







CONTEXT

Customer: Public service Sector of activity:

DATA CENTERS

Location: Germany (Nürnberg)

Year: 2021

Equipment installed:

3x ZEUS R513a 820KW

Description of the equipment:

- *Water-to-water chiller
- *Two magnetic bearing centrifugal compressors on one circuit.
- *Flooded spray evaporator.

Total capacity:

2,5MW

THE CUSTOMER

As part of the modernization of a federal administration building in Nuremberg, CTA was selected to supply the cooling systems for the data center, which hosts the IT infrastructure dedicated to employee payroll processing.

In such critical infrastructures, cooling plays a key role. Servers and IT equipment generate significant heat that must be continuously dissipated to prevent overheating. Maintaining a stable temperature and controlled humidity level is essential to ensure data availability, protect electronic equipment, and guarantee service continuity.

To meet these demanding requirements, CTA supplied three water-cooled chillers, each rated at 820 kW, operating with R513A refrigerant, a low-GWP fluid compliant with European environmental regulations. The units feature flooded evaporator technology, delivering high energy efficiency and stable performance, even under partial load conditions.

Thanks to this installation, the data center benefits from continuous, safe, and efficient cooling, ensuring the reliability of its IT infrastructure. With this project, CTA confirms its expertise in cooling solutions for data centers and strengthens its presence on the German market, particularly in Bavaria.