

Regulus UK

CTC



Heat Pumps



ground source
and air source models

Innovation with engineering excellence



www.Regulus.co.uk
hello@Regulus.co.uk
01282 841500

7 Year Warranty
Energy Saving Solutions
Wi-Fi Control

■ Approved Products



The Microgeneration Certification Scheme is a nationally recognised quality assurance scheme.

MCS is also an eligibility requirement for the Government's financial incentives, which include the Feed-in Tariff and the Renewable Heat Incentive.



CTC Heat Pumps have been awarded the CEN European Heat Pump KEYMARK

■ Warranty

Thanks to the high quality of all components and the reliability of Regulus CTC Heat Pumps, all parts and components have a 7 year warranty

■ Regulus CTC Enertec

Regulus and CTC Enertec are renowned for quality engineering and innovation.

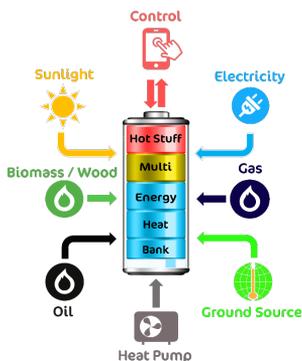
ABParts.co.uk at **Ashburn** are UK distributors for *Regulus* and provide full technical support and warranty management, design and specification services within the UK.

■ How it works...like a fridge in reverse

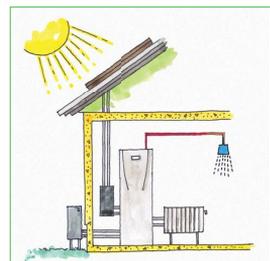
Heat pumps draws low-temperature energy from the ambient environment and "pumps" it to a higher temperature

Air or ground temperature is usually the heat source

■ Multi-Energy Future-Proof Controllable Heating



- Biomass
- Solar
- Heat Pump
- Gas
- Oil
- Electricity



Heat Pumps

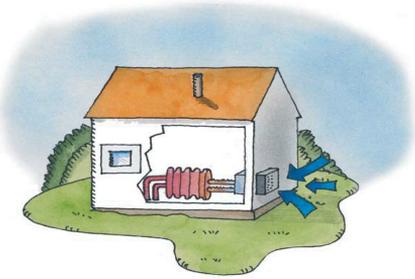
Energy-saving solutions

Regulus UK
CTC

WHERE DOES A HEAT PUMP TAKE THE ENERGY FROM?

In milder climates air is the most available heat source for heat pumps. Air-source heat pumps benefit from easy installation requiring no deep bores and no groundwork.

In order to gain heat from the ground, either deep bores need to be drilled, or loops buried about 1.2m underground. In these systems the output is stable even under severe frost as the soil maintains a stable temperature.



Air-to-water heat pumps

Advantages of air-to-water heat pumps

- + Low purchase costs
- + Easy installation
- + No groundwork

Drawbacks of air-to-water heat pumps

- Inconsiderate placement might cause noise disturbance
- Power output sinks at extremely low temperatures

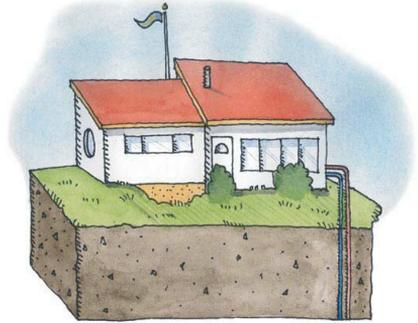
Heat pumps with deep bore holes

Advantages of heat pumps with a deep bore

- + Stable heat source under low outdoor temperature
- + Deep bores do not require a big ground area
- + Summer cooling possible

Drawbacks of heat pumps with a deep bore

- Higher installation costs
- Deep bores need a permit
- Water resources must be taken into consideration



Heat pumps with ground collector

Advantages of heat pumps with ground collector

- + Lower installation costs against deep bores
- + Relatively stable heat source under low outdoor temperature
- + No special permit needed

Drawbacks of heat pumps with ground collector

- Groundwork on a large area

EcoAir 400 series Air-to-Water Heat

The EcoAir 400 series Air to Water Heat Pump is available for 3 phase or single phase electrical supplies.

