



CTC GSi 600

Speed-controlled heat pumps for ground source, lake or geothermal heating. 2-16 kW, models 608, 612 and 616

A new stylish, smart and economical series of speed-controlled ground source heat pumps.

CTC GSi 600 has a touch display with a very user-friendly interface through which you can easily access all functions – just like your smartphone. You can also mirror the display on your tablet, phone or computer. But most importantly, it has a multi-language interface and clear symbols that make it easy to adjust heating, hot water, etc. and retrieve a wealth of information about the operation. The integrated automatic mixing valve is climate-controlled and takes into account both the indoor and outdoor temperatures.

With the help of inverter control, the CTC GSi 600 automatically adapts to the property's power requirements throughout the year. When high output is required, the output increases. When less output is required, the compressor shifts to lower output. This means you will always achieve maximum savings (up to 85%).

The seasonal coefficient of performance (SCOP) of the CTC GSi 600 means that, over the course of year, it produces 5 times as much energy as it consumes. The compressor and cooling components are enclosed in a separate sound-insulated unit, which makes it very quiet – only 34 dB(A) at normal speed. Furthermore, the entire heat pump has very efficient insulation, which minimises energy losses. The CTC GSi 600 meets the requirements for an A⁺⁺⁺ rating, which is the best possible energy rating a heat pump can have.

The CTC GSi 600 automatically adapts to the existing bedrock. This means that when you replace your old heat pump, your installation costs are significantly reduced. In addition, the product has been given a new flexible brine connection that makes it even easier to install.

The CTC GSi 600 is equipped with a highly efficient DHW heater, which produces over 300 litres of hot water. In addition, CTC GSi is available in three sizes: The CTC GSi 608 is best suited for slightly smaller properties, the CTC GSi 612 for mid-sized properties, and the CTC GSi 616 for slightly larger properties.

CTC GSi 600 has internet connectivity as standard, so you can easily control your heat pump remotely. To ensure compatibility with smart homes, the product is equipped for connection to Alexa, Google Home, etc. It is also SmartGrid-ready, which means it is equipped for the electricity grid of the future.

Benefits

- · Stylish design
- Smart touch display with user-friendly interface
- Economical: save up to 85%
- Highest energy class: A +++
- Produces over 300 litres of hot water
- Very high seasonal coefficient of performance: SCOP 5.5
- · Internet connection as standard
- Very quiet 34 dB(A)
- Climate-controlled
- SG-ready



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.

myUplink

With the myUplink 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. The myUplink app can be downloaded for free from the App Store or Google Play.





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 CO₂ 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.

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 Expansion Vessel GS

Everything you need to install your product.

Contents: expansion vessel with flexi-hose and connectors.

CTC no.: 587886301

Adapt your product to your ceiling height

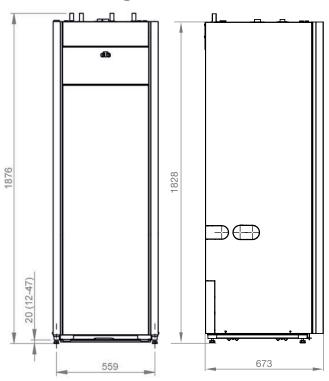
Hide pipe connections, etc. with a stylish housing cover, or set the product on a base in the same design. Housing covers are available in three heights and all are combinable to fit most ceiling heights.

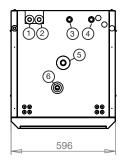
Housing Cover, low 146 mm CTC no.: 589440301
Housing Cover, medium 380 mm CTC no.: 589441301
Housing Cover, high 480 mm CTC no.: 589442301
Raised Base II 168 mm CTC-no.: 589590301



Other accessories		CTC no.:
CTC SMS Control	For remote control of heat pump via SMS	585518301
CTC Installation Kit EVK	For installation of an additional heat source (wood, water-jacketed stove, etc.)	587368301
CTC Expansion EnergyFlex II	External control of solar/pool/DHW circulation, etc.	589262301
CTC Volume Tank VT80	Detached volume tank with 4 connections (3/4")	587190301
CTC EcoComfort	A passive cooling unit that uses the borehole's cool temperature	585920001
CTC Diverting Valve, 3-way	For interconnections in system, e.g. pool (22 mm connection)	583621401
CTC Flow Heater	INCOLOY – for problem areas with high chlorine content	588360302
Current Sensor, 3-pack	For monitoring the building's main fuses	572271001

Dimensions diagram





- 1. Cold water Ø22
- 2. DHW Ø22
- 3. Return Ø22
- 4. Primary flow Ø22
- 5. Expansion connection/ Lifting sleeve G 3/4"
- 6. Bleed valve connection G 1/2"

Delivery includes:

Heat pump and manual.

