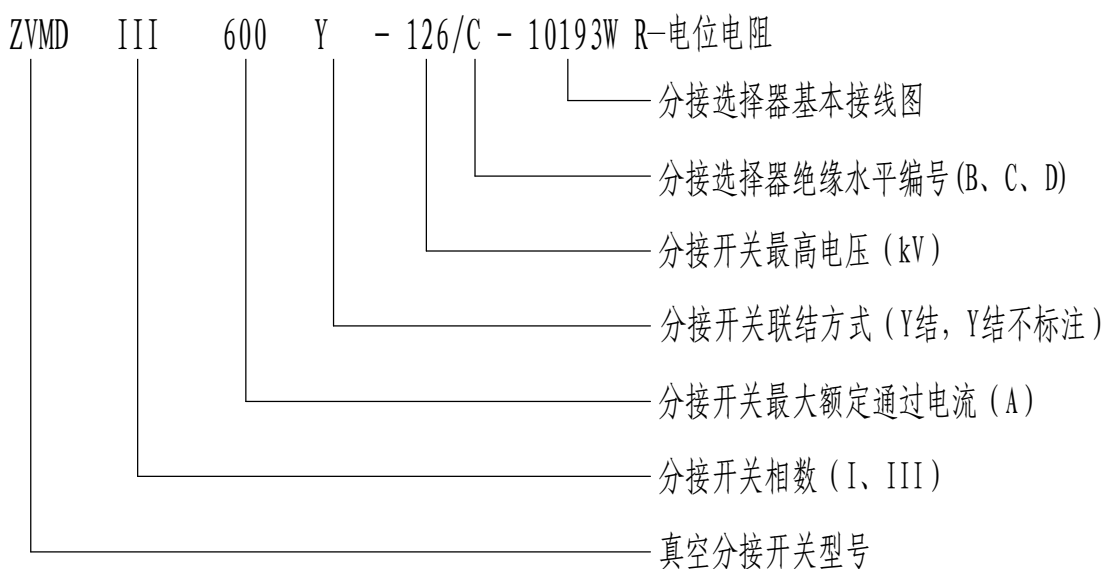


ZVMD组合式真空改进型有载分接开关

一、ZVMD型号说明

1.1 型号表示方法

ZVMD有载分接开关根据其相数、最大额定电流、最高电压、分接选择器绝缘等级和联结方式的不同组合，有多种型号规格。型号中各项参数含义说明如下：



1.2 型号中分接选择器基本接线图表示方法

根据变压器的调压范围和绕组的连接方式不同，分接选择器有多种不同的规格。分接选择器的规格由分接选择器分布触头数、操作位置数、中间位置数和转换选择器组成。在基本接线图中。各项参数含义说明如下：



