Automated Low Voltage Intelligent Networks

ea technology

ALVIN™ Suite

Next generation LV network management equipment for Safer, Stronger, Smarter networks

www.eatechnology.com

The ALVIN™ family of Low Voltage network restoration and control products is the most technically advanced system for safe fault management and network automation.

The performance of Electricity Networks is having to evolve to meet the demands and expectations of customers and accommodate the uptake of Low Carbon Technologies. The sophistication of network control that has been deployed on the High Voltage network now needs to be deployed on the Low Voltage network with the same capability, but due to the scale of the LV network, at a greatly reduced cost.

The ALVIN™ family of equipment offers the following solutions

- Monitoring of the LV Network

- Fault management and location

- Management of stresses on the LV network due to Low Carbon Technologies

- Remote network reconfiguration

- Automated network reconfiguration

- Synchronisation with HV automation regimes

Increasing network demands and the connection of new devices to the LV network can be monitored via a combination of **ALVIN™** products which can provide the appropriate solution to mitigate these effects:

This equipment includes:

ALVIN™ Reclose

For self-clearing faults, **ALVIN™** Reclose™ will automatically perform multiple circuit recloses. For permanent faults, using the **SafeOn™** technology the device will not reclose, but instead lock-out

ALVIN™ LinkSwitch

Remotely controlled Link Box actuator

ALVIN™ LinkSense

Fully automated link box actuator
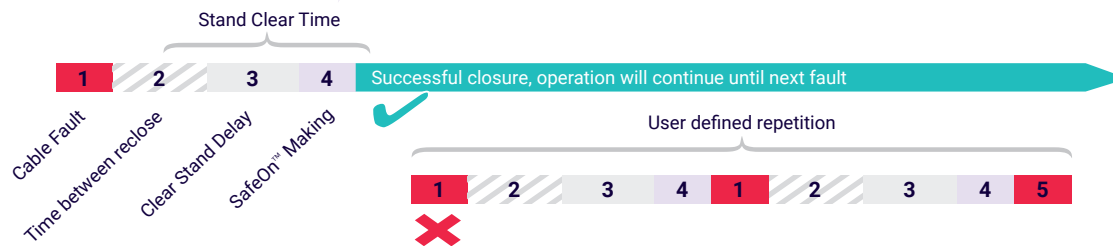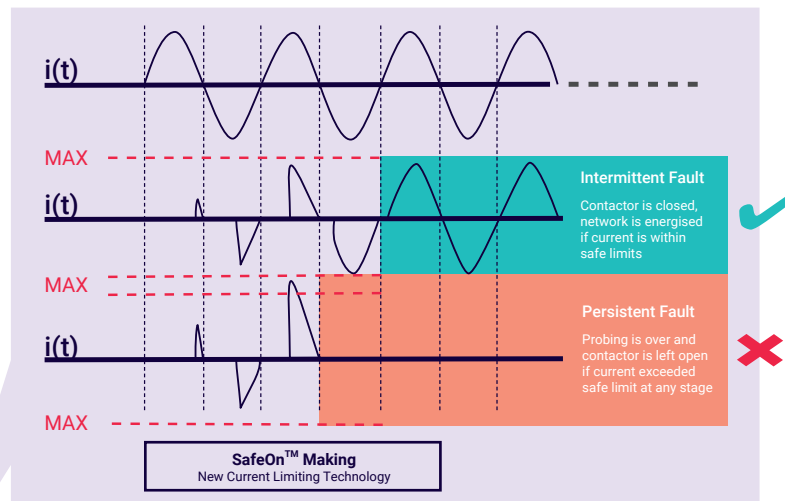
ALVIN™ MiniPortal

Communication portal link to LV Cloud

SafeOn™

Current limitation and protection for network operators and the public

SafeOn™ Making

Controls current during making operations, limiting amplitude during making on fault

i(t)

MAX

i(t)

Intermittent Fault

Contactor is closed, network is energised if current is within safe limits

MAX

i(t)

Persistent Fault

Probing is over and contactor is left open if current exceeded safe limit at any stage

MAX

SafeOn™ Making
New Current Limiting Technology

Stand Clear Time

| 1 | 2 | 3 | 4 | Successful closure, operation will continue until next fault |

Cable Fault

Time between reclose

Clear Stand Delay

SafeOn™ Making

User defined repetition

| 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 5 |

ALVIN™ Equipment Capabilities

- Monitors the network (voltage, current, fault level, harmonic distortion etc.) and provides information and alarms

