

▷ V.I. (Vacuum Interrupter)

Vacuum Interrupter (V.I) is a core part that composes the breaking part of high-voltage VCB. Generally, it is a satisfactory conductor to supply power and it promptly interrupts the current in case of an overload and short circuit faults to ensure the insulation. It is the most ideal, arc-extinguishing device.



Name of Type			5F	0K	M10QA	M20QCB	M40SA	M50SC	M51S	M30S	M101T	0KPN	M12S	M52Q	M102R	M102SM	M102SGI	M202T	M102STR	M203SM	M263T	
Shape																						
Electrical Rating	Rated Voltage	kV	7.2	7.2	7.2	7.2	7.2	7.2	12 15	4.76	8.25 15	25.8	25.8	24	25.8	25.8	25.8	25.8	27.5	36 38	38	
	Power Frequency Withstand Voltage	kV	20	35	22	22	22	22	36	19	36	60	77	60	60	60	70	60	75	80	80	
	Lightning Impulse Withstand Voltage	kV	60	85	60	60	60	60	95	60	95	150(125)	165	125	125	150	125	150	175	200	200	
	Rating Frequency	Hz	50 60	50 60	50 60	50 60	50 60	50 60	50 60	50 60	50 60	50 60	50 60	50 60	50 60	50 60	50 60	50 60	50 60	50 60	50 60	50 60
	Rated Current	A	400	630	400	630	2000	3150	2000	2000	2000	3150	630	2000	630	1250	2000	2000	3150	1000	2000	3000
	Rated Breaking Current	kA	(4)	(4)	8	13	20 25	40	25	32	50 40	(4)	(4)	13	25	25	25	25	40	20	32	40
	Rated Closing Current	kAp	-10.4	32.5	20.8	32.5	65	104	65	82	130 104	32.5	65	32.5	65	65	65	65	104	52	85	104
Rated short time withstand current	kA/3sec	6.3(1s)	12.5(4s)	8	12.5	25	40	25	31.5	50 40	12.5(4s)	25(1s)	12.5	25	25	25	25	40(1s)	20(1s)	32	40	
Stroke	mm	4±0.3	8±0.5	8±1	8±1	8±1	8±1	12±1	8±1	10±1	12±1	15±1	16±1	16±1	16±1	16±1	16±1	16±1	20±1	24±1	20±1	
Average Opening velocity	m/s	0.5±0.1	0.8±0.1	0.9±0.1	1.2±0.3	1.2±0.3	1.5±0.2	1.7±0.2	1.6±0.2	1.0±0.2	0.9±0.1	1.2±0.2	1.5±0.2	1.5±0.2	1.5±0.2	1.5±0.2	1.5±0.2	1.7±0.2	1.0±0.2	1.5±0.2	1.5±0.1	
Average closing velocity	m/s	0.35±0.1	0.6±0.1	0.7±0.2	0.7±0.2	0.7±0.2	0.8±0.2	1.2±0.2	0.9±0.2	1.0±0.2	1.0±0.2	0.7±0.3	0.9±0.1	1.0±0.2	1.0±0.2	1.0±0.2	1.0±0.2	1.1±0.2	1.0±0.2	1.0±0.2	1.0±0.1	
Maximum Over Travel	mm	1	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Maximum Over Travel Time	ms	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
Maximum Rebound	mm	0.75	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Contact Consumption Limit	mm	1	1	1.5	1.5	2	2	3	2	3	2	1	3	3	3	3	3	3	3	3	3	
Contact Virtual Limit	kg-f	10≤F≤18	50≤F≤65	25≤F≤40	50≤F≤60	180≤F≤220	450≤F≤550	180≤F≤220	280≤F≤335	390≤F≤450	50≤F≤65	93≤F≤118	95≤F≤124	180≤F≤220	180≤F≤220	180≤F≤220	180≤F≤220	450≤F≤550	180≤F≤220	400≤F≤500	330≤F≤380	
Contact self-closing Force	kg-f	7	7	7	7	16	27	16	16	27	7	16	10	20	27	27	27	27	27	27	27	
switching Cycle(No-load)	times	500,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	250,000	10,000	10,000	
Weight	kg	0.6	1.1	0.7	1	4.1	5.5	4.2	4.1	7.2	1.1	4.7	2	4.2	5.2	6.3	9.5	7.4	10.9	11.8		
Application Range	Circuit Breaker	-	-	-	o	o	o	o	o	o	-	o	o	o	o	o	o	o	o	o	o	
	Break Switch	-	o	o	-	-	-	-	-	-	o	o	-	-	-	-	-	-	-	-	-	
External Insulation	Air	-	o	o	o	o	o	o	o	o	-	-	-	o	o	-	o	o	o	o	o	
	GAS stc.	-	-	-	-	-	-	-	-	-	o	o	o	-	-	-	o	-	-	-	-	