

VACUUM CIRCUIT BREAKER

# LS VCB production specification

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LS VCB production specification

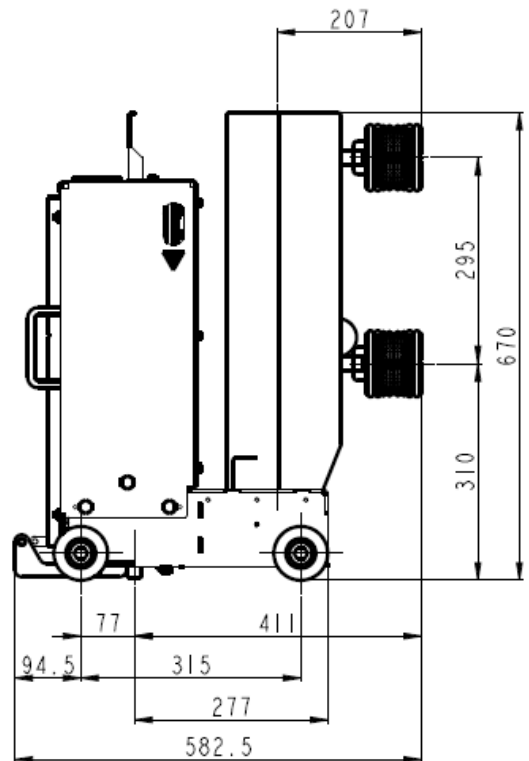
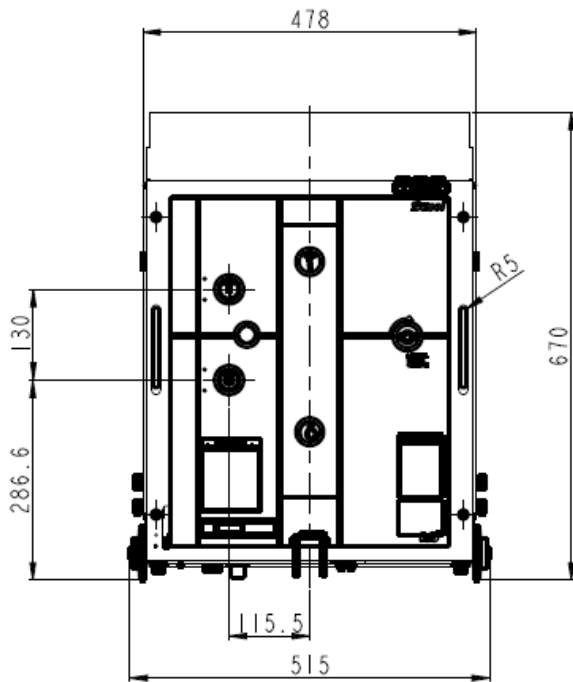
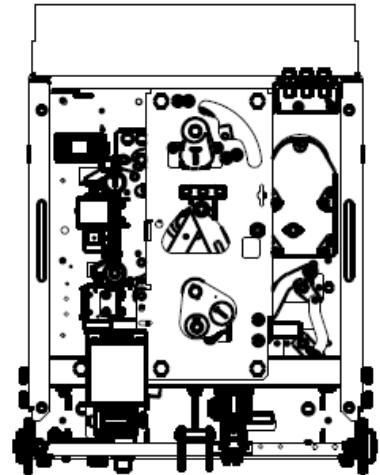
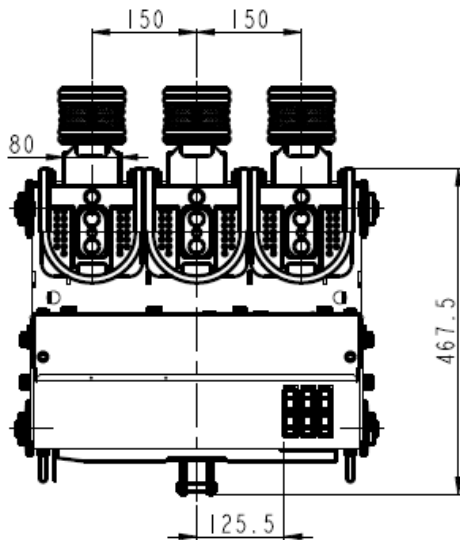
1. Major specification table

NO	Item	Rating of VCB		Remarks
1	Description	LVB-06E-32L/20-1A2E-B2 SM		
2	Rated voltage	7.2kV		
3	rated short-circuit current	31.5kA		
4	rated normal current	2000A		
5	rated withstand voltage (Power frequency)	20kV/1min		
6	rated withstand voltage (Impulse)	60kV/1.2x50 $\mu$ s		
7	Rated frequency	50/60Hz		
8	Rated short-circuit making current	78.75/81.9kA		
9	Rated short-time withstand current	31.5kA/3s		
10	Rated breaking time	3cycle		
11	Rated operating sequence	O-0.3s-CO-3min-CO		
12	Closing coil control voltage	DC 110V		
13	Trip coil control voltage	DC 110V		
14	Auxiliary contacts	4a4b, 10a10b		
15	Trip coil resistance	37 $\pm$ 10% [ $\Omega$ ]		
16	Closing coil resistance	37 $\pm$ 10% [ $\Omega$ ]		
17	Rated opening time	24 $\pm$ 10%[ms]		at 110V
18	No-load closing time	39 $\pm$ 10%[ms]		at 110V
19	standards	IEC62271-100		
20	Weight	VCB	135 kg	
		Cradle	63 kg	

