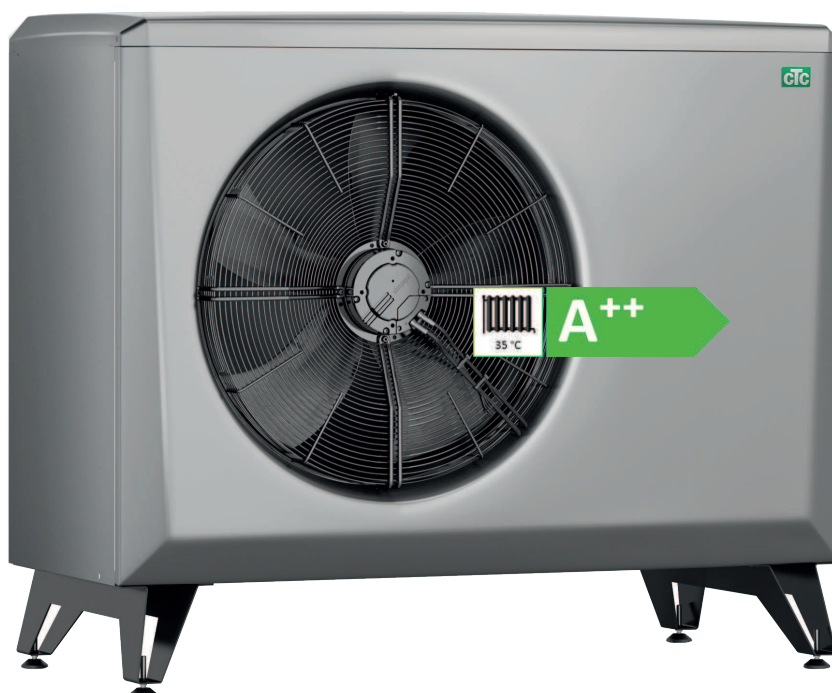# CTC EcoAir 406-420

Air-to-Water Heat Pumps 6-17kW

Sweden's best-selling air-to-water heat pump. CTC EcoAir 400 is one of the most efficient and quietest heat pumps we have developed!

35 °C A++

ENERGY FLEX

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

CTC EcoAir 400 is one of our quietest air-to-water heat pumps with a very high seasonal efficiency of 3.92 in SCOP

Efficient and quiet
CTC EcoAir 400 has been fitted with a new, more efficient and more reliable compressor, an electronic expansion valve and a newly developed fan design. This makes it one of the most efficient (SCOP 3.9) and quietest air-to-water heat pumps we have ever developed.

Discreet
Sweden's best-selling heat pump for air/water has a discreet design that allows it to fit into most environments.

The air is clear and full of energy
CTC EcoAir 400 is easy to install, takes up little space on the house wall and requires no holes or coils in the ground. Instead, CTC EcoAir 400 takes energy from the air and converts it into domestic hot water and heat for your radiators or floor heating.

Power when it is needed most
The CTC EcoAir 400 lowers your heating costs by up to 70 %, provides heating down to -22 °C and produces up to 65 °C hot water.

More power and a longer service life
The CTC EcoAir 400 has on-demand automatic defrost, which reduces the need for defrosting to a minimum. This produces more heat, more power and a longer life.

No igloo!
Under many heat pumps, condensation freezes to form an entire igloo of ice. Not anymore. CTC EcoAir 400 has a condensation tray with built-in heater as standard.

Low Ceiling Height? – No Problem!
If you have a low ceiling and a normal heat pump is too tall, all you need to do is install CTC EcoAir 406-410 with one of our lower indoor modules.
CTC EcoZenith i350L (1,666 mm) or
CTC EcoZenith i250L (1,654 mm).

The combined function of the products is a complete, controllable heat pump able to produce hot water.

Need a lot of water?
If you use a lot of water, you can connect CTC EcoAir 400 to the CTC EcoZenith i550 Pro multi-tank. It has a hot water capacity of more than 600 litres, which is enough for 15 shower-loving teenagers.

Connect to an existing installation
If you would like to connect CTC EcoAir 400 to your existing installation, just add the CTC EcoLogic PRO control module. A unique control system that monitors and controls the CTC's heat pumps, solar panels, additional heating, buffer tank, swimming pool, cooling, etc. for up to four different heating systems.
CTC EcoLogic prioritises hot water production or heating wholly according to need. If the energy requirement is particularly large, up to ten pumps can be run together.

