

DISTRIBUTION SOLUTIONS

UniSec Air

SF6-free air-insulated switchgear
for secondary distribution



Product scope

- Rated voltage up to 24kV
- Rated current up to 630A, up to 1250A with LSC2B frontal withdrawable circuit breaker panel
- Rated short-time withstand current up to 20kA, up to 25kA with LSC2B frontal withdrawable circuit breaker panel
- Internal Arc Classified Up to IAC A FLR 20kA
- Other High duty circuit breakers with M2 (10000 operations) mechanical endurance

UniSec Air is a medium voltage switchgear designed for secondary distribution up to 24kV, 630A, 20kA. It contains GSec Air, three-position load break switch or disconnector and earthing switch. This new component has a shunt vacuum interrupter for breaking capacity, dry air as the insulation medium, and a global warming potential (GWP) of zero. The switchgear also contains a vacuum circuit breaker and is fully compliant with IEC standards and the EU F-gas regulation (EU) 2024/573.

The switchgear is based on a highly flexible and modular concept with standardized solutions that can be readily configured to meet the specific needs of each application. UniSec Air is fully tested according to IEC standard 62271-200.

UniSec Air is internal arc classified, IAC A FLR up to 20kA, assuring safe operations for technicians when standing in front of the switchgear. Robust control and protection, metering, monitoring, and diagnostics suitable for various applications are also available.

UniSec Air is designed with a refined interface and with the same footprint, operations, and backward compatibility as the original UniSec switchgear, facilitating integration into existing systems and extensions of the installed base.

UniSec Air

Customer benefits

01



F-gas regulation compliance

- Fully compliant with the EU F-gas regulation (EU) 2024/573
- GWP of 0

02



Flexible and modular design

- Better accessibility to MV cable connection and simplified installation, use, and maintenance.
- Wide range of functional units equipped with LBS and disconnectors, circuit breaker, conventional measuring transformers, current and voltage sensors, and protection relay solutions, making it suitable for most indoor applications.
- Provides flexibility for a high level of customization to meet demanding requirements and is easy to order thanks to user-friendly configurator tools.
- Compact design with multiple functional units width 375, 500 and 750mm for installation in a wide variety of electrical rooms and layouts.
- Backward compatibility between UniSec Air and UniSec allows for easy integration into existing systems and extensions of the installed base.

03



Safe and Reliable

- Internal arc classification available with various gas exhaust variants for enhanced safety.
- Service continuity solutions LSC2B/LSC2A/LSC2 tailored for application needs, ensuring minimal service interruption.
- High operator safety features an internal arc-proof design and a wide range of mechanical and electrical interlocks to enhance operator safety.
- The GSec Air component has an internal volume of less than 25 liters.
- Fast and dependable delivery times with pre-engineered just to install (JTI) switchgear solutions.

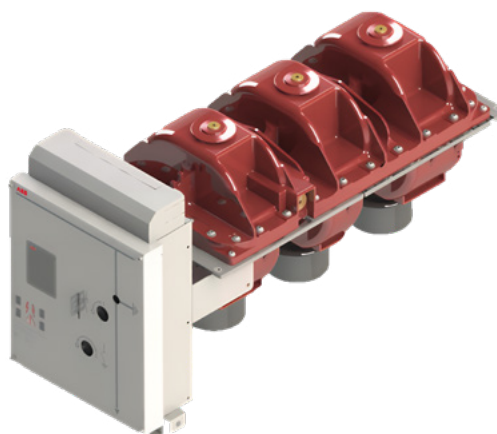


UniSec Air

Main Technical Characteristics

UniSec Air	
Rated Voltage	up to 24 kV
Power frequency withstand voltage (50/60 Hz, 1 min)	50 kV
Lightning impulse withstand voltage (BIL 1.2/50 µs)	125 kV
Rated Frequency	50 Hz/60 Hz
Rated current	up to 630A, up to 1250A with LSC2B frontal withdrawable circuit breaker panel
Rated short time withstand current	up to 20 kA, up to 25 kA with LSC2B frontal withdrawable circuit breaker panel
Short-circuit making current (peak)	52 kA
Internal Arc Classification IAC	up to A FLR 20 kA
Reference product standard	IEC 62271-200
GSec Air	
Rated Voltage	up to 24 kV
Power frequency withstand voltage (50/60 Hz, 1 min)	50 kV
Lightning impulse withstand voltage (BIL 1.2/50 µs)	125 kV
Rated Frequency	50 Hz/60 Hz
Rated current	up to 630 A
Rated short time withstand current	up to 20 kA
Short-circuit making current (peak)	52 kA
Reference product standard	IEC 62271-103 and IEC 62271-105

GSec Air



*UniSec Air will be available for commercial sales in the first half of 2025.