

# Healthcare center leads the way to a better future..

- By using environmental friendly cooling systems.

*Brørup healthcenter is now a reality and the old buildings are well preserved. The earlier know as Brørup Hospital was closed in 2008 and is now a modern healthcare center with wide focus.*

By Morten Sminge Frederiksen, sales- and marketing coordinator, Bundgaard Køleteknik A/S (Denmark)



The 103 year old buildings in Brørup were used as hospital and epidemic clinic, with 30 beds. Now history has changed. Today the healthcare center, sizing approximately 4.450 m<sup>2</sup>, offers:

- Doctor
- Assistance
- Psychology
- Psychiatrics information
- Midwifery
- Blood bank
- Vein clinic
- Home assistance
- Rehabilitation
- Nurses

We were from the start in a good dialog with the consulting engineer and there were no doubt about the goal. The task was to cool down the rooms for rehabilitation to comfort level, using as little power as necessary and secure the possibility of environmental risks. The cooling system had to be of substantial quality. The cooling demand and the environmental profile called for a solution with natural refrigerants. In this case R290 Propane because it is very suitable for applications working in this temperature area. It was highly preferred that the cooling unit was able to be controlled by CTS systems so cooperation with the ventilation system was possible. After a few constructive dialogues



with the engineer we found a good solution for both parts. The price were also in a reasonable level.

The engineer wanted to avoid price increases by so the unit were delivered directly to the costumer. The aircooled water chiller was delivered with plate heat exchanger and of course an aircooled condenser, built on a firm frame with electrical switchboard. Aircooled water chillers with R290 Propane is built for indirect cooling and at the secondary side we used ethylenglycol (30%)

We also delivered a Hydrostation, with reservoir tank and distribution pump supplying the 13 ceiling cassettes with 4-ways air throw, and a brazed plate heat exchanger for the ventilation unit.

The idea were that the ventilation unit with the BPHE should cool the air intake as frequently as possible without activating the supply for the ceiling cassettes. Then the chiller could operate as little as possible. But the chiller had to be ready for supplying the whole rehabilitation area in the hottest days of summer. To avoid creating unwanted noise and to avoid too much airflow in the rooms we chose to dimension the cassettes larger than the actual cooling demand.

Chillers and heatpumps from Bundgaard Køleteknik A/S are of the best quality and we never compromise with safety.



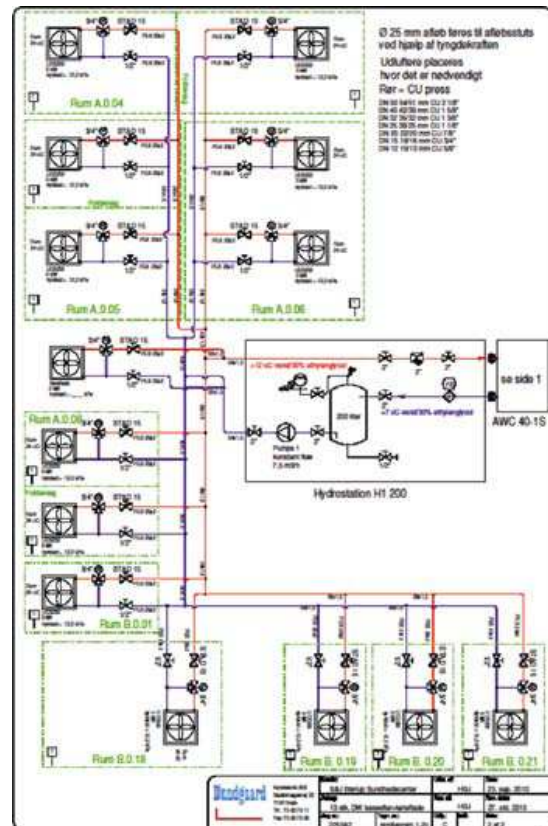
# Healthcare center leads the way to a better future..

- By using environmental friendly cooling systems.

Our R290 Propane unit are delivered with gasdetector and exhaust ventilator with EX approval. The compressor is mounted on rubberfeet, and the compressors is always of the highest quality. It is the Italian company Frascold who delivers these compressors and the also delivers a reliable professional cooperation.



Bundgaard Køleteknik has used Frascold as supplier since the start for more than 10 years ago. And we probably never have had a fatal error or problem using Frascold and their compressors. Brørup invested in offering healthcare for the whole city and surrounding areas and Bundgaard Køleteknik have contributed to many years of healthcare without compromising cost efficiency and environmental possibilities. R290 Propane are one of the most environmental friendly refrigerants in the world and it has no destructive contribution to the ozone layer, and one of the smallest contributions to the global warming impact, it is almost close to none. We are proud of helping the engineer and the healthcare center, and to have a good network of professional suppliers.



Aircooled & watercooled chillers and heatpumps from Bundgaard Køleteknik A/S, is ranged from 15 to 190 kW pr. cooling circuit, which can be deployed with several units.

Contact Bundgaard Køleteknik A/S Denmark for more information – [www.coolcare.dk](http://www.coolcare.dk).