- Output figures for 3 phase models range from 6 kW to 20 kW
- Output figures for single phase models range from 6 kW to 10 kW



EcoAir 500 series Ground-to-Water Heat Pump

The EcoAir 500M are variable speed inverter driven Air to Water Heat Pumps

- Output figures between 2 kW to 10 kW single phase and 3 phase 4.9 kw to 22 kW



EcoHeat - Ground to Water

EcoPart 400 series Ground-to-Water Heat

The EcoPart 400 series Ground to Water Heat Pump

- output figures range from 6 kW to 14 kW single phase and 6 kW to 17 kW 3 phase



Smart Controller



The main advantages

- Smart control for the best utilisation of renewable energy sources
- Multiple heating zones control, hot water and heating
- Simple temperature control by an adjustable thermostat in the room
- Simple controller adjustments via a web browser
- Control and information on your heating system from anywhere over the internet
- Access to the controller menu from a computer, tablet or mobile phone
- The controller can send failure reports directly to your e-mail account
- Communication with the controller is also possible via SmS text messages
- Remote monitoring which can avoid the need for a technician travelling to the site



Heat Pumps

Energy-saving solutions

Regulus UK
CTC

| Technical Data | | | EcoAir 406 | EcoAir 408 | EcoAir 410 | EcoAir 415 | EcoAir 420 | |
|--|---------------|-------------|------------|------------|------------|------------|------------|-------|
| Air/water temperature in °C | A7/W35* | Heat output | [kW] | 6.22 | 7.83 | 11.45 | 16.19 | 17.52 |
| | | Power input | [kW] | 1.30 | 1.62 | 2.36 | 3.53 | 4.23 |
| | | COP | [-] | 4.78 | 4.83 | 4.86 | 4.58 | 4.15 |
| | A2/W35* | Heat output | [kW] | 4.69 | 6.02 | 8.80 | 11.42 | 14.55 |
| | | Power input | [kW] | 1.28 | 1.60 | 2.30 | 3.24 | 4.13 |
| | | COP | [-] | 3.66 | 3.76 | 3.83 | 3.52 | 3.52 |
| | A-7/W35* | Heat output | [kW] | 3.87 | 4.73 | 7.32 | 9.96 | 11.51 |
| | | Power input | [kW] | 1.25 | 1.57 | 2.29 | 3.27 | 3.94 |
| | | COP | [-] | 3.10 | 3.02 | 3.19 | 3.04 | 2.92 |
| Dimensions and weight | Width | [mm] | 1245 | 1245 | 1375 | 1375 | 1375 | |
| | Height | [mm] | 1075 | 1075 | 1175 | 1175 | 1175 | |
| | Depth | [mm] | 545 | 545 | 610 | 610 | 610 | |
| | Weight | [kg] | 120 | 126 | 180 | 187 | 190 | |
| Sound power level | | [dB(A)] | 56.2 | 58.3 | 57.3 | 64.2 | 65.7 | |
| Noise level: (medium/reduced speed) | 1 m distance | [dB(A)] | 48.2 | 50.3 | 50 | 56 | 56 | |
| | 5 m distance | [dB(A)] | 34.2 | 36.3 | 36 | 42 | 44 | |
| | 10 m distance | [dB(A)] | 28.2 | 30.3 | 30 | 36 | 39 | |
| Code | | | 13 243 | 13 244 | 12 994 | 12 995 | 12 848 | |

*Values measured according to EN 14511 incl. defrost cycle in a Test Lab of the manufacturer.

Each CTC Heat Pump is equipped with a max. current limiter for compressor startup.

CTC 400 Heat Pumps are supplied with high-efficiency circulation pumps.

As a novelty, 400 series heat pumps are fitted with a condensate tray for efficient disposal of condensed humidity. The tray is fitted with an electric heating cable that heats the condensate during and shortly after defrost, protecting it from freezing. Heat pump parameters already involve the energy needed to heat up the condensate tray.

| Technical Data | | | EcoAir 406 1f | EcoAir 408 1f | EcoAir 410 1f | |
|-----------------------------|----------|-------------|---------------|---------------|---------------|-------|
| Air/water temperature in °C | A7/W35* | Heat output | [kW] | 6.20 | 7.70 | 11.60 |
| | | Power input | [kW] | 1.30 | 1.70 | 2.5 |
| | | COP | [-] | 4.59 | 4.64 | 4.86 |
| | A2/W35* | Heat output | [kW] | 4.70 | 6.00 | 8.9 |
| | | Power input | [kW] | 1.30 | 1.60 | 2.40 |
| | | COP | [-] | 3.53 | 3.62 | 3.65 |
| | A-7/W35* | Heat output | [kW] | 3.70 | 4.80 | 7.1 |
| | | Power input | [kW] | 1.30 | 1.60 | 2.30 |
| | | COP | [-] | 2.87 | 2.97 | 3.03 |
| Code | | | 14 893 | 14 894 | 14 895 | |

