pump for geothermal, ground and water source heat

Our quiet and efficient heat pump with touchscreen and EnergyFlex



Using CTC Connect, the heat pump can be controlled easily from your smartphone.

Download the app for free from the App Store or Google Play.



A++



ENERGY FLEX

For more information in the range please visit:
www.ctc-heating.com

CTC EcoHeat 400 is one of Sweden's quietest and most efficient geothermal heat pumps with touchscreen

Control and set

The 4.3-inch colour touchscreen has clear symbols with easily understandable text that makes it easy to adjust the heat and hot water or to retrieve a variety of information about the operation.



New design

CTC EcoHeat 400 has a new white design. We have equipped the product with a wall cabinet that is available in three heights. A cabinet of 146 mm is standard. Wall cabinets can be combined for a neat and attractive installation.

Fits multiple systems

CTC EcoHeat 400 is suitable for different heating systems: one-and two-pipe systems for radiators and convectors, as well as for floor heating. With the shunt group 2 accessory, you can control two different radiator systems.

Effective and quiet

CTC EcoHeat 400 has top efficiency, thanks to a newly developed refrigerant circuit with electronic expansion valve and an efficient compressor. Compressor and refrigeration components are enclosed in a separate, sound-insulated unit. This provides exceptionally low noise and makes it one of the quietest geothermal heat pump we've ever developed.

Lots of fresh hot water

A new technical design means that we have increased the hot water capacity. With CTC EcoHeat 400, we guarantee legionella-free hot water. Our unique solution produces hot water as it is needed.

Cooling

Now you can also get cool in summer, supplement with CTC Comfort which uses the borehole's cool temperature for pleasant cool air.

Even temperature without noise

At CTC, we have chosen a proprietary technology that provides much more even heat. Radiators and floor heating are always at the right temperature thanks to the automatic shunt.

Since the temperature is constant, you avoid the scourge of expansion sounds that make annoying clicks in the floor and pipes. A difficult problem for many manufacturers

Freedom without extra charge.

Energyflex gives you the freedom to supplement with other energy sources. Thanks to two ingenious connections, you can supplement with solar heat, or have a water-jacketed stove provide warmth, or connect a pool so you can also enjoy the warmth in summer.

CTC has developed the industry

We develop all of our heat pumps in Ljungby, Sweden. The roots go back to 1923 when we began to heat Swedish homes. We were the first with heating boilers with built-in hot water heating and we were the first to introduce heat pumps for air/water. It is therefore no exaggeration to say that we have developed the industry.

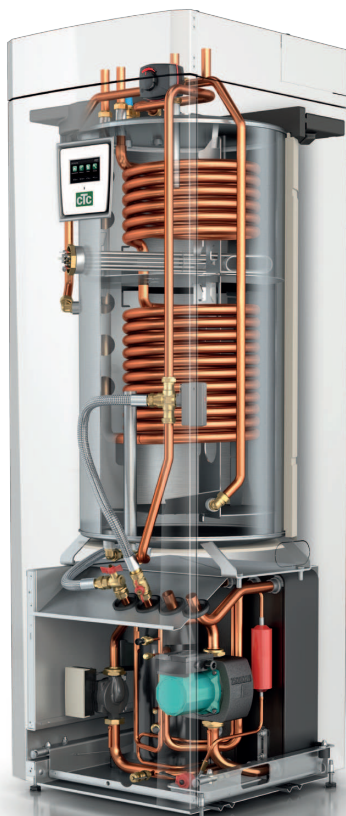
One of the quietest geothermal heat pump we've ever developed.

4.3-inch colour touchscreen.

Built-in immersion heater.

Speed-controlled low-energy circulation pump.

Newly developed refrigerant circuit with electronic expansion valve.



Mixing valve for even heat without noise.

New efficient insulation.

Cooling with a cool accessory.

Can control two different radiator systems.

Energyflex provides total flexibility to connect other heat sources.

Compressor and refrigeration components are enclosed in a separate, sound-insulated unit.

When you buy a CTC heat pump, most extras are included. But there are still some ingenious accessories that make life easier.



CTC Wireless room sensor

Place it anywhere in your house – do away with pulling cables. Set the desired temperature that you want the heat pump to work at. You can connect two room sensors for each product. It couldn't be simpler. CTC

Prod. no.: 585520301

Extra wireless room unit CTC Prod. no.: 585521401

CTC Internet

With CTC Internet and the CTC Connect app, you can monitor and control your system directly via your mobile phone. For instance, you can adjust the temperature or be alerted if the system shuts down for any reason. CTC Connect can be downloaded for free from the App Store or Google Play.

CTC Prod. no.: 587581301



Cooling CTC EcoComfort

Free cooling in the summer! When the outside temperature rises, it is the perfect complement to CTC EcoComfort. The equipment consists of a passive cooling unit that uses the borehole's cool temperature for pleasant cool air.

CTC Prod. no.: 585920001.

Flap check valve

184GO-25 INV CTC Prod. no. 586703303

184GO-32 INV CTC Prod. no. 586703304

Wall cabinet

Hide pipe fittings etc. with a neat wall cabinet in the same design as your CTC product. The cabinets are available in two heights, 480 and 580 mm respectively, and can be combined to fit most ceiling heights.

480 mm CTC Prod. no.: 586463302

580 mm CTC Prod. no.: 586463303



Other accessories

Raised base

168 mm, white, assembled under the product to add extra space.

CTC Prod. no.: 586500301

CTC SMS control

GSM modem that easily plugs into the heat pump control.

CTC Prod. no.: 585581301

Expansion tank G20 18 l

for installation above the tank incl. mounting kit.

