Serving the Electrical Utility Industry Since 1920



Vertical-Break Switch



Ordering Information

Standard Equipment

Type VIPA and VIPC vertical-break switches come complete with either aluminum or copper alloy live parts, silver to silver reverse loop contact fingers, blade counterbalance, galvanized steel channel bases, and a manual control mechanism consisting of vertical control rods, horizontal control rods, outboard bearings, intermediate control rod guides, operating handle, lock-plate assembly and ground strap.

Switches up through 69kV are shipped complete with standard strength station post insulators; individual switch pole units are pre-assembled and factory adjusted. Switches rated 115 kV and above are shipped pre-assembled (live parts on switch bases), but with insulators crated separately for more economical transportation and ease of handling.

Type VIPA and VIPC switches are supplied with wipe-type arcing horns of stainless steel. Wipe-type horns protect the main switch contacts in opening and closing but are not rated for interrupting duty. For more demanding interrupting requirements, quick break horns and single or multi bottle vacuum interrupters can be supplied.

Optional Equipment

Accessories, such as motor operators, worm gear mechanisms, single and multi bottle vacuum interrupter devices, operator platforms, ground switches and auxiliary switches are also available.

Type: VIPA (aluminum) and VIPC (copper)
Insulator Profile: Parallel or Vee Configuration
Orientation: Horizontal Upright, Vertical, Underhung

Voltage: 15 - 230 KV

Current: 600, 1200, 2000, 3000 Ampere **Current:** 4000, 5000 Ampere (available in 2018)

Description

A three insulator, group operated, vertical opening airbreak disconnect switch, with one rotating insulator per phase for operation. Final contact engagement and contact pressure are accomplished by rotation of the blade.

Application

Frequently used for line disconnecting, isolating and bypassing breakers and transformers, bus sectionalizing and isolating arrestors, metering equipment and other apparatus.

Features & Benefits

- Minimizes phase spacing; the most compact phase spacing of any group operated switch configuration
- Simple and mechanically reliable
- Minimal operating effort, especially at higher voltages
- No shunts, pins or moving linkages in the current path
- Excellent ice breaking characteristics
- A full range of interruption devices are available, including quick break arcing horns and SEECO single and multibottle vacuum interrupters

To Be Specified on Order

To obtain pricing information or to place an order, the following minimum information must be specified:

- Catalog Number
- Voltage Rating (kV) and BIL Rating (kV)
- Continuous Current Rating (amps)
- Momentary Current Rating (RMS amps)
- Insulator Configuration: Parallel or Vee
- If insulators are required, specify TR Number; if insulators are non-standard, specify required parameters, i.e. polymer, extra leakage distance, high strength, resistive glazing, etc.
- Type of mounting structure (beam, tube, lattice, H-frame or pole) with mounting details and dimensions, i.e. switch mounting height above grade, phase spacing, etc. and any special mounting requirements or considerations.
- Interruption device: standard wipe type horn or optional quick break horn, single or multi bottle vacuum interrupter
- Operating mechanism: standard swing handle or optional motor operator or worm gear
- Optional equipment

An Order Specification checklist is available to assist you in organizing and completing the information required. You may obtain a copy of the checklist by contacting SEECO, your local sales representative, or on-line at www.seecoswitch.com

Catalog Numbers and Ratings

Voltage Rating			Current Rating		Insul Insul		Insul	Type VIPA (Aluminum)		Type VIPC (Copper)	
Nom	Max	BIL	Cont	Mom	TR Nbr	BC (Inch)	Height (Inch)	Catalog	Wght	Catalog	Wght
Nom								Galalog	Lbs	Galalog	Lbs
15	15.5	110	600	40	205	3	10	VIPA-H01506S	648	VIPC-H01506S	819
			1200	61	205	3		VIPA-H01512S	675	VIPC-H01512S	851
			2000	100	205	3		VIPA-H01520S	696	VIPC-H01520S	909
			3000	120	205	3		VIPA-H01530S	1008		
23	27	150	600	40	208	3	14	VIPA-H02306S 749 VIPC-		VIPC-H02306S	921
			1200	61	208	3		VIPA-H02312S	780	VIPC-H02312S	958
			2000	100	208	3		VIPA-H02320S	801	VIPC-H02320S	1017
			3000	120	208	3		VIPA-H02330S	1218		
34.5	38	200	600	40	210	3	18	VIPA-H03406S	850	VIPC-H03406S	1024
			1200	61	210	3		VIPA-H03412S	885	VIPC-H03412S	1067
			2000	100	210	3		VIPA-H03420S	909	VIPC-H03420S	1131
			3000	120	210	3		VIPA-H03430S	1473		-
46	48.3	250	600	40	214	3	22	VIPA-H04606S	999	VIPC-H04606S	1176
			1200	61	214	3		VIPA-H04612S	1041	VIPC-H04612S	1227
			2000	100	214	3		VIPA-H04620S	1065	VIPC-H04620S	1292
			3000	120	214	3		VIPA-H04630S	1656		-
69	72.5	350	600	40	216	3	30	VIPA-H06906S	1322	VIPC-H06906S	1533
			1200	61	216	3		VIPA-H06912S	1377	VIPC-H06912S	1602
			2000	100	216	3		VIPA-H06920S	1419	VIPC-H06920S	1688
			3000	120	216	3		VIPA-H06930S	2129		
115	123	550	1200	61	286	5	45	VIPA-H11512S	512S 2697 VIPC-H11512S		2935
			2000	100	286	5		VIPA-H11520S	2709	VIPC-H11520S	2993
			3000	120	286	5		VIPA-H11530S	2829		
138	145	650	1200	61	288	5	54	VIPA-H13812S 2982		VIPC-H13812S	3274
			2000	100	288	5		VIPA-H13820S	3006	VIPC-H13820S	3317
			3000	120	288	5		VIPA-H13830S	3144		-
161	170	750	1200	61	291	5	62	VIPA-H16112S	3423	VIPC-H16112S	3723
		(1)	2000	100	291	5		VIPA-H16120S	3462	VIPC-H16120S	3785
			3000	120	291	5		VIPA-H16130S	3564		
230	245	900	1200	61	304	5	80	VIPA-H23012S-NS	4737	VIPC-H23012S	5037
		(2)	2000	100	304	5		VIPA-H23020S-NS	4791	VIPC-H23020S	5114
			3000	120	304	5		VIPA-H23030S-NS	4827		

