



Double End-Break Switch



**SEECO 138 kV, 2000 amp double end-break switch,
catalog DV13820S**

Ordering Information

Standard Equipment

Type "D" double end-break switches come complete with copper and copper alloy live parts, 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 230 kV are shipped complete with standard strength station post insulators; individual switch pole units are pre-assembled and factory adjusted.

Type "D" switches for horizontal upright mounting are supplied with wipe-type arcing horns of hard drawn copper. Wipe-type horns protect the main switch contacts in opening and closing but are not rated for interruption of line charging or transformer magnetizing currents. For more demanding interrupting requirements, high speed, snap-out arcing horns can be provided, at additional cost.

Optional Equipment

Accessories, such as motor operators, worm gear mechanisms, mounting trusses, quick break arcing horns, operator platforms, terminal connectors, and auxiliary switches are also available.

Type: D

Insulator Profile: Parallel or Vee Configuration

Orientation: Horizontal Upright, Vertical, Underhung

Voltage: 34.5 - 230 KV

Current: 600, 1200, and 2000 Ampere

Description

A three insulator, group operated, side-opening, air-break disconnect switch, with a single center rotating insulator per phase for operation.

Application

Comparable to a vertical break and often used as a substitute where there are overhead clearance problems. Has the same phase spacing requirements as a vertical break.

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

Features & Benefits

- Minimal phase spacing reduces structure size and weight
- Excellent ice breaking characteristics
- Horizontal break minimizes overhead clearance issues
- Horizontal break aligns with substation bus in low profile substations to maintain desired appearance
- Lower cost compared to vertical breaks

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)
- 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.
- For structure mounted switches, type of mounting structure (beam, tube, lattice) with mounting details and dimensions, i.e. switch mounting height above grade, phase spacing, etc.
- For pole mounted switches, type of pole (wood, concrete, steel, laminated wood) with mounting details and dimensions, i.e. switch mounting height above grade, phase spacing, cross-arm or truss details, etc.
- Type of operating mechanism: manual, 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 TR Nbr	Type "D" Double End-Break Switch (1)				
Nom	Max	BIL	Cont	Mom		Horizontal	Vertical	Underhung	Weight, Lbs	
									Install	Ship
34.5	38	200	600	40	210	DH03406S	DV03406S	DU03406S	750	1089
			1200	61		DH03412S	DV03412S	DU03412S	769	1115
			2000	100		DH03420S	DV03420S	DU03420S	781	1134
46	48.3	250	600	40	214	DH04606S	DV04606S	DU04606S	874	1269
			1200	61		DH04612S	DV04612S	DU04612S	893	1288
			2000	100		DH04620S	DV04620S	DU04620S	905	1306
69	72.5	350	600	40	216	DH06906S	DV06906S	DU06906S	1185	1825
			1200	61		DH06912S	DV06912S	DU06912S	1196	1838
			2000	100		DH06920S	DV06920S	DU06920S	1209	1856
115	121	550	600	40	286	DH11506S	DV11506S	DU11506S	2554	3350
			1200	61		DH11512S	DV11512S	DU11512S	2591	3388
			2000	100		DH11520S	DV11520S	DU11520S	2616	3420
138	145	650	600	40	288	DH13806S	DV13806S	DU13806S	2771	3531
			1200	61		DH13812S	DV13812S	DU13812S	2816	3575
			2000	100		DH13820S	DV13820S	DU13820S	2854	3623
161	169	750 (2)	600	40	291	DH16106S	DV16106S	DU16106S	3585	4344
			1200	61		DH16112S	DV16112S	DU16112S	3649	4406
			2000	100		DH16120S	DV16120S	DU16120S	3724	4496
230	245	900 (3)	600	40	304	DH23006S	DV23006S	DU23006S	4460	5256
			1200	61		DH23012S	DV23012S	DU23012S	4560	5375
			2000	100		DH23020S	DV23020S	DU23020S	4610	5434

NEMA Recommended Phase Spacing (inches)				
kV	Buses	Without Horns	Horn Gap	Min. Metal to Metal
34.5	36	36	60	12
46	48	48	72	15
69	60	60	84	22
115	84	84	120	32
138	96	96	144	38
161	108	108	168	44
230	132	132	192	50

(1) To specify a Vee insulator configuration, add "-V"
to catalog number, ex. DH06906S-V