LS VCB production specification

2. Outline drawing

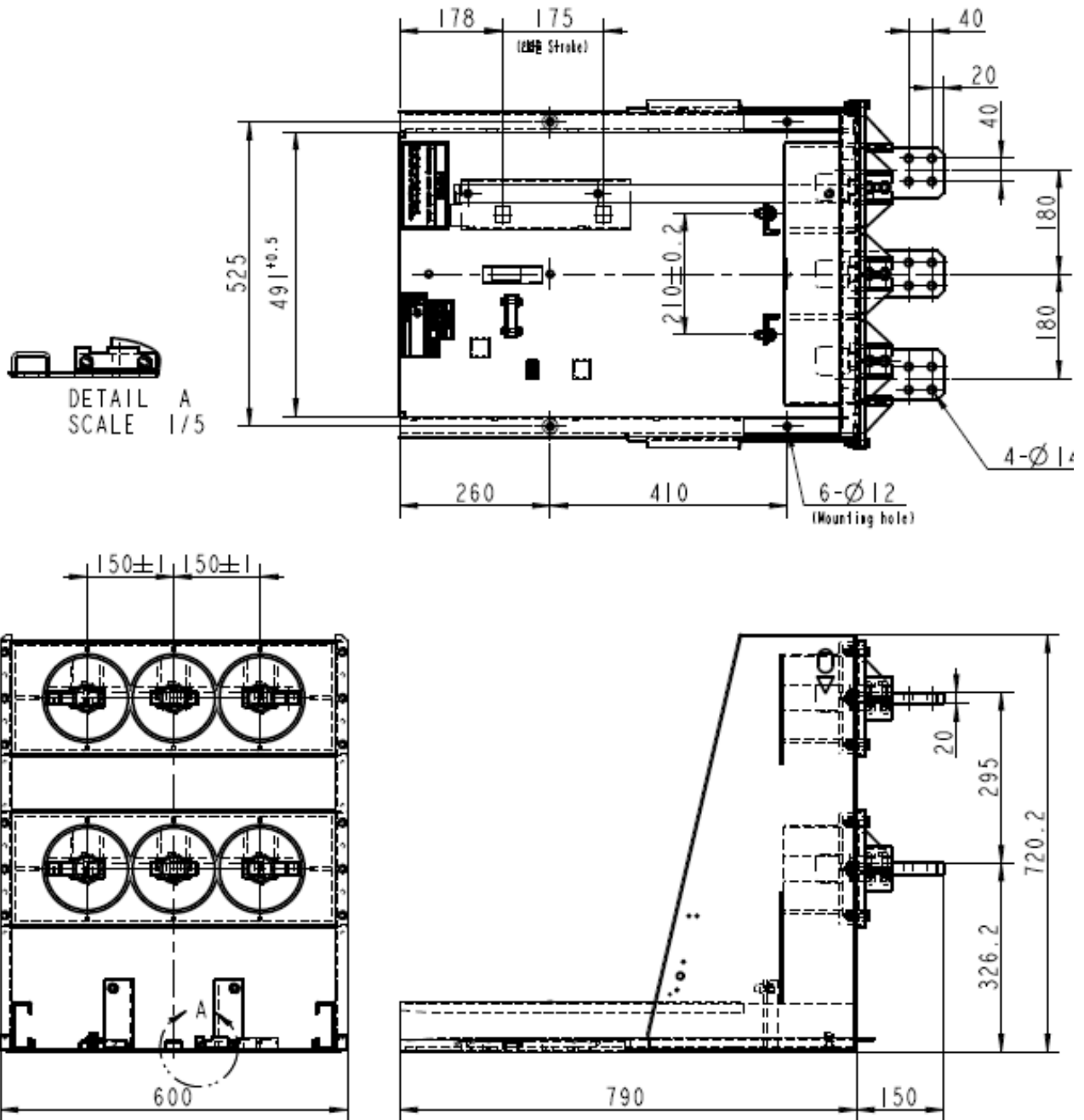
1) VCB (LVB-06E-32L/20-1A2E-B2 SM)