Packaging includes:

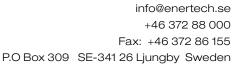
Room sensor, outdoor sensor, filler manifold, brine level tank, magnetite filter for return heating circuit, pressure gauge, cold water dirt filter, automatic bleeder, safety valve for brine (3 bar) and heating system (2.5 bar).

Technical data 3x400 V		GSi 608	GSi 612	GSi 616
CTC-nr		589300001	589300002	589300003
Weight (packaged weight)	kg	275 (304)	275 (304)	278 (307)
Dimensions (depth x width x height)	mm	673 x 596 x 1876		
Required ceiling height	mm	1940		
Specified output max: W35 & B0/5/10 (EN14511)	kW	7.67 /9.21 /10.65	12.14 /13.11 /13.49	15.6 /16.52 /16.97
Input power max: W35 & B0/5/10 (EN14511)	kW	1.74 /1.67 /1.69	2.42 /2.34 /2.34	4.19 /4.37 /4.40
COP max: W35 & B0/5/10 (EN14511)		4.42 /5.52 /6.32	5.01 /5.61 /5.78	3.72 /3.78 /3.85
Sound power L _{WA} B0/W35 (EN 12102)	dB(A)	34	39	42
Sound pressure L _{PA} 1m B0/W35 (EN ISO 11203)	dB(A)	29 34		37
Electrical Data, connection		400V 3N~ 50Hz		
Rated current (Recommended fuse)	А	15.2 (16)	22.7 (25)	23.8 (25)
Max. immersion heater output at group fuse: 10/13/16/20/25 A	kW	2.1/2.1/5.8/ 0.3/0.9/2.1/ 5.8/5.8 7.2/9		-/0.3/0.9/ 2.1/9*
Ingress protection class (IP)		IP X1		
Output range immersion heater (min-max)	kW	0.3-5.8	0.3-9.0	0.3-9.0
Refrigerant quantity (R407C, GWP 1774)	kg	2.40	2.40	2.20
CO₂ equivalent	tonnes	4.258	4.258	3.903
DHW-performance V ₄₀ Economy/Normal/Comfort (EN16147)	litres	210 / 235 / 304		
SCOP cold climate: W35 (EN14825, Pdesignh)		5.4	5.4	5.2
SCOP average climate: W35 (EN14825, Pdesignh)		5.4	5.4	5.2
Package efficiency class: W35/W55 (A ⁺⁺⁺ - G)		A+++ / A+++		
Energy efficiency class: W35/W55 (A ⁺⁺⁺ - D)		A+++ / A+++		
Energy efficiency class DHW (A ⁺ - F) / tapprofil (EN16147)		A / XL		

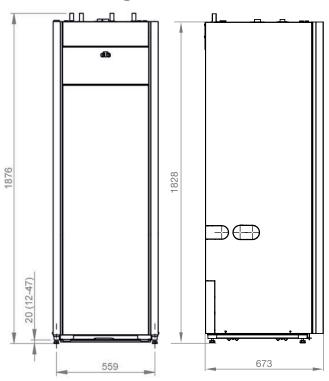
Energy labels and data sheets can be downloaded from www.ctc-heating.com/Ecodesign

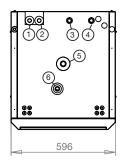
 $^{^{\}star}$ Max. 6 kW electric heater output in combination with compressor operation.





Dimensions diagram





- 1. Cold water Ø22
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- 6. Bleed valve connection G 1/2"

Delivery includes:

Heat pump and manual.

