



THE COMPANY

Cineca is a not-for-profit Interuniversity Consortium, comprising of 67 Italian universities, 9 Italian research institutions and the Italian Ministry of Education, Universities and Research (MIUR). Formed in 1969 (as the Interuniversity Consortium of Northeastern Italy for Automatic Computing), today Cineca is the largest data centre in Italy and one of the most important worldwide. Operating under the management of the MIUR, it provides the scientific community with a cutting-edge data centre. Supporting the national and international sphere of research through supercomputing and its applications, Cineca creates management systems for university administration services and the MIUR, as well as engineers and develops information systems for public administrations, healthcare and businesses. The Marconi supercomputer is actually ranked as one of the first among the Top500 ranking of the most powerful supercomputers, and Cineca represents Italy in the PRACE project (Partnership for Advanced Computing in Europe).

www.cineca.it

Summary

Location: Casalecchio di Reno (Bologna), Italy

Sector: Computing, Education, Data Centre

Vertiv Solutions:

- Liebert® XD air-conditioning unit
- Liebert CRV air-conditioning unit
- Liebert PDX air-conditioning unit
- Liebert HPC-M chiller
- 400 kVA Liebert Trinergy™ Cube UPS
- Preventive monitoring and remote diagnostics services
Vertiv™ LIFE™ Services

Requirements:

Constant enhancement of infrastructure to increase efficiency, availability and reliability, enabling a significant reduction in energy consumption and environmental impact, as well as limiting management costs.

Results:

- Implementing efficient technologies
- Increasing operational efficiency and agility
- Saving energy, reducing environmental impact and limiting administration costs

Background

Cineca is increasingly becoming Italy's unique point of reference for technological innovation. With offices in Bologna, Milan and Rome and more than 700 employees, Cineca serves the entire academic, educational and research system in Italy. To guarantee the consistent reliability, safety and flexibility of its infrastructure, Cineca is constantly updating and enhancing its technologies. Since the 1990s, it has been relying on solutions, services and capabilities by Vertiv to safeguard its own data centres in terms of protecting electricity supply, precision air-conditioning and infrastructure monitoring.

Context and Solutions

The collaboration between Cineca and Vertiv began in the 1990s and consolidated itself over time, starting from the introduction of Uninterruptible Power Supplies (UPS) and static switches to guarantee availability and security of critical infrastructure. Over the years, Liebert® XD, Liebert CRV and Liebert PDX air-conditioning systems have been installed for temperature management in complex IT environments, coupled with Liebert HPC-M chillers.

Furthermore, Cineca has also deployed the Vertiv™ LIFE™ Services preventive monitoring and remote diagnostics services, making it possible to promptly identify any situation when an alarm is activated or tolerances are exceeded, for efficient, proactive maintenance and rapid responses in case of malfunctions.

To update the existing system and ultimately improve the energy-savings of the data centre, Cineca has confirmed Vertiv as its technology partner, also thanks to the unique features of the new-generation Liebert® Trinergy™ Cube UPS along with the capabilities and experience in support services. The Liebert Trinergy Cube has in fact emerged as the only product able to respond perfectly to the performance requirements desired by Cineca: it guarantees unparalleled performance for commercial data centres and is set up to evolve to accommodate internal demands, thereby minimising Total Cost of Ownership (TCO), energy consumption and CO² emissions. Thanks to Liebert Trinergy Cube, which was installed and made operational in roughly three months, Cineca can boast an energy saving of several thousand euro per year and an innovative, flexible and unique system of its kind.

“We chose Vertiv™ LIFE™ Services as we found it to be a cutting-edge service that showed a number of beneficial features compared to the competition. What’s more, after installing Liebert Trinergy Cube, it proved itself to be an essential, high-quality tool constantly monitoring systems and ensuring the maximum availability and efficiency,” explained **Massimo Alessio Mauri**, **Head of General and Technical Services at Cineca.**



“Liebert® Trinergy™ Cube ensures around 98.5% efficiency, allowing hot scalability of up to 3.4 MW in a single unit and of up to 27 MW in parallel,” states Roberto Sabbatini, AC Power Sales Director at Vertiv in Italy.

“It also intelligently adjusts the power supplied to the charge based on the atmospheric conditions in the installation location. We are truly proud of this partnership - which we can consider historic - with Cineca and of the projects we have carried out over the years. We are going to remain side-by-side to continuously improve the performance and energy efficiency of their technological environments.”