



# PELLEGRIN Hospital

*The fuse-based switch at the heart of the general distribution system*

> APPLICATION

## Other applications:

*Any general distribution requiring fail-safe electrical supply continuity. In particular, general public establishments.*



**The distribution board supplies power requirements for hospital wards...**

*The renovation concerns the supply of part of the "Tripod", a building which accommodates hospital departments and care services. Supplied by four MV / LV redundant transformers, the main board supplies nine existing divisional distribution enclosures in the same premises. Changeover switches assure the switching of sources should one go off-line.*

**To renew one of its eleven posts, the Pellegrin Hospital, Bordeaux, has chosen a solution based on the fuse switch and the motorised changeover switch. A reassuring device, which satisfies the recent ministerial directives concerning installation safety.**

**T**he electric installation at the Pellegrin Hospital is representative of a whole generation of establishments. On one hand, the distribution board comprises older circuit breakers (20 - 25 years) of doubtful reliability, and which are difficult to replace. On the other hand, the impossibility of switching the supply sometimes necessitates "additive" evolutions that cannot always take into account all the optimal safety regulations. The necessity of load continuity and a very vast site with ageing feeders and cables requires the application of an IT-load together with a system for monitoring insulation faults.

## A double supply

The hospital's Technical Service has based its new system on the FUSOMAT fuse switch and the motorised SIRCOVER from SOCOMEC. In fact each input

benefits from a double supply and from a switch and a protection device appropriate for each source. Moreover, a complete system for monitoring insulation faults is based on the SOCOMEC range of ISOM products. DIRIS units for energy management complete the system.

**A fine example of integrating complementary solutions on a distribution board! ■**



## "Ensuring fail-safe service continuity"

For Bernard SADLER, Works Manager at the Pellegrin Hospital, the simplicity of the fuse-based solution is a guarantee of safety.

Mr Sadler, what made you choose the fuse solution?

"For us, switching over to fuse-based solutions after years of circuit breakers could be seen as a step backwards. Nevertheless, this option has numerous advantages which helped determine our choice.

"The simplicity of the SIRCOVER changeover switch means easier maintenance and operation. The high reliability of the FUSOMAT fuse protection also offers certain economic advantages. Basically, it is simpler, cheaper and more reliable than the equipment based on circuit breakers, which was installed during our last renovation in 1978".



Safety breaking enclosures placed for each incomer: additional safety for maintenance operations on the distribution pillar.

To be even more precise, what are the advantages for the hospital?

"Two points are particularly interesting for our activity. If there is a breakdown in our PLC systems, the motorised changeover switches can be operated manually. And if an incident occurs at night, the absence of qualified personnel is not a handicap: this material can be used by untrained electricians."

You opted for the installation of a safety switch for the incomers of each existing enclosure. Could you explain this choice to us?...

"I remind you that our main concern is to assure a continuity of service 24h a day, all year long. From then on, how can we ensure selective switching should we need to intervene in the enclosure? We therefore chose to place a fuse switch at the enclosure incomer in order to insulate it and to enable us to intervene on the distribution (feeder) pillar in complete safety. It is, of course, this equipment that has allowed us to renovate the distribution boards." ■

Comments reported by Emmanuel IGOT

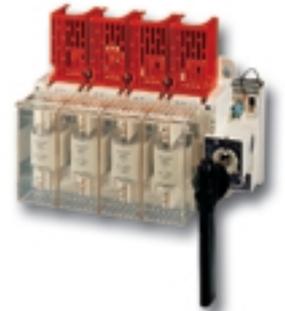
View inside, showing two cells composing the new distribution board. Protection for one of the inputs using FUSOMAT fuse switches.

SIRCOVER motorised changeover switch, which supplies the divisional enclosures.

### A complete renovation

The replacement of the distribution board and bringing the installation up to current norms are an excellent illustration of a manufacturer able to react promptly and with full competence around high-performance products. Having contributed to the elaboration of the specific technical specifications and to the calculation of feeder cables, SOCOMEC has supplied contractors with several types of products and technical solutions with complementary functions:

- a full range of **fuse-switches** from 25 to 1800 A,



- SIRCOVER motorised **changeover switches** (125 - 3150 A),
- a complete system for monitoring insulation faults,



- and a system of DIRIS energy meters and energy management units.

Configuring the DIRIS and ISOM equipment was carried out by SOCOMEC engineers.

A considerable saving of time and extra assurance for the Technical Service of the hospital.