

Client:
Standard Life

Project:
Retrofit

Location:
Standard Life data centre, Edinburgh

Retrofit Type:
Ellison to Terasaki TemPower 2 transplant

Scope:
Replace ACB1, bus-coupler and ACB2 on four identical switchboards without shutdown of data centre. Total of 12 ACBs replaced over 4 weekends.

Technical Challenges:

- Transplant a modern ACB into the rolling shell of an obsolete device
- Enable auto-coupling without switchboard shutdown
- No downtime for the data centre
- Achieved



Transplanted ACB in original rolling shell

SUCCESSFUL SWITCHGEAR TRANSPLANT FOR STANDARD LIFE DATA CENTRE

Standard Life wanted to avoid switching off the computer suites in their Edinburgh data centre in order to replace faulty and obsolete Ellison Air Circuit Breakers (ACBs). Terasaki's Direct Response Service Division suggested performing an ACB transplant operation – replacing the working parts of the Ellison ACBs with a modern product but retaining the auto-coupling shells – to provide a full upgrade without a shutdown.

Read below how we fitted the works around Standard Life's business by running the load on UPS for a short period each weekend for three weeks:



- 1. ACB1: after transplant
- 2. ACB 2: before transplant
- 3. Bus: Coupler - before

Location	Works	Load Status
Site visit 1	Open, rack-out and remove ACB1 (Ellison)	CS1 running on UPS for 15 minutes
Site visit 1	Close bus-coupler	CS1 fed by Tx 2, CS2 fed by Tx2
Factory	Transplant TemPower 2 ACB into Ellison ACB1 shell	
Site visit 2	Open bus-coupler	CS1 running on UPS for 15 minutes
Site visit 2	Replace, rack-in and close ACB1 (Terasaki)	CS1 fed by Tx1
Site visit 2	Open, rack-out and remove ACB2 (Ellison)	CS2 running on UPS for 15 minutes
Site visit 2	Close bus-coupler	CS2 fed by Tx 1, CS1 fed by Tx1
Factory	Transplant TemPower 2 ACB into Ellison ACB2 shell	
Site visit 3	Open bus-coupler	CS2 running on UPS for 15 minutes
Site visit 3	Replace, rack-in and close ACB2 (Terasaki)	CS1 fed by TX1, CS2 fed by Tx2
Site visit 3	Rack-out and remove bus-coupler	
Factory	Transplant TemPower 2 ACB into bus-coupler shell	
Site visit 4	Replace and rack-in bus coupler	

CS1: Computer Suite 1
CS2: Computer Suite 2
Tx1: Transformer 1
Tx2: Transformer 2

