

Vacuum Circuit Breaker

Ratings

Type			LVB-06□-20D			LVB-06□-25D			
Rated voltage (kV)			7.2			7.2			
Rated normal current (A)			630	1250	2000	630	1250	2000	
Rated frequency (Hz)			50/60			50/60			
Rated short-circuit breaking current (kA)			20			25			
Rated short-circuit breaking capacity (MVA)			250			310			
Rated short-time withstand current (kA/3sec)			20			25			
Rated short-circuit making current (kAp)			52			65			
Rated breaking time (Cycle)			3			3			
Rated opening time (sec)			≤ 0.04			≤ 0.04			
No-load closing time (sec)			≤ 0.06			≤ 0.06			
Withstand voltage	Power frequency (kV/min)		20			20			
	Impulse (kV/1.2×50μs)		60			60			
Rated operating sequence			O-0.3s-CO-3min-CO			O-0.3s-CO-3min-CO			
Type test	Mechanical		M2 (10,000 times)			M2 (10,000 times)			
	Electrical		E2 (List1)			E2 (List1)			
	Capacitive current switching Note 1)		C2			C2			
Lifetime	Mechanical	Without maintenance (Time)	20000			20000			
		Maintenance (Time)	30000			30000			
	Electrical	Without maintenance (Time)	20000			20000			
		Maintenance (Time)	30000			30000			
Auxiliary switch			4a4b, 10a10b			4a4b, 10a10b			
Installing method	Fixed		Visible, Fixed		Visible, Fixed	Visible, Fixed		Visible, Fixed	
	Draw-out type	E-type	Visible, Clip		Visible, Tulip	Visible, Clip		Visible, Tulip	
		F-type	Visible, Clip		Visible, Tulip	Visible, Clip		Visible, Tulip	
		G-type Note 2)	-	Visible, Clip		Visible, Tulip	Visible, Clip		Visible, Tulip
			T	Enclosed, Tulip		Enclosed, Tulip	Enclosed, Tulip		Enclosed, Tulip
M-type Note 2)		Enclosed, Tulip			Enclosed, Tulip				
Weight Note 3)	VCB	E-type (kg)	94	99	134.5	94	99	134.5	
		F-type (kg)	95	100	135.5	95	100	135.5	
		G, M-type (kg)	95 (137)	100 (147)	135.5 (163.5)	95(137)	100(147)	135.5(163.5)	
	Cradle	E-type (kg)	37	39.5	60	37	39.5	60	
		F-type (kg)	39	41.5	62.5	39	41.5	62.5	
		G-type (kg)	39(103)	41.5(107)	62.5(117)	39(103)	41.5(107)	62.5(117)	
Applied standard			IEC 62271-100			IEC 62271-100			
Test laboratory		KERI Note 4)		■		■			

Note 1) Applied cable-charging current switching test

2) In the event of ordering Enclosed Tulip type for G class VCB, please add T in the end of type name. (Ex: LVB-06G-20D/06-1A2B-T)

3) () indicates the weight of Enclosed Tulip installing method VCB.

4) KERI: Korea Electrotechnology Research Institute.



▲ Visible VCB
(Draw-out type)



▲ E-type cradle
(Visible, Clip contact)



▲ E-type cradle
(Visible, Tulip contact)



▲ F-type cradle
(Visible, Clip contact)



▲ G-type cradle
(Visible, Tulip contact)

