

Medium-voltage products



Bernhard Jucker
Head of Power Products division
Member of ABB Group Executive Committee



Bruno Melles
Head of Medium Voltage Products business unit

Dear Reader,

Medium-voltage (MV) products play a key role in the distribution part of the power value chain, facilitating the “last mile” connect that brings electricity to billions of users around the world. ABB’s MV products tradition dates back to the 1920s with the introduction of the first MV switchgear manufactured by Brown Boveri. Today, ABB is a global market and technology leader in this space, with more than 30 production centers around the world and a sales and service network in over 100 countries.

ABB’s vast medium-voltage product portfolio serves utility, industry and infrastructure customers with the most reliable, efficient, safe and sustainable technologies. This includes solutions such as current conduction, control and interruption, electrical insulation, switching operations and network protection. Our products can be found in substations, industrial complexes, airports, skyscrapers and shopping malls, ships and oil platforms, railway lines, and major sports venues.

Technology and innovation are at the core of ABB’s medium-voltage product offering. As a case in point, we recently introduced UniGear Digital. This innovative product combines switching capability with a unique solution for protection, control, measurement and digital communication enabled by current and voltage sensors, which are integrated into each panel, alongside ABB’s multifunctional Relion IEDs that ensure an IEC-61850-based open communication protocol.

Eco-efficiency remains another key focus area of our R&D efforts to address the environmental challenge. For instance, ABB has developed a ring main unit (RMU) as compact as the traditional SF₆ insulated RMU but using dry air as an alternative. SafeRing Air provides a solution using an insulating gas that consists of atmospheric components, without enlarging the physical dimensions of the product, making it the most compact solution of its kind.

We are not only introducing new globally relevant products to serve customers but also developing products specific to the needs of different regions and countries around the world. As part of ABB’s “in country for country” strategy we locate manufacturing and R&D centers in proximity to our markets so we can be closer to our customers. Recently launched products for India, China and the United States bear testimony to this approach.

We also continue to develop innovative technologies that are enabling grids to get smarter by facilitating network automation and distribution management and addressing areas like fault management, outage response, reporting and network planning. We also offer solutions for refurbishment and maintenance asset optimization.

In addition to serving the needs of our customers directly, we leverage high-value partnerships with distributors, original equipment manufacturers (OEMs) and engineering, procurement and construction companies (EPCs), and our extensive worldwide channel partner network helps us to penetrate local markets and serve a vast customer base with a comprehensive product portfolio.

We hope you enjoy this special edition of *ABB Review*, which sheds light on the world of power distribution from a medium-voltage-products perspective. We bring you some of our recent innovations and developing technologies that are shaping evolving power networks and elaborate on how we are helping our customers address the challenge of providing safe, reliable and adequate electricity all over the world.

Happy reading!

Bernhard Jucker

Bruno Melles

