MADE IN SWEDEN

CTC GSi

Speed-controlled heat pumps for ground source, lake or geothermal heating. 2.5-16 kW, models 12 and 16

CTC GSi adapts automatically to the building's output requirements 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 GSi is equipped with a highly efficient water heater, which produces over 300 litres of hot water. CTC GSi is ideal for family homes as well as larger properties. CTC GSi comes in 2 sizes, which enables it to be utilised in most properties. CTC GSi 12 with an output range at 2.5-12 kW and CTC GSi 16 at 4-16 kW.

CTC GSi has a seasonal coefficient of performance (SCOP) of 5.5, which means that, over the course of year, it produces 5 times as much energy as it consumes. Compressor and cooling components are enclosed in a separate, sound-insulated unit, which makes it very quiet – only 36 dB(A) at 50 rps. Furthermore, the entire heat pump has very efficient insulation, which minimises energy losses. CTC GSi is so energy efficient that it easily meets the requirements for an A^{+++} rating – the highest and best energy rating a heat pump can be given.

CTC GSi has a stylish white design and flexible modular dimensions that allow it to fit into most environments. Owing to the heat pump's modular construction, it can be easily separated into two individual units. The brine system can be connected to the right, left or rear. All for simple and easy installation. The 4.3-inch colour touchscreen has clear symbols with English text, which makes it easy to adjust the heat and hot water or to retrieve a range of information about the operation.

Do you have an old heat pump that needs to be replaced? No problem. CTC GSi automatically adapts to the existing borehole. This means that when you replace your old heat pump, your installation costs are significantly reduced. The built-in automatic control is climate controlled and takes into account both indoor and outdoor temperatures. CTC GSi is able to control two individual heating systems as standard.

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 manufacture up to delivery of the finished product.

Benefits

- Highest energy rating – A+++
- Produces over 300 litres of hot water
- Very high seasonal coefficient of performance: SCOP 5.5
- Smart Grid – ready to adapt to electricity prices
- Can control two heating systems
- All-inclusive, most functions come as standard
- Easy to install
- 4.3" colour touchscreen
- Very quiet, 36 dB(A)
- Can be controlled from a smartphone with CTC Connect+

ENERGY FLEX

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

Whenever you purchase a product from CTC, it usually comes fully equipped, but there are also a few smart accessories to make life even easier.

CTC Internet

With CTC Internet and the CTC Connect+ app, you can monitor and control your system directly via your mobile phone. For instance, you can adjust the temperature or be alerted if the system shuts down for any reason. CTC Connect+ can be downloaded for free from the App Store or Google Play.

CTC no.: 587581301

CTC EcoVent 20 - Exhaust Air Unit

Allows for neat and easy installation in buildings with mechanical exhaust air ventilation. The used air is vented out and new, fresh air is supplied to the building by the building's own air supply diffuser.

CTC no.: 588000001

CTC EcoVåf III – Exhaust Air Unit with recovery

Designed to dock with CTC's geothermal/ground source heat pumps in buildings with mechanical exhaust air ventilation. Recovers heat from the exhaust air and raises the temperature of the brine, which produces a higher COP.

CTC no.: 586713001

CTC Expansion Tank GS

Everything you need to install your product. Contents: Expansion tank, flexi-hose and connectors.

CTC no.: 587886301

Adapt your product to your ceiling height

Hide pipe connections, etc. with a stylish housing cover, or set the product on a base in the same design. Top cabinets are available in three heights, and all are combinable to fit most ceiling heights.

Housing Cover	146 mm (supplied fitted to the product)
	488 mm CTC no.: 586463302R
	588 mm CTC no.: 586463303R
Raised Base	168 mm CTC-no.: 587810301

CTC Extra Mixing Valve Group

Complete package for neat and easy installation of additional heating circuits. Complete and ready-to-use with connected controls – so getting started is quick and simple. Equipped with an energy-efficient circulation pump, in accordance with the ErP Directive. Well-insulated unit with easy external access to all adjustment controls and electronic components.