CTC Prod. no.: 586750401

Installation kit

Contents: Expansion tank 18 l for installation above the tank incl. elbow connector, Wilo radiator pump, mixing valve.

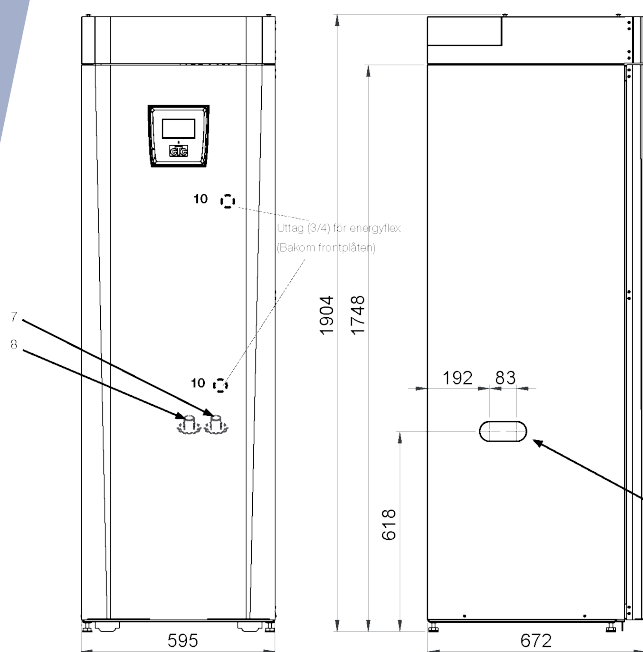
CTC Prod. no.: 585331401

Mixing valve group 2:

Contents: Mixing valve motor, mixing valve and sensors.

CTC Prod. no.: 586857001

Dimensional drawing



1. Bleed nipple 22
2. Connection waste pipe 3/4"
3. Cold water connection Ø22
4. Hot water Ø22
5. Radiator primary flow 22 compression
6. Radiator return Ø22
7. From ground loop Ø28 (right, left and back)
8. To ground loop Ø28 (right, left and back)
9. Lifting sleeve 3/4" BSP
10. Socket for external systems

Delivery includes

Heat pump CTC EcoHeat 400, cover 146mm, flexible connection hoses (brine), brine filling kit, brine level vessel
Kit bag: room sensor, primary flow sensor, return sensor, outdoor sensor, safety valve (9 bar) DHW, safety valve (3 bar) cold side, couplings and current sensors.

Technical data		406	408	410	412
Energy class heating 35/55°C (in package with control)		A++/A+	A++/A++	A++/A++	A++/A++
Energy class heating 35/55°C (without control)		A++/A+	A++/A++	A++/A++	A++/A+
Energy class hot water/tap profile		A/ L	A/ L	A/ L	A/ L
Nominal heat output (P _{designh}) 35/55°C	kW	7/ 6	10/ 9	12/ 10	14/ 13
Electrical data		400V 3N~ 50 Hz			
Rated power	kW	11.7	12.6	13.4	14.1
Max starting current	A	16.6	17.7	19.8	23.5
Immersion heater (adjustable in steps of 0.3 kW)	kW	0 - 9.0			
Max immersion heater output @ fuse size 16/ 20/ 25A	kW	6.1/ 9.0/ 9.0	5.2/ 8.4/ 9.0	4.6/ 7.5/ 9.0	3.8/ 6.9/ 9.0
IP class		IPX1			
Output power @ 5/35 5/55 ¹⁾	kW	6.81 / 6.08	9.44 / 8.65	11.42 / 10.58	13.53 / 12.57
Input power @ 5/35 5/55 ¹⁾	kW	1,30 / 1,91	1,88 / 2,62	2,19 / 3,23	2,65 / 3,75
COP @5/35 5/55 ¹⁾	kW	5.24 / 3.18	5.02 / 3.30	5.20 / 3.28	5.11 / 3.35
SCOP cold climate 35 / 55 °C (EN14825)		4,3 / 3,3	4,2 / 3,4	4,2 / 3,4	4,1 / 3,3
SCOP medium climate 35 / 55 °C (EN14825)		4,2 / 3,2	4,2 / 3,3	4,1 / 3,3	4,1 / 3,3
Max. operating current, compressor	A	4.5	5.2	6.8	8.2
Water volume. thermal store (V)	liter	223			
Max. operating pressure. thermal store (PS)	bar	2.5			
Water volume, hot water coil (V)	liter	5.7			
Max. operating pressure, hot water coil (PS)	bar	10			
Brine system min./max. pressure (PS)	bar	0.2/ 3.0			
Refrigerant quantity (R407C)	kg	1.9	1.9	1.9	2.3
CO ₂ -equivalent	ton	3,370	3,370	3,370	4,080
Interrupt value switch HP	MPa	3.1 (31 bar)			
Weight	kg	267	270	272	279
Measurements (width x depth x height)	mm	595 x 672 x 1904			
Minimum ceiling height	mm	1925			
Sound power according to EN12102	dB(A)	44.9	43.9	48.5	48.0

¹⁾ EN14511:2007, incl. heating medium pump and brine pump

No annual leakage control of the refrigerant is required

The product conforms to the EN directive:

LVD: 73/23/EEC and 93/68 EEC

EMC: 89/336/EEC and tested to EN255

CTC UK

Ten Acres, Berry Hill Industrial Estate

Droitwich Spa, Worcestershire, WR9 9BP

Tel: +44(0)1905 791610

Fax: +44(0)1905 795829

Web: www.ctc-uk.com



Enertech Group