

SafeRing 12 - 24 kV 630A

SF₆-insulated ring main unit for secondary distribution



SafeRing is a ring main unit for the secondary distribution network. SafeRing can be supplied in a number of different configurations suitable for most switching applications in 12/24 kV distribution networks.

SafeRing is manufactured according to our strict quality and environment procedures. Our ISO 9001 and ISO 14001 certifications assure the quality and environmental excellence.

SafeRing is supplied with the following standard equipment

- Earthing switches
- Operating mechanisms with integral mechanical interlocking
- Operating handle
- Facilities for padlocks on all switching functions
- Bushings for cable connection in front with cable covers
- Manometer for SF₆-pressure/density monitoring
- Lifting lug for easy handling
- All units are designed for the subsequent fitting of an integral remote control and monitoring unit

Transformer protection

SafeRing offers a choice between a switch-fuse combination and circuit-breaker with relay for transformer protection. The switch-fuse combination offers optimal protection against short-circuits, while the circuit-breaker with relay option offers better protection against low overcurrents. Circuit-breaker with relay is always recommended for larger transformers.

Additional equipment

- Arc suppressor
- Cable test bushings
- Interlocked cable covers
- Cable cover with window
- Cable cover for double T
- Arc proof cable covers complete incl. interlocking
- Integrated control and monitoring
- Signal (1NO/1NC) from pressure indicator wired to terminals
- Extra base frame (h=290 or 450 mm)
- Trip coil open
- Trip coil open and close
- Motor operation
- Auxiliary switches for all switching functions
- Prepared for relay test equipment
- Capacitive voltage indication
- Short-circuit indicator
- Smart grid solutions

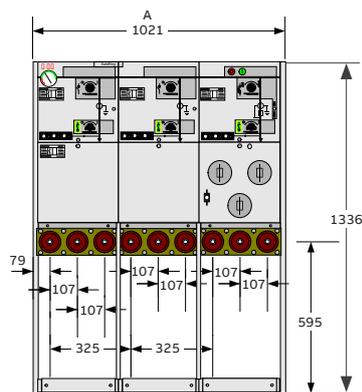
Technical Data		C-module		F-module		V-module	
SafeRing		Switch disconnecter	Earthing switch	Switch-fuse combination	Earthing switch	Vacuum circuit-breaker	Earthing switch
Rated voltage	kV	12/17,5/24	12/17,5/24	12/17,5/24	12/17,5/24	12/17,5/24	12/17,5/24
Power frequency withstand voltage	kV	28 ⁶⁾ /38/50	28 ⁶⁾ /38/50	28 ⁶⁾ /38/50	28 ⁶⁾ /38/50	28 ⁶⁾ /38/50	28 ⁶⁾ /38/50
Impuls withstand voltage	kV	95/95/125	95/95/125	95/95/125	95/95/125	95/95/125	95/95/125
Rated normal current	A	630/630/630		200 ¹⁾		200/200/200	
Breaking capacities:							
- active load	A	630/630/630					
- closed loop	A	670/670/670					
- off load cable charging	A	141/141/141					
- off load transformer				20/20/20			
- earth fault	A	205/160/160					
- earth fault cable charging	A	117/91/91					
- short-circuit breaking current	kA			see ²⁾		16/16/16	
Making capacity	kA	52,5/40/40	52,5/40/40	see ²⁾	12,5/12,5/12,5	40/40/40	40/40/40
Short time current 0,5 sec. ³⁾						16/16/16	
Short time current 1 sec. ⁴⁾					5/5/5	16/16/16	
Short time current 3 sec. ⁵⁾	kA	21/16/16	21/16/16				16/16/16

¹⁾ Depending on the current rating of the fuse-link ²⁾ Limited by high voltage fuse-links ³⁾ Maximum rating for bushings Interface A (200 series plug-in)

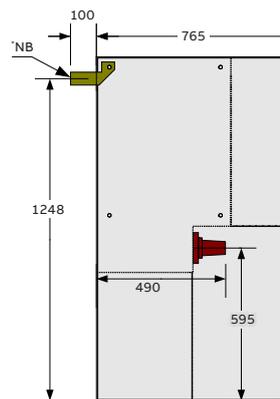
⁴⁾ Maximum rating for bushings Interface B (400 series plug-in) ⁵⁾ Maximum rating for bushings Interface C (400 series bolted)

⁶⁾ GOST version is available with 42kV power frequency withstand voltage

Dimensions

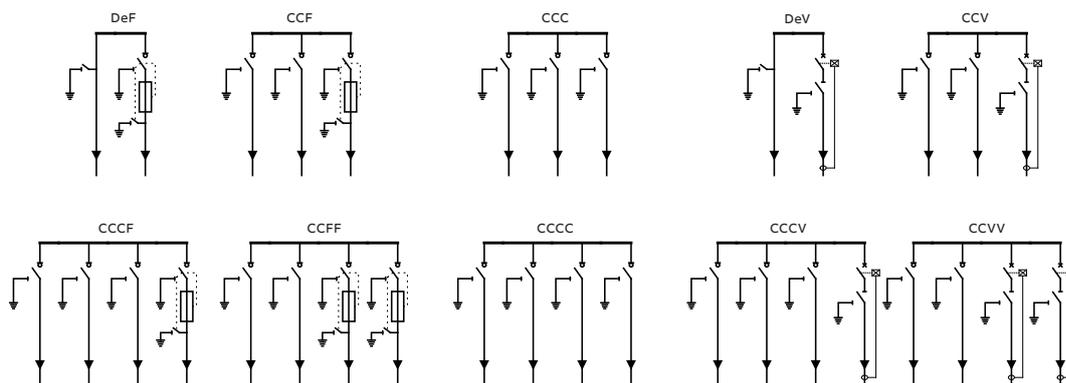


Type of unit	A (mm)
2-way	696
3-way	1021
4-way	1346



*NB: Wall fixing bracket

Available configurations



More information required? Configurations or features missing?

SafeRing is our ring main unit for standard configurations. For higher requirements or other configurations, SafePlus is the more flexible compact switchgear solution.

Please contact your local ABB for more information on SafeRing and SafePlus products.

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