



Grid Solutions
a GE and Alstom joint venture

DISCONNECT SWITCHES PRODUCT SOLUTIONS

CGVB-05

25 kV to 550 kV vertical break disconnect switch

Grid Solutions is the world's largest manufacturer of disconnect switches with over 140,000 units installed in more than 130 countries around the world.



CUSTOMER BENEFITS

- Proven reliability
- Tried and tested technology
- Minimum phase-to-phase spacing
- Maintenance free design
- Full set of accessories available
- Factory adjusted live parts

Switch it, switch it good!

Grid Solutions' disconnect switches are the result of over 75 years of experience in developing high voltage switches that have proven their reliability in the scorching climates of Arizona (USA), Australia and Sudan, in the extremely cold territories of Canada, Russia and Sweden, in the tropical weather of Panama, Indonesia, Malaysia and Venezuela, and in regions with intense seismic activity such as Chile and California (USA).

The CGVB-05 vertical break disconnect switch is designed to reduce phase spacing to a minimum.

The jaw end of the switch is supported by one fixed insulator. The hinge end consists of two insulators, one of which is fixed, and the other rotates in order to open and close the switch. The double movement of the aluminum blade ensures high short circuit rating and excellent ice breaking capabilities. The CGVB-05 disconnect switch has been designed to be maintenance free with factory sealed bearing housings and counter balancing springs.

OPTIONS AND FEATURES

- Temperatures from -50°C to + 50°C
- Ice up to 20 mm (¾")
- Hinge current transfer by laminated shunts up to 2000 A and by double jaw for 3000 A and 4000 A
- Silver-to-silver, field-replaceable contacts
- Jacking bolts for insulator adjustments
- Swing handle, handcrank or motor operation
- Provision for padlocking
- Visual position indicator
- Arcing horns
- High-speed whip
- Vacuum interrupter
- Auxiliary contacts
- Interlock mechanisms
- Built-on ground switch
- Factory mounted insulators up to 245 kV



CERTIFICATION

All Grid Solutions disconnect switch manufacturing sites worldwide are certified according to ISO 9001, ISO 14001 and OHSAS 18001.

Grid Solutions designs, manufactures, tests and delivers its disconnect switches in accordance with the latest IEEE/ANSI standards.

QUALITY

Grid Solutions prides itself on being the # 1 supplier of disconnect switches in the world.

Our design principles, the technical know-how and experience of our experts, and the careful selection of our suppliers to ensure that only top quality materials are used during production, guarantee an excellent life cycle cost.

25 TO 245 kV 1200-2000 A

TECHNICAL DATA

Rated voltage	Max. rated current	Short circuit current	BIL	A inch (mm)	B inch (mm)	C inch (mm)	D inch (mm)	E inch (mm)
25.8 kV	1200 - 2000 A	38 kA 3 sec. - 63 kA 3 sec.	150	59 (1499)	28 (710)	66 (1690)	14 (355)	10 (254)
38 kV	1200 - 2000 A	38 kA 3 sec. - 63 kA 3 sec.	200	69 (1753)	32 (810)	76 (1950)	18 (457)	10 (254)
72.5 kV	1200 - 2000 A	38 kA 3 sec. - 63 kA 3 sec.	350	85 (2159)	44 (1115)	106 (2699)	30 (760)	10 (254)
121 kV	1200 - 2000 A	38 kA 3 sec. - 63 kA 3 sec.	550	102 (2597)	59 (1494)	139 (3527)	45 (1143)	10 (254)
145 kV	1200 - 2000 A	38 kA 3 sec. - 63 kA 3 sec.	650	113 (2870)	68 (1725)	157 (4000)	54 (1370)	10 (254)
169 kV	1200 - 2000 A	38 kA 3 sec. - 63 kA 3 sec.	750	124 (3150)	76 (1930)	178 (4520)	62 (1575)	10 (254)
242 kV	1200 - 2000 A	38 kA 3 sec. - 63 kA 3 sec.	900	147 (3734)	95 (2416)	223 (5659)	80 (2032)	11 (286)
242 kV	1200 - 2000 A	38 kA 3 sec. - 63 kA 3 sec.	1050	169 (4140)	107 (2700)	251 (6374)	92 (2340)	11 (286)