二、ZVMD技术参数

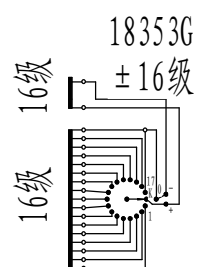
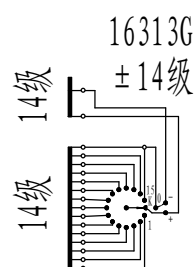
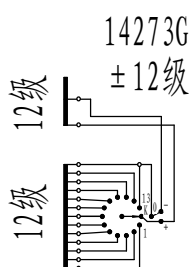
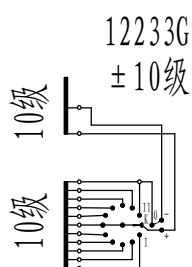
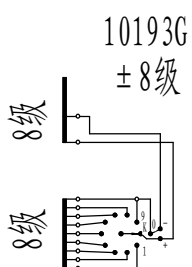
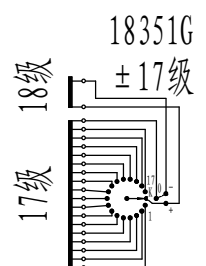
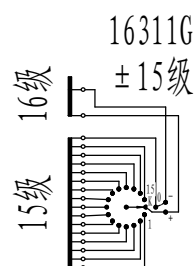
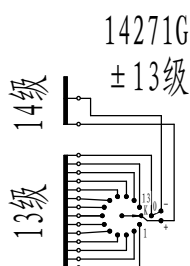
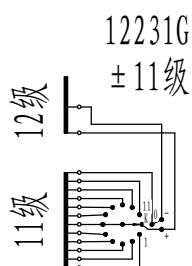
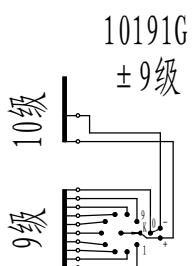
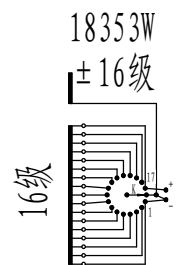
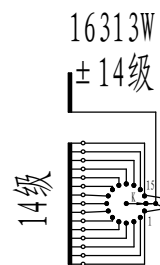
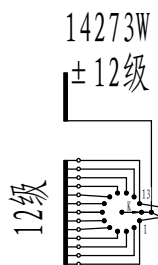
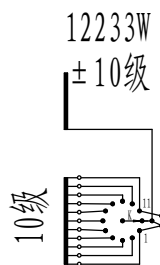
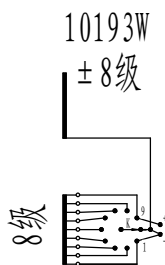
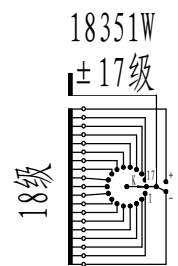
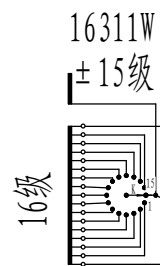
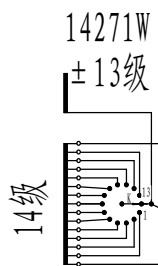
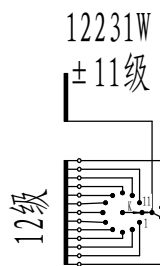
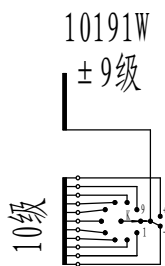
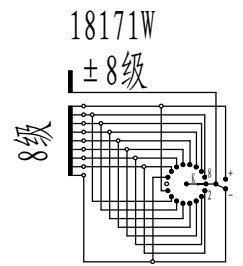
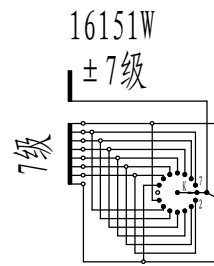
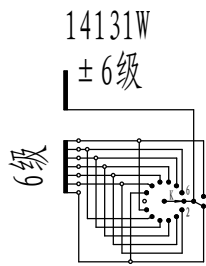
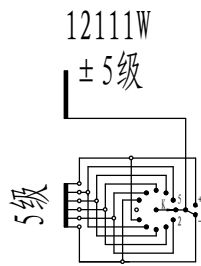
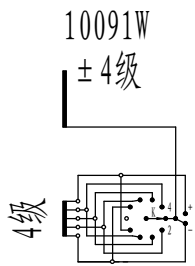
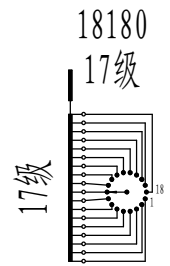
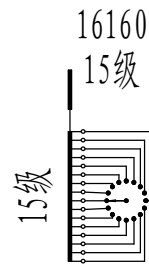
