

CTC EcoHeat 400

Conventional heat pumps for ground source heating.

6-12 kW, models 406, 408, 410 and 412.



- A more even heating provides higher comfort
- Freedom with EnergyFlex included
- 223 litres buffer volume
- Available in four sizes
- Smartgrid and ready for future challenges



CTC EcoHeat are conventional heat pumps that heat the house and hot water via a scroll compressor with start/stop function (on/off type). CTC EcoHeat 400 is available in 4 models (6 to 12 kW) and is a reliable and quiet ground source heat pump that can save you up to 80% of your current energy needs.

A more even heating provides higher comfort

For CTC EcoHeat 400, we have opted for proprietary technology that provides more even heating. CTC EcoHeat 400 is built with a water buffer that ensures good operating conditions for the compressor, irrespective of the heating system. This minimises the risk of noise problems in your radiator system.

Control and set

CTC EcoHeat 400 comes with a 4.3 inch colour touchscreen. But most important of all is that it has text options and clear symbols –

you can easily adjust the heating, hot water, and other functions, or retrieve a wealth of operating data.

Freedom with EnergyFlex included

You can add other energy sources now or later. Two connections are provided for attaching, e.g. solar heating, a waterjacketed stove, or why not a pool.

Available in four sizes

CTC EcoHeat is available in four sizes in four designs, all with guaranteed legionella-free DHW

Smartgrid and ready for future challenges

CTC EcoHeat 400 has internet connectivity as standard. You can control your product by using the myUplink app on your mobile phone. It is also equipped to connect to Alexa, Google Home and the future power grid (SmartGrid).

Technical data 400 V		406	406 inox
CTC-nr		586610001	586614001
Weight (packaged weight)	kg	278 (307) 267 (296)	
Dimensions (depth x width x height)	mm	673 x 596 x 1904	
Required ceiling height	mm	1925	
Specified output max: W35 & B0/5/10 (EN14511)	kW	5.90 / 6.81 / 7.21	
Input power max: W35 & B0/5/10 (EN14511)	kW	1.29 / 1.30 / 1.39	
Sound power L _{WA} B0/W35 (EN 12102)	dB(A)	43	
Sound pressure L _{PA} 1m B0/W35 (EN ISO 11203)	dB(A)	38	
Electrical Data, connection		400V 3N~ 50Hz	
Rated current (Recommended fuse)	А	19.7 (25)	
Max. immersion heater output at group fuse: 10/13/16/20/25 A	kW	2.1 / 2.1 / 6.9 / 9.0 / 9.0	
Ingress protection class (IP)		IP X1	
Output range immersion heater (min-max)	kW	0.3 - 9.0	
Water volume (V)	litres	223	
Refrigerant quantity (R407C, GWP 1774)	kg	1.9	
CO ₂ equivalent	tonnes	3.370	
DHW-performance V ₄₀ Normal (EN16147)	litres	<200	
SCOP cold climate: W35 (EN14825, Pdesignh)		4.3	
SCOP average climate: W35 (EN14825, Pdesignh)		4.3	
SCOP warm climate: W35 (EN14825, Pdesignh)		4.1	
Package efficiency class: W35/W55 (A ⁺⁺⁺ - G)		A ⁺⁺ / A ⁺⁺	
Energy efficiency class: W35/W55 (A*** - D)		A ⁺⁺ / A ⁺⁺	
Energy efficiency class DHW (A ⁺ - F) / charge profile (EN16147)		A/L	

 ${\tt Energy \, labels \, and \, data \, sheets \, can \, be \, downloaded \, from \, www.ctc-heating.com/Ecodesign}$



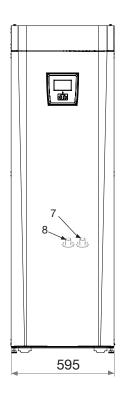


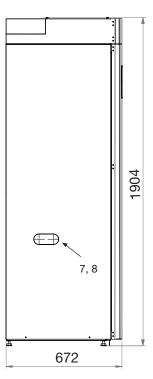


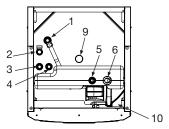




Dimensions diagram







- 1. Venting clamp ring 22
- 2. Waste pipe connection clamp ring 3/4"
- 3. Cold water connection Ø22
- 4. DHW Ø22
- 5. Radiator primary flow clamp ring \emptyset 22
- 6. Radiator return/expansion connection \varnothing 22
- 7. From ground/bedrock Ø28 (right, left and back)
- 8. To ground/bedrock Ø28 (right, left and back)
- 9. Lifting sleeve 3/4" BSP
- 10.Connection of external systems (pipe lead-through)

Delivery includes:

Heat pump with top cabinet and manual.