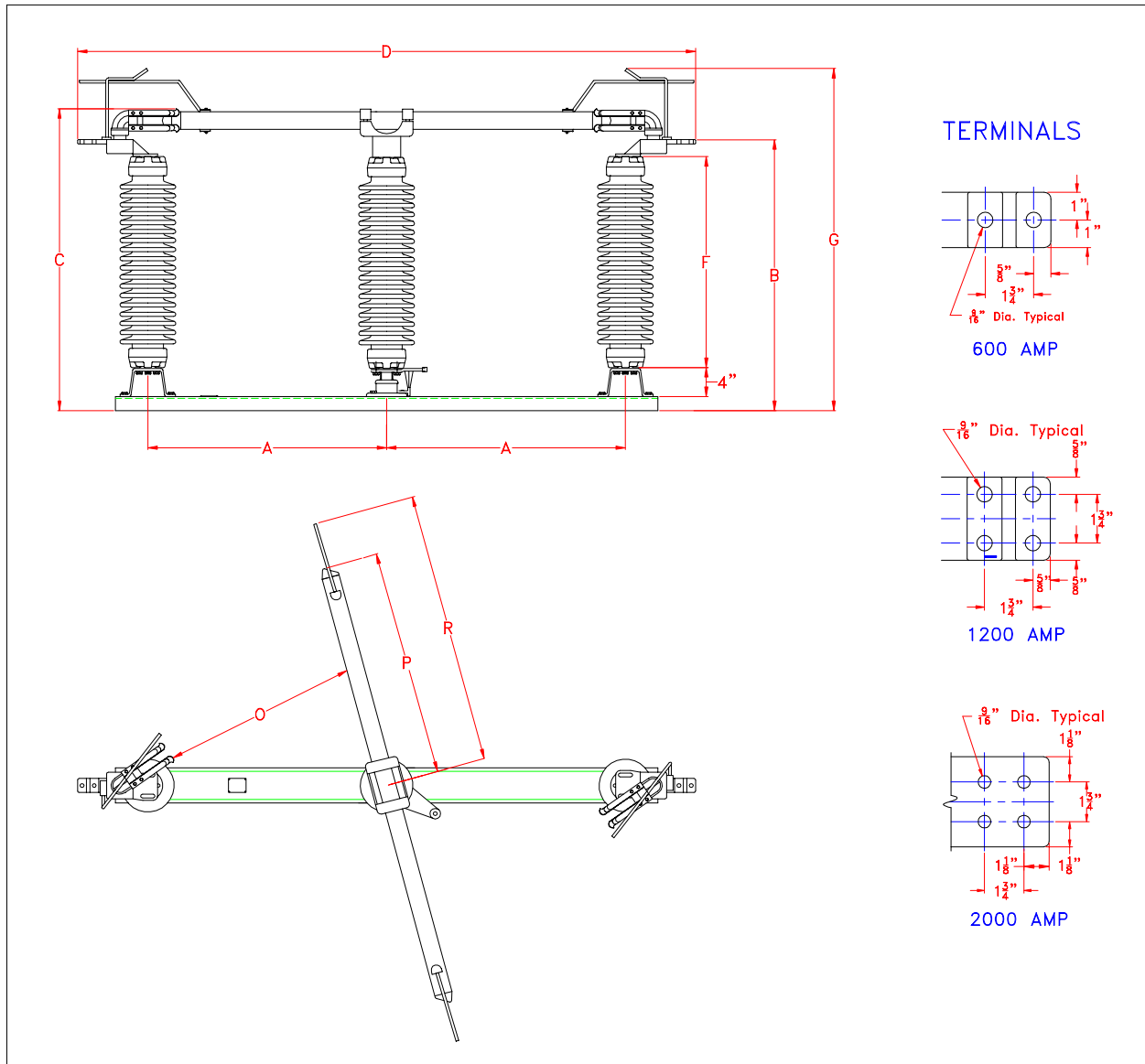
(2) To specify a 161 kV switch with a 900 BIL, add
"-0900" to catalog number, ex. DH16112S-0900

(3) To specify a 230 kV switch with a 1050 BIL, add
"-1050" to catalog number, ex. DH23012S-1050



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Document PC-005-1
March 11, 2002