One of our quietest air-to-water heat pumps

Provides heat down to an outdoor temperature of -22°C

Produces up to 65°C hot water.

On-demand defrosting for more heat and a longer service life

Electronic expansion valve for optimum operation

New efficient and reliable compressor

Condensation tray with built-in heater as standard.

Very high seasonal efficiency, SCOP 3.9

Energy labelling stickers can be downloaded from: www.ctc-heating.com/ecodesign

Control units compatible with CTC EcoAir 406-420 - refer to the individual product sheets for more detailed information

CTC EcoZenith i350L/H*
Indoor module with an ultra-efficient water heater. Exceptionally 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 i250L/H*
Indoor module with EnergyFlex. Flexible system tank with heat pump control and two hot water coils. Charge pump included.

Low: 1,654 mm Top Connection

High: 1,904 mm Top Connection

*Only for CTC EcoAir 406-410

CTC EcoLogic Pro/Family
EnergyFlex heating system control. A unique control system that monitors and controls CTC's heat pumps, solar panels, additional heating, buffer tank, pool, free cooling, etc.

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

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

Family: Able to control two CTC heat pumps across two heating systems.
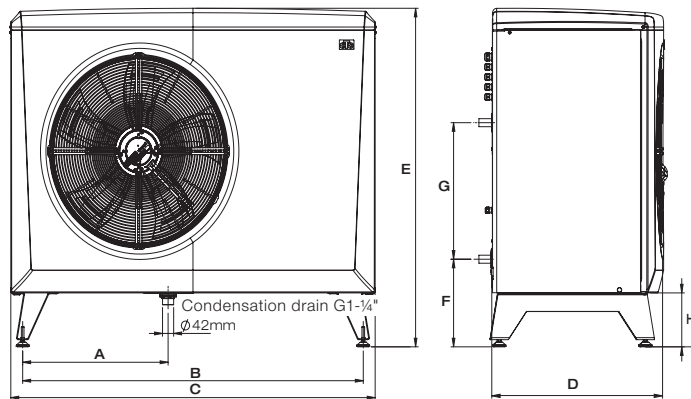
CTC EcoZenith i550 Pro
Intelligent multi-tank with EnergyFlex. An all-in-one tank able to control three heat pumps across three different heating systems, with integrated solar control and two hot water coils.

CTC EcoZenith i550 Pro has a hot water capacity of more than 600 litres, but stands at only 1,700 mm, which allows it to be placed in low-ceilinged rooms.

Accessories

CTC Installation Kit EA400	Antifreeze, flexible hoses and fittings for the heat pump.	586534401
CTC Basic Display 1m	Digital thermostat control Used during servicing and when assigning a name to the heat pump.	586043401
CTC Basic Display 2.5m	Digital thermostat control Used during servicing and when assigning a name to the heat pump.	586043402
Communication cable 10m	For when the control unit and heat pump are far apart.	586041401
CTC Charge Pump 25/7-130	Suitable for 6-8 kW heat pumps.	586041401
CTC Charge Pump 25/7.5-130	Suitable for 10-12 kW heat pumps.	586396303
CTC Charge Pump 25/8.5-130	Suitable for 14-20 kW heat pumps.	586396301
Heating cable 5m	Frost protection kit for condensation pipe incl. terminal block and 5 m cable.	586685401
Flow meter G25	For measuring and adjusting the water flow. (Insulated clamp CTC no.: 586683411).	586683401
CTC Converter	Enables CTC EcoAir 400 to be combined with CTC products in model version 3.	585821302

Dimensions Diagram

Condensation drain G1-¼"
⌀42mm

mm	406-408	410-420
A	486	551
B	1155	1285
C	1245	1375
D	530	610
E	1080	1180
F	301	301
G	476	476
H	188	188

Included in the delivery:
Heat pump, communication cable (Modbus) 15 m, connector for power supply and communication.