25 TO 245 kV 3000-4000 A

TECHNICAL DATA

Rated voltage	Max. rated current	Short circuit current	BIL	F inch (mm)	G inch (mm)	H inch (mm)	J inch (mm)	K inch (mm)
25.8 kV	3000 - 4000 A	63 kA 3 sec. - 80 kA 3 sec.	150	73 (1854)	25 (632)	83 (2118)	14 (356)	10 (254)
38 kV	3000 - 4000 A	63 kA 3 sec. - 80 kA 3 sec.	200	85 (2159)	29 (735)	97 (2462)	18 (457)	10 (254)
72.5 kV	3000 - 4000 A	63 kA 3 sec. - 80 kA 3 sec.	350	95 (2413)	41 (1037)	118 (3010)	30 (762)	10 (254)
121 kV	3000 - 4000 A	63 kA 3 sec. - 80 kA 3 sec.	550	113 (2877)	56 (1419)	152 (3873)	45 (1143)	10 (254)
145 kV	3000 - 4000 A	63 kA 3 sec. - 80 kA 3 sec.	650	124 (3150)	66 (1680)	173 (4394)	54 (1375)	10 (254)
169 kV	3000 - 4000 A	63 kA 3 sec. - 80 kA 3 sec.	750	131 (3327)	73 (1851)	187 (4742)	62 (1575)	10 (254)
242 kV	3000 - 4000 A	63 kA 3 sec. - 80 kA 3 sec.	1050	183 (4648)	104 (2646)	273 (6944)	92 (2340)	11 (286)

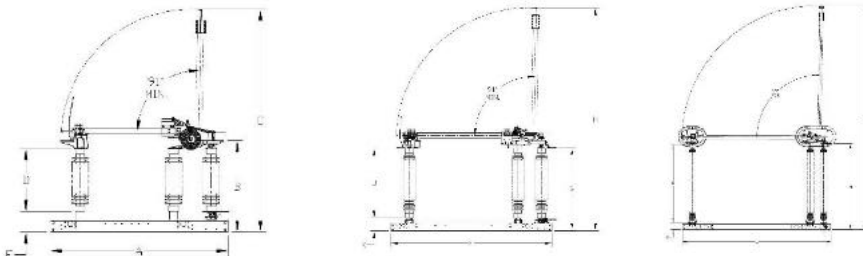
362 TO 550 kV 3000-4000 A

TECHNICAL DATA

Rated voltage	Max. rated current	Short circuit current	BIL	L inch (mm)	M inch (mm)	N inch (mm)	P inch (mm)	Q inch (mm)
362 kV	3000 - 4000 A	63 kA 3 sec. - 80 kA 3 sec.	1300	198 (5029)	116 (2946)	303 (7696)	106 (2692)	9 (225)
550 kV	3000 - 4000 A	63 kA 3 sec. - 80 kA 3 sec.	1550	246 (6248)	143 (3630)	384 (9766)	128 (3251)	9 (225)
550 kV	3000 - 4000 A	63 kA 3 sec. - 80 kA 3 sec.	1800	270 (6858)	162 (4110)	427 (10854)	152 (3861)	9 (225)

INSTALLATION & MAINTENANCE

The CGVB-05 vertical break disconnect switch does not require any special tools to be adjusted and is recognized worldwide as easy to install and adjust. Thanks to lifetime greased or self-lubricated parts and corrosion free materials, the CGVB-05 is virtually maintenance free.



Customized layouts available upon request. Phase-to-phase distance defined by substation layout.

For more information please contact
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