ABB unveils world’s first AirPlus gas-insulated switchgear range

New eco-efficient alternative to SF₆ gas maintaining ABB’s class-leading switchgear performance

Mannheim / Hanover, April 25, 2016 – ABB has launched its eco-efficient medium-voltage gas-insulated switchgear (GIS) range with its AirPlus formula. The new fluoroketone-based gas mixture delivers the reliability of ABB’s proven switchgear range with a global warming potential (GWP) of less than 1 – 99.99 percent lower than SF₆.

A switchgear combines electrical switches, fuses or circuit breakers to control, protect and isolate electrical equipment in a power network. Switchgear is installed throughout the power value chain from generation through to transmission, distribution and consumption, across their different voltage levels. Medium-voltage switchgear is generally installed for power distribution, helping to ensure grid reliability, efficiency and safety.

Bruno Melles, managing director of ABB’s Medium Voltage business, said: “This is a great example of ABB innovating to deliver its ‘Better World’ promise. We are using an SF₆ alternative gas mixture as the insulation medium for our switchgear that has a GWP almost 100 percent lower than SF₆. Moreover, we retain the quality and reliability and compact footprint that our customers expect from a market leader.”

The fluoroketone-based SF₆ alternative gas mixture is developed for switchgear applications in collaboration with 3M. The new gas helps to reduce the carbon footprint of the power grid and will stepwise complement the existing SF₆ portfolio.

The first two switchgear products with AirPlus will be available within 2016. ZX2 AirPlus is the new primary distribution switchgear available in an IEC rating of up to 36 kV, with 31.5 kA short-circuit and 2,000 A nominal current. SafeRing AirPlus is the new secondary distribution ring main unit (RMU) available in IEC ratings up to 24 kV with 16 kA short-circuit and 630 A nominal current. The good technical performance of AirPlus made it possible to retain the same compact dimensions of our known medium-voltage GIS. Both new products are based on proven and widely-accepted existing switchgear design with the same level of safety and reliability.

The range has been developed following the successful pilot in the world’s first high- and medium-voltage pilot GIS installation with this new eco-efficient gas mixture. The GIS bays are installed in a pilot substation in Zurich operated by leading Swiss utility ewz.

ABB (www.abb.com) is a leading global technology company in power and automation that enables utility, industry, and transport & infrastructure customers to improve performance while lowering environmental impact. The ABB Group of companies operates in roughly 100 countries and employs about 135,000 people.

All data in accordance with US-GAAP regulations.

Photos can be found on the press area of our website www.abb.de.
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