



Medium voltage products

UniSec

Air-insulated medium voltage
switchgear for secondary distribution
up to 24 kV, 1250 A, 25 kA

UniSec – a superior switchgear range

UniSec is the result of ABB's quest for continuous innovation, following a vision of meeting ever-changing market needs. It provides long-term engineered solutions for a world of distribution applications. Safety and reliability, user-friendly specification and installation, and sustainability have been the driving forces in its development.





Designed for all applications

UniSec is the new ABB air-insulated switchgear, LSC2A-PM for panels with switch-disconnector, LSC2B-PM for panels with withdrawable circuit-breaker up to 17.5 kV and LSC2B-PI at 24 kV, in accordance with the loss of service continuity definitions and standard IEC 62271-200.

UniSec offers these features:

- Air insulation of all live parts
- SF₆ switch-disconnector
- Removable and withdrawable vacuum and SF₆ circuit-breakers class LSC2A service continuity classification
- Withdrawable vacuum contactor class LSC2B service continuity classification
- Multifunctional apparatus with vacuum circuit breaker and disconnectors in SF₆ integrated class LSC2A service continuity classification
- Withdrawable vacuum and SF₆ circuit-breaker class LSC2B service continuity classification
- Complete range of functional units and accessories
- Large selection of state-of-the-art protection relays, integrated on removable circuit-breakers or separately mounted for protection, control and measurement functions.

Switchgear electrical characteristics

Rated voltage	kV	12	17.5	24
Test voltage (50-60 Hz x 1 min)	kV	28	38	50
Impulse withstand voltage	kV	75	95	125
Rated frequency	Hz	50-60	50-60	50-60
Rated main busbar current	A	630/800/1250	630/800/1250	630/1250
Rated current of apparatus:				
– VD4/R-Sec - HD4/R-Sec - HD4/RE-Sec removable circuit-breaker	A	630/800	630/800	630
– VD4/R-Sec - HD4/R-Sec withdrawable circuit-breaker	A	630	630	630
– HySec multi-function apparatus	A	630	630	630
– GSec gas switch-disconnector	A	630/800	630/800	630
– Vmax/Sec withdrawable circuit-breaker	A	630/1250	630/1250	–
– VD4/Sec withdrawable circuit-breaker	A	–	–	630/1250
– HD4/Sec withdrawable circuit-breaker	A	630/1250	630/1250	630/1250
– VSC/P withdrawable vacuum contactor	A	400	–	–
Rated short time withstand current	kA (3s)	16 ⁽⁴⁾ /20 ⁽³⁾ /25 ^{(1) (2)}	16 ⁽⁴⁾ /20 ⁽³⁾ /25 ⁽²⁾	16 ⁽⁴⁾ /20 ⁽³⁾
Peak current	kA	40 ⁽⁴⁾ /50 ⁽³⁾ /62.5	40 ⁽⁴⁾ /50 ⁽³⁾ /62.5	40 ⁽⁴⁾ /50 ⁽³⁾
Internal arc withstand current (up to IAC AFLR)	kA (1s)	12.5/16 ⁽⁴⁾ /21/25 ⁽²⁾	12.5/16 ⁽⁴⁾ /21/25 ⁽²⁾	12.5/16 ⁽⁴⁾ /21

⁽¹⁾ 25 kA 2s for LSC2A service continuity classification

⁽²⁾ For LSC2B service continuity classification

⁽³⁾ Contact ABB for 21 kA/52.5 kAp

⁽⁴⁾ For HySec 16 kA(1s)/40 kAp

Ultimately convenient



Wherever your business location, UniSec always provides the most direct route to solving your technical and market challenges.

Always the optimum solution for different needs

UniSec offers the most versatile switchgear on the market, with a very broad portfolio of functional units.

Fewer parts, all standardized and modularized, require less service training and fewer competencies.

Easy access for cable connection; simple solutions for panel connectivity; easily removable circuit-breakers.

Designed to enable customization, even at the later project stages, and easy modifications, fast replacement and upgrading of main accessories.

UniSec brings you state-of-the-art control, monitoring and protection technology. From low-end self-powered protection relays to high-end configurable terminals, available for all applications.



Absolutely trustworthy



When people's lives are on the line, they need to know that they can rely on UniSec for safety and reliability.

Reliable and Safe

Reliability and service continuity are assured.

UniSec's long life-cycle is assured by extensive product testing and an unrivalled global service network.

The metallic segregation between busbars and cable compartments is a further safety and service continuity feature.

Personnel safety is paramount. Safety features protect your investment.

The UniSec range is fully designed and type tested according to the IEC standard no. 62271-200, and has a high internal arc withstandability rating.

Optional arc-protection solutions integrated within protection relays limit the negative effects of the internal arc.

Genuinely adaptable



Any place, anywhere, with ABB's global experience and knowledge, UniSec will always adapt to local challenges and conditions.

Local market knowledge is based on our global footprint

ABB operates in around 100 countries. That helps us understand local markets and regulatory regimes. Wherever you operate, we not only apply the relevant standards and specifications but also deliver localized drawings, documentation, training and eLearning packages.

Because identical UniSec switchgear and components are produced and shipped in all parts of the world from regional factories, delivery times are optimized, quality is assured and supply is guaranteed.

Committed all the way



Backed by ABB's global presence, financial strength and sustainable approach to long-term development, UniSec is here to make a difference.

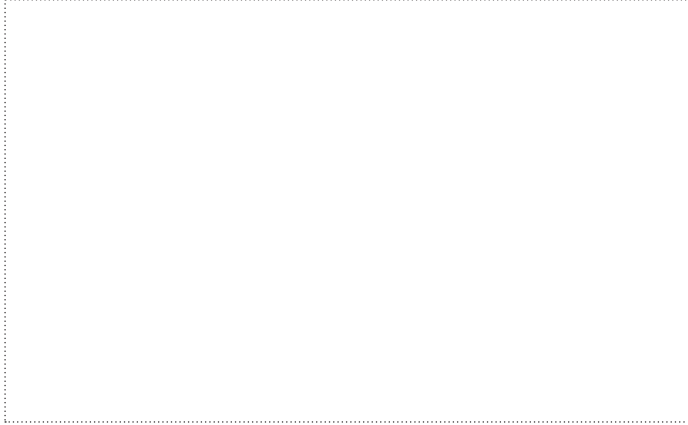
A sustainable solution from a long-term player in the global marketplace

ABB's global presence, philosophy of continuous development and financial strength enable you to rely on our long-term commitment to making UniSec the leading brand in secondary distribution air-insulated switchgear.

It combines high quality, state-of-the-art technology with minimal environmental impact.

UniSec is fully supported with tools, services, product configurator, eLearning, personalized training and product documentation.

Contact us



Your sales contact: www.abb.com/contacts

More product information: www.abb.com/productguide

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