





Speed-controlled air-to-water heat pumps, models 610M-622M, 2.5-22 kW

CTC EcoAir 600M is a series of ultra-efficient, speed-controlled air-to-water heat pumps which automatically adapt to the heating needs of houses, properties or small industrial premises 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.

CTC EcoAir 600 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 does not require boreholes or coils in the ground. CTC EcoAir 600M has automatic defrosting, which results in more heat, more power and a longer service life. CTC EcoAir 600M is equipped with a condensation tray with a built-in heater as standard.

CTC EcoAir 600M should always be installed with one of our indoor or control modules for best results. We recommend CTC EcoZenith i360 for control and hot water. To make heating and hot water adjustment easy, all of 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 use a lot of water, you can connect CTC EcoAir 622M to the CTC EcoZenith i550 Pro all-in-one multi-tank. It has a hot water capacity of more than 600 litres.

If you wish to connect the CTC EcoAir 600M to your existing installation, complement with the CTC EcoLogic control module. A unique control system that monitors and controls CTC's heat pumps, additional heating, buffer tanks, pools, 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 control units are designed, developed and manufactured in our factory in Ljungby. This gives us total control of all stages of the manufacturing process.



- Best Energy class A⁺⁺⁺
- · Very low noise level
- Produces up to 80% lower heating costs.
- Highest seasonal coefficient of performance (SCOP): SCOP of 4.9
- Condensation water tray with built-in heating
- Provides heating in temperatures as low as -22 °C and produces hot water up to 65 °C
- Speed-controlled compressor
- Can be controlled from a smartphone with myUplink





Control units compatible with CTC EcoAir 610M-622M - refer to individual product sheets for more detailed information





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.



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 Only for CTC EcoAir 614M-622M

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

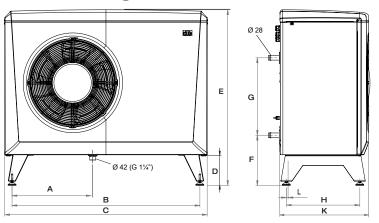
Indoor module with EnergyFlex. Flexible system tank with heat pump control and two hot water coils, including installation kit and charge pump.

Low: 1.65 m Top connection. **High:** 1.90 m Top connection.

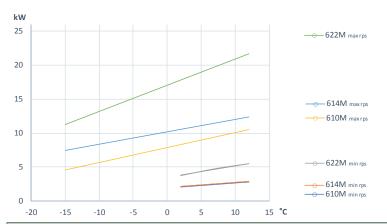


Accessories		CTC no.:
CTC Installation Kit EcoAir	For frost-protected outdoor installations. Flexible hoses with insulation and connections	586534402
CTC Charge Pump 25/7.5-130	7.5 m A-class PWM. Suitable for 10-12 kW heat pumps.	587477302
CTC Charge Pump 25/8.5-130	8.5 m A-class PWM. Suitable for 14-20 kW heat pumps.	587477301
CTC Heating Cable	Frost protection kit for condensate pipe with 5 m cable. (Terminal block only. 586394401)	586685401
CTC Flow sensor EA	Frost protection kit in case of flow problems	589995301
CTC Protective Grille EA Ø500	Vapour guard for CTC EcoAir 610M-614M	588918301
CTC Protective Grille EA Ø650	Vapour guard for CTC EcoAir 622M	588599301
CTC Protective Cover EA Ø500	Protection for connection pipes for CTC EcoAir 610M-614M	588916301
CTC Protective Cover EA Ø650	Protection for connection pipes for CTC EcoAir 622M	588917301

Dimensions diagram



610M/614M		622M		
Α	486	550		
В	1155	1285		
С	1245	1375		
D	188	188		
Е	1080	1180		
F	308	308		
G	476	476		
Н	451	551		
K	545	645		
L	10	33		



Delivery includes:

Heat pump with factory-fitted connectors for power supply and communication: Communication cable 15 m. Power cable 2 m.

Packaging includes:

Manual, condensate drain G1 $\frac{1}{4}$ " and filter ball valve: G1" (610M/614M)/ G1 $\frac{1}{4}$ " (622M)

Recommended accessories:

CTC Installation Kit EcoAir

Flexi-hoses with insulation and connectors for frost-protected installation.

CTC no.: 586534402

Technical data 3x400 V	610M	614M	622M	
CTC no.		588402001	588400001	588401001
Weight (packaged weight)	kg	174 (204)	174 (204)	192 (226)
Dimensions (depth x width x height)	mm	545 x 1245 x 1080		645 x 1375 x 1180
Output range (specified output: min-max)	kW	2.5 - 10	2.5 - 14	4.5 - 22
Specified output nominal: W35 & A +12/+7/+2/-7/-15 (EN14511)	kW	7.43 /6.42 /5.31 /4.11 /3.15	7.43 /6.42 /5.31 /4.11 /3.15	13.5 /10.3 /8.27 /7.29 /5.77
Input power nominal: W35 & A +12/+7/+2/-7/-15 (EN14511)	kW	1.33 /1.32 /1.31 /1.26 /1.21	1.33 /1.32 /1.31 /1.26 /1.21	2.49 /2.27 /2.19 /2.18 /2.07
COP nominal: W35 & A +12/+7/+2/-7/-15 (EN14511)		5.58 /4.85 /4.05 /3.27 /2.60	5.58 /4.85 /4.05 /3.27 /2.60	5.41 /4.53 /3.78 /3.34 /2.79
Sound power L _{WA} W35/A7 (EN 12102)	dB(A)	53	51	55
Sound pressure L _{PA} 5 m	dB(A)	34	32	36
Sound pressure L _{PA} 10 m	dB(A)	28	26	30
Electrical Data, connection		400V 3N~ 50Hz		
Rated current/ with speed regulation in control unit	А	7.1/ 6.6	10.2/ 9.4	16.9/ 15.5
Recommended fuse/ with speed regulation in control unit	А	10/ 10	13/ 10	20/ 16
Ingress protection class (IP)		IP X4		
Airflow nominal / max.	m³/h	2350/3129	2350/3129	4200/5457
Refrigerant quantity (R407C, fluorinated greenhouse gas GWP 1774)	kg	2.2	2.2	2.7
CO ₂ - equivalent	tonnes	3.903	3.903	4.790
SCOP cold climate: W35 (EN14825, Pdesignh)		4.08	3.85	4.26
SCOP average climate: W35 (EN14825, Pdesignh)		4.81	4.90	4.92
SCOP warm climate: W35 (EN14825, Pdesignh)		5.91	5.87	6.19
Package efficiency class: W35/55 (A ⁺⁺⁺ to G)		A ⁺⁺⁺ / A ⁺⁺	A+++ / A+++	A ⁺⁺⁺ / A ⁺⁺⁺
Energy efficiency class: W35/55 (A ⁺⁺⁺ to D)		A ⁺⁺⁺ / A ⁺⁺	A+++ / A+++	A+++ / A++

The reported data applies to use with the CTC EcoZenith i360 control unit.

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