Packaging includes:

Room sensor, outdoor sensor, filler manifold, brine level tank, brine hoses, primary flow sensor, return sensor, current sensor, heating system safety valve 2.5 bar) and brine safety valve (3 bar).

408	408 inox	410	410 inox	412	412 inox
586610002	586614002	58661003	586614003	586610004	586614004
276 (305)	265 (294)	281 (310)	270 (299)	294 (323)	283 (312)
673 x 596 x 1904		673 x 596 x 1904		673 x 596 x 1904	
1925		1925		1925	
8.19 / 9.44 / 10.65		9.97 / 11.42 / 12.49		11.75 / 13.53 / 15.45	
1.79 / 1.88 / 1.93		2.17 / 2.20 / 2.29		2.55 / 2.65 / 2.78	
46		49		50	
41		44		45	
400V 3N~ 50Hz		400V 3N~ 50Hz		400V 3N~ 50Hz	
20.4 (25)		22 (25)		23.4 (25)	
0.9 / 2.1 / 6.9 / 7.8 / 9.0		0.9 / 2.1 / 2.1 / 7.8 / 9.0		NA / 0.9 / 2.1 / 6.9 / 9.0	
IP X1		IP X1		IP X1	
0.3 - 9.0		0.3 - 9.0		0.3 - 9.0	
223		223		223	
1.9		1.9		2.3	
3.370		3.370		4.080	
<200		<200		<200	
4.2		4.2		4.1	
4.2		4.1		4.1	
4.1		4.0		4.0	
A ⁺⁺ / A ⁺⁺		A ⁺⁺ / A ⁺⁺		A ⁺⁺ / A ⁺⁺	
A ⁺⁺ / A ⁺⁺ A ⁺		A ⁺⁺	/ A ⁺⁺	A ⁺⁺ / A ⁺⁺	
A/L		A/L		A/L	







Technical data 230 V	406 1N~	406 3~	
CTC-nr		586611001	586612001
Weight (packaged weight) *(inox -11 kg)	kg	278 (309)	
Dimensions (depth x width x height)	mm	673 x 596 x 1904	
Required ceiling height	mm	1925	
Specified output max: W35 & B0/5/10 (EN14511)	kW	5.90 / 6	5.81 / 7.21
Input power max: W35 & B0/5/10 (EN14511)	kW	1.29 / 1.30 / 1.39	
Sound power L _{WA} B0/W35 (EN 12102)	dB(A)	(A) 43	
Sound pressure L _{PA} 1m B0/W35 (EN ISO 11203)	dB(A)	38	
Electrical Data, connection		230V 1N~ 50Hz	230V 3~ 50Hz
Rated current (Recommended fuse)	А	52.2 (63)	33.9 (35)
Max. immersion heater output at group fuse: 20/25/32/35/50/63 A	kW	1.8 / 3.0 / 4.5 / 5.1 / 8.7 / 9.0	2.3 / 4.7 / 5.8 / 7.0 / 7.0 / 7.0
Ingress protection class (IP)		IP X1	
Output range immersion heater (min-max)	kW	0.3 - 9.0 1.2 - 7.05	
Water volume (V)	litres	223	
Refrigerant quantity (R407C, GWP 1774)	kg	1.9	
CO ₂ equivalent	tonnes	3.370	
DHW-performance V ₄₀ Normal (EN16147)	litres	<200	
SCOP cold climate: W35 (EN14825, Pdesignh)		4.3	
SCOP average climate: W35 (EN14825, Pdesignh)		4.3	
SCOP warm climate: W35 (EN14825, Pdesignh)		4.1	
Package efficiency class: W35/W55 (A*** - G)		A ⁺⁺ / A ⁺⁺	
Energy efficiency class: W35/W55 (A ⁺⁺⁺ - D)		A ⁺⁺ / A ⁺⁺	
Energy efficiency class DHW (A+ - F) / charge profile (EN16147)		A/L	

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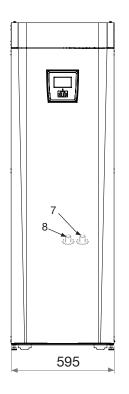