CTC no.: 587396301

CTC SmartControl

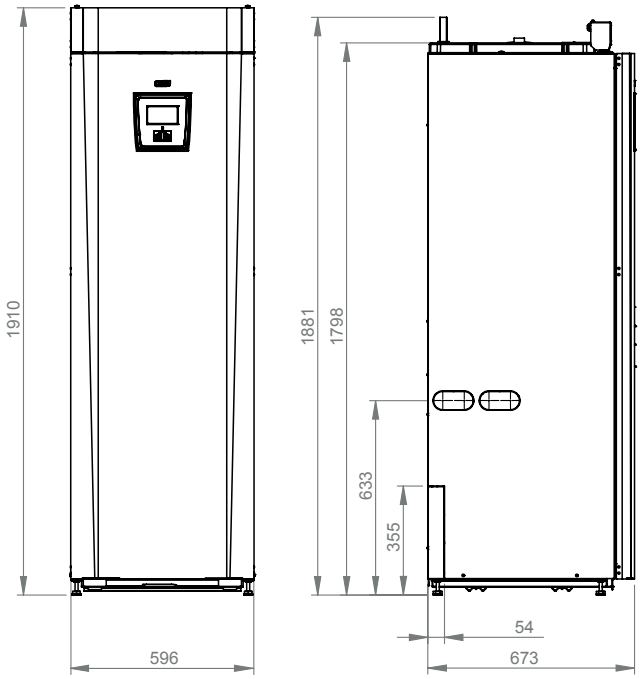
A series of smart wireless sensors which detect temperature, humidity and carbon dioxide. The system is based on CTC SmartControl Gateway, a base unit able to control up to seven optional wireless accessories.

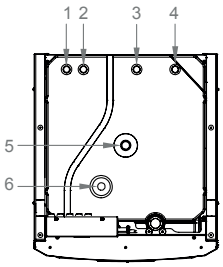
The series includes a wireless room sensor powered by solar cells, a humidity and CO_2 sensor that can control ventilation as needed, a repeater that amplifies signals between different accessories and a multi-button able to control several different functions, such as additional hot water.

Other accessories

		CTC no.:
CTC Installation Kit EVK	For installation of an additional heat source (wood, water-jacketed stove, etc.)	587368301
CTC Expansion EnergyFlex	External control of solar/pool/tank charging, etc.	587202301
CTC Volume Tank VT80	Detached volume tank with 4 connections (3/4")	587190301
CTC SMS Control	For remote control of your heat pump via your mobile phone	585518301
CTC BMS/Internet	For external, online control of your property via Modbus	585513301
CTC EcoComfort	A passive cooling unit that uses the borehole's cool temperature	585920001
Current Sensor, 3-pack	For monitoring the building's main fuses	572271001
CTC Diverting Valve, 3-way	For interconnections in the system, e.g. pool (22 mm connection)	583621401
CTC Flow Heater	INCOLOY – for problem areas with high chlorine content	588360302

Dimensions diagram





1. Cold water Ø22
2. DHW Ø22
3. Return Ø22
4. Primary flow Ø22
5. Expansion connection/ Lifting sleeve G3/4”
6. DHW bleeding Ø22

Delivery includes:
Heat pump with housing cover and manual.

Packaging includes:
Room sensor, outdoor sensor, filler manifold, brine level tank, brine hoses, magnetite filter for return heating circuit, cold water dirt filter, pressure gauge, automatic bleeder, safety valve for brine (3 bar) and heating system (2.5 bar).

