

Specify A Cleaner Future

GaeaTherm

Harnessing thermal energy stored within the earth

21.3kW ground source heat pump



4.7 Coefficient of Performance

Ultra low noise level
of 33 dB(A) at 1 metre

Compact, small footprint design

Cascade multi-unit
installation configurations

POTTERTON
COMMERCIAL

heating specialists

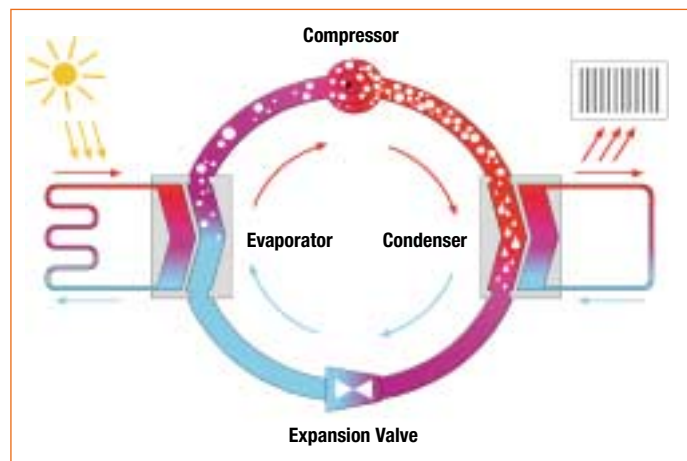
Introduction

For over 100 years Potterton has been supplying gas fired boilers into the domestic and commercial heating sectors. Now this prestigious brand with an enviable reputation brings you the latest in state-of-the-art heat pump technology for commercial applications.

The earth acts as a huge thermal store with the energy supplied by solar rays incident on the surface of the ground. At a depth of around 1 metre to 2 metres the temperature within the ground remains fairly constant at around 10°C to 12°C. Ground source heat pumps harness this energy through the use of a ground loop which extracts this heat to commence and sustain the refrigeration cycle within the heat pump. Through a process of changing the state of the refrigerant, heat is generated which can be used via a plate heat exchanger for space heating.

GaeaTherm is a ground source heat pump with an output of 21.3kW and a 'best in class' coefficient of performance of 4.7 when used with a low temperature heat load such as underfloor heating. GaeaTherm controls are based on the same platform as the Paramount two and Eurocondense two high efficiency condensing boilers enabling the technologies to operate in harmony and deliver low carbon heating solutions.

The GaeaTherm solution includes the heat pump, pump station for the ground loop, and optional 500 litre buffer tank.



GaeaTherm Technical Details

	Units	
Heat Output	kW	21.3
Coefficient of Performance (COP)	-	4.7
Basis for COP	-	0°C source temp, 35°C load temp
Electrical Power Input	kW	4.6
Electrical Supply	-	400V, 3 phase, 50Hz
Refrigerant	-	R410A
Heat Transfer Medium	-	70% water, 30% ethylene glycol
Minimum Heat Source Temperature	°C	- 6
Maximum Heat Source Temperature	°C	+ 20
Maximum Heat Load Temperature	°C	+ 60
Noise Level (Sound Pressure)	dB(A)	33 measured at 1 metre
Dimensions (H x W x D)	mm	1380 x 530 x 700
Footprint (W x D) with access	mm	1430 x 900
Weight	kg	230

Please contact Potterton Commercial for more information.