

VARMATIC VARIO CASE STUDY LEISURE CENTRE, EDINBURGH



SDC Industries installed the Varmatic Vario Voltage Optimiser in a leisure centre located in Edinburgh. This particular leisure centre is a large building, offering a number of services, including swimming pool, sauna/steamroom, racquet sports area, gym and fitness area. The facility caters for thousands of visitors per annum, and the opening hours are 7.00am to 10.00pm Monday to Friday, and 9.00am to 7.00pm Saturday/Sunday. As a result, annual electricity costs can be quite excessive.



To counteract this, the leisure centre Facilities Management team decided to explore the benefits of utilising voltage optimisation. Their Facilities Manager contacted SDC Industries to discuss the options available to them, and we provided information on the benefits of installing the Varmatic Vario.

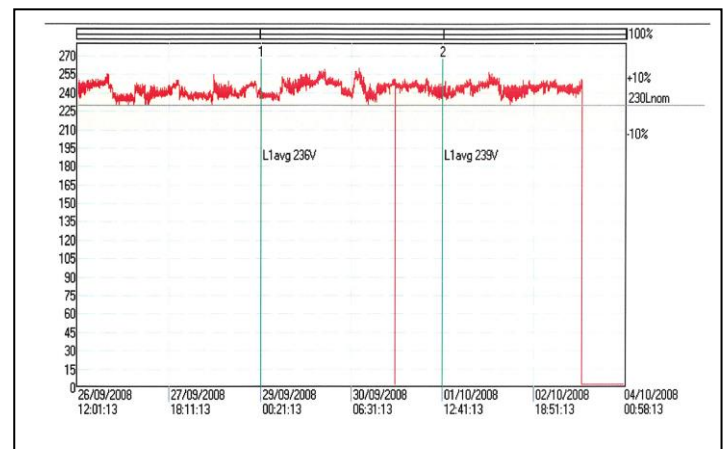
A voltage logger was sent by post to the leisure centre, and was installed from 26 Sept to 04 October. From the half hourly data obtained, and from analysing the load details, SDC Industries engineer advised that installation of a 200KVA Varmatic Vario would be required.

Installation would be performed on the incoming busbars after the main circuit breaker. This would not involve any co-ordination with the leisure centre electricity/utilities supplier, as no access is required to the incoming busbars which are fed from the transformer.

In this instance, the Varmatic Vario was delivered to site and accommodated in the electrical switchroom on 27th December. Our installations team arrived at site early to carry out the preparatory works before fitting the unit. The works were completed in one day.

For this particular installation, SDC Industries manufactured and installed the unit. No external sub-contractors were involved.

INFORMATION FROM VOLTAGE LOGGER – 26 SEPT – 04 OCTOBER



**200KVA Varmatic
Vario**

COST SAVINGS

| | | |
|--|---|--|
| SIZE OF VARMATIC VARIO | : | 200KVA |
| UNIT SIZE** | : | Control Panel : 800mm long x 400mm deep x 1000mm high Optimiser : 1150mm long x 750mm deep x 800mm high |
| NUMBER OF WEEKS SYSTEM IN FULL OPERATION | : | 52 WEEKS PER ANNUM |
| OPTIMISATION LEVEL | : | 8% |
| LEVEL OF SAVINGS | : | 10% |
| ANNUAL ELECTRICITY COSTS (WITHOUT VARMATIC VOLTAGEMASTER) | : | £62,835 |
| ANNUAL ELECTRICITY COSTS (WITH VOLTAGEMASTER) | : | £56,552 |
| ANNUAL TOTAL SAVINGS (10%) | : | £6,283 |

**Sizes can be subject to change – please check before ordering

CO2/CARBON SAVINGS

TOTAL KWH USED PER ANNUM = 940,784KWH

TOTAL KWH SAVINGS PER ANNUM = 94,078KWH

TOTAL CO2 SAVINGS PER ANNUM = 94,078KWH x 0.43*= 40,454KG CO2

*Calculation taken from National Energy Foundation (www.nef.org)