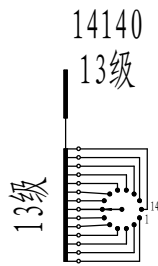
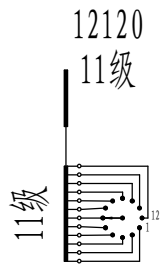
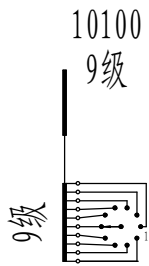
项	分类特征	III400	III500	III600	III1000	I401	I501	I601	I800	I1200	I1500	
1	最大额定通过电流 (A)	400	500	600	1000	400	500	600	800	1200	1500	
2	额定频率 (Hz)	50或60										
3	相数和联结方式	三相Y联结中性点				单相任意联结方式						
4	最大额定级电压 (V)	4000										
5	额定级容量 (kVA)	1320	1400	1500	3000	1320	1400	1500	2640	3100	3500	
6	承受短路能力 (kA)	热稳定(3秒有效值)	6	8	8	15	6	8	8	16	24	24
		动稳定(峰值)	15	20	20	37.5	15	20	20	40	60	60
7	工作位置数	线性调7、10、12、14、16、18、22、34 正反调和粗细调: $\pm 3 \sim \pm 17$										
8	分接开关绝缘水平 (kV)	额定电压	35		66		110		150		220	
		最高工作电压	40.5		72.5		126		170		252	
		工频试验电压(50Hz, 1min)	85		140		230		325		460	
		冲击试验电压(1.2/50 μ s)	200		350		550		750		1050	
9	分接选择器	按绝缘水平分为3种尺寸: 编号为B、C、D										
10	机械寿命	不低于150万次										
11	电气寿命	不低于35万次										
12	切换开关油室	工作压力	0.03MPa									
		密封性能	0.1MPa 24h 不渗漏									
		超压保护	爆破盖(0.4~0.5)MPa									
		保护继电器	QJ4-25整定油速1.0m/s $\pm 10\%$									
13	排油量(L)	约240~300										
14	充油量(L)	约168~223										
15	重量(kg)	约250~370										
16	配用电动机构	ZD/MA7D										

