

# New ABB breakthrough in gas-insulated switchgear

## Significant reduction in global warming potential



### ABB launches the world's first eco-efficient, medium-voltage gas-insulated switchgear with AirPlus

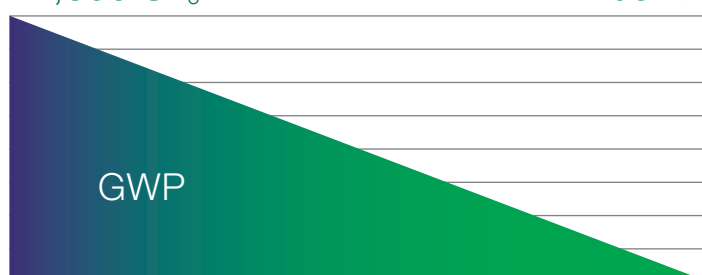
The brand new gas-insulated switchgear (GIS) with AirPlus™ is a revolutionary eco-efficient SF<sub>6</sub> alternative for medium-voltage (MV). With a global warming potential (GWP) < 1, it is the world's first MV GIS with a new gas molecule, which keeps compact switchgear dimensions and all GIS advantages. AirPlus technology is introduced stepwise to the ZX and SafeRing/SafePlus product families – ABB's primary and secondary distribution GIS.

#### Benefits of AirPlus switchgear

- Eco-efficient with a GWP < 1
- Compact
- Retains advantages of established GIS technology
- Avoids SF<sub>6</sub> regulations
- Used in reliable and proven switchgear products
- ZX2 available SF<sub>6</sub>-filled, but 'Ready-for-AirPlus'

22,800 SF<sub>6</sub>

AirPlus <1



#### Green and reliable – The best of both worlds

With more than 15 years market experience, both the SafeRing and ZX families are reliable and proven products. ABB has added the latest AirPlus technology to both to help reduce the carbon footprint of the power grid.

#### Fewer regulations – Now and in the future

In some countries, GIS operators are already facing regulatory and inventory procedures for SF<sub>6</sub>, increasing administrative efforts and operational costs. These regulations do not apply to AirPlus with a GWP < 1, and are not expected to in the future.



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### New eco-efficient ZX2 AirPlus

The new ZX2 with AirPlus™ insulation gas is the world's first eco-efficient GIS for primary distribution with a new gas molecule. It is an eco-efficient SF<sub>6</sub> alternative for MV with the same compact dimensions and advantages of established ZX2 switchgear – and a GWP < 1.

As the premium product of the ZX family, ZX2 AirPlus is especially suited for demanding applications in single and double busbar configurations.

### Future proof – with ZX2 Ready-for-AirPlus

All ABB's GIS using AirPlus are backwards compatible to SF<sub>6</sub>. If you don't want to switch to AirPlus right away, you can still be prepared for the future ordering your ZX2 "Ready-for-AirPlus". Then it comes factory-filled with SF<sub>6</sub> but is fully compatible for a later change to AirPlus.

### ZX2 AirPlus availability

ZX2 is the first member of the ZX family available with eco-efficient AirPlus technology. Availability will increase continuously. For initial release by the end of 2016, ZX2 AirPlus is available with:

- **Ratings:** IEC ratings up to 36 kV, 2000 A @ 50 Hz, 31.5 kA – most panel variants available
- **Coverage:** First introduction in Central and Northern Europe, other countries on request



### Interested in finding out more about ABB's eco-efficient MV GIS technology?

Contact your local ABB team or visit us at  
[new.abb.com/eco-efficient-gas-insulated-switchgear](http://new.abb.com/eco-efficient-gas-insulated-switchgear)

We are happy to receive your project requirements and check the technical feasibility and timeline.

### New eco-efficient SafeRing AirPlus

The new SafeRing with AirPlus™ insulation gas is the world's first eco-efficient ring main unit (RMU) with a new gas molecule. It is an eco-efficient SF<sub>6</sub> alternative for MV and combines the same compact dimensions and advantages of established SafeRing RMU with a GWP < 1.

### Using vacuum interrupter technology

Because AirPlus required a redesign of the existing RMU, both the circuit breaker and load-break switch are based on vacuum technology. This SafeRing AirPlus offers the possibility of upgrading the load-break switch to a circuit breaker unit by changing the front mechanism outside the gas compartment – a possible scenario in the ever more dynamic secondary distribution networks.

### SafeRing AirPlus availability

The AirPlus technology will first be available for the 24 kV SafeRing product line. Availability will increase continuously. For initial release by the end of 2016, SafeRing AirPlus is available with:

- **Ratings:** IEC ratings up to 24 kV, 630 A, 16 kA – circuit-breaker (V) & load-break switch (C) units
- **Coverage:** First introduction in Central and Northern Europe, other countries on request



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