

TERRA-HGL/Standard Open Well Heat Pump

Safety plate heat exchanger set comprises:

Stainless steel plate heat exchanger (copper-soldered), expansion vessel, safety valve, circulation pump including antifreeze for the intermediate circuit

Heat pump warranty extended to 6 years when using the safety plate heat exchangers. This also applies to safety plate heat exchanger sets except for electronics and control unit.

Frost and corrosion damage is not covered by warranty for installations without safety plate heat exchanger sets.

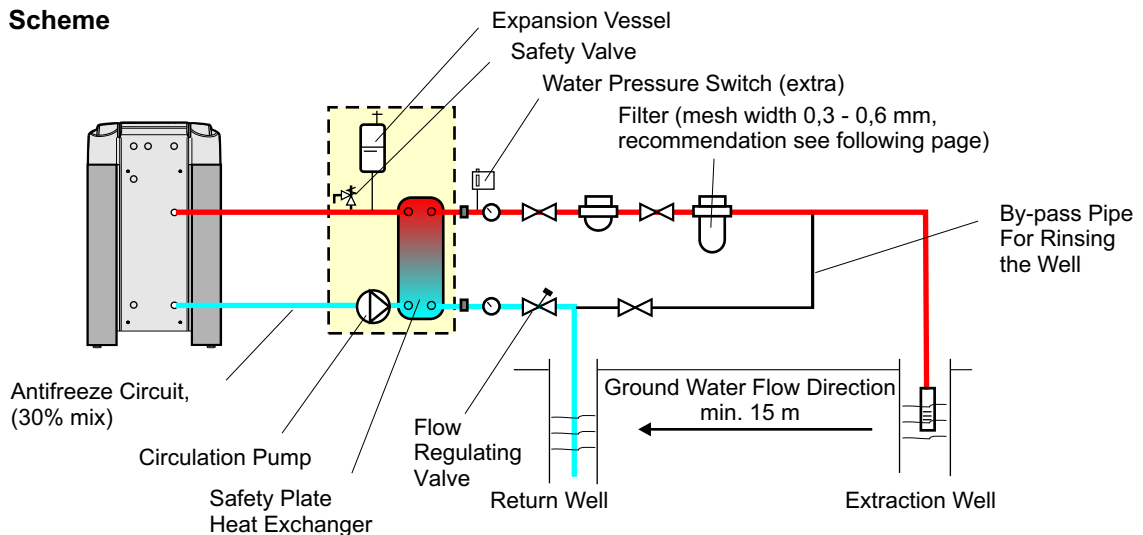
Ground Water Quality: The following values must be adhered to:

Chloride:	(Cl)	< 100 mg/kg	pH-value:	6,5 - 9,0
Sulfates:	(SO ₄ ²⁻)	< 50 mg/kg	Conductivity:	> 50 µS/cm and < 600 µS/cm
Nitrates:	(NO ₃)	< 100 mg/kg		
Manganese:	(Mn)	< 0,1 mg/kg*		
dissolved carbonic acid:	(CO ₂)	< 5 mg/kg		
Ammonia:	(NH ₃)	< 2 mg/kg		
Iron:	(Fe)	< 0,2 mg/kg*		
Free Chloride:	(Cl)	< 0,5 mg/kg		
Oxygen:	(O ₂)	< 2mg/kg*		
Hydrogen sulphide:	(H ₂ S)	< 0,05 mg/kg		
Sulfides:	(SO ₃)	< 1 mg/kg		
Free chlorine gas:	(Cl ₂)	< 1 mg/kg		

* Exceeding the critical values may result in the evaporator and the pipes silting up and blockage of the drainage well. The operator must ensure a constant ground water quality level.

Note: The ground water temperature must not fall below 7°C, even in winter.

Installation Scheme



A minimum temperature thermostat for the ground_water exit side is built into the heat pump.

A water pressure switch for the ground_water entry side is available as an accessory.

Note:

The safety plate heat exchanger reduces the efficiency of the heat pump due to the loss of 3 degrees over the plate heat exchanger

To be supplied and installed on site

Flow and return from deep well to heat pump, ground water pump (well pump), foot valve, filters, water counters (if mandatory), stop valve, flow regulating valve

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