



**netec**

**Energy Technology**

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## Ground-heat pump controller HTR 2-1

- Use:** Stepless temperature controlled powering of the brine pump of a ground heat exchanger in cold season (air preheating) and in hot season (air cooling)
- Electricity supply:** AC 230 V 50 Hz
- Sensor:** 1 \* PT-100 temperature sensor with 6 mm diameter to be placed into fresh air pipe between the brine heat exchanger and the ventilation system.
- Output:** 230-V-cable with cold machinery sleeve to be connected directly with counterpart at the brine pump. Useable for single-phase (AC) pump not electronically controlled, that must allow stepless speed control as if with a dimmer by pulses length (f.e.: WILO-Star-RS 25/.. and Grundfos UPS 25-40)
- Modulation:** Modulation runs nearly stepless between 0 and 100 % of pumps power by modulating AC pulses length. Controller compares real fresh air temperature with seasonal, user specified settings.
- Handling:** With the three keys, the following values can be set:  
 - minimal fresh air temperature in cold season  
 - maximal fresh air temperature in hot season  
 - some background set points (f.e. duration of pulses)
- During current operation, the display shows the fresh air temperature behind the brine-to-air heat-exchanger and the pump power level.
- Accessories:** Netec Pump- and Safety unit PGR-1-40 / PG-1-60  
 Netec brine-to-air heat exchanger CWK for systems with 200...400 cbm/h  
 Netec brine-to-air heat exchanger PGK for systems with 500...12.000 cbm/h  
 Netec air heaters for passive houses "LHR Plus" for 100-250 cbm/h