Packaging includes:

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

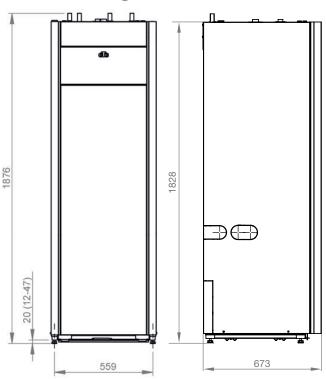
Technical data 1x230 V	GSi 612	
CTC-nr		589301002
Weight (packaged weight)	kg	252 (282)
Dimensions (depth x width x height)	mm	673 x 596 x 1876
Required ceiling height	mm	1940
Specified output max: W35 & B0/5/10 (EN14511)	kW	11.88 / 13.87 / 14.66
Input power max: W35 & B0/5/10 (EN14511)	kW	3.28 / 3.47 / 3.49
COP max: W35 & B0/5/10 (EN14511)		3.63 / 4.00 / 4.20
Sound power L _{WA} B0/W35 (EN 12102)	dB(A)	41
Sound pressure L _{PA} 1m B0/W35 (EN ISO 11203)	dB(A)	36
Electrical Data, connection		230V 1N~ 50Hz
Rated current (Recommended fuse: 63 A)	А	51
Max. immersion heater output at group fuse: 20/25/32/35/50/63 A	kW	- / 0.9 / 0.9 / 5.2 / 5.5
Ingress protection class (IP)		IP X1
Output range immersion heater (min-max)	kW	0.3-5.5
Refrigerant quantity (R410A, GWP 2088)	kg	2.30
CO ₂ equivalent	tonnes	4.802
DHW-performance V ₄₀ Economy/Normal/Comfort (EN16147)	litres	210 / 232 / 304
SCOP cold climate: W35 (EN14825, Pdesignh)		5.5
SCOP average climate: W35 (EN14825, Pdesignh)		5.4
Package efficiency class: W35/W55 (A ⁺⁺⁺ - G)		A+++/ A+++
Energy efficiency class: W35/W55 (A ⁺⁺⁺ - D)		A+++ / A+++
Energy efficiency class DHW (A ⁺ - F) / tapprofil (EN16147)		A / XL

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





Dimensions diagram





- 1. Cold water Ø22
- 2. DHW Ø22
- 3. Return Ø22
- 4. Primary flow Ø22
- 5. Expansion connection/ Lifting sleeve G 3/4"
- 6. Bleed valve connection G 1/2"

Delivery includes:

Heat pump and manual.

Packaging includes:

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

Technical data 3x230 V	GSi 612	
CTC-nr		589302002
Weight (packaged weight)	kg	252 (282)
Dimensions (depth x width x height)	mm	673 x 596 x 1876
Required ceiling height	mm	1940
Specified output max: W35 & B0/5/10 (EN14511)	kW	11.88 / 13.87 / 14.66
Input power max: W35 & B0/5/10 (EN14511)	kW	3.28 / 3.47 / 3.49
COP max: W35 & B0/5/10 (EN14511)		3.63 / 4.00 / 4.20
Sound power L _{WA} B0/W35 (EN 12102)	dB(A)	41
Sound pressure L _{PA} 1m B0/W35 (EN ISO 11203)	dB(A)	36
Electrical Data, connection		230V 3~ 50Hz
Rated current (Recommended fuse: 50 A)	А	47
Max. immersion heater output at group fuse: 20/25/32/35/50/63 A	kW	- / 2.3 / 2.3 / 7.0 / 7.0
Ingress protection class (IP)		IP X1
Output range immersion heater (min-max)	kW	1.6-7.05
Refrigerant quantity (R407C, GWP 1774)	kg	2.30
CO ₂ equivalent	tonnes	4.802
DHW-performance V ₄₀ Economy/Normal/Comfort (EN16147)	litres	210 / 232 / 304
SCOP cold climate: W35 (EN14825, Pdesignh)		5.5
SCOP average climate: W35 (EN14825, Pdesignh)		5.4
Package efficiency class: W35/W55 (A ⁺⁺⁺ - G)		A+++/ A+++
Energy efficiency class: W35/W55 (A+++ - D)		A+++ / A+++
Energy efficiency class DHW (A+ - F) / tapprofil (EN16147)		A / XL

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