Center-Break Switch



SEECO 230 kV, 1200 amp center-break switch, catalog CH23012S

Ordering Information

Standard Equipment

Type "C" center 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 69 kV are shipped complete with standard strength station post insulators: individual switch pole units are preassembled and factory adjusted. Switches rated 115 kV and above are shipped preassembled (live parts on switch bases), but with insulators crated separately.

Type "C" 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, snapout arcing horns can be provided for interruption of charging and magnetizing currents. Loop split applications can be handled through the addition of a SEECO MONORUPTR(R) single bottle vacuum interrupter.

Optional Equipment

Accessories, such as motor operators, worm gear mechanisms, mounting trusses, single bottle loop split interrupters, operator platforms, terminal connectors, and auxiliary switches are also available.

Type: C

Insulator Profile: Parallel

Orientation: Horizontal Upright, Vertical, Underhung

Voltage: 34.5 - 230 KV

Current: 600, 1200, and 2000 Ampere

Description

A two insulator, group operated, center side-opening, airbreak disconnect switch, with two rotating insulators per phase for operation.

Application

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

Features & Benefits

- Simple and mechanically reliable
- No overhead clearance problems
- Easiest operating of all group operated swtiches
- Excellent ice breaking characteristics
- Lower cost vs. three insulator style switches
- Readily adaptable to quick break arcing horns and single bottle loop split 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)
- 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 structure (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 online at www.seecoswitch.com

Catalog Numbers and Ratings

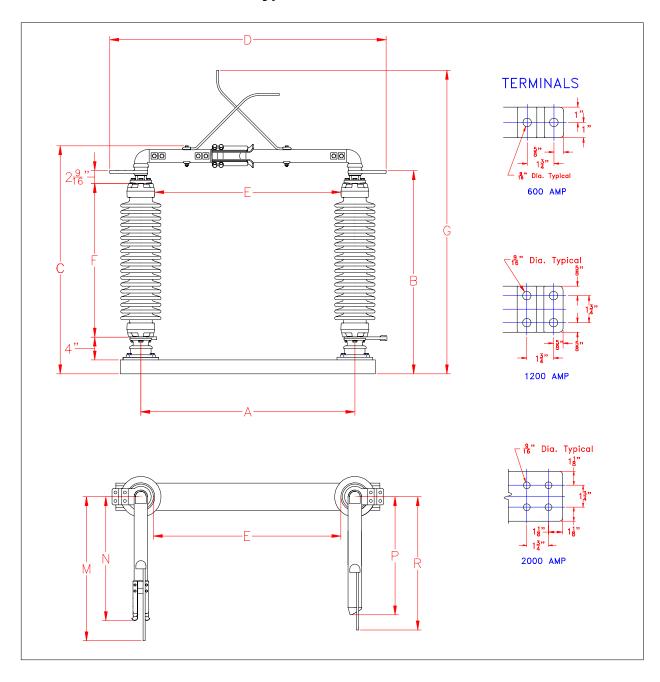
Voltage Rating			Current Rating		Insul					
Nom	Max	BIL	Cont	Mom	TR	Horizontal	\/owticel	Lindorbuna	Weight, Lbs	
Nom	IVIAX	DIL	Cont	IVIOTTI	Nbr	Horizoniai	Vertical	Underhung	Install	Ship
34.5	38	200	600	40	210	CH03406S	CV03406S	CU03406S	600	871
			1200	61		CH03412S	CV03412S	CU03412S	615	892
			2000	100		CH03420S	CV03420S	CU03420S	625	907
46	48.3	250	600	40	214	CH04606S	CV04606S	CU04606S	699	1015
			1200	61		CH04612S	CV04612S	CU04612S	714	1030
			2000	100		CH04620S	CV04620S	CU04620S	724	1045
69	72.5	350	600	40	216	CH06906S	CV06906S	CU06906S	948	1460
			1200	61		CH06912S	CV06912S	CU06912S	957	1470
			2000	100		CH06920S	CV06920S	CU06920S	967	1485
115	121	550	600	40	286	CH11506S	CV11506S	CU11506S	2043	2680
			1200	61		CH11512S	CV11512S	CU11512S	2073	2710
			2000	100		CH11520S	CV11520S	CU11520S	2093	2736
138	145	650	600	40	288	CH13806S	CV13806S	CU13806S	2217	2825
			1200	61		CH13812S	CV13812S	CU13812S	2253	2860
			2000	100		CH13820S	CV13820S	CU13820S	2283	2898
161	169	750	600	40	291	CH16106S	CV16106S	CU16106S	2868	3475
		(1)	1200	61		CH16112S	CV16112S CU16112S		2919	3525
			2000	100		CH16120S	CV16120S	CU16120S	2979	3597
230	245	900	600	40	304	CH23006S	CV23006S	CU23006S	3568	4205
		(2)	1200	61		CH23012S	CV23012S	CU23012S	3648	4300
			2000	100		CH23020S	CV23020S	CU23020S	3688	4347