Technical data 3x400 V		**GSi 12**	**GSi 16**
CTC no.		587304001	587307001
Weight (packaged weight)	kg	265 (295)	275 (300)
Dimensions (depth x width x height)	mm	673 x 596 x 1910	
Required ceiling height	mm	1 940	
Electrical Data, connection		400V 3N~ 50Hz	
Energy efficiency class – Heating system @ 35/55 °C [1)]		A^{+++} / A^{+++}	
Energy efficiency class @ 35/55 °C		A^{++} / A^{++}	
Energy efficiency class – Hot tap water/charge profile (EN16147)		A / XL	
Energy efficiency – water heating η_{WH}	%	100	95
Hot water performance (V_{max}) Volume 40 °C @ Economy/Normal/Comfort (EN16147)	litres	210 / 235 / 304	
Nominal heating output ($P_{designh}$) @ moderate climate 35/55 °C	kW	10 / 7	16 / 16
Rated current (recommended fuse 25 A)	A	25	20
Max. immersion heater output @ group fuse 13/16/20/25 A	kW	0.3/ 0.9/ 2.1/ 7.2/ 9	-/ 0,3/ 0.9/ 2.1/ 9**
Output range (specified output cooling module)	kW	2.5 - 11.8	4 - 16
Output range immersion heater/number of level steps	kW/step	0.3 - 9 / 27	
Enclosure class (IP)		IP X1	
Specified output @ 0/35 | 0/45 | 0/55 @ 50 rps (EN14511)	kW	6.17 / 5.64 / 5.40	10.52 / 9.58 / 8.90
COP @ 0/35 | 0/45 | 0/55 @ 50 rps (EN14511)		4.78 / 3.71 / 3.01	4.50 / 3.43 / 2.72
SCOP ($P_{designh}$) cold climate @ 0/35 | 0/55 (EN14825)		5.4 / 4.1	5.2 / 4.0
SCOP ($P_{designh}$) moderate climate @ 0/35 | 0/55 (EN14825)		5.5 / 4.3	5.5 / 4.2
Water volume – Heating system (V)	litres	229	
Water volume – Water supply system (V)	litres	1.7	
Refrigerant quantity (R407C, fluorinated greenhouse gas GWP 1774)	kg	2.4	2.2
CO_2 equivalent	tonnes	4.258	3.903
Sound power @ 0/35 | 0/55 (according to EN12102)	dB(A)	39 / 41	36 / 40

[1)] The stated efficiency of the heating system takes into account the product’s temperature controller. Ecodesign data scale: A^{+++} to G

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

** Max. 6 kW electric heater output in combination with compressor operation.

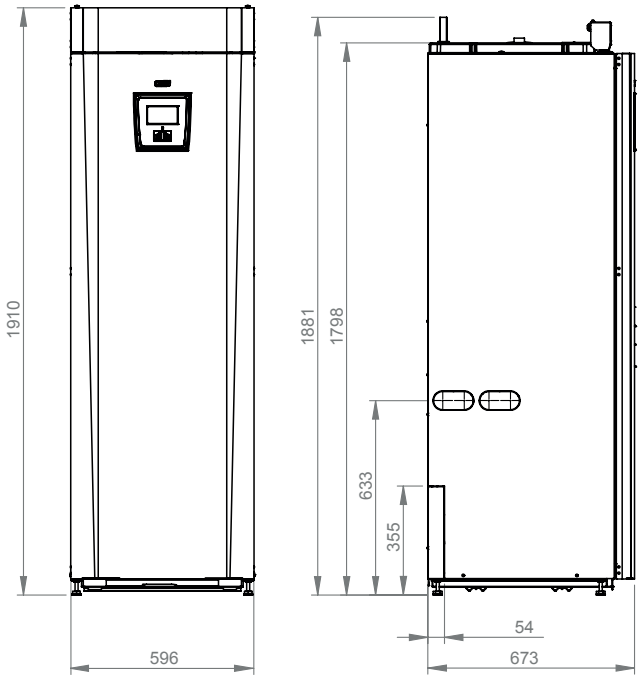
The Company reserves the right to change, amend or modify the information contained herein (Not all models are available in all countries)

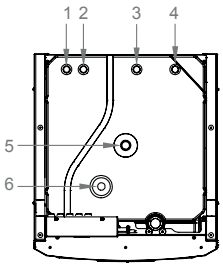
2018-10-10
17005179_13

CE 012

info@enertech.se
+46 372 88 000
Fax: +46 372 86 155
P.O Box 309 SE-341 26 Ljungby Sweden

Dimensions diagram





1. Cold water Ø22
2. DHW Ø22
3. Return Ø22
4. Primary flow Ø22
5. Expansion connection/ Lifting sleeve G3/4”
6. DHW bleeding Ø22

Delivery includes:
Heat pump with housing cover and manual.

