

# Functional and innovative energy solutions

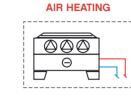
- customer-based product development
- easy to install and service
- can be integrated in all heating, heat recovery and cooling systems
- ecological energy solution

Chillquick Thermo<sup>™</sup> heat pumps

# Chillquick Thermo<sup>™</sup> Heat pumps

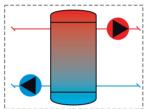
Chillquick Thermo<sup>™</sup> heat pump range provides a solution for all your heating and cooling installations. The modular structure means that the heat pumps can be manufactured for the particular requirements of every customer. The system can contain several heat recovery, collection and cooling systems. If necessary, the heat can be utilized at several temperature levels. You can implement active or passive cooling and heat other sites at the same time.

Chillquick Thermo<sup>™</sup> models cover all capacity ranges from 20 kW all the way to 500 kW. If you connect machine units together, you can reach a thermal capacity of up to 2 MW. Depending on the size category, one machine unit contains between one and four compressors. The advantages of having several compressors in a machine unit include good power adjustment and reliability of operation, even during malfunctions.



COOLING SYSTEMS AND

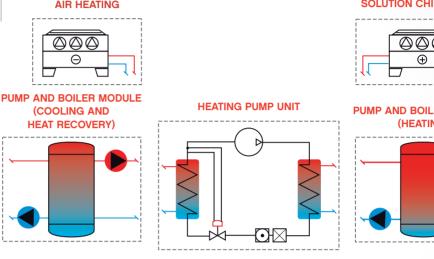
(COOLING AND **HEAT RECOVERY**)



HEAT RECOVERY



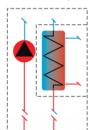
Modular heating pump



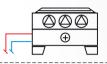
HEAT COLLECTION (LAND, WATER SYSTEM, ROCK)

PASSIVE

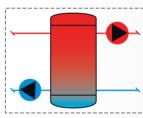
COOLING AND HEAT STORAGE IN THE ROCK



#### SOLUTION CHILLER



PUMP AND BOILER MODULE (HEATING)



#### HEATING SYSTEMS





### **Electronic Expansion Valves**

Each machine is equipped with an electronic expansion valve. The valve reacts quickly to load variations and thus guarantees optimal operating circumstances for the compressors and a long service life for the entire system. Thanks to the electronic expansion valves, operation of the heating pump machine unit can be controlled according to your requirements; whether your primary need is to heat the building, heat the household water or to cool the building.

The refrigerant has been developed for heat pumps and air-conditioning applications

R410A



### **Quality and Testing**

Quality of the heat pumps is always guaranteed by high-quality components that are tested both separately and together. We have developed advanced testing methods together with the leading equipment suppliers in the industry. Each device is leak tested in two phases: overpressure test with a mixed gas, and vacuum test as a separate test. This system guarantees leakproof joints in accordance with the latest European standards and directives. The devices are filled up with refrigerant gas in full automatic mode according to a pre-programmed logic. The final test is a full-scale test run that the customer can participate in. The test is always summarized in a test report.

Fullscale test run

### CHT Control Automation and Group Controller

The CHT control automation Group Controller has been developed for control of the Chillquick Thermo<sup>™</sup> heating pumps. The control automation ensures smooth and optimal operation of the compressors. Together with the Group Controller unit, the automatic system controls up to four separate machine units and guarantees even temperatures in the cooling and heating systems of the building. The control automation can operate in fully independent mode and attend to the adjustments of the heat pump and the entire heating system, or you can connect it to housing automation systems.

> CHILLER SERVICE NEXT™ REMOTE DEVICE MANAGE

> > REMOTELY MANAGED DEVICES



### Accessories

- Description 2 Ecotronic<sup>™</sup> optimization system
- Service Next<sup>™</sup> service network system
- Remote control connections
- Titanium heat exchangers

### Chillquick Thermo<sup>™</sup> heat pumps

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