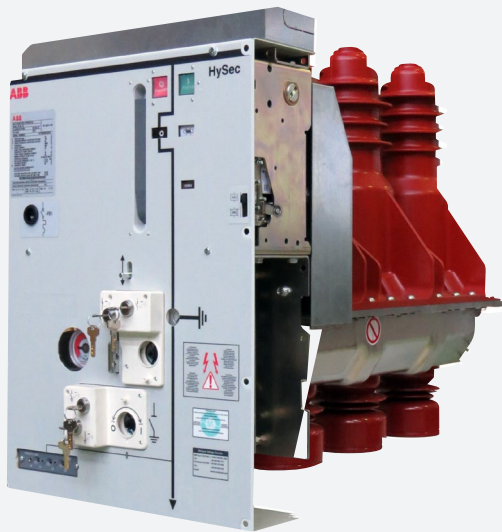


HySec

Medium voltage multi-function apparatus for increased safety and compactness



Safety and protection

- Integrated interlocks between different functions
- Stainless steel bottom tank for metallic partition during maintenance



Space saving

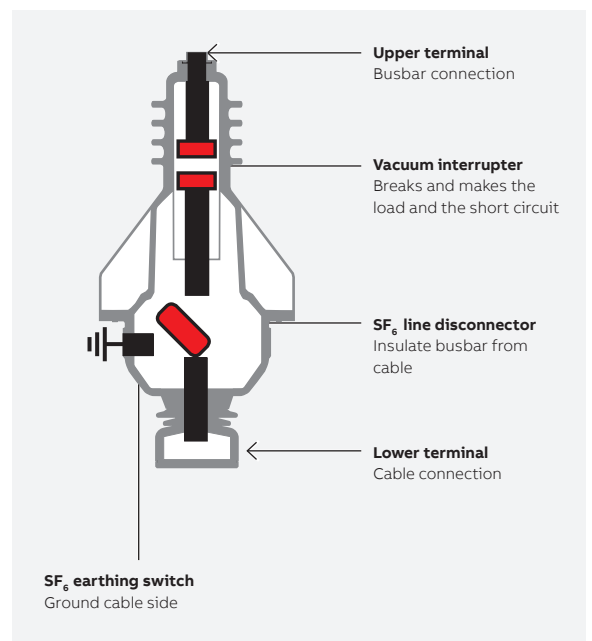
- It can fit 500mm wide panels
- 30% footprint saving with respect to standard solutions



Easy to install

- One device instead of three
- Up to 10% labor reduction for panel assembly
- Up to 15% material reduction for panel assembly

HySec is the optimal solution for air insulated metal enclosed panels for secondary distribution, especially where space limitation is a concern (e.g. Compact Substations). HySec comprises in one single compact apparatus the functions of three different devices: circuit breaker, line disconnecter and earthing switch.



Technical characteristics

Description

Electrical characteristics				
Rated voltage		kV 12	17.5	24
Insulation voltage		kV 12	17.5	24
Power frequency withstand voltage (50/60 Hz, 1 min)		kV 28	38	50
Lightning impulse withstand voltage (BIL 1.2/50 µs)		kV 75	95	125
Rated frequency		Hz 50 - 60	50 - 60	50 - 60
Rated current		A 630	630	630
Short-time withstand current (3s)		kA 12.5 ... 21	12.5 ... 21	12.5 ... 21
Performance of breaking part (IEC 62271-100)				
Breaking capacity	Short-circuit current	kA 12.5 ... 21	12.5 ... 21	12.5 ... 21
	No-load transformers	A 6.3	6.3	6.3
	No-load lines	A 10	10	10
	No-load cables	A 16	16	16
	Capacitive currents (single capacitor bank)	A 400	400	400
Making capacity		kAp 32.5 ... 54.5	32.5 ... 54.5	32.5 ... 54.5
Operating sequence		O - 0.3s - CO - 15s - CO	O - 0.3s - CO - 15s - CO	O - 0.3s - CO - 15s - CO
Opening time		ms 40 ... 55	40 ... 55	40 ... 55
Arcing time		ms 10 ... 15	10 ... 15	10 ... 15
Total break-time		ms 50 ... 70	50 ... 70	50 ... 70
Closing time		ms 40 ... 55	40 ... 55	40 ... 55
Electrical life		class E2	E2	E2
Mechanical life		class - no-load operations M2 - 10,000	M2 - 10,000	M2 - 10,000
Capacitive current breaking class		class C2	C2	C2
Line disconnector performance (IEC 62271-102)				
Electrical life		class E0	E0	E0
Mechanical life		class - no-load operations M0 - 1,000	M0 - 1,000	M0 - 1,000
Earthing switch performance (IEC 62271-102)				
Electrical life		class E2	E2	E2
Mechanical life		class - no-load operations M0 - 1,000	M0 - 1,000	M0 - 1,000
Earthing switch making capacity		kAp 32.5 ... 54.5	32.5 ... 54.5	32.5 ... 54.5
Other characteristics				
Center-distance between phases		mm 230	230	230
Operating temperature (°)		°C -15 ... +40	-15 ... +40	-15 ... +40
Maximum installation altitude		masl 3000	3000	3000
SF6 absolute pressure		kPa 142	142	142
Mass of SF6		g 213	213	213
Internal volume of SF6		l 25	25	25

(°) For service temperature -25 °C and storage temperature -40 °C please contact ABB

For more information please contact:

More product information:

abb.com/mediumvoltage

Your contact center:

abb.com/contactcenters

More service information:

abb.com/service

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