Values measured according to EN 14511 incl. defrost cycle in a Test Lab of the manufacturer.

| Technical Data | | | EcoAir 520 | | | |
|-----------------------------|--------------------|-------------|--|---------|---------|----|
| Output | | [kW] | 3-20 | | | |
| SCOP | | [-] | 4,5 | | | |
| Air/water temperature in °C | A7/W35* 20 rps | Heat output | [kW] | 4.90 | | |
| | | Power input | [kW] | 0.90 | | |
| | | COP | [-] | 5.24 | | |
| | A2/W35* 38 rps | Heat output | [kW] | 6.73 | | |
| | | Power input | [kW] | 1.70 | | |
| | | COP | [-] | 3.97 | | |
| | A-7/W35* 90 rps | Heat output | [kW] | 10.40 | | |
| | | Power input | [kW] | 3.80 | | |
| | | COP | [-] | 2.71 | | |
| | | | Dimensions and weight | | | |
| | | | Width | [mm] | 1375 | |
| | | | Height | [mm] | 1180 | |
| | | | Depth | [mm] | 610 | |
| | | | Weight | [kg] | 186 | |
| | | | Sound power level | [dB(A)] | 55,4 | |
| | | | Sound pressure level at distance of | 5 m | [dB(A)] | 35 |
| | | | | 10 m | [dB(A)] | 29 |

| Technical Data | | | EcoHeat 406 | EcoHeat 408 | EcoHeat 410 | EcoHeat 412 |
|---|---------------------------|------|-------------|-------------|-------------|-------------|
| Primary circuit/HP flow temp. at B0/W25 | Heat output | [kW] | 6.1 | 8.5 | 10.4 | 12.3 |
| | Power input | [kW] | 1.20 | 1.72 | 1.87 | 2.23 |
| | COP | [-] | 5.10 | 4.93 | 5.55 | 5.51 |
| Primary circuit/HP flow temp. at B0/W35 | Heat output | [kW] | 5.9 | 8.2 | 10 | 11.8 |
| | Power input | [kW] | 1.29 | 1.79 | 2.17 | 2.57 |
| | COP | [-] | 4.57 | 4.58 | 4.60 | 4.60 |
| Primary circuit/HP flow temp. at B0/W55 | Heat output | [kW] | 5.2 | 7.6 | 9.3 | 11.0 |
| | Power input | [kW] | 1.88 | 2.54 | 3.12 | 3.72 |
| | COP | [-] | 2.76 | 2.99 | 2.98 | 2.96 |
| Dimensions and weight | Width | [mm] | 595 | 595 | 595 | 595 |
| | Height | [mm] | 1904 | 1904 | 1904 | 1904 |
| | Depth | [mm] | 672 | 672 | 672 | 672 |
| | Weight | [kg] | 267 | 270 | 272 | 279 |
| Electric backup heating in 300W steps | | [kW] | 0 - 9 | 0 - 9 | 0 - 9 | 0 - 9 |
| Thermal store | Volume | [l] | 223 | 223 | 223 | 223 |
| Volume of 40°C warm DHW available at the temperatures in the thermal store of 60/40°C (upper/lower) | if 8 l/min. DHW is drawn | [l] | 174 | 233 | 283 | 348 |
| | if 12 l/min. DHW is drawn | [l] | 107 | 134 | 157 | 187 |
| Code | | [-] | 13 441 | 13 442 | 13 443 | 13 444 |

COP given according to EN 14511 incl. power input for both the circulation pumps.

Max. flow temperature of the heat pump is 65°C.

Each CTC Heat Pump is fitted with a max. current limiter for compressor startup.