注: 1. 级容量等于级电压与负载电流的乘积, 额定级容量是连续允许的最大级容量。

2. 三相分接开关触头并联而成的单相分接开关选用时应考虑变压器线圈分流, ZVMDI800两路分流, ZVMDI1200、I1500三路分流。

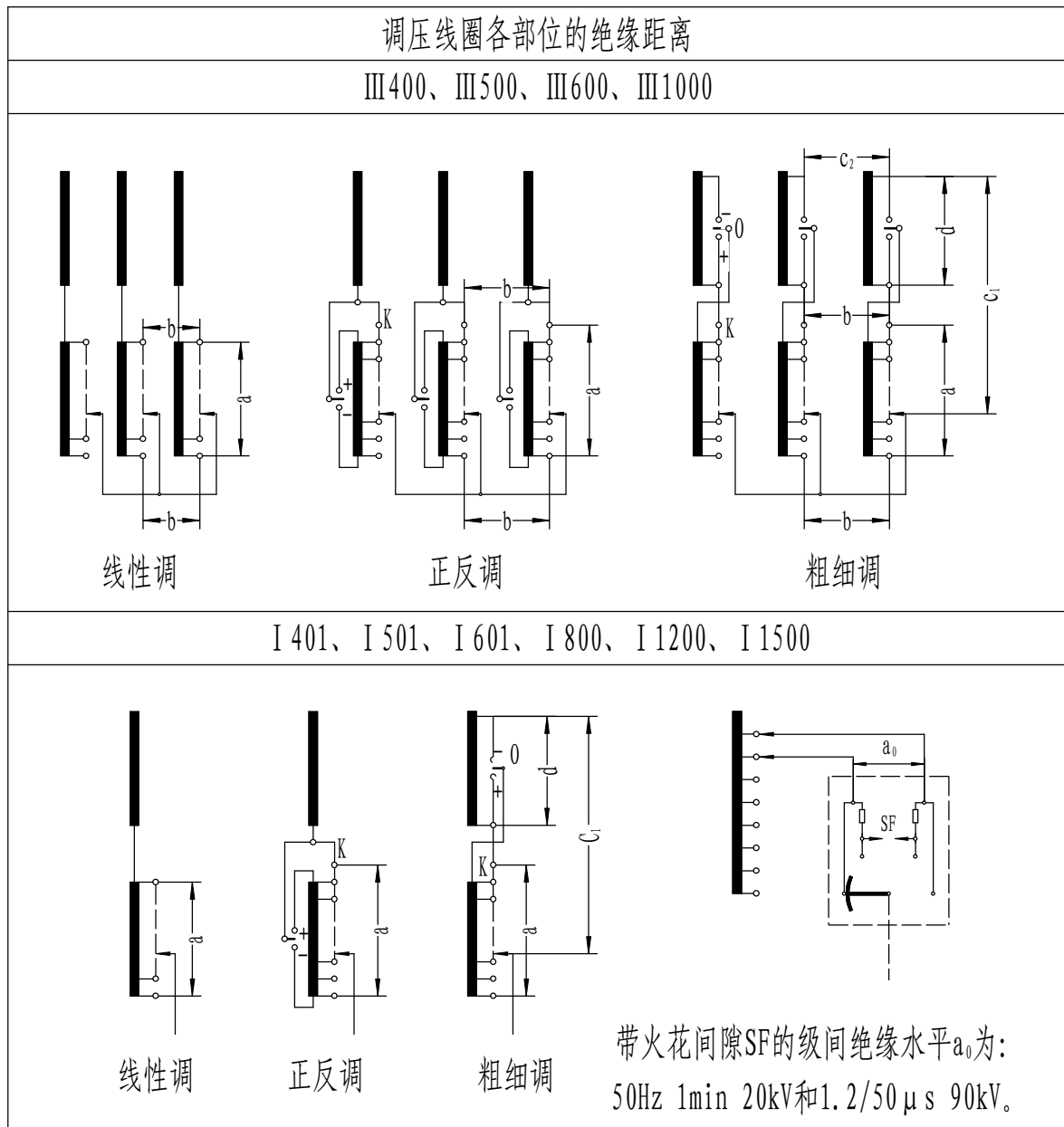
3. 工作位置数为34的单相线性调分接开关只有: I500A、I800A、I1500A。

