

Use / Planning / Energy Control Systems Installation in Building Facilities.

The use of automation BMS (business management system) or PLC (Programmable Logic Controller) is recommended for the purpose of improving the energy efficiency mainly in large buildings such as hospitals, schools, public and private offices, stores, hotels etc. Furthermore, through continuous monitoring of the functions a large percentage of the building operating costs is saved, energy sources are preserved and thus the emission of CO₂ is reduced.

The theme of the project is: Use / Planning / Installation of Energy Control Systems in Building Facilities. The facility chosen to be studied/controlled is a hotel indoor swimming pool. The purpose of this project is the scheduling of the pool control system to reduce energy consumption while offering comfort and security to the users. With the help of the device USB DrDAQ Data logger and proper planning the process of heating the water has been automated, and the same has happened regarding the addition of soda when the pH of the water descends and respectively adding acid when the pH exceeds a specified value. Lastly, it has been programmed to activate the ventilation of the swimming pools area when the relative humidity exceeds a critical value.