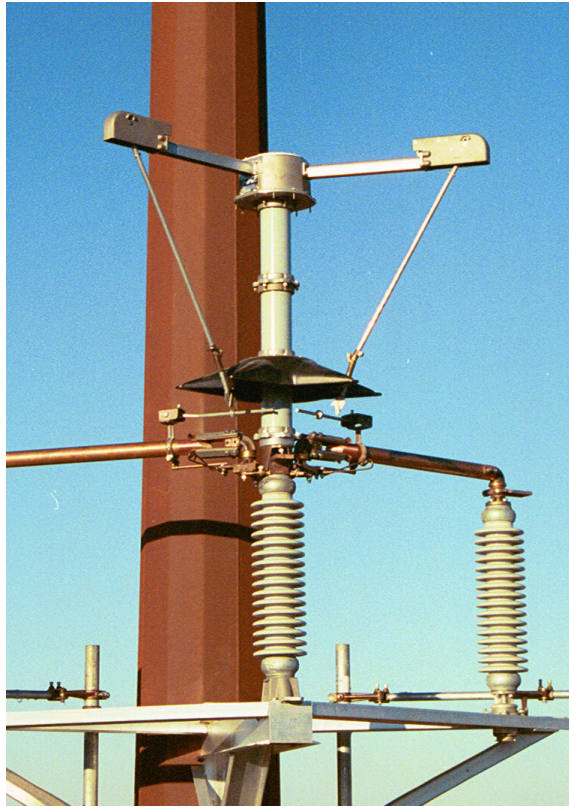




Monoruptr® Vacuum Interrupters



Catalog 2M06912-3

Standard Equipment

Monoruptr® vacuum interrupters utilize a column of vacuum bottles in series with voltage grading provided by paired sets of capacitors and resistors. Each vacuum bottle is housed in a fiberglass tube with aluminum flanges to facilitate stacking. The assembled unit is filled with a silicon oil, which serves as a dielectric medium. The aluminum flanges also provide a convenient means for hi-pot or continuity testing of the individual vacuum bottles.

Interrupter units are supplied complete with mounting hardware, blade mounted pick-up rods and moving and stationary contacts, which protect the main switch contacts in both opening and closing operations.

Installation

The interrupter units are shipped fully assembled and pre-adjusted for proper activation or "trip"; no field adjustment of the interrupter unit is required, nor should be attempted. Field adjustment is limited to the blade mounted pick-up rods and auxiliary contacts, and can be easily accomplished in less than an hour.

A complete set of installation instructions are available from our website at www.seecoswitch.com or you can contact us at the number below for assistance.

Type: 1M, 2M and 3M

Voltage: 15 - 230 kV

Maximum Interrupting Current: 3000 Ampere

Number of Vacuum Bottles: 1 - 8

Description

A vacuum interruption device for use with SEECO one-way, two-way and three-way phase-over-phase switches. Provides full load or reduced voltage interruption capabilities.

Application

Common applications for single and multi bottle interrupters include:

- Load dropping
- Line dropping
- Loop splitting (parallel break)

Monoruptr® vacuum interrupters are not designed or rated for fault duty. Please contact the factory for confirmation of the appropriate interrupter configuration for your specific application.

Features & Benefits

- Provides arc-less switching
- Supports load management, remote switching and automatic sectionalizing schemes
- Full load interrupters provide convenience, flexibility and clarity in switching; reduces confusion about switching "rules" under various operating conditions
- Cost effective - one interrupter unit is shared by all sides of two and three-way switches
- Interrupter units are out of the main current path when not in operation and are not subject to fault currents
- Proven vacuum bottle technology with an established history of successful field service
- Environmentally friendly - dielectric medium is a silicon oil; no special handling or disposal procedures required
- Safety - no SF6 that can produce chlorine gas under high currents
- Quick, simple field installation

Operation Sequence

The interrupters are only in the circuit for a few seconds during the opening operation of the air switch. The movement of the air switch blade "trips" the interrupter unit through a series of mechanical linkages and a high speed toggle mechanism which opens all vacuum bottle contacts simultaneously. The speed of contact opening is independent of the air switch blade speed. After contact opening, the trip arm of the interrupter disengages from the blade mounted pick-up rod and automatically returns to its original position, closing the vacuum bottle contacts. In switch closing, the interrupter is out of the circuit.



