

STULZ

CLIMATE. CUSTOMIZED.



How the Mitsubishi Heavy Industries cassette units contribute to energy and cost efficiency.

In collaboration with Breuer Klimatechnik, STULZ completed a project in Berkel and Rodenrijs containing new comfort air conditioning unit for an office (Helmhoek).

STULZ was responsible for supplying more than 25 units from Mitsubishi Heavy Industries. Partly due to the COVID-19 pandemic, this project posed a number of challenges.

THE FACTS

Customer

Breuer
Klimatechnik
Helmhoek

Hardware

FDC
FDT
FDTC

Task

Supplying comfort airconditioning units



THE CUSTOMER

Breuer Klimatechnik is an installer who is active in projects for (among others) houses, shops and office buildings.

The company attaches great importance to a healthy indoor climate. The choice for Mitsubishi Heavy Industries units, confirms their values towards a healthy indoor climate.

THE CHALLENGES

The impetus for this project was the client's long-standing wish for energy and cost-efficient air conditioning in the office building in Berkel and Rodenrijs. This for the benefit of better comfort in the building and higher productivity of the staff in the summer. The TCO (total cost of ownership) is very important for the client. The office building consists largely of glass, so that as soon as the sun shines on it, there is a lot of heat load, partly because there is no outside sun protection. On the shady side, the heating switches on during the spring and autumn season.

Another challenge that addressed the project was the COVID-19 pandemic. Since the project took place during the measures announced by the government, a number of precautions had to be taken by the installer. In consultation with the client, Breuer Klimatechnik chose to complete the installation in the evenings (4:00 pm to 10:00 pm). This choice meant there was no inconvenience to the staff and the maximum number of people per room could be guaranteed.





THE SOLUTION

As a solution, the FDC and FDT ceiling / cassette units were chosen, in combination with the FDC units of the KX series from Mitsubishi Heavy Industries. The excellent air distribution and quiet operation of the cassette units characterize the installation as a whole. In this way, the correct indoor climate is achieved in a fast, effective and quiet manner. The cassette units are also characterized by an elegant and European design with a clear white panel. In addition, the FTDC unit has won the A'Design Award in 2019.

The setup as described above was created because there may be a varying heat / cold demand between the east and west sides of the building. The 2nd floor does not have this issue and is expected to always have the same heat / cold demand. The 2-pipe VRF system was chosen because of the small available installation space (from 0.36m²!) and divided into an east and west side, so that cooling and heating can be carried out independently.

The outdoor units are selected on the basis of cost, efficiency, applicability and ease of installation. They are set up on the ground floor with the condenser facing the wall, which minimizes any sun exposure, and no noise or vibration can penetrate the property, which is also the safest and easiest way concerning annual maintenance for the service technicians.

Commissioning of the units has been supervised and inspected on site by STULZ, so that the end user is assured that the installation complies with the guidelines set by Mitsubishi Heavy Industries.

After the evaluation with Breuer Klimaattechniek and the client, we concluded the project as satisfied parties. Summers in the office are now cool and comfortable (instead of 30 °C the temperature shows now an average of 25 °C). In this way, staff can work more efficiently in the summer due to the improved conditions in climate and comfort.



This story was written in collaboration with:

