SafePlus AirPlus 24kV
Eco-efficient compact switchgear

The SafePlus AirPlus is a gas insulated compact switchgear with AirPlus™ as insulation medium: The eco-efficient solution for secondary distribution networks up to 24kV.

As an alternative to SF₆, SafePlus AirPlus helps users with a green focus to reduce the climate impact of their distribution grid:

• Global Warming Potential (GWP) < 1
• No SF₆ regulations - today and in the future
• Same compactness as SafePlus with SF₆
• True GIS - independent from ambient air

Independent from ambient conditions
SafePlus AirPlus is a true GIS switchgear with a sealed stainless steel gas tank containing all live parts and switching functions.

Safe, reliable and maintenance-free
The constant gas conditions in the encapsulation ensure a high level of reliability as well as personnel safety and a virtually maintenance-free system.

Known SafePlus compactness
Like the proven SafePlus with SF₆ insulation, the SafePlus AirPlus is the most compact solution on the market - ideal for utility, CSS, light industry and building applications up to 24kV.

Eco-efficient with a GWP < 1
The SafePlus AirPlus completely avoids the use of SF₆, and is the ideal solution for customers with a green focus. This avoids any actions and costs related to the regulations for SF₆ - now and in the future!

AirPlus composition for MV
The AirPlus composition consists of more than 80% dry air and less than 20% C₅ Fluoroketones (C₅ FK), 3M™ Novec™ 5110 Fluid.
Technical Data Switch Earthing Vacuum circuit-
SafePlus AirPlus switch/disconnector Earthing switch/disconnector
Rated voltage kV 24 24
Power frequency withstand voltage kV 50 50 50 50
Impulse withstand voltage kV 125 125 125 125
Rated normal current A 630
Breaking capacities
- active load A 630
- closed loop A 630
- off load cable charging A 10 25
- earth fault A 200
- earth fault cable charging A 115
- short-circuit breaking current kA 16
- single capacitor bank breaking current kA 135
Making capacity kA 40 40 40 40
Short time current 3 sec. kA 16 16 16 16

Modularity
All modules are only 325 mm wide, which is the same width as for the existing SF₆-insulated SafeRing/
SafePlus portfolio.
SafePlus AirPlus can be configured with a maximum of 5 modules in one air tank with an internal busbar.

- **D-module for direct cable connection**
  D-module is a direct connection module, which can be placed as the first or the last module of a switchgear unit with common gas volume.

- **C-module for ring cable connection**
The cable-connection module uses vacuum technology for switching, in series with an earthing switch/disconnector.

- **V-module for transformer protection**
The transformer is protected by a vacuum circuit-breaker combined with a relay and current transformers. The standard relays do not require an external power supply.

Standard features
- Operating mechanisms with integral mechanical interlocking
- Facilities for padlocking on switching functions
- Manometer for pressure monitoring
- Lifting lug for easy handling

Additional features
- Motor operation
- Capacitive voltage indication
- Auxiliary switches & trip coils
- Short-circuit indicator
- Cable covers interlocked / arc-proof
- Extra base frame (290 or 450 mm height)

Dimensional drawings

For standard ring main unit applications ABB recommend the use of SafeRing AirPlus ring main unit.
Please contact your local ABB for more information on SafeRing and SafePlus products.

ABB AS
Amtm. Aallsgt. 73
P.O. Box 108, Sentrum
3716 Skien, Norway

abb.com/airplus