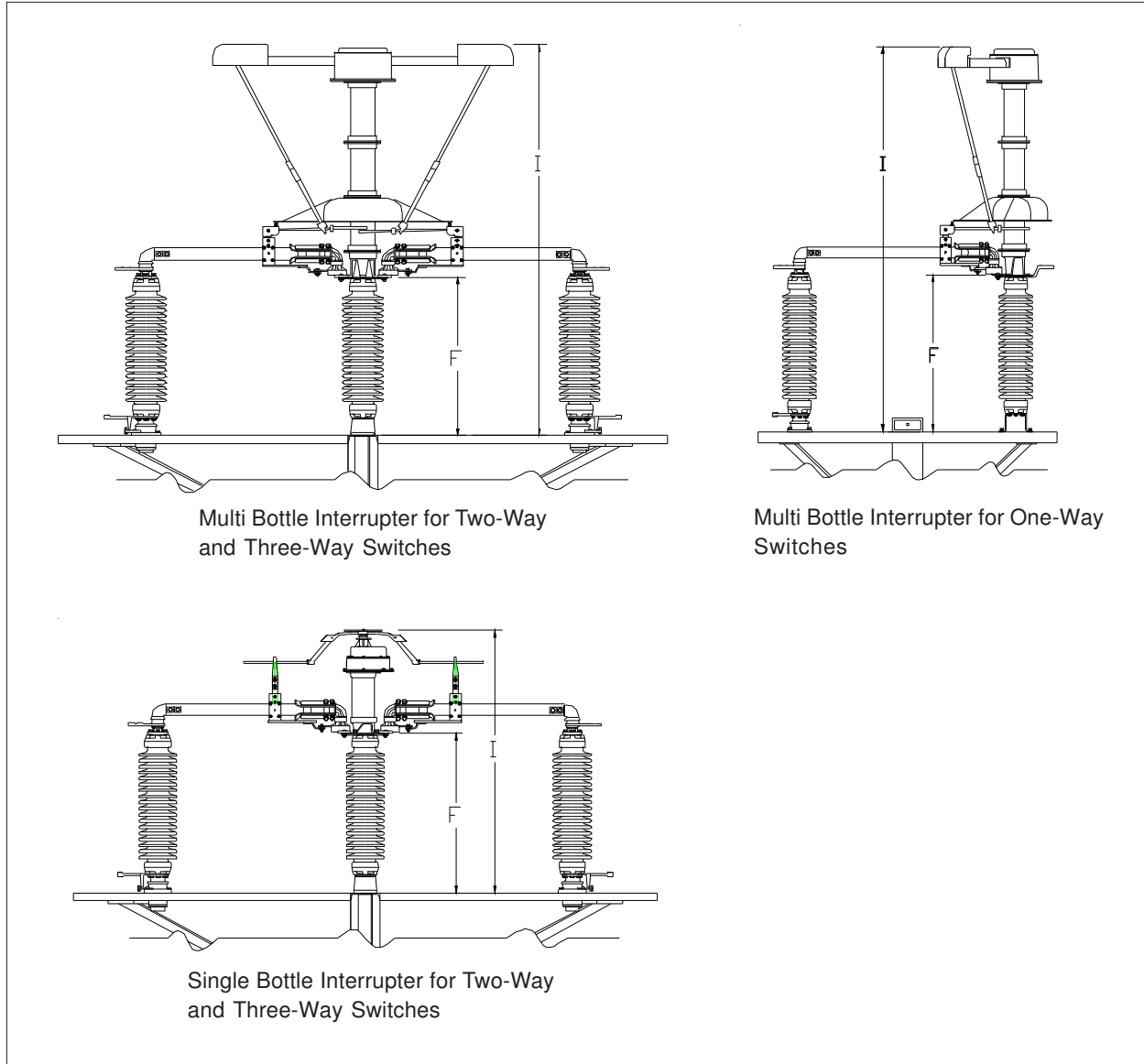
Catalog Numbers and Ratings

Switch Voltage Rating	Switch Current Rating	Vacuum Bottles Per Unit	Type 1M			Type 2M			Type 3M								
			Catalog	Weight, Lbs		Catalog	Weight, Lbs		Catalog	Weight, Lbs							
				Install	Ship		Install	Ship		Install	Ship						
14.4	600	1				2M01506-1	170	390	3M01506-1	180	395						
	1200					2M01512-1	170	390	3M01512-1	180	395						
	2000					2M01520-1	170	390	3M01520-1	180	395						
	3000					2M01530-1	170	390	3M01530-1	180	395						
23	600	1							2M02306-1	170	390	3M02306-1	180	395			
	1200								2M02312-1	170	390	3M02312-1	180	395			
	2000								2M02320-1	170	390	3M02320-1	180	395			
	3000								2M02330-1	170	390	3M02330-1	180	395			
34.5	600	1										2M03406-1	170	390	3M03406-1	180	395
	1200											2M03412-1	170	390	3M03412-1	180	395
	2000											2M03420-1	170	390	3M03420-1	180	395
	3000											2M03430-1	170	390	3M03430-1	180	395
46	600	2	1M04606-2	220	370							2M04606-2	245	485	3M04606-2	250	495
	1200		1M04612-2	220	370							2M04612-2	245	485	3M04612-2	250	495
	2000		1M04620-2	220	370							2M04620-2	245	485	3M04620-2	250	495
	3000		1M04630-2	220	370							2M04630-2	245	485	3M04630-2	250	495
69	600	3	1M06906-3	270	480	2M06906-3	295	595				3M06906-3	300	605			
	1200		1M06912-3	270	480	2M06912-3	295	595				3M06912-3	300	605			
	2000		1M06920-3	270	480	2M06920-3	295	595				3M06920-3	300	605			
	3000		1M06930-3	270	480	2M06930-3	295	595				3M06930-3	300	605			
115	600	4	1M11506-4	310	590	2M11506-4	335	705	3M11506-4	340	710						
	1200		1M11512-4	310	590	2M11512-4	335	705	3M11512-4	340	710						
	2000		1M11520-4	310	590	2M11520-4	335	705	3M11520-4	340	710						
