# ThermoTerra BF brine/water heat pumps





## Roth ThermoTerra BF brine/water heat pumps

demand-based heating and cooling with geothermal energy



- > optimum performance figures
- > low energy consumption
- compact design
- > outstandingly quiet when running
- > integrated hydraulic components
- > includes optional cooling function
- > simple installation
- > takes up minimal space





### ■ Soil is a highly effective heat store

Soil temperatures fluctuate very little throughout the year. In heat pumps that use soil as a heat source, the resulting system delivers high performance with low energy consumption.

### Roth ThermoTerra BF brine/water heat pumps

The Roth ThermoTerra BF boasts an output of 2 to 6,25 kW for heating and passive cooling and a compact internal mechanism. The heat generator and integrated hot water tank are perfectly coordinated for optimum compatibility, resulting in a hygienic and space-saving system solution. The pump operates with input temperatures of up to 65 °C. The coolant circuit is located in the lower section of the heat pump, housed inside a removable multibox. This design insulates the compressor for virtually noiseless operation.

### **■** Easy, flexible installation

The multibox can be removed for transport and assembly. This enables the housing to be transported to the installation location in a horizontal position if required. The heating, domestic water and electrical connections are located on the top of the housing. The brine connection can be located either on top, or to the left or right. Service access is via the front of the pump. Thanks to this design, the Roth ThermoTerra BF can be installed in a range of positions, including in a corner or directly against a wall.

Combined with an intermediate heat exchanger, Roth ThermoTerra BF heat pumps can use ground water as a heat source, turning them into water/water heat pumps.

### Roth ThermoTerra BF with thermal output based on need

Frequency-controlled heat pumps operate based on the precise needs of the user and the building, resulting in a significant increase in energy efficiency. Its compressor and the heat source and heating circulation pump automatically adapt their speed to requirements. The Roth ThermoTerra BF boasts an outstanding performance coefficient of 4,86. Operating costs are further reduced by the low start-up current requirements.

The ThermoTerra BF heat pump is especially suited to apartment buildings as well as houses.

Each individual home in the building can be fitted with its own heat pump, allowing you to claim **multiple BAFA subsidies** for the property.

The heat pumps are smart-grid- and photovoltaic-enabled.







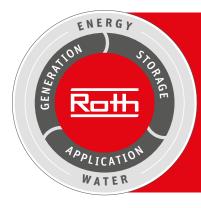
1 Roth ThermoTerra BF brine/water heat pumps

2 Roth Thermotank Quadroline

Example calculation			
"Apartment building with six individual homes"		Subsidies	
central 36-kW heat pump		€4500	
for ex. distributed between 6 individual homes	= 6 x 6 kW = 6 x €4500	€27000	

- deep boreholes also sit centrally in the 6 x 6 kW version
  no need for freshwater stations per home
  no need for a heat meter in each home

	ThermoTerra BF
Heat output in kW (min. – max)	2 - 6,25
COP	4,86
Energy efficiency class: Room heating 55 °C/hot water supply	A++/A
Composite heat pump/regulator system 55 °C	A+++
Dimensions width/height/depth in mm	598 x 730 x 1850
Weight in kg (including transport packaging)	240
Weight in kg (without multibox, including transport packaging)	160



## **Roth Energy and Sanitary Systems**

### Generation

- > Solar systems
- > Heat pump systems
- > Solar heat pump systems

### Storage

Storage systems for

- > Domestic and heating water
- > Combustibles and biofuels
- > Rainwater and waste water

### **Application**

- Floor heating and cooling systems
- > Pipe installation systems
- > Shower systems



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