



Do you know the most cost-effective way to upgrade your distribution equipment with minimum down-time?

Distribution protection technologies are constantly developing to provide maximum safety. You can upgrade your existing system with the latest innovations and minimum down time using a Terasaki Retrofit system.

In the case study below you can see an example of a perfect solution for replacing obsolete distribution equipment without disturbance to switchboard or copperwork.

## "Seamless to the Sainsbury's business" - obsolete MEM breakers retrofitted by Terasaki



**Client:** Sainsbury's Supermarkets Ltd

## Project: Retrofit

**Location:** Sainsbury's headquarters at Holburn, London

**Retrofit Type:** MEM Meshield to Terasaki TemPower 2

Testimonial: "I would like to thank all of Terasaki and the team who carried out the work that was seamless to the Sainsbury's Business. No one really knew how intrusive this was when they returned on the Monday to work at their desks." -Al Sacco, Projects and Data Centre Engineering Manager, Sainsbury's Supermarkets Ltd

Terasaki's Direct Response Service Division helped Sainsburys adapt their Holburn (London) Headquarters for multiple occupancy.

Sainsburys had to make major changes to the electrical system but were unable to replace the four main switchboards without major civil works.

The answer was to retain the switchboards but replace the obsolete circuit breakers. The Direct Response site team replaced 16 MEM air circuit breakers (ACBs) with modern TemPower 2 retrofit ACBs over two weekend shutdowns.

### **Retrofit Details:**

Timeline: All ACBs replaced over two weekends shutdowns

Impact on client's business continuity: nil

Technical challenge 1: Incorporate replacement ACBs into existing Castell interlocking system

(achieved ✓)

Technical challenge 2: Incorporate new ACBs into existing Restricted Earth Fault protection scheme (achieved ✓)

### **What is a Retrofit?**

Retrofit 0.4 kV – this is the replacement of obsolete circuit breakers to modern devices using a standard adaptation kit for increase the functionality and reliability of switches and their protections, without change compartment and busbar low voltage switchgear, with no building works. Retrofit available for withdrawable and fixed circuit-breakers, for rated currents from 20A to 6300A.

Company «AZBUKA EL LTD», being the official exclusive distributor of Terasaki Electric in RUSSIA, manufactures retrofit the following types of circuit breakers (but not limited to):

- retrofit ABM
- retrofit ELECTRON
- retrofit AB2M
- retrofit AE
- retrofit BA
- retrofit ABB
- retrofit SCHNEIDER ELECTRIC
- retrofit SIEMENS
- retrofit FUJI
- retrofit MITSUBISHI
- retrofit NISSIN
- retrofit HITACHI
- retrofit TERASAKI
- retrofit TOSHIBA
- and other

Modernization of equipment for the retrofit program can save up to 80% of the funds, and reduce the time for replacement equipment up to 1 day.

80% of equipment wear and domestic distribution networks is a causes of frequent blackouts and a long breaks of electricity transmission to the consumer and industrial companies.

The low voltage circuit breakers are is a heart of a distribution networks. Obsolete circuit breakers (both introductory and sectional and feeder) is main wear element of power equipment and in modern conditions they can not provide reliable protection of equipment and personnel.

Four reasons for use Retrofit system:

- increase safety and improve functionality, including measurement of all parameters of the network, data transmission, relay protection and extend the life equipment cycle to another 30 years;
- avoid the construction work and save up to 80% of the funds;
- reduce time to repair equipment until 1 day;
- prevent stop of production lines, as there is no need to turn off the entire section busbar and work is carried out alternately on each feeder.

For technical advice and for order, you can contact our competent specialists at **+7 495 221-01-57** , and  
also you can write to our mail  
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We always respond promptly to any requests! If your e-mail appeal remained unanswered - please call back and verify whether we have received your e-mail request!