Packaging includes:
Room sensor, outdoor sensor, filler manifold, brine level tank, brine hoses, magnetite filter for return heating circuit, cold water dirt filter, pressure gauge, automatic bleeder, safety valve for brine (3 bar) and heating system (2.5 bar).

Technical data 1x230 V		**GSi 12**
CTC no.		587305001
Weight (packaged weight)	kg	252 (282)
Dimensions (depth x width x height)	mm	673 x 596 x 1910
Required ceiling height	mm	1 940
Electrical Data, connection		230 V 1N~ 50Hz
Energy efficiency class – Heating system @ 35/55 °C [1)]		A^{+++}/ A^{+++}
Energy efficiency class @ 35/55 °C		A^{++} / A^{++}
Energy efficiency class – Hot tap water/charge profile (EN16147)		A / XL
Energy efficiency – water heating η_{WH}	%	96
Hot water performance (V_{max}) Volume 40 °C @ Economy/Normal/Comfort (EN16147)	litres	215 / 235 / 311
Nominal heating output ($P_{designh}$) @ moderate climate 35/55 °C	kW	10 / 7
Rated current (recommended fuse 50 A)	A	49
Max. electric heater output @ group fuse 25/32/35/50/63 A	kW	-/0.9/2.3/5.5/5.5
Output range (specified output cooling module)	kW	1.6-12.5
Output range immersion heater/number of level steps	kW/step	0.3-5.5 / 11
Enclosure class (IP)	IP	IP X1
Specified output @ 0/35 | 0/45 | 0/55 @ 50 rps (EN14511)	kW	6.17 / 5.64 / 5.40
COP @ 0/35 | 0/45 | 0/55 @ 50 rps (EN14511)		4.78 / 3.71 / 3.01
SCOP ($P_{designh}$) cold climate @ 0/35 | 0/55 (EN14825)		5.3 / 4.0
SCOP ($P_{designh}$) moderate climate @ 0/35 | 0/55 (EN14825)		5.1 / 3.9
Water volume – Heating system (V)	litres	229
Water volume – Water supply system (V)	litres	1.7
Refrigerant quantity (R407C, fluorinated greenhouse gas GWP 1774)	kg	2.30
CO_2 equivalent	tonnes	4.802
Sound power @ 0/35 | 0/55 (according to EN12102)	dB(A)	38 / 43

[1)] The stated efficiency of the heating system takes into account the product’s temperature controller. Ecodesign data scale: A^{+++} to G
Energy labels and data sheets can be downloaded from www.ctc-heating.com/Ecodesign

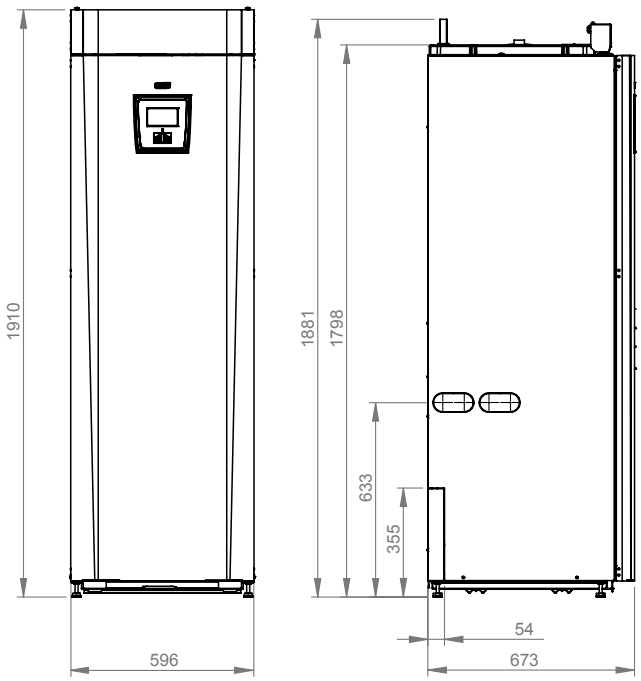
The Company reserves the right to change, amend or modify the information contained herein (Not all models are available in all countries)

