

SafePlus 36

SF6 insulated compact switchgear for secondary distribution



SafePlus 36 is a metal enclosed compact switchgear system for distribution applications up to 40.5 kV. The switchgear is highly flexible due to its extendability and the possible combination of fully modular and semimodular configurations.

SafePlus 36 is a completely sealed system with a stainless steel tank containing all the live parts and switching functions. The sealed steel tank with constant atmospheric conditions ensures high reliability, personnel safety, and a virtually maintenance-free system.

The SafePlus 36 system offers two position switch disconnectors using SF6 gas as an arc quenching medium, plus a vacuum circuit-breaker with relay for superior protection.

Features and benefits

- 40.5kV/630A/50Hz (38kV/600A/60Hz)
- 170kV BIL
- Auto-reclosing capability
- Metal-enclosed design
- No exposure of live parts
- Virtually maintenance free
- Dead end outer cone cable termination system
- 16.5 inches / 420 mm wide functional units
- Type tested according to all relevant IEEE and IEC standards
- Manufactured according to ISO 9001, 14001 and OHSAS 18 001
- Carefully selected materials ensure 88% recycling capability for minimal environmental impact
- Rear viewports for visual verification of the two position disconnector status

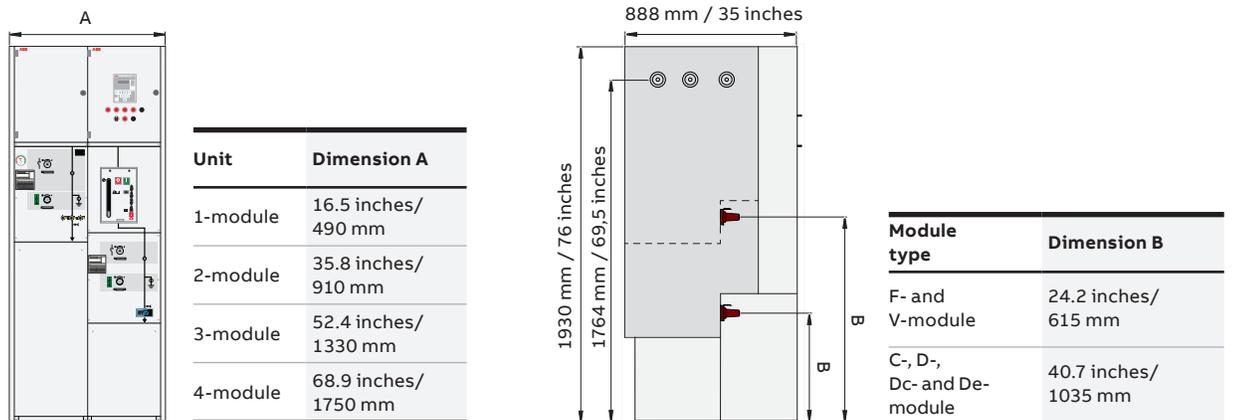
With its compact, extendable design (each functional unit is only 16.5 inches / 420mm wide), enhanced short circuit capabilities, and optional arc suppressor, SafePlus is tailor-made for any installation that requires reliable, efficient, and safe solutions.

SafePlus is commonly used in Renewable Energy, Pulp and Paper, Food & Beverage, Oil and Gas, Data Centers, Utilities and Power Plants, Transportation, Infrastructure, and more.

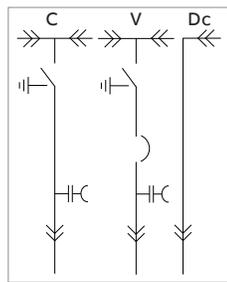
Customized features

- Air-insulated cable riser panel
- Internal arc classified according to IEC 62271-200
- Extendable in both directions
- Arc suppressor in gas enclosure
- Arc suppressor in cable compartment
- Arc flash sensor
- Motor operation
- Base frames for cable entry
- Cold climate version
- Low version 66.9 inches / 1700 mm tall
- Current and voltage sensors technology
- Metering solution

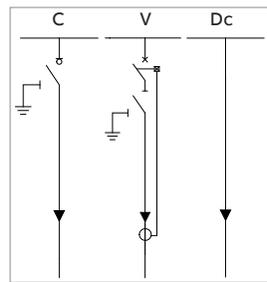
Technical data	IEEE				IEC						
	C-module		V-module		C-module		V-module				
				Switch disconnector	Earthing switch		Vacuum circuit-breaker		Earthing switch/disconnector		
SafePlus											
Rated voltage	kV	38		38	40.5	38	40.5	38	40.5	38	40.5
Rated frequency	Hz	60		60	50	60	50	60	50	60	50
Power frequency withstand voltage	kV	80		80	95	80	95	80	95	80	95
- across disconnector				95	110					95	110
Lightning impulse withstand voltage	kV	150		170	185	170	185	170	185	170	185
- across disconnector				210	215					210	215
Rated normal current	A	600		600	630			600	630	600	630
Short-circuit breaking current	kA	20						20	25		
Rated peak current	kA	65	52								
Making capacity	kA	65		65	62.5	65	62.5	52	65	65	65
Short time current 1 sec.	kA	25	20	25	25	25	25	20	25	25	25
Short time current 2 sec.	kA	20	20	20	20	20	20	20	20	20	20
Short time current 3 sec.	kA			20	20	20	20	20	20	20	20
Internal arc classification According to IEC 62271-200											
- AFL Backwards	kA/s			20/1	25/1	20/1	25/1	20/1	25/1	20/1	25/1
- AFLR Upwards	kA/s			20/1	25/1	20/1	25/1	20/1	25/1	20/1	25/1
- AFLR Downwards	kA/s			20/1	20/1	20/1	20/1	20/1	20/1	20/1	20/1
Classes				E2, C2, E1, M1 M1		E1, M0 E2, M0		E2, C2, M1, S1		E1, M0	E2, M0
Standard		ANSI/IEEE C37.20.3, C37.58, C37.54		IEC 62271-1, 62271-100, 62271-102, 62271-103, 62271-105, 62271-200, 60529							



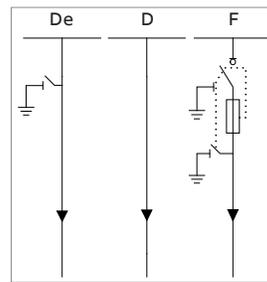
Available modules:
ANSI/IEEE/IEC



ANSI



IEC



IEC only



C Cable switch
V Vacuum circuit-breaker
Dc Air insulated direct cable connection (side connection only)

De Direct cable connection with earthing switch
D Direct cable connection
F Switch-fuse disconnector

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electrification.us.abb.com/switchgear

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