NEMA Recommended Phase Spacing (inches)										
kV	Buses	Without Horns	Horn Gap	Min. Metal to Metal						
34.5	36	48	60	18						
46	48	60	72	22						
69	60	72	84	32						
115	84	108	120	53						
138	96	132	144	63						
161	108	156	168	72						
230	132	192	192	89						

⁽¹⁾ To specify a 161 kV switch with a 900 BIL, add "-0900" to the catalog number, ex. CH16112S-0900

⁽²⁾ To specify a 230 kV switch with a 1050 BIL, add "-1050" to the catalog number, ex. CH23012S-1050 $\,$

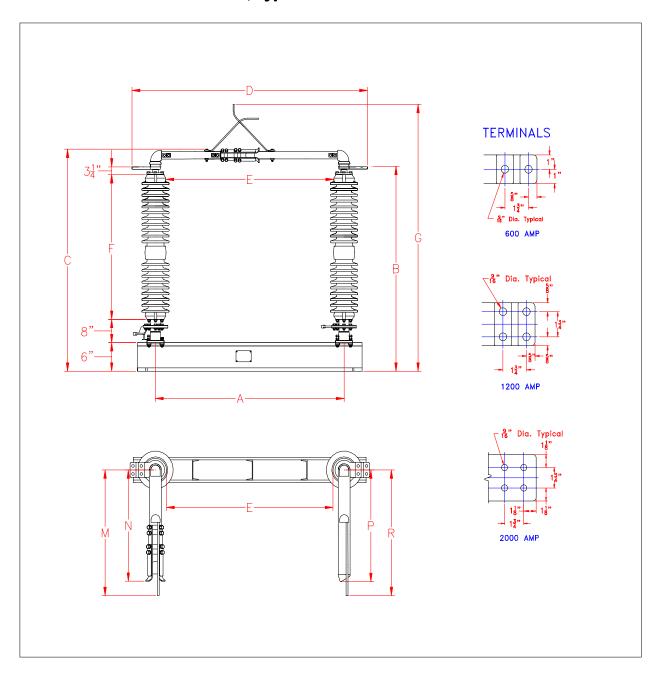
Dimensional Data 34.5 - 69 kV, Type C



Dimensions in Inches (Unless Otherwise Specified)

kV	Α	В	С	D	Е	F	G	Н	М	N	Р	R
34.5	30	26-13/16	31-5/16	42-1/4	23	18	46-3/8	39	23-1/8	17-11/16	15-7/16	19-5/8
46	30	30-13/16	35-5/16	46-1/4	23	22	50-3/8	39	23-1/8	17-11/16	15-7/16	19-5/8
69	42	39-5/16	43-13/16	55-1/4	34-1/2	30	58-7/8	51	27-5/8	23-3/16	21-15/16	26-1/8

Dimensional Data 115 - 230 kV, Type C



Dimensions in Inches (Unless Otherwise Specified)

kV	Α	В	С	D	E	F	G	Н	М	N	Р	R
115	60	63-1/8	67-7/8	72-1/4	50-1/4	45	82-5/8	72	35-3/4	31-3/16	31-7/8	36-1/8
138	72	72-1/8	76-7/8	84-1/4	62-1/4	54	91-5/8	84	41-3/4	37-3/16	38-1/4	42-1/2
161	84	80-1/8	84-7/8	96-1/4	74-1/4	62	99-5/8	96	47-3/4	43-3/16	44-1/4	48-1/2
230	96	102-1/16	108-1/2	108-1/4	85-1/8	80	NA	108	NA	49-3/16	50-1/4	NA