- Provides fault management and location capabilities

- Reconfigure the network to re-balance load and voltage

- Manage stress by limiting the current when energising the circuit

- Improve availability and reliability: automated functionalities of **ALVIN™** allows power to be restored quicker. Power outages due to intermittent faults can be dealt with in seconds

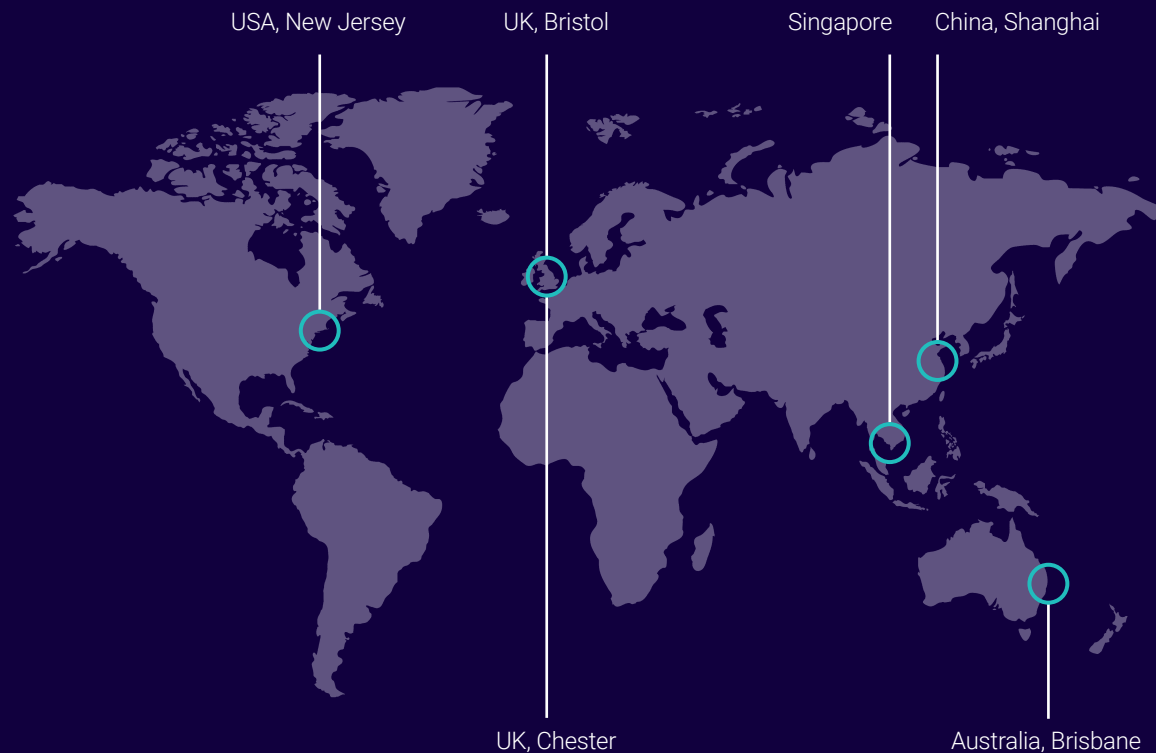- Offers a platform to allow algorithms to detect the presence of LCTs on the network

Benefits

- Low maintenance and life time cost

- Improved network performance

- Extended asset life: limited current flow on restart offered less stress on the Asset

- Increase resource efficiency / reduced operational expenditure

- Reduced network imbalance offering potential savings through network reinforcement deferrals

- Defer load related network reinforcement

To book your demonstration or to get further information and advice please contact us on +44 (0) 0151 347 2313 or **email sales@eatechnology.com / www.eatechnology.com**

EA Technology

At EA Technology we specialise in asset management solutions
for owners and operators of power network assets.

USA, New Jersey   UK, Bristol   Singapore   China, Shanghai

UK, Chester   Australia, Brisbane

**Founded in in 1966 we have over 50 years'
experience in the industry and 6 regional
offices around the world to support our global
customer base.**

We work with a lot of our clients on a long-term
basis to help them safeguard their power networks.

We advise our clients on strategy and implementation
of a range of technology solutions to manage power
assets, delivering maximum life and minimise cost.

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