Type			LVB-06□-32D			LVB-06□-40D			
Rated voltage (kV)			7.2			7.2			
Rated normal current (A)			1250	2000	3150	1250	2000	3150	
Rated frequency (Hz)			50/60			50/60			
Rated short-circuit breaking current (kA)			31.5			40			
Rated short-circuit breaking capacity (MVA)			390			500			
Rated short-time withstand current (kA/3sec)			31.5			40			
Rated short-circuit making current (kAp)			82			104			
Rated breaking time (Cycle)			3			3			
Rated opening time (sec)			≤ 0.04			≤ 0.04			
No-load closing time (sec)			≤ 0.06			≤ 0.06			
Withstand voltage	Power frequency (kV/min)		20			20			
	Impulse (kV/1.2 × 50 _μ S)		60			60			
Rated operating sequence			O-0.3s-CO-3min-CO			O-0.3s-CO-3min-CO			
Type test	Mechanical		M2 (10,000 times)			M2 (10,000 times)			
	Electrical		E2 (List1)			E2 (List1)			
	Capacitive current switching Note 1)		C2			C2			
Lifetime	Mechanical	Without maintenance (Time)	20000			20000			
		Maintenance (Time)	30000			30000			
	Electrical	Without maintenance (Time)	20000			20000			
		Maintenance (Time)	30000			30000			
Auxiliary switch			4a4b, 10a10b			4a4b, 10a10b			
Installing method	Fixed		Visible, Fixed		Visible, Fixed	Visible, Fixed		Visible, Fixed	
	Draw-out type	E-type		Visible, Tulip		Visible, Clip	Visible, Tulip		Visible, Tulip
		F-type		Visible, Tulip		Visible, Tulip	Visible, Tulip		Visible, Tulip
		G-type Note 2)	-	Visible, Tulip		Visible, Tulip	Visible, Tulip		Visible, Tulip
			T	Enclosed, Tulip		-	Enclosed, Tulip		-
M-type		Enclosed, Tulip		-	Enclosed, Tulip		-		
Weight Note 3)	VCB	E-type (kg)	131.5	134.5	210	135	138	210	
		F-type (kg)	132.5	135.5	211	136	139	211	
		G, M-type (kg)	132.5(159)	135.5(160)	220	136(162.5)	139(163.5)	220	
	Cradle	E-type (kg)	52	60	131	52	60	131	
		F-type (kg)	54.5	62.5	135	54.5	62.5	135	
		G-type (kg)	62.5(110)	135(117)	155	62.5(110)	135(117)	155	
Applied standard			IEC 62271-100			IEC 62271-100			
Test laboratory		KERI Note 4)		■		■			

Note 1) Applied cable-charging current switching test

2) In the event of ordering Enclosed Tulip type for G class VCB, please add T in the end of type name. (Ex: LVB-06G-20D/06-1A2B-T)

3) () * indicates the weight of Enclosed Tulip installing method VCB.

4) KERI: Korea Electrotechnology Research Institute



▲ Enclosed VCB
(Draw-out type, G-type)



▲ G-type Cradle
(Enclosed, Tulip contact)



▲ Visible, Clip contact



▲ Visible, Tulip contact



▲ Enclosed, Tulip contact

Vacuum Circuit Breaker

Ratings

Type			LVB-12□-25D/06, 12, 20-T			LVB-12□-32D/12, 20-T	
Rated voltage (kV)			12			12	
Rated normal current (A)			630	1250	2000	1250	2000
Rated frequency (Hz)			50(E1,C2: KEMA), 60(E2: PT & T)			60(E1,E2,C2: PT & T)	
Rated short-circuit breaking current (kA)			25			31.5	
Rated short-circuit breaking capacity (MVA)			500			650	
Rated short-time withstand current (kA/sec)			25/3			31.5/3	
Rated short-circuit making current (kAp)			62.5			81.9	
Rated breaking time (Cycle)			3				
Rated opening time (sec)			0.04				
No-load closing time (sec)			0.06				
Withstand voltage	Power frequency (kV/min)		28				
	Impulse (kV/1.2 × 50 μs)		75				
Rated operating sequence			O-0.3s-CO-3min-CO				
Type test	Mechanical		M2 (10,000 times)				
	Electrical		E2 (List 1)				
	Capacitive current switching Note 1)		C2				
Lifetime	Mechanical	Without maintenance (Time)	20,000				
		Maintenance (Time)	30,000				
	Electrical	Without maintenance (Time)	20,000				
		Maintenance (Time)	30,000				
Auxiliary switch			4a4b, 10a10b				
Installing Method	Fixed		-				
	Draw-out type	E-TYPE	-				
		F-TYPE	-				
		G-TYPE	Enclosed, Tulip				
		M-TYPE	Enclosed, Tulip				
Weight	VCB	E-TYPE (kg)	-				
		F-TYPE (kg)	-				
		G, M-TYPE (kg)	137	147	163.5	159	160
	Cradle	E-TYPE (kg)	-	-	-	-	-
		F-TYPE (kg)	-	-	-	-	-
		G, M-TYPE (kg)	103	107	117	110	117
Applied standard			IEC 62271-100				
Test laboratory			KEMA: E1, C2 PT & T: E2 Note 2)			PT & T: E1, E2, C2, M2	

Note 1) Applied cable-charging current switching test

2) PT&T: Power Testing & Technology Institute (L&S high-power laboratory)

