

Citroën car dealership Case study



Citroën car dealership

PROJECT

Improve energy efficiency and cost savings

SECTOR Automotive

CLIENT Garaje Eloy Citröen Car Dealers

Information of interest From the first month, there has been a 24% electrical energy consumption saving

Most significant results

Dealership surface area 6220 m²

Annual energy consumption 260000 kWh

Annual consumption in Euros €55000 a year

Savings Between 11% and 24% the first year

Annual return on the investment 61%

3SL Aplicaciones Integrales Eléctricas is a company that specialises in electrical installations. Major increases in electrical energy costs and the demand from the internal market have led us to specialise in energy consulting services to enable us to offer our clients greater returns from their installations.

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The client

The **Garaje Eloy Citröen** Dealers grew gradually and reached 6220 m² for its activities, consuming 260,000 kWh per year at an annual cost of €55000.

Objectives

The ownership's top priority was to improve energy efficiency and the resulting cost savings. To achieve this, it looked at three fundamental areas: air conditioning, controlling electrical consumption by programming temperatures and calendars, and compensation of inefficient energy (reactive energy).

Solution

Energy measurement and control units were installed (**EDS** and **EDS 3G**, **CIRCUTOR CVM** analyzers), for lighting and air conditioning, and inefficient energy (reactive energy) was compensated with an **OPTIM 1** capacitor bank. The entire system is controlled via the WEB, both for managing parameters and viewing alarms. As a result of these measures, savings of €13200 were achieved in the first year.

Results

From the first month following installation, the electrical energy consumption savings amounted to 24%. Other savings were also noticed both in terms of use and maintenance, thus facilitating rational energy use in the installations, including





> 15% was saved on the electricity bill as a result of power factor correction



> 25% of the saving was achieved through better control and working habits

Savings Measurements and Results

On installing the electrical network analysis units, the variability and need to compensate inefficient energy (reactive energy) was clear, since this was not only a waste of energy but also a non-productive excess cost.

Improvements in air conditioning management

20% was also saved on air conditioning consumption, which was optimised thanks to the CIRCUTOR measurement and control systems.

Implementation of new management protocols

By programming energy use and managing incidents and excess consumption via alarms, energy consumption was rationalised right from the start of the project, achieving savings of 24%, and later actions were also possible thanks to the system data.

"The energy saving was already 24% in the first year, and reached 28% at some points, as a result of the comprehensive control of energy use"

25% of the saving was

achieved through better control and working habits



Capacitor bank Optim

electricity bill as a result of power factor correction

Savings

159

remotely via the WEB platform. To achieve these results, a technical study was first of all performed so that the improvements could then be introduced and the entire supervision system installed. In August, following the installation, 28% was saved on the electricity bill, and even greater improvements were achieved thanks to the use of consumption and programming calendars.

Partners

CIRCUTOR supplies units and software for energy management and saving in the public administration, tertiary, corporate, industrial and residential sectors. Through its network of Experts and its distribution channel, installers, integrators and partners, it provides services in more than 100 countries and has received several energy efficiency awards for projects, units and R&D+i. CIRCUTOR'S management solutions are compatible with other units on the market, so that installations can be updated with minimum investment **CIRCUTOR** Electric Energy Management. In this case, the chosen Partner was 3SL Aplicaciones Integrales Eléctricas.

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