

ctc



CTC EcoAir 510M

Variable-speed air-to-water heat pump. 2-10 kW



The CTC EcoAir 510M is a variable-speed air-to-water heat pump with an output of 2-10 kW that automatically adapts to the output requirements of your home or property during the year. When high output is required, the output increases. When less output is required, the compressor shifts to lower output. This means that you will always achieve maximum savings.

The CTC EcoAir 510M is optimised to make the best possible use of eco-friendly energy in the air. It converts energy in the air into heating and hot water, and requires no boreholes or coils in the ground. The CTC EcoAir 510M has automatic defrosting, which results in more heat, more power and a longer service life. The CTC EcoAir 510M is, of course, fitted with a heated condensation water tray.

The CTC EcoAir 510M should always be installed with one of our indoor modules (we recommend the CTC EcoZenith i360) for control and hot water. To make heating and hot water adjustment easy, our indoor modules have colour touchscreens.

The CTC EcoZenith i360 indoor module is equipped with a highly efficient water heater, which produces over 300 litres of hot water.

If you would like to connect CTC EcoAir 510M to your existing installation, just add the CTC EcoLogic L/M control module. A unique control system that monitors and regulates the CTC's heat pumps, solar panels, additional heating, buffer tank, swimming pool, cooling, etc. for up to four different heating systems. If the energy requirement is particularly large, up to ten 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:

- Best Energy class A+++
- Produces up to 80% lower heating costs
- Heat pump with low noise level
- Very high seasonal coefficient of performance: 4.6 SCOP
- Provides heating down to -22 °C and produces water up to 65 °C
- Inverter-controlled compressor
- Built-in condensation water tray
- Can be controlled from a smartphone with CTC Connect+



ENERGY FLEX

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

Control units compatible with CTC EcoAir 510M - 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 EA

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

CTC EcoVent i360F

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

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

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.

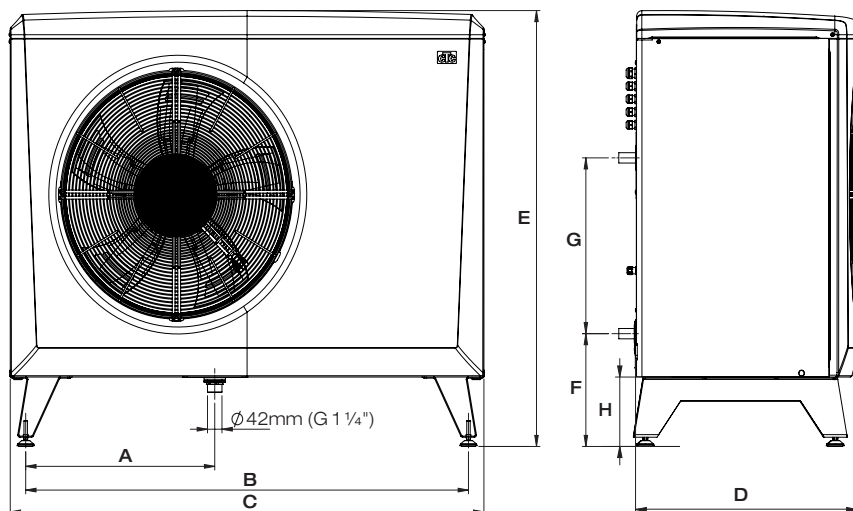
High: 1.90 m Top connection.

Accessories

		CTC no.:
CTC Installation Kit EcoAir	For frost-protected outdoor installation. Flexible hoses with insulation and couplings.	586534402
CTC Charge pump 25/7.5-130	Suitable for CTC EcoAir 510M	587477302
CTC Heating cable kit	Frost protection kit for condensate water drain with 5 m cable.	586685401
CTC Flow meter G25	For measuring and adjusting the water flow. (Insulated clamp: 586683411)	586683401
CTC Rain Cover EA Ø500	Rain protection for CTC EcoAir 510M	586997301
CTC Protection grid EA Ø500	Impact protection for the evaporator	588918301
CTC Protection cover EA Ø500	Impact protection for the connection pipes	588916301

Dimensions diagram

CTC EcoAir 1x230V	A	B	C	D	E	F	G	H
510M	486	1155	1245	530	1080	301	476	188



Included in the delivery:

Heat pump, 15 m communication cable (Modbus), connector for power supply and communication.

Recommended accessories:

Installation Kit EcoAir 586534402
Frost protection. Flexible hoses with insulation and connections for the heat pump.

Technical data 1x230V		510M
RSK no		6251398
CTC no		587601001
Weight (excl./incl. packaging)	kg	155 (136)
Dimensions (depth x width x height)	mm	545x1245x1080
Specified output max: W35 & A +12/+7/+2/-7/-15 (EN14511)	kW	- /11.00 /9.00 /6.50 /5.50
Input power max: W35 & A +12/+7/+2/-7/-15 (EN14511)	kW	- /3.20 /3.10 /3.00 /2.80
COP max: W35 & A +12/+7/+2/-7/-15 (EN14511)		- /3.44 /2.90 /2.17 /1.96
Sound power L_{WA} A7/W35 (EN 12102)	m^3/h	58
Sound pressure L_{pA} 5m A7/W35	dB(A)	39
Sound pressure L_{pA} 10m A7/W35	dB(A)	33
Electrical Data, connection		230 1N~50 Hz
Rated current	A	20.8
Ingress Protection class (IP)		IP 24
Air flow: max	m^3/h	3800
Refrigerant quantity (R410A, GWP 2088)		2.2
CO ₂ - equivalent	kg	4.594
SCOP moderate climate: W35 (EN14825, Pdesignh)		4.4
SCOP cold climate: W35 (EN14825, Pdesignh)		3.9
Package efficiency class: W35/55 (A+++ to G) ¹⁾		A+++/A++
Energy efficiency class: W35/55 (A+++ to D)		A++/A++

¹⁾ The reported efficiency in heating system applies together with CTC EcoLogic.

Energy labeling decals can be easily downloaded at www.ctc-heating.com/Ecodesign.