

Garibaldi Station Complex

Milan - Italy - 2009
Designer: Tekser s.r.l.

System type: Hydronic system - Total cooling capacity: 1900 kW
Total heating capacity: 2000 kW - Installed appliances: 2 water-cooled ERACS-WQ units optimized for geothermal systems



Project

The project is presented as an important example on the Italian property scene where the subject of the redevelopment of property is predominant, especially in the current crisis period, compared to new constructions and is one of the objectives of the European Commission for energy saving.

Challenge

The design challenge consisted of the redevelopment of an existing office tower block, built in the 1980s, looking for technical solutions which, through the skilled integration of architecture and systems, allowed precise sustainability objectives to be met. Out of the many optimisation measures, a fundamental role is played by the efficiency of the heat-carrying fluid production system for climate control.



Solution

The heart of the climate control system is made up of two ("energy raiser") Climaveneta ERACS multiuse heating and cooling units with heat exchange from a geothermal source (water from water-bearing strata). The high efficiency of this choice has made it possible to place the redeveloped building in energy class "B" in the winter climate control (obtained from a situation that was poor before redevelopment as the building was placed in class E) and also ensures low handling costs in any operating regime.

TEKSER s.r.l.
società di ingegneria

The designer says:

Ing. G. Davoglio

"Thanks to Climaveneta technology, a pioneer in the field of energy raiser units, this building has proved to be efficient, both under an energy and economic point of view, thus representing an energy sustainability model and a possible landmark for future activities aimed at the recovery of the historical buildings."