

DVB 5 固封式真空断路器

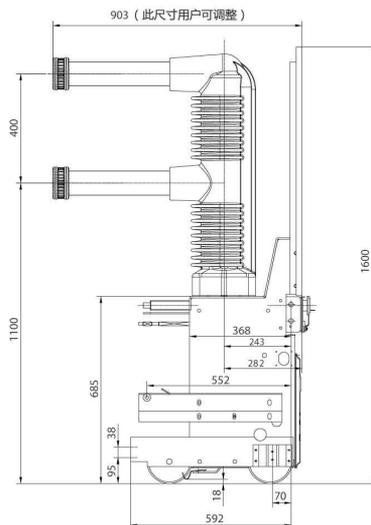
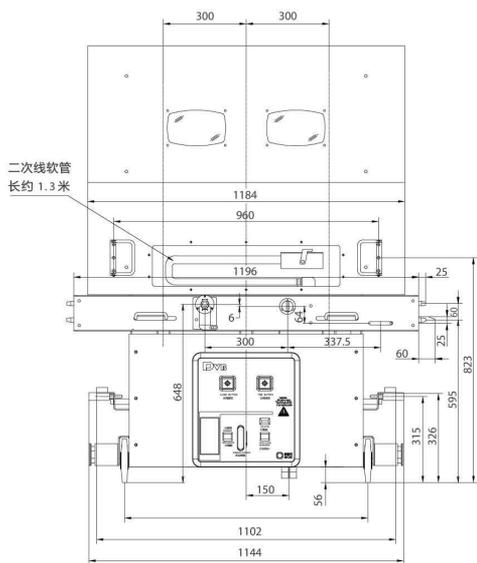
DVB5 Embedded Vacuum Circuit Breaker

主要技术参数 Main Technical Parameters

序号	参数名称	单位	参数值 Parameters
1	额定电压 Rated voltage	KV	40.5
2	额定电流 Rated current	A	1250 1600 2000 2500
3	额定频率 Rated frequency	Hz	50/60
4	短时工频耐受电压 Short-time(1min) power-frequency withstand voltage (1min)	KV	95
5	雷电冲击耐受电压 Lightning impulse withstand voltage	KV	185
6	额定短路开断电流 Rated short-circuit breaking current	KA	31.5
7	额定短路关合电流 Rated short-circuit making current	KA	80
8	额定短时耐受电流 (4S) Rated short-time withstand current(4s)	KA	31.5
9	额定峰值耐受电流 Rated peak withstand current	KA	80
10	额定单个电容器组开断电流 Rated breaking current of single capacitor bank	A	630 ▷
11	额定背对背电容器组开断电流 Rated breaking current of back to back capacitor bank	A	400 ▷
12	额定电缆充电开断电流 Class of restriking performance during capacitive current switching	A	C2
13	额定短路开断电流开断次 Operations of short-circuit breaking current interruption	次	20
14	额定操作顺序 Rated operating sequence		0—0.3s—CO—180s—CO
15	合闸时间 Closing time	ms	30 ~ 70
16	分闸时间 Opening time	ms	20 ~ 50
17	机械寿命 Mechanical life	次	10000
18	触头允许磨损厚度 Contact erosion limit	mm	3
19	额定操作电压 Rated voltage of motor	V	DC 220
20	储能时间 Charging time	s	≤ 15
21	触头开距 Rated contact stroke	mm	18 ~ 22
22	触头接触行程 Contact connection stroke	mm	5 ~ 7
23	三相合、分闸同期性 Asynchronous operation between poles	ms	≤ 2
24	合闸触头弹跳时间 Closing bounce	ms	≤ 3
25	分闸速度 Opening speed (0-8mm)	m/s	1.4 ~ 2.0
26	合闸速度 Closing speed (8mm-closed)	m/s	0.8 ~ 1.2
27	合闸触头接触压力 Contact force at contact touch point	N	3100±200
28	每相主回路电阻 (不大于) Single phase Circuit resistance	μ Ω	≤ 50

▷ 订货时需与本公司协商

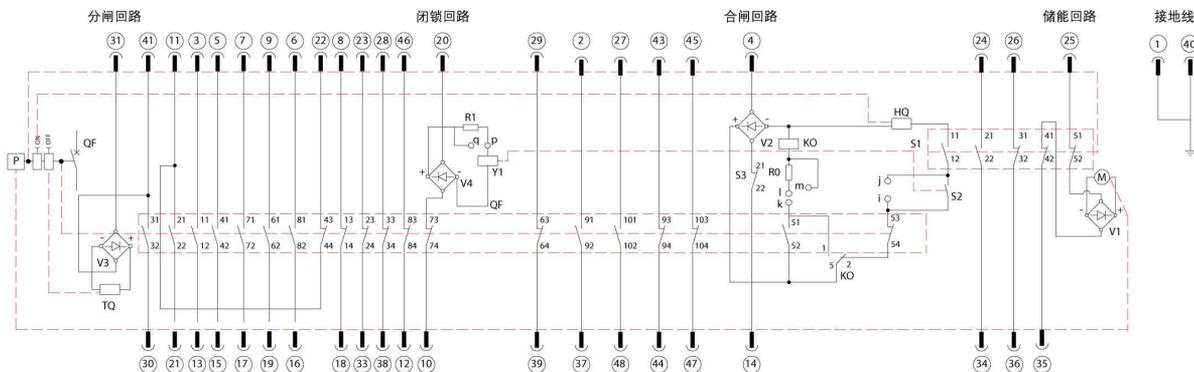
DVB5固封式真空断路器安装尺寸图 Dimensions of DVB5



额定电流 (A)	630	1250	1600	2000	2500
配静触头尺寸(mm)	∅ 49	∅ 49	∅ 55	∅ 79	∅ 109

注：配1400宽柜；推进机构推进行程 $610 \pm 3\text{mm}$

DVB5固封式真空断路器电气原理图 Electrical wiring diagram of DVB5



40.5kV真空断路器电气控制原理图
(断路器处于分闸、未储能状态)

代号	元件名称	代号	元件名称
Y1	闭锁电磁铁	S3	微动开关 (与推进机构联动)
TQ	分闸脱扣器	QF	与主轴联动的辅助开关
HQ	合闸脱扣器	M	储能电机
P	手动储能	KO	机构内部防跳继电器
S1	储能电机用微动开关	R0、R1	串联电阻
S2	闭锁电磁铁的辅助开关	V1~V4	整流元件