⁽¹⁾ To specify a 161 kV switch with a 900 BIL, add "-0900" to the catalog number, ex. VIPA-H16112S-0900 (2) To specify a 230 kV switch with a 1050 BIL, add "-1050" to the catalog number, ex. VIPA-H23012S-1050

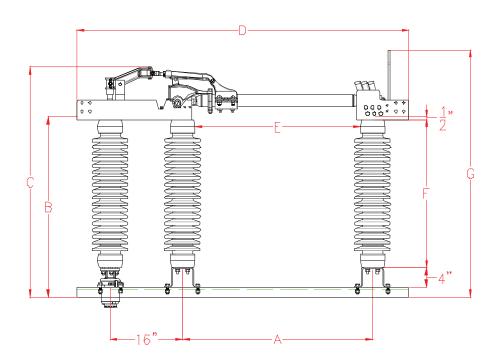
⁽³⁾ For slant Vee insulator configuration, add "-V1" to the end of the catalog number, ex. VIPA-H06906S-V1

⁽⁴⁾ To specify underhung switch mounting, change "H" to "U", ex. VIPA-U06906S

⁽⁵⁾ To specify vertical switch mounting, change "H" to "V", ex. VIPA-V06906S



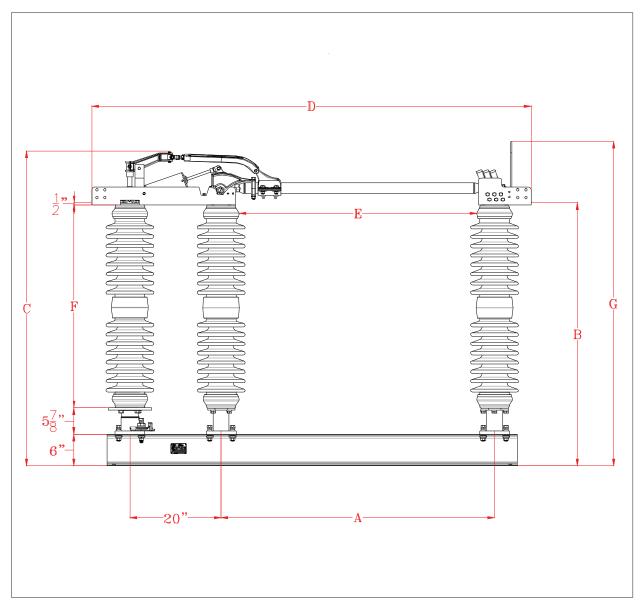
Dimensional Data 15 - 69 kV, Type VIPA and VIPC



Dimensions in Inches (Unless Otherwise Specified)

kV	Α	В	С	D	Е	F	G
15	15	16 1/2	26 1/2	46 3/8	9 1/2	10	30
23	18	20 1/2	30 1/2	49 3/8	12 1/2	14	34
34.5	24	24 1/2	34 1/2	55 3/8	18 1/2	18	38
46	30	28 1/2	38 1/2	61 3/8	24 1/2	22	42
69	42	36 1/2	46 1/2	73 3/8	36 1/2	30	50

Dimensional Data 115 - 230 kV, Type VIPA and VIPC



Dimensions in Inches (Unless Otherwise Specified)

kV	Α	В	С	D	Е	F	G
115	60	57 1/2	68 3/4	96 3/8	51 1/8	45	72
138	72	66 1/2	77 3/4	108 3/8	61 1/8	54	81
161	84	74 1/2	85 3/4	120 3/8	69 1/8	62	89
230	96	92 1/2	103 3/4	132 3/8	87 1/8	80	107
345	108	104 1/2	115 3/4	144 3/8	99 1/8	92	119