SafeRing Air 12kV
Eco-efficient ring main unit

The SafeRing Air is a gas insulated ring main unit (RMU) with dry air as insulation medium:
The eco-efficient solution for ring-cable networks up to 12kV.

As alternative to SF₆, SafeRing Air helps users with a green focus to reduce the climate impact of their distribution grid:
- Global Warming Potential (GWP) of 0
- No SF₆ regulations - today and in the future
- Same compactness as SafeRing with SF₆
- True GIS - independent from ambient air

Independent from ambient conditions
SafeRing Air 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 SafeRing compactness
Like the proven SafeRing with SF₆ insulation, the SafeRing Air is the most compact solution on the market - ideal for utility, CSS, light industry and building applications up to 12kV.

Eco-efficient with 100% dry air
The SafeRing Air 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!
### Technical Data Switch Earthing Vacuum circuit-breaker Earthing

<table>
<thead>
<tr>
<th>SafeRing Air</th>
<th>Switch</th>
<th>Earthing switch/disconnector</th>
<th>Vacuum circuit-breaker</th>
<th>Earthing switch/disconnector</th>
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<tbody>
<tr>
<td>Rated voltage</td>
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<tr>
<td>Power frequency withstand voltage</td>
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<td>Impulse withstand voltage</td>
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<td>Breaking capacities</td>
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<td>- active load</td>
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<td>- single capacitor bank breaking current</td>
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<tr>
<td>Short time current 3 sec.</td>
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</table>

### Modules & configurations
SafeRing Air is available in 18 different standard configurations of C-, V- and direct connection D-modules.

- **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.

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

### Available configurations
CC, CCC, CCCCC, CCCCCC, DC, DCC, DCCC, DCCCC, DV, DVV, DVVV, DVVV, CV, CCV, CCCV, CCVV, CCCVV, CCVVV

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

### Additional features
- Arc suppressor
- 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)

### Technical drawings

![Technical drawings](image)

### More information required? Configurations or features missing?
SafeRing Air is our eco-efficient RMU for standard configurations. For higher requirements or other configurations, SafePlus Air is the more flexible eco-efficient switchgear solution up to 12kV.
Please contact your local ABB for more information on SafeRing Air and SafePlus Air products.