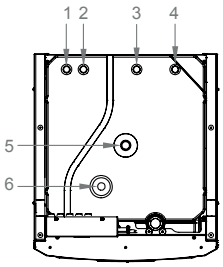
2018-10-10
17005179_13

CE 012

info@enertech.se
+46 372 88 000
Fax: +46 372 86 155
P.O Box 309 SE-341 26 Ljungby Sweden

Dimensions diagram





1. Cold water Ø22
2. DHW Ø22
3. Return Ø22
4. Primary flow Ø22
5. Expansion connection/ Lifting sleeve G3/4”
6. DHW bleeding Ø22

Delivery includes:
Heat pump with housing cover and manual.

Packaging includes:
Room sensor, outdoor sensor, filler manifold, brine level tank, brine hoses, magnetite filter for return heating circuit, cold water dirt filter, pressure gauge, automatic bleeder, safety valve for brine (3 bar) and heating system (2.5 bar).

Technical data 3x230 V		**GSi 12**
CTC no.		587306001
Weight (packaged weight)	kg	252 (282)
Dimensions (depth x width x height)	mm	673 x 596 x 1910
Required ceiling height	mm	1 940
Electrical Data, connection		230V 3~ 50Hz
Energy efficiency class – Heating system @ 35/55 °C [1)]		A^{+++}/ A^{+++}
Energy efficiency class @ 35/55 °C		A^{++} / A^{++}
Energy efficiency class – Hot tap water/charge profile (EN16147)		A / XL
Energy efficiency – water heating η_{WH}	%	96
Hot water performance (V_{max}) Volume 40 °C @ Economy/Normal/Comfort (EN16147)	litres	215 / 235 / 311
Nominal heating output ($P_{designh}$) @ moderate climate 35/55 °C	kW	10 / 7
Rated current (recommended fuse 50 A)	A	45
Max. electric heater output @ group fuse 25/32/35/50/63 A	kW	-/2.3/2.3/7.0/7.0
Output range (specified output cooling module)	kW	1.6-12.5
Output range immersion heater/number of level steps	kW/step	1.6-7 / 7
Protection class	IP	IP X1
Specified output @ 0/35 | 0/45 | 0/55 @ 50 rps (EN14511)	kW	6.17 / 5.64 / 5.40
COP @ 0/35 | 0/45 | 0/55 @ 50 rps (EN14511)		4.78 / 3.71 / 3.01
SCOP ($P_{designh}$) cold climate @ 0/35 | 0/55 (EN14825)		5.3 / 4.0
SCOP ($P_{designh}$) moderate climate @ 0/35 | 0/55 (EN14825)		5.1 / 3.9
Water volume – Heating system (V)	litres	229
Water volume – Water supply system (V)	litres	1.7
Refrigerant quantity (R410A, fluorinated greenhouse gas GWP 1774)	kg	2.30
CO_2 equivalent	tonnes	4.802
Sound power @ 0/35 | 0/55 (according to EN12102)	dB(A)	38 / 43

[1)] The stated efficiency of the heating system takes into account the product’s temperature controller. Ecodesign data scale: A^{+++} to G
Energy labels and data sheets can be downloaded from www.ctc-heating.com/Ecodesign

The Company reserves the right to change, amend or modify the information contained herein (Not all models are available in all countries)

2018-10-10
17005179_13

CE 012

info@enertech.se
+46 372 88 000
Fax: +46 372 86 155
P.O Box 309 SE-341 26 Ljungby Sweden