

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 AFLR 20 kA, up to 25 kA with LSC2B frontal withdrawable circuit breaker panel
- Other high duty circuit breakers with M2 (10000 operations) mechanical endurance

UniSec Air is a medium-voltage switchgear designed for secondary distribution up to 24 kV, 630 A, 20 kA. It contains GSec Air, a general purpose three-position switch disconnecter or disconnecter for frequent switching applications, with dry air as the insulation medium – that has a global warming potential (GWP) of zero and vacuum interrupter for breaking capacity. The switchgear, when equipped with a disconnecter, also contains a vacuum circuit breaker. UniSec Air 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



Regulation-compliant and sustainable

- Fully compliant with the EU F-gas regulation (EU) 2024/573
- GSec Air switch disconnecter and disconnecter with dry air insulation medium with global warming potential (GWP) of 0 and dedicated vacuum interrupter for reliable breaking capacity
- Switch disconnecter and disconnecter actuator made of fully recyclable steel

02



Safe and reliable

- GSec Air switch disconnecter and disconnecter with a volume of less than 25 liters with all active parts segregated in a low-volume tank
- Internal arc classified with gas exhaust configured according to the application, allowing for evacuation either inside or outside the room
- A wide range of mechanical and electrical interlocks to enhance operator safety
- Service continuity solutions LSC2B/LSc2A/LSC2 are tailored for application needs, ensuring minimal service interruption

03



Optimized user experience

- Compatibility between UniSec Air and UniSec enables seamless integration into existing systems and facilitates expansion of the installed base
- Easy frontal and lateral access to MV cable connections simplifies installation, operation, and maintenance
- Equipped with a comprehensive range of monitoring and diagnostic features, providing continuous operational insights to optimize switchgear performance, reduce maintenance costs, and support preventive maintenance



UniSec Air

Main technical characteristics

UniSec Air	
Rated voltage	up to 24 kV
Power frequency withstand voltage (50 Hz, 1 min)	50 kV
Lightning impulse withstand voltage (BIL 1.2/50 µs)	125 kV
Rated frequency	50 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)	50 kA
Internal arc classification IAC	up to A FLR 20 kA
Reference product standard	IEC 62271-200

GSec Air - General purpose switch	
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
Rated current	up to 630 A
Rated short time withstand current @ 3s	up to 20 kA
Short-circuit making current (peak)	50 kA
Reference product standard	IEC 62271-102, IEC 62271-103 and IEC 62271-105

GSec Air - Preliminary tank dimensions (actuator excluded) in millimeters

