More information

GAS-INSULATED MEDIUM-VOLTAGE SWITCHGEAR

8DAB 40 – blue GIS

Sustainable Innovation

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SIEMENS

Our contribution to **a cleaner planet.**

Clean Air

8DAB 40 – blue GIS is the reflection of Siemens' commitment to 100% sustainable innovation, which integrates both Clean Air as an insulating medium and an eco-efficient design that reduces its carbon footprint throughout its entire life cycle. At the same time, 8DAB 40 switchgear fulfills all necessary criteria like reliability, compactness, and personal safety that are usually associated with conventional Gas-Insulated Switchgear (GIS).

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Vacuum interrupter

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Gas-insulated switchgear

Clean Air – a sustainable alternative to SF_6

The use of Clean Air as an insulating medium in the new 8DAB 40 single-busbar gas-insulated switchgear represents a significant step towards sustainability. Clean Air consists of natural-origin gases with a GWP < 1, which means it has virtually no impact on the environment or climate change. The gas is highly stable and non-toxic, making it safe to work with. The 8DAB 40 switchgear combines the advantages of gas-insulated switchgear with innovative climate-friendly technology, making it one of the most sustainable switchgear available for primary distribution grids up to the 40.5 kV level.

Proven design platform

Developed based on the renowned 8DA/B design platform, with an installed base of more than 150,000 panels worlwide, the 8DAB 40 ensures a reliable power for an expected service life of at least 40 years under normal service conditions. The 8DAB 40 further enables predictive maintenance and prevents unexpected downtimes by utilizing cutting-edge condition monitoring techniques in combination with advanced sensors to monitor the switchgear's critical functions.

Robust Eco Design

8DAB 40 switchgear is designed as a part of Eco Efficiency @ Siemens program, where the environmental impacts expected in each of the product's life cycle phases are addressed right from the design phase. The 8DAB 40 is designed not only to minimize its CO_2 footprint, but also to prioritize resource efficiency and circular economy. Using Clean Air as insulating medium, this switchgear eliminates the need for energy-intensive gas recycling processes at the end of its service life, since the gas can be safely released into the atmosphere. Additionally, most switchgear parts are recyclable, and the materials used are recoverable and reusable, thus reducing landfill waste and maximizing resource efficiency.
With 8DAB 40, sustainability and innovation go hand in hand, providing a win-win solution for businesses and the planet alike.

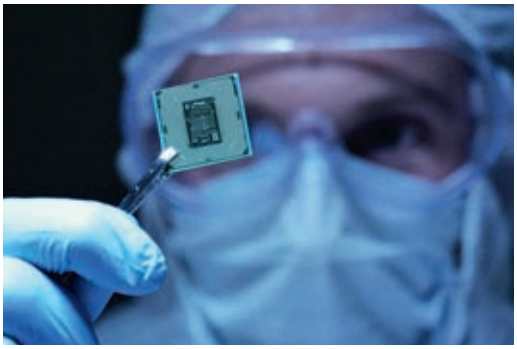
Reliable protection
for key infrastructures

The 8DAB 40 – blue GIS can be described as a reliable solution to ensure continuous energy supply to key infrastructures. It combines the proven properties of a gas-insulated switchgear with future-proof innovation, representing the best of today and tomorrow while minimizing environmental impacts. This eco-friendly approach makes it a viable option for industries looking to adopt sustainable energy practices.

Key technical ratings

- Single-busbar design
- Rated voltage up to 40.5 kV
- Rated continuous current up to 2500 A
- Rated short-circuit current up to 40 kA
- Rated frequency 50 Hz
- Standards: IEC 62271-1/-100/-200

Siemens 8DAB 40 switchgear offers several benefits across a wide range of applications. The switchgear's modular and compact design allows for flexible feeder configurations, making them suitable for both urban and rural applications of DSOs. The 8DAB 40 switchgear further offers excellent reliability and safety thanks to its sealed-for-life and single-pole enclosed design as well as high MTBF values, making it perfect for critical infrastructures such as semiconductor manufacturing industries. In data center applications, its compact size, high reliability, integrated condition monitoring, and low maintenance costs make it the top choice for protection.



As an F-gas-free switchgear with a Robust Eco Design approach, 8DAB 40 also meets the customers' sustainability targets and accelerates the transformation towards sustainable power distribution. This makes 8DAB 40 – blue GIS an ideal choice for applications such as the production of green hydrogen, which is considered a crucial step for decarbonization.

Besides the mentioned key infrastructure applications, 8DAB 40 can also be used in traction power supply systems, the cement industry, automobile industry, textile, paper and food industries, chemical and pharmaceutical industries, airports and ports, rolling mills, shipbuilding industry, and many more.

Altogether, the 8DAB 40 switchgear's reliability, compact design, and environmental friendliness – combined with integrated sensors and communication interfaces to higher-level automation systems and the Internet of Things (IoT) –, provides a versatile and efficient solution for a variety of industries and applications.

Sustainability in its DNA

Clean Air
- Elements of natural-origin gases
- GWP < 1
- No regulatory restrictions

Health and safety
- Non-toxic gas
- No PFAS gas
- Highly stable

Compact design
- Smaller footprint
- Saves space and resources

Highest reliability
- Expected service life of 40 years
- Single-pole enclosed design
- Hermetically sealed
- Proven design with very high MTBF

Robust Eco Design
- Resource efficiency
- Easily recyclable

Digital, intelligent and secure

The digitalization technologies integrated in the 8DAB 40 – blue GIS are crucial for increased reliability, efficiency, and safety. They provide data-driven advanced analytics to identify potential threats and enable critical decision-making to meet the challenges of today's and tomorrow's energy supply.

More transparency and control

8DAB 40 switchgear incorporates cutting-edge digital technologies that offer users a multitude of benefits. With enhanced asset transparency, you can now monitor the key functionalities of the switchgear in real time, and identify potential issues before they escalate, thanks to the cloud-based application NXpower Monitor and the integrated automation and remote terminal unit SICAM A8000.

NXpower Monitor enables condition monitoring diagnostics of all the electrical assets in substations across multiple locations worldwide, so that you can access important information from anywhere. This advanced monitoring system allows you to instantly view the status of the switchgear and quickly address any emerging problems, which helps to prevent unplanned downtimes.

To ensure maximum security, the digital solutions in 8DAB 40 are developed with the highest focus on cybersecurity, ensuring peace of mind for the users while leveraging the benefits of the digital features. This further enhances operational efficiency, reliability, and safety by enabling preventive and predictive maintenance, thus making 8DAB 40 – blue GIS future-proof for secure power distribution.

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