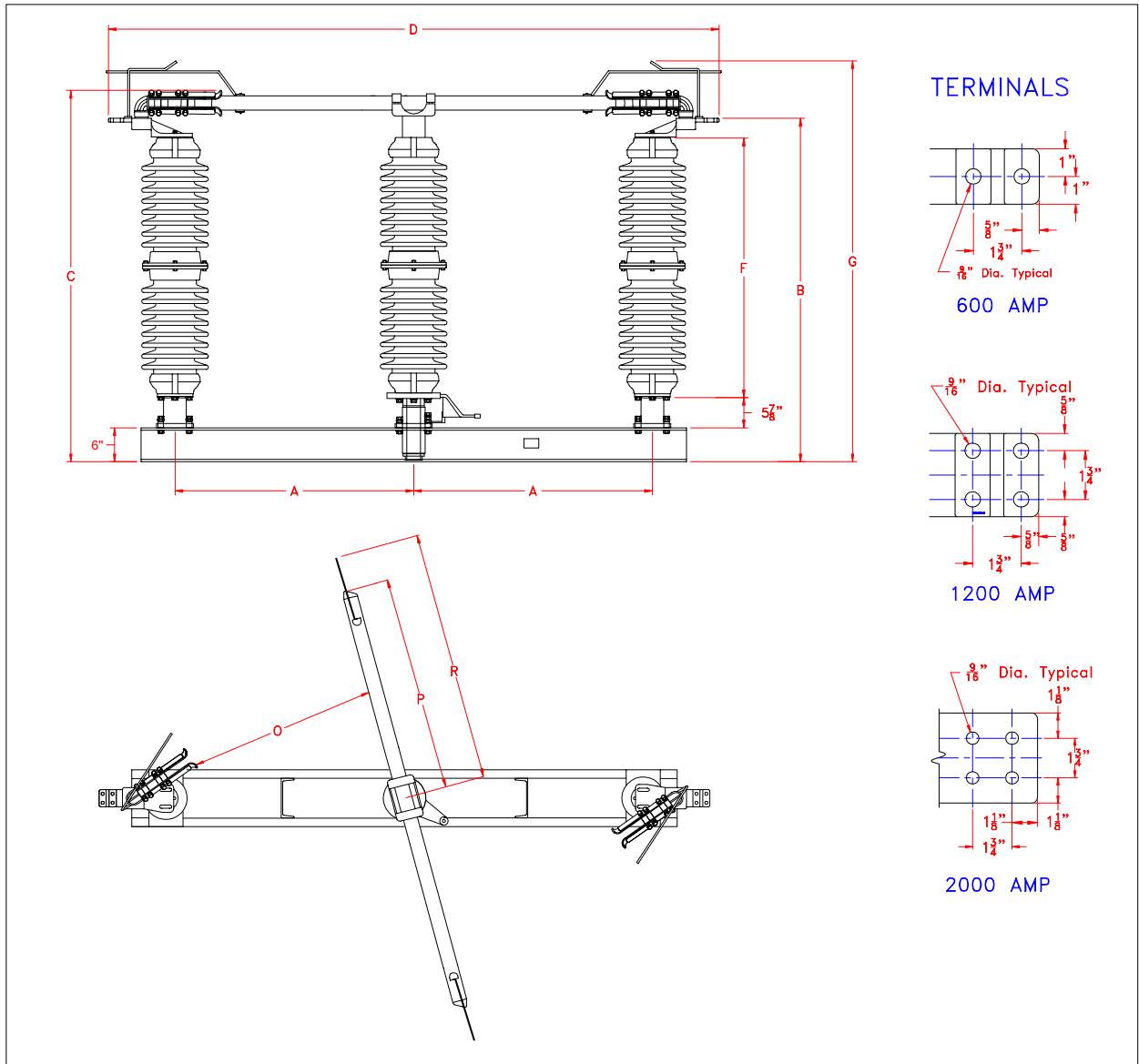
Dimensions in Inches (Unless Otherwise Specified)

kV	A	B	C	D	E	F	G	O	P	R
34.5	18	26-1/2	31	56	11-3/4	18	37-1/2	10-1/2	14-13/16	21-1/8
46	22	30-1/2	35	64	15-3/4	22	41-1/2	15-1/4	18-13/16	25-1/8
69	34	38-1/2	43	88	27-3/4	30	49-1/2	26-1/4	30-13/16	37-1/8



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Dimensions in Inches (Unless Otherwise Specified)

kV	A	B	C	D	E	F	G	O	P	R
115	42	60-1/8	64-13/16	104	35-3/4	45	71-1/4	36-1/8	38-1/8	49-1/8
138	48	69-1/8	73-13/16	116	41-3/4	54	80-1/4	42-1/8	44-1/8	55-1/8
161	54	77-1/8	81-13/16	128	47-3/4	62	88-1/4	48-1/8	50-1/8	61-1/8
230	68	95-1/8	99-13/16	156	61-3/4	80	106-1/4	62-1/8	64-1/8	75-1/8