LS VCB production specification

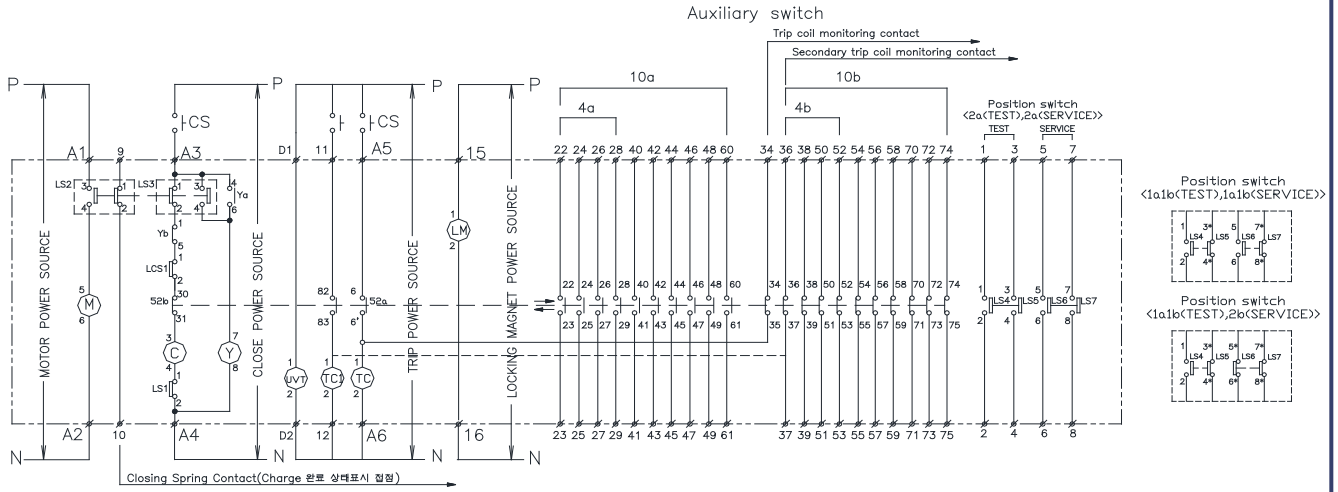
2.Outline drawing

2) Cradle (CRADLE,LCL-06E-32D/20 )



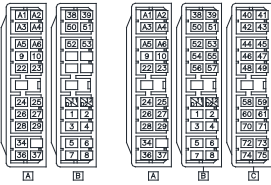
# LS VCB production specification

## 3. Sequence diagram



### <Connector Terminal Configuration>

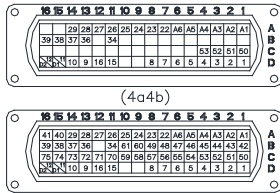
A type connector



(4a4b)

(10a10b)

B type connector



(4a4b)

(10a10b)

- ø : External terminal of VCB
- 52 : Vacuum circuit breaker
- M : Spring charging motor
- TC : Trip coil
- TC1 : Secondary trip coil
- C : Closing coil
- Y : Anti-pump relay
- UVT : Under voltage trip
- LS1 : Auxiliary switch(a)
- 52b : Auxiliary switch(b)
- LS1 : Close interlock limit switch (only withdrawable type)
- LS2 : Motor stop, close spring charged indication limit switch

- LS3 : Anti-close, anti-pumping limit switch
- LS1 : Latch checking switch (preventing closing unless the trip latch is properly reset)
- LS4, LS5 : Position S/W (TEST position)
- LS6, LS7 : Position S/W (SERVICE position)

S/W No.	TEST : 1a1b SERVICE : 2b	TEST : 2a SERVICE : 2a	TEST : 1a1b SERVICE : 1a1b
	A3	A4	A5
LS4	Close at TEST position	Close at TEST position	Close at TEST position
LS5	Open at TEST position	Close at TEST position	Open at TEST position
LS6	Open at SERVICE position	Close at SERVICE position	Close at SERVICE position
LS7	Open at SERVICE position	Close at SERVICE position	Open at SERVICE position

LM : Locking magnet (only H type withdrawable type)

- Note)
1. LCS1 : Latch Checking Switch \_\_\_\_\_
  2. Position S/W : TEST 2a, SERVICE 2a (Terminal No. 1,2,3,4,5,6,7,8) \_\_\_\_\_  
1a1b at TEST position and 1a1b/2b at SERVICE position are also available.  
(\* marked contact is b contact)
  3. UVT : Under voltage trip (Terminal No. D1,D2) \_\_\_\_\_
  4. TC1 : Secondary trip coil (Terminal No. 11,12) \_\_\_\_\_
  5. LM : Locking magnet (Terminal No. 15,16) \_\_\_\_\_
  6. Secondary trip coil monitoring contact (Terminal No. 36) \_\_\_\_\_  
In case Secondary trip coil monitoring contact is selected, 'b' contact(36,37) are not available.
  7. In above optional accessories, UVT and TC1 can not be selected simultaneously.
  8. In case of the fixed type, LS1(Closing-interlock limit switch) is not applied.
  9. Above circuit diagram is based on 'OFF' status of VCB and closing spring is charged.
  10. Please follow the direction of P and N shown on the circuit diagram.

Option