

## The ClimaCheck Performance Analyser

Approximately 20% of total world electricity consumption is used for refrigeration and air-conditioning and in many operations cooling can represent more than 50% of the entire electricity cost.

The unique, patented and award-winning ClimaCheck method offers an easy and accurate way for analysing virtually any system. The ClimaCheck method provides several advantages:

- Reduced electricity consumption of 10-40%.
- Reduced environmental impact.
- Reduced repair costs.
- Longer plant life-time.



ClimaCheck is today used in several hundreds of installations worldwide and is gradually becoming a preferred method for performance analyses.

## ClimaCheck reduce energy use in air-conditioning



ClimaCheck Performance Analysers evaluate air conditioning systems and are used in all areas of the industry. Manufacturer use ClimaCheck in development and production test rigs as well as after installation to minimize warranty costs. Contractors, commissioning engineers and auditors use ClimaCheck field measurement system in connection with commissioning, end of warranty and troubleshooting inspections. For equipment owners, un-biased validation of performance ensures that specified performance is achieved. Performance contractors can predict and then achieve savings by using ClimaCheck. Finally, fixed installations offering continuous monitoring, provides an early warning system down to component level.

## Customer case Air conditioning inspections, UK

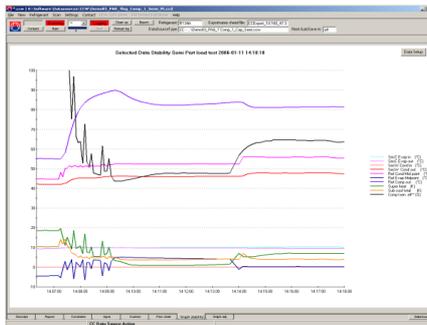
### State of the art inspections and audits

Requirements on performance inspections are being implemented on many markets and incentives for re-commissioning introduced. Traditional methods for measuring performance involve flow measurements that cannot provide accurate and stable measurements, which makes them not cost-effective. ClimaCheck offers a solution that identifies any deviation from optimal performance on component level and validates performance in an un-biased way without input from manufacturer's data.



Thousands of inspections have been carried out showing that savings of 10-40 % can be achieved without significant investments.

Cost effective visualisation of performance with data on component level offers new possibilities to validate performance and optimise systems.



The example above, documents the performance of a chiller with a compressor with inefficient part-load operation. The measurements pinpointed that insufficient control of super heat at part-load operation was the cause of several earlier unexplained compressor failures. ClimaCheck identified the shortcomings of the expansion valve

### Result

Time used for measurement was 2 hours and part load solenoids that was not beneficial for this plant was deactivated:  
Annual operating cost decreased with 5000 Euro and removed high risk of future compressor failures.