Type			LVB-17□-25D/06, 12, 20, 25			
Rated voltage (kV)			17.5			
Rated normal current (A)			630	1250	2000	2500
Rated frequency (Hz)			50/60			
Rated short-circuit breaking current (kA)			25			
Rated short-circuit breaking capacity (MVA)			750			
Rated short-time withstand current (kA/sec)			25/3sec			
Rated short-circuit making current (kAp)			65			
Rated breaking time (Cycle)			3			
Rated opening time (sec)			0.04			
No-load closing time (sec)			0.06			
Withstand voltage	Power frequency (kV/min)		38			
	Impulse (kV/1.2×50μs)		95			
Rated operating sequence			O-0.3s-CO-3min-CO			
Type test	Mechanical		M2 (10,000 times)			
	Electrical		E2 (List1)			
	Capacitive current switching Note 1)		C2			
Lifetime	Mechanical	Without maintenance (Time)	20000			
		Maintenance (Time)	30000			
	Electrical	Without maintenance (Time)	20000			
		Maintenance (Time)	30000			
Auxiliary switch			4a4b,10a10b			
Installing method	Fixed		Visible, Fixed			
	Draw-out type	E-TYPE	Visible, Tulip			
		F-TYPE	Visible, Tulip			
		G-TYPE	Visible, Tulip			
Weight	Fixed type VCB (kg)		115	125	135	165
	VCB	E-TYPE (kg)	130	140	155	195
		F-TYPE (kg)	130	140	155	195
		G-TYPE (kg)	160	170	190	220
		Cradle	E-TYPE (kg)	65	67	78
	F-TYPE (kg)		75	77	88	172
	G-TYPE (kg)		100	105	115	185
Applied standard			IEC 62271-100			
Test laboratory		KEMA , PT&T		■		

Note 1) Applied cable-charging current switching test.

Vacuum Circuit Breaker

Ratings

Type			LVB-20□-13D	LVB-20□-13D/T	LVB-20□-16D	LVB-20□-16D/T	LVB-20□-25D	LVB-20□-25D/T
Rated voltage (kV)			24		24		24	
Rated normal current (A)			630		630		630	
			1250		1250		1250	
							2000	
Rated frequency (Hz)			50/60		50/60		50/60	
Rated short-circuit breaking current (kA)			12.5		16		25	
Rated short-circuit breaking capacity (MVA)			520		665		1000	
Rated short-time withstand current (kA/3sec)			12.5		16		25	
Rated short-circuit making current (kAp)			32.5		40		65	
Rated breaking time (Cycle)			3		3		3	
Rated opening time (sec)			≤ 0.04		≤ 0.04		≤ 0.04	
No-load closing time (sec)			≤ 0.06		≤ 0.06		≤ 0.06	
Withstand voltage	Power frequency (kV/min)		50		50		50	
	Impulse (kV/1.2 × 50μs)		125		125		125	
Rated operating sequence			O-0.3s-CO-3min-CO		O-0.3s-CO-3min-CO		O-0.3s-CO-3min-CO	
Type test	Mechanical		M2(10,000 times)		M2(10,000 times)		M2(10,000 times)	
	Electrical		E2 (List1)		E2 (List1)		E2 (List1)	
	Capacitive current switching Note 1)		C2		C2		C2	
Lifetime	Mechanical	Without maintenance (Time)	20000		20000		20000	
		Maintenance (Time)	30000		30000		30000	
	Electrical	Without maintenance (Time)	20000		20000		20000	
		Maintenance (Time)	30000		30000		30000	
Auxiliary switch			4a4b, 10a10b		4a4b, 10a10b		4a4b, 10a10b	
Installing method	Fixed		Visible, Fixed	-	Visible, Fixed	-	Visible, Fixed	-
	Draw-out type	E-type	Visible, Clip	Enclosed, Tulip	Visible, Clip	Enclosed, Tulip	Visible, Clip	Enclosed, Tulip
		F-type	Visible, Clip	Enclosed, Tulip	Visible, Clip	Enclosed, Tulip	Visible, Clip	Enclosed, Tulip
		G-type Note 2)	Visible, Tulip	Enclosed, Tulip	Visible, Tulip	Enclosed, Tulip	Visible, Tulip	Enclosed, Tulip
		M-type	-	Enclosed, Tulip	-	Enclosed, Tulip	-	Enclosed, Tulip
Weight	VCB	E-type (kg)	145	145	145	145	145	145
		F-type (kg)	145	145	145	145	145	145
		G, M-type (kg)	155	187	155	187	155	187/218 (2000A)
	Cradle	E-type (kg)	80	80	80	80	80	80
		F-type (kg)	82	82	82	82	82	82
		G-type (kg)	110	120	110	120	110	120
Applied standard			IEC 62271-100		IEC 62271-100		IEC 62271-100	
Test laboratory		KERI	■		-		■	
		KEMA	-		■		■	

Note 1) Applied cable-charging breaking current

2) In the event of ordering Enclosed Tulip type for G class VCB, please add T in the end of type name. (Ex: LVB-06G-20D/06-1A2B-T)



▲ Fixed type VCB



▲ E-type cradle



▲ F-type cradle



▲ G-type cradle
(Withdrawable by lever)



▲ G-type cradle
(Withdrawable by screw)