Technical Data CTC EcoAir		406	408	410	415	420
CTC number		585600001	585600002	585600003	585600004	585600005
Weight	kg	120	126	180	187	190
Dimensions (height x width x depth)	mm	1080 x 1245 x 545		1180 x 1375 x 610		
Electrical data		400V 3N~ 50Hz				
Energy efficiency class heating system @ 35/55 °C		A++ / A+	A++ / A+	A++ / A++	A++ / A+	A+ / A+
Energy efficiency class @ 35/55 °C		A++ / A+	A++ / A+	A++/ A+	A++ / A+	A+/ A+
Nominal heat output (Pdesignh) @ 35/55 °C		5 / 5	6 / 6	10 / 9	13 / 12	14 / 14
Protection class	IP	IP24				
Output [1]	kW	6.2/4.8/3.8	7.8/6.0/4.7	11.5/8.8/7.3	15.9/12.0/10.0	17.6/13.9/11.5
Input power [1]	kW	1.3/1.3/1.2	1.6/1.6/1.6	2.4/2.3/2.3	3.5/3.4/3.3	4.1/3.9/3.9
COP [1]		4.78/3.69/3.10	4.83/3.76/3.02	4.86/3.83/3.19	4.76/3.57/3.03	4.62/3.54/3.02
SCOP moderate climate 35/55°C (EN14825)		3.9/3.0	3.9/3.0	3.9/3.1	3.8/3.1	3.7/3.0
SCOP cold climate 35/55°C (EN14825)		3.5/2.7	3.4/2.7	3.5/2.8	3.3/2.8	3.3/2.8
Refrigerant quantity (R407C, GWP 1774)	kg	2.2	2.2	2.7	3.4	3.5
CO_2 equivalent [2] (* Hermetically sealed equipment)	tonnes	3.902	3.902	4.790	6.032 *	6.209 *
Airflow rate (silent mode)	m³/h	2500	2800	4100	5400 (4000)	6200 (5400)
Sound power L_{WA} [2] (EN12102 @ A7/W35) (silent mode)	dB(A)	56	58	58	64 (61)	66 (64)
Sound pressure L_{pA} 5 m [2] (EN12102 @ A7/W35) (silent mode)	dB(A)	34-37	36-39	36-39	42-45 (39-42)	44-47 (42-45)
Sound pressure L_{pA} 10 m [2] (EN12102 @ A7/W35) (silent mode)	dB(A)	28-31	30-33	30-33	36-39 (33-36)	39-42 (36-39)

Technical Data CTC EcoAir		406	408	410
CTC number		585600011	585600012	585600013
Weight	kg	120	126	180
Dimensions (height x width x depth)	mm	1080x1245x545		1180x1375x610
Electrical data		230V 1N~ 50Hz		
Energy efficiency class heating system @ 35/55 °C		A++ / A+	A++ / A+	A++ / A++
Energy efficiency class @ 35/55 °C		A++ / A+	A++ / A+	A++/ A+
Nominal heat output (Pdesignh) @ 35/55 °C		5/5	6/6	10/9
Protection class	IP	IP 24		
Output [1]	kW	6.2/4.7/3.7	7.7/6.0/4.8	11.6/8.9/7.1
Input power [1]	kW	1.3/1.3/1.3	1.7/1.6/1.6	2.5/2.4/2.3
COP [1]		4.59/3.53/2.87	4.64/3.62/2.97	4.86/3.65/3.03
SCOP moderate climate 35/55°C (EN14825)		3.85/2.95	3.92/3.03	3.92/3.09
SCOP cold climate 35/55°C (EN14825)		3.53/2.65	3.40/2.72	3.46/2.81
Refrigerant quantity (R407C, GWP 1774)	kg	2.2	2.2	2.7
CO_2 equivalent	tonnes	3.902	3.902	4.789
Airflow rate	m³/h	2500	2800	4100
Sound power L_{WA} [2] (EN12102 @ A7/W35)	dB(A)	56	58	58
Sound pressure L_{pA} 5 m [2] (EN12102 @ A7/W35)	dB(A)	34-37	36-39	36-39
Sound pressure L_{pA} 10 m [2] (EN12102 @ A7/W35)	dB(A)	28-31	30-33	30-33

The products are not covered by the periodic leak-check for refrigerant.
1) At a hot water temperature of 35 °C and an outdoor air temperature of +7/+2/-7.
2) The stated sound values should be considered an indication only, as the level is affected by the surroundings.
   The upper value corresponds to 100 % reflecting ground and walls (smooth concrete). Values in accordance with EN12102

CE

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Subject to alterations in design. (All models are not available in all countries.)

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