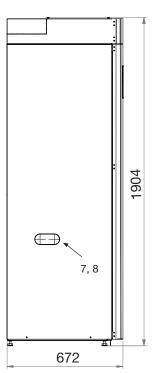


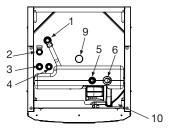




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- 10.Connection of external systems (pipe lead-through)

Delivery includes:

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Packaging includes:

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408 1N~	408 3~	410 1N~	410 3~	412 1N~	412 3~	
586611002	586612002	58661103	586612003	586611004	586612004	
276 ((306)	281 (311)		294 (324)		
673 x 59	673 x 596 x 1904		673 x 596 x 1904		673 x 596 x 1904	
1925		1925		1925		
8.19 / 9.44 / 10.65		9.97 / 11.42 / 12.49		11.75 / 13.53 / 15.45		
1.79 / 1.88 / 1.93		2.17 / 2.20 / 2.29		2.55 / 2.65 / 2.78		
46		49		50		
41		44		45		
230V 1N~ 50Hz	230V 3~ 50Hz	230V 1N~ 50Hz	230V 3~ 50Hz	230V 1N~ 50Hz	230V 3~ 50Hz	
57.6 (63)	39.4 (50)	59.7 (63)	41.5 (50)	62.3 (63)	47 (50)	
0.9 / 1.8 / 3.6 / 4.2 / 7.8 / 9.0	NA / 3.5 / 4.7 / 5.8 / 7.0 / 7.0	NA / 1.2 / 3.0 / 3.6 / 6.9 / 9.0	NA / 3.5 / 4.7 / 4.7 / 7.0 / 7.0	NA / 0.6 / 2.1 / 2.7 / 6.3 / 9.0	NA / NA / 3.5 / 3.5 / 7.0 / 7.0	
IP X1		IP X1		IP X1		
0.3 - 9.0	1.2 - 7.05	0.3 - 9.0	1.2 - 7.05	0.3 - 9.0	1.2 - 7.05	
223		223		223		
1.9		1.9		2.3		
3.370		3.370		4.080		
<200 <200		00	<200			
4.2 4.2		.2	4.1			
4.2		4.1		4.1		
4.1		4.0		4.0		
A ⁺⁺ / A ⁺⁺		A ⁺⁺ / A ⁺⁺		A ⁺⁺ / A ⁺⁺		
A ⁺⁺ / A ⁺⁺		A ⁺⁺ / A ⁺⁺		A ⁺⁺ / A ⁺⁺		
A/L		A/L		A/L		







Smart accessories

- supplement and simplify.

CTC Expansion EnergyFlex II	External control of solar/pool/DHW circulation, etc.
CTC Installation Kit EH400	For installing an additional heat source
CTC Extra Shunt group	Complete package for neat and easy installation of additional heating circuits
CTC Mixing Valve Group 2	For installing an additional heating circuit
CTC Brine Connection	Installation kit for heat pump exchange - from top connection to side connection
CTC EnergyFlex Kit 400	For flexible top connection of external systems
CTC EcoVent 20	Exhaust air unit - Adapted for placement above the heat pump
CTC EcoComfort	A passive cooling unit that uses the borehole's cool temperature
CTC Safety pressure switch	Provides a warning in the event of low brine pressure
CTC Current Sensor, 3-pack	For monitoring the building's main fuses
CTC Brine pump 25/125-180	12.5 m A-class PWM. Suitable for heat pump 10-16 kW
CTC Filler Manifold G32	Larger filler manifold if needed
CTC Housing cover 588 mm	Hide pipe connections, etc. with a stylish housing cover
CTC Housing cover 488 mm	Hide pipe connections, etc. with a stylish housing cover
CTC Raised base II	168 mm. For more space under the heat pump
CTC DHW button	Activates the extra hot water function, wire-bound
CTC SmartControl Gateway	Base unit able to control up to seven optional units
CTC SmartControl Repeater	Amplifies the signal between the base unit and the different accessories
CTC SmartControl Room Sensor	Solar powered and wireless with rechargeable battery (Base unit required)
CTC SmartControl Multi-button	Wireless 2 mode button (Base unit required)
CTC Solar Pump Station	Compact solar pump station for solar heating
CTC Start-kit EcoSol	Start kit for connecting CTC solar control with existing solar system