

Newsletter May 2018

ClimaCheck and GDPR

ClimaCheck implements the new General Data Protection Regulation ("GDPR"), that comes into effect May 25, 2018 (further information about the EU lawhere). We hope that our content is relevant to you. You can remove your subscription by clicking the unsubscribe link in the footer of any email you receive from us, or by contacting us at klas@climacheck.com. We always will treat your information with respect.

Global News
Meet ClimaCheck at
Atmosphere America



Natural Refrigerants

06/12-14/2018 - Long Beach, CA

The Athmosphere America Conference focus on the use of refrigerants with low impact on the global warming and obviously also on how to make system efficient. To ensure that new technologies are energy efficient require clear strategies for measuring and validation. ClimaCheck's extensive experience of validating both low GWP alternatives as well as operating efficiencies will be shared in a workshop June 12th.

ClimaCheck CEO Klas Berglöf and Sean McCaffery from ClimaCheck US distributor will be there.

Please do not miss to join the workshop or write a note to Klas at klas@climacheck.com to arrange a meeting to discuss your projects and our technology.

ClimaCheck in Singapore and Hawaii

ClimaCheck has appointed nExergy Pte. Ltd. as distributor for ClimaCheck solutions in Singapore



in connection with that one of the founders Lekha Patmanathan participated in the International training in April. Lekha and Rafael have experience from Energy optimisation projects and we are looking forward to work with them to improve efficiency of chillers and refrigeration plants in the region.

At the same Donogh McSherry of Blue Light Technologies joined the Climacheck Network as distributor for Hawaii.



Pls find their or nearest ClimaCheck contact info on our website

Cooling tower analyses to save water and energy

ClimaCheck monitor many systems with cooling towers around the world.



So far the main focus has been to evaluate the approach between water and wet bulb. But there is much more to it. It becomes obvious that the M&V for the cooling towers can be improved. More can be done to create not energy efficiency benchmarking but also define the "water efficiency" of the tower. ClimaCheck is in the process of initiating field tests with the new cooling tower evaluation algoritms on several markets. Contact us if you have cooling towers in

refrigeration or chiller plants and want to participate in pilot studies to measure - analyse - optimise and benchmark the water and energy efficiency.

Product news

ClimaCheck's new IoT platform introduces integration options through Modbus RTU. ClimaCheck PA Pro III has two RS485 serial interfaces. One of the interfaces is used to communicate with external devices such as analog modules and power meters. The other interface can now be configured to be a Modbus slave.



This enables integration with building management systems (BMS) and allows them to write measurement inputs to the PA Pro III and read back calculated results such as COP and System Efficiency Index.

1-wire technology in ClimaCheck



With the new IoT platform introduced with ClimaCheck PA Pro III, it is now possible to use 1-wire temperature sensors. ClimaCheck 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.

ClimaCheck
International training
Measuring – analysing
– optimisation was
held in Stockholm
April 16th to 17th 2018

The ClimaCheck international training held in April in Stockholm was as always a meeting point for a group of air conditioning and refrigeration experts. The mix of some of the most experience of ClimaCheck users and beginners some with very deep experience of plants is a great opportunity to exchange experiences and learn the latest tricks. This Year EBM Pabst was guest speaker to educate us ion the latest technology when it comes to energy efficient fans and the saving potential of variable speed.



Guideline to Measure&Validate geothermal heat pump and chiller plants.

ClimaCheck has been an active member in a Swedish workgroup with representatives from equipment owners, consultants and tradeorganisations to create guidelines for how to improve validation of geothermal systems. The background is the experiences that it is hardly possible to make

validation of the operation of the installations due to lack of information on design and lack of structured approach of monitring. This can be true even if there is a lot of datapoints installed. A Guideline has been developed including a structure for what design data that should be made available, what data points should be recorded for different levels of monitoring.



The work done in this project will also be input in **International Energy Agency Annex 52** "Long term performance measurement of GSHP Systems serving commercial, institutional and multi-family buildings". Many countries will be contributing to this project. More information is available at http://heatpumpingtechnologies.org/annex52/. Contact your national contacts or klas@climacheck.com.