OPTIONAL

Active Arc Eliminator - Safest in the world

Extremely fast “3 phase earthing switch” (< 5 ms)
Detectors operated by light
No thermal damages - No toxic gasses
No dangerous pressure increase - No pressure release system needed

IEC 60298 Open Arc tested to all 6 criteria’s at $I_k$ 40 kA 1 sec
Only one system needed per bus bar section
No need to change device after use

Quick back in service (a few hours)
Increased availability

If an arc occurs...........

Without Arc Eliminator  
With Arc Eliminator
OPTIONAL

Support panel - Smartest in the world

Interface panel with terminals for connection of all customer external cables and optic fibres for signals and auxiliary power.

All switchgear panels internal wiring are prepared in factory with snap-on contacts.

Prefabricated cables with snap-on contacts in one end are connected to terminals in the Support panel.

Thus all wiring for the entire switchgear can be tested in the factory before delivered to site. (F.A.T.)

This will give extremely fast installation / commissioning time

Battery system fully supervised up to 100 Ah/8h can be integrated
Installation

Installation time is reduced with about 25% of the time used for conventional switchgears. Based on:

- Lower frame and power cable terminations are prepared before panel arrives.

![Image of lower frame and power cable terminations]

- Bus bar joints connected without bolts (coil spring contacts).

![Image of bus bar joints]

- All switchgear panels internal wiring are prepared in factory with snap-on contacts.

![Image of internal wiring prepared in factory]

- The prefabricated cables with snap-on contacts in one end are connected to terminals in the support panel from factory.

![Image of prefabricated cables connected]

- All functions are factory tested.
Commissioning

Commissioning time is *reduced with about 50%* of the time used for conventional switchgears. Based on:

**Bay computer REF 54x in all panels with:**

a) Interlocking functions within the panel and between panels

b) Protection functions

c) Alarms

d) Measurements

e) Condition monitoring

All switchgear panels internal wiring are prepared in factory with snap-on contacts.

The prefabricated cables with snap-on contacts in one end are connected to terminals in the support panel from factory.

All functions have been tested at factory
Service and Maintenance

Service & maintenance time is *much reduced* compared to the time used for conventional switchgears. Based on:

**Continuous monitoring of switchgear**

No need for periodic maintenance
Maintenance on demand

**No need to access primary compartment**

All joints are connected without bolts

Operating mechanism are mounted in the operating enclosure accessible from the front

Cable connections are accessible in the lower frame

**No need for thermo-photographing**

All copper bar joints are welded by robot, high mechanical strength and low losses

All joints are connected without bolts
More Cost Effective

The AX1 concept will give the user a higher LCP (Life Cycle Profit) than with the use of conventional switchgears. Based on:

**Lower building costs**
- Small and compact design
- Low panel weight
- Can be placed anywhere with arc eliminator

**Lower service & maintenance costs**
- All joints are connected without bolts
- Continuous supervision
- Can be connected to remote main station control systems

**Lower operating costs**
- Using sensors
- No bolted joints – low internal resistance
- Maintenance on demand

**High recycling factor**
- Aluminium in enclosure constructions
- and pure copper in bar systems
- Reduced total amount of material used