

CTC GSi-12

Variable speed heat pump for ground source, lake or geothermal heating. 2.5–12 kW

CTC GSi-12 is our new variable speed heat pump adapts automatically to the building's output requirement during the year. Output will increase if required, otherwise the compressor speed will reduce and output will decrease. Thanks to this you will always achieve maximum savings.

The new CTC GSi-12 is perfect for most family homes having a large output range of 2.5-12 kW. The inverter-controlled compressor with electronic expansion valve gives a very high seasonal coefficient of performance (SCOP 5.43) and thus minimal operating costs. CTC GSi-12 is also equipped with highly efficient water heating that produces up to 300 litres of hot water, which is the best in the class. New, more efficient tank insulation also ensures minimal energy loss.

CTC GSi-12 has a 4.3-inch colour touchscreen with English text and clear symbols. This makes it simple to adjust hot and cold water or to retrieve information about operation. Compressor and refrigeration components are enclosed in a separate, sound-insulated unit. This provides exceptionally low noise and makes it the quietest geothermal heat pump we have ever developed.

Thanks to Energyflex, you have the option of supplementing it with solar heating or connecting an existing wood-fired system or water-jacketed stove. CTC GSi-12 can also be connected for efficient heating of your pool.

In order to achieve the lowest possible energy consumption and best savings, CTC GSi-12 is equipped with class A low-energy circulation pumps on both the brine and heating sides. Heat stored in rock, soil or lake water is used as the heat source. The brine system can easily be connected to the right, left or rear. To ensure smooth and easy installation, the heat pump is modular, which allows it to be divided into two separate units.

Benefits of CTC GSi-12

- Savings of up to 85%
- Energy class* A⁺⁺⁺
- Most hot water in the class
- With high seasonal coefficient of performance (SCOP 5.43)
- Most output when required
- Inverter-controlled compressor
- Electronic expansion valve
- Can control two different heating systems
- Very quiet, 45.6 dB(A) (0/35 50 rps)
- You can control it with your phone using CTC Connect

ENERGY FLEX

Using CTC Connect,

the heat pump

can be controlled

Download the app

for free from the App

Store or Google Play.

easily from your

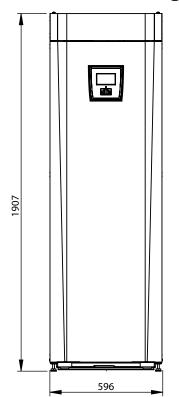
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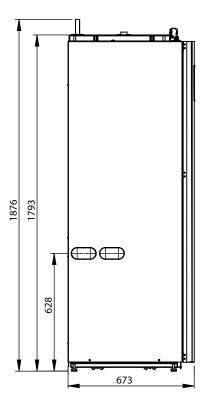


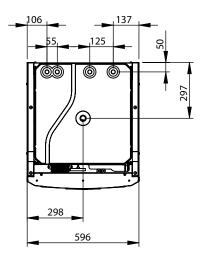
For more information on all CTC products, please visit **www.ctc-heating.com**

^{*} Energy class heating, in package with built-in control

Dimensional drawing of CTC GSi-12







Delivery includes

Heat pump CTC GSi 12

Installation and Maintenance Manual

Filler manifold, brine level vessel, 2 brine hoses

Kit bag: room sensor, outdoor sensor, safety valve for heating system (2.5 bar), safety valve for cold side (3 bar), 2 cable ties, 2 support sleeves, 2 clamping ring connections, filter ball valve for return heating system, dirt filter for cold water.

Electrical data		400 V 3 N~50 Hz
Energy class heating (i package with control)		
0, 0, 1		A+++
Energy class heating (without control)/hot water		A++/A
Rated output electricity, excl./incl. immersion heater	kW	5.8 / 14.8
Immersion heater (adjustable in steps of 0.3 kW)	kW	9
Cladding class		IPX1
Max. specified output compressor	kW	11.8
SCOP (EN14825 low-temperature use, cold climate)	SCOP	5.43
Specified output 1) 0/35 0/45 0/55 (50 rps)	kW	6.13 5.68 5.40
COP 1) 0/35 0/45 0/55 (50 rps)	COP	4.84 3.68 3.01
Specified output 1) 5/35 5/45 5/55 (50 rps)	kW	7.10 6.65 6.36
COP 1) 5/35 5/45 5/55 (50 rps)	COP	5.62 4.26 3.57
Noise level (0/35 50 rps)	dB(A)	45.6
Max. operating current, compressor operation/incl. immersion heater	А	8.4 / 21.4
Max immersion heater output with group fuse 16, 20, 25 A	kW	2.115.219.0
Water volume, boiler (V)	1	229
Max. operating pressure, boiler (PS)	bar	3.0
Water volume, DHW system	1	1.7
Max. operating pressure, DHW system	bar	10
Brine pump		Class A LEP
Brine system min./max. pressure (PS)	bar	0.2/3.0
Refrigerant quantity (R407C)	kg	2.4
Break value high pressure switch	bar	31
Dimensions b x h x d	mm	596 x 1907 x 673
Required ceiling height	mm	1910
Weight	kg	253

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