	3000		1M11530-4	310	590	2M11530-4	335	705	3M11530-4	340	710						
138	600	5	1M13806-5	355	650	2M13806-5	380	765	3M13806-5	385	770						
	1200		1M13812-5	355	650	2M13812-5	380	765	3M13812-5	385	770						
	2000		1M13820-5	355	650	2M13820-5	380	765	3M13820-5	385	770						
	3000		1M13830-5	355	650	2M13830-5	380	765	3M13830-5	385	770						
161	600	6	1M16106-6	400	750	2M16106-6	425	865	3M16106-6	430	870						
	1200		1M16112-6	400	750	2M16112-6	425	865	3M16112-6	430	870						
	2000		1M16120-6	400	750	2M16120-6	425	865	3M16120-6	430	870						
	3000		1M16130-6	400	750	2M16130-6	425	865	3M16130-6	430	870						
230	600	8	1M23006-8	490	880	2M23006-8	515	995	3M23006-8	520	1000						
	1200		1M23012-8	490	880	2M23012-8	515	995	3M23012-8	520	1000						
	2000		1M23020-8	490	880	2M23020-8	515	995	3M23020-8	520	1000						
	3000		1M23030-8	490	880	2M23030-8	515	995	3M23030-8	520	1000						

Please consult the factory for questions about interrupter ratings and your specific switching application.



Dimensional Data 15 - 230 kV, Type 1M, 2M and 3M



Dimension "G" represents phase spacing for the most typical applications; consult the factory for 230 kV applications or other voltages requiring different values than those published here.

Dimensions in Inches (Unless Otherwise Specified)

kV	Bottles	Height	I	F	G
14.4	1	22-7/8	36-7/8	14	6'-0"
23	1	22-7/8	40-7/8	18	6'-0"
34.5	1	22-7/8	44-7/8	22	7'-0"
46	2	38-5/16	64-5/16	26	9'-0"
69	3	50-3/16	84-3/16	34	10'-0"

kV	Bottles	Height	I	F	G
115	4	61-5/8	113-3/8	51-3/4	18'-0"
138	5	73-1/2	134-1/4	60-3/4	22'-0"
161	6	85-3/8	154-1/8	68-3/4	24'-0"
230	8	108	193-7/8	85-7/8	***



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