ClimaCheck

You can't predict the weather

- but you can prevent unexpected problems Extreme weather conditions are becoming more common all over the world. The last long and hot summer caused many problems in our industry as the capacity of technicians was not sufficient when systems failed. Many contractors had to say no when customers called to get urgent help. Due to the workload of technicians it took a long time to restore cooling and Hospitals could not make surgeries, food was de-

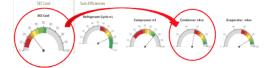


stroyed and Hotels could not maintain comfort for their guests. The way to avoid failures and downtime is to work with preventive maintenance

and monitoring.

ClimaCheck is the perfect tool for early detection of any problem in air conditioning, refrigeration and heat pump systems. ClimaCheck documented preventive maintenance or even better 24/7 monitoring will identify almost all problems before they create a problem in the plants.

• An overcharged system or fouled condenser will trip at high ambient.



- A system low on charge will trip on high discharge or not deliver sufficient capacity at high ambient.
- A compressor with low efficiency will fail or not deliver sufficient capacity when exposed to extreme conditions.

Faults do not occur because of hot weather. They could have been fixed well before the heat wave.

IoT makes relevant information available to the expert. Early warning and optimisation through real time data are the best recipe to avoid breakdowns or malfunction.

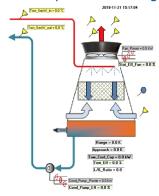
Get prepared NOW for the next summer. Ensure that your systems are checked or monitored 24/7 with ClimaCheck before they are tested at extreme conditions again.

Product news

Save water and energy in Cooling towers

It is not only energy efficiency that is important for cooling towers, evaporative and adiabatic condensers. In hot climates cooling towers are one of the major water consumers. The cooling tower can dramatically decrease efficiency of a chiller or refrigeration plant at the same time as an inefficient chiller or tower will waste large amount of water. ClimaCheck is introducing a completely new level of analytics that evaluate both energy and water consumption of cooling

towers in real time. "Water efficiency" of a cooling tower is as important as energy efficiency. Contact us if you have cooling towers in refrigeration or chiller plants where you want to save water and energy.



ClimaCheck input module R560 fixed+portable

With the ClimaCheck analog input module we have added a very flexible expansion module to the program. The module has 8 analog inputs that can set to take Pt1000, 0-10 V or 4-20 mA inputs independently. The communication with the performance analyser is on Modbus RS485



so the module can be used hundreds of meters away from the performance analyser and only connected with signal cable (even wireless is possible). For the portable ClimaCheck performance analysers we have mounted the module in a housing where the four first channels have double contacts so they

can be used either as inputs for 0-10V/4-20mA or Pt1000.

The input module is perfect to add extra channels and if you want to measure on i.e. two racks or chillers simultaneously. Download product info from our website or contact for further information.

Global News Thanks to all that visited us at Chillventa



October 15th to 18th ClimaCheck participated in Chillventa in Nürnberg, Germany. It was three intensive days where we met many of our business partners and old friends in the industry to exchange experiences. We also met many new contacts and had a chance to introduce the ClimaCheck technology to them. Watch the new presentation on why and how ClimaCheck works that was produced for Chillventa on our YouTube channel.

International project to Evaluate Geothermal heat pumps.

In the International Energy Association Annex 52 "Long term performance measurement of GSHP Systems serving commercial, institutional and multi-family buildings" methods for measuring and evaluation of GSHP are developed and evaluated in this project.



Currently five countries have joined the Annex and more are expected. Which coun-

tries that are participating and more information is available here . For more information on ClimaCheck involvement contacts klas@climacheck.com.

ClimaCheck market in Asia is increasing

ClimaCheck participated in EU Green Energy Technology mission in Indonesia and Singapore in early November and also then did a training for enthusiastic new performance analysers in cooperation with Nexergy the ClimaCheck distributor in Singapore and Teale our first Evaluation partner in Singapore.

1-wire technology in ClimaCheck

With the new platform introduced with ClimaCheck PA Pro III, it is now possible to use 1-wire temperature sensors. The 1-wire is a bus sensor, meaning that it has a chip in the sensor and the communication is digital. The advantage with this technology is that it does not require any analog inputs and cable resistance does not affect the measuring accuracy.

New distributor for India

BP Refcool based in Gurgaon near New Delhi has taken on the responsibility of introducing ClimaCheck in India Contact here. ClimaCheck will be represented at the Clean Energy Showroom inaugurated at Business

Sweden in New Dehli.

Find a ClimaCheck distributor close to your location here.

ClimaCheck announcements International training 2018



International Training and workshop April 2019

ClimaCheck will arrange the 8th International training in ClimaCheck-based performance analysing troubleshooting and optimisation of air conditioning, refrigeration and heat pump systems, April 11-12 2019. Reserve your place now to level 1 or 2 ensure availability and follow the updates on the program here.

New staff at ClimaCheck

ClimaCheck is welcoming a new knowledgeable team member. We would like to introduce



Niklas Berglöf as our new marketing and sales manager from January 2019. He has a training in B2B sales and marketing and has worked with sales at a leading IT equipment company in Sweden. Niklas has experience with ClimaCheck products as he

has worked in the company prior to his studies and done his internship with us.