A solar module can be connected to EcoHeat to utilize solar energy from solar thermal collectors. Solar energy can be used together with a heat pump which means combining the most ecologic energy sources (more on Page 7). Solar energy is used to heat DHW in the summer and to support space heating in the winter. At the same time, this prolongs the service life of the heat pump. For a heat pump with a deep bore, summer solar energy surplus can be stored in the bore which helps increase the operation efficiency of the heat pump.

| Technical Data | | | EcoPart 406 | EcoPart 408 | EcoPart 410 | EcoPart 412 | EcoPart 414 | EcoPart 417 |
|---|-------------|------|-------------|-------------|-------------|-------------|-------------|-------------|
| Primary circuit/HP flow temp. at B0/W25 | Heat output | [kW] | 6.1 | 8.5 | 10.4 | 12.3 | 14.63 | -- |
| | Power input | [kW] | 1.20 | 1.72 | 1.87 | 2.23 | 2.79 | -- |
| | COP | [-] | 5.10 | 4.93 | 5.55 | 5.51 | 5.25 | -- |
| Primary circuit/HP flow temp. at B0/W35 | Heat output | [kW] | 5.9 | 8.2 | 10 | 11.8 | 14.5 | 16.76 |
| | Power input | [kW] | 1.29 | 1.79 | 2.17 | 2.57 | 3.19 | 3.71 |
| | COP | [-] | 4.57 | 4.58 | 4.60 | 4.60 | 4.54 | 4.52 |
| Primary circuit/HP flow temp. at B0/W55 | Heat output | [kW] | 5.2 | 7.6 | 9.3 | 11.0 | 13.4 | 15.9 |
| | Power input | [kW] | 1.88 | 2.54 | 3.12 | 3.72 | 4.54 | 5.17 |
| | COP | [-] | 2.76 | 2.99 | 2.98 | 2.96 | 2.95 | 3.07 |
| Dimensions and weight | Width | [mm] | 600 | 600 | 600 | 600 | 600 | 600 |
| | Height | [mm] | 760 | 760 | 760 | 760 | 760 | 760 |
| | Depth | [mm] | 672 | 672 | 672 | 672 | 672 | 672 |
| | Weight | [kg] | 138 | 143 | 148 | 164 | 168 | 172 |
| Code | | [-] | 12 647 | 12 648 | 12 649 | 12 650 | 12 651 | 12 652 |

COP given according to EN 14511 incl. power input for both the circulation pumps.

Max. flow temperature of the heat pump is 65 °C.

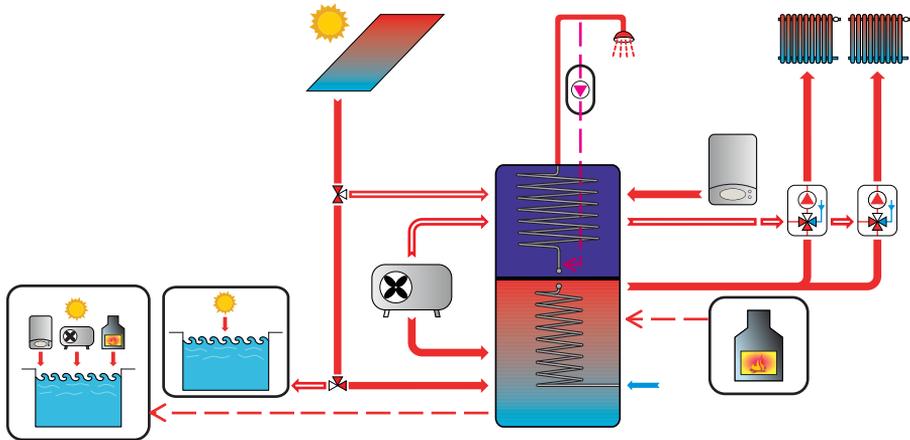
Each CTC Heat Pump is fitted with a max. current limiter for compressor startup.

Each CTC Heat Pump comes with a high-efficiency circulation pump for secondary circuit (the heating water circuit between a heat pump and a thermal store) and with an integrated primary circuit pump (bore/collector).

Regulus are industry leaders in innovative technology and are recognised for the quality of their engineering. **Regulus** provide the full range of parts and components for renewable heating systems.

UK **Regulus** distributors **Ashburn** Parts have an in-depth understanding of renewable heating installations within the UK and can provide expert advice, specification and design services.

In short - everything you require from one source.



You can find out more about **Regulus** CTC Heat Pumps on www.Regulus.co.uk

Regulus CTC Heat Pumps are distributed in the UK by **Ashburn** Parts www.ABparts.co.uk

ABparts at Ashburn Stoves
Unit 10 Victoria Mill
Boot Street. Earby.
BB18 6UX

hello@Abparts.co.uk

01282 841500

Your Local Installer:

Regulus UK
CTC

Heat Pumps
Energy-saving solutions