三、ZVMD基本接线图

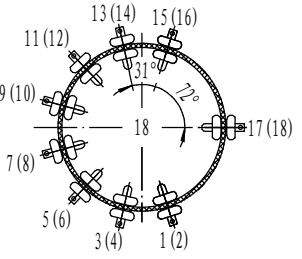
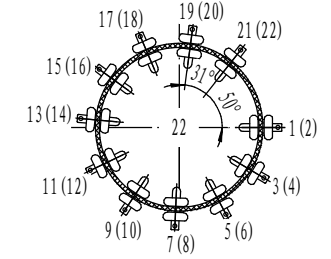
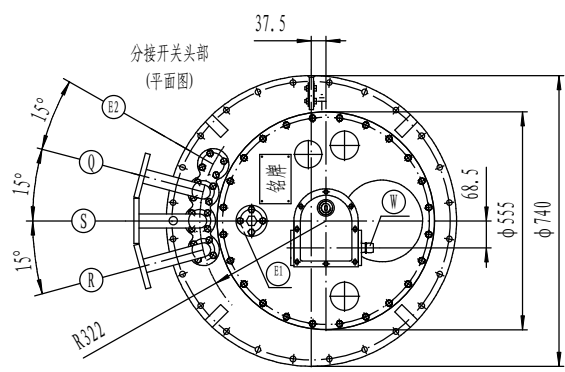
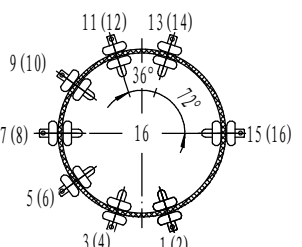
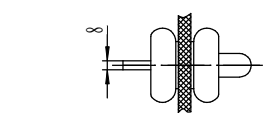
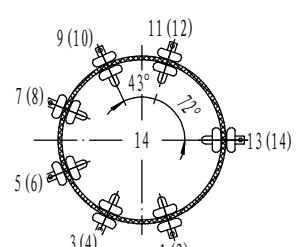
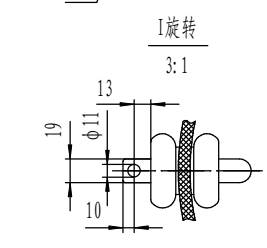
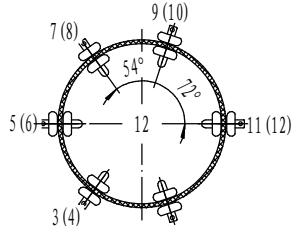
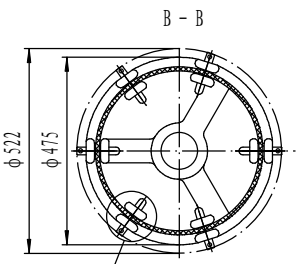
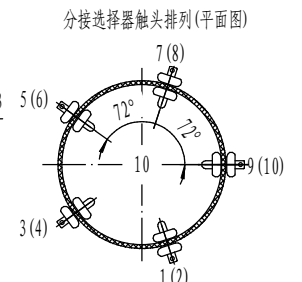
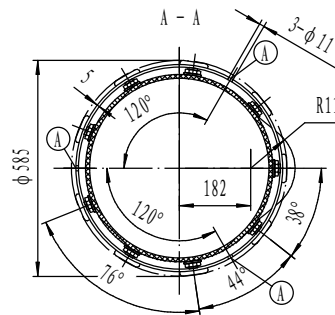
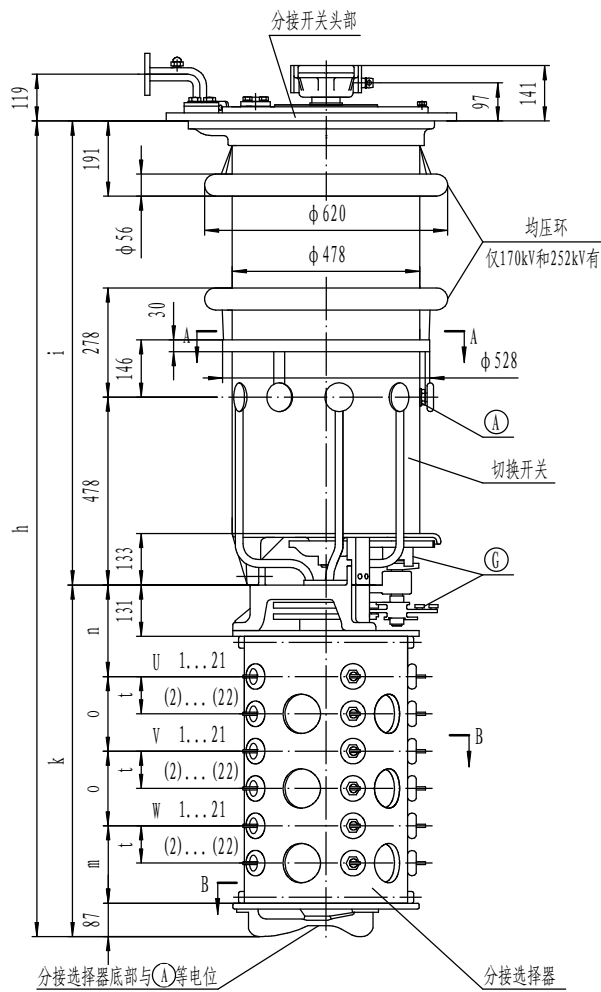


四、ZVMD内部绝缘水平

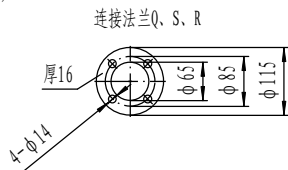
绝缘 距离 符号	分接选择器B型		分接选择器C型		分接选择器D型	
	kV	kV	kV	kV	kV	kV
	1.2/50 μ s	50Hz1min	1.2/50 μ s	50Hz1min	1.2/50 μ s	50Hz1min
a	265	50	350	82	490	105
b	265	50	350	82	490	146
c ₁	485	143	545	178	590	208
c ₂	495	150	550	182	590	225
d	265	50	350	82	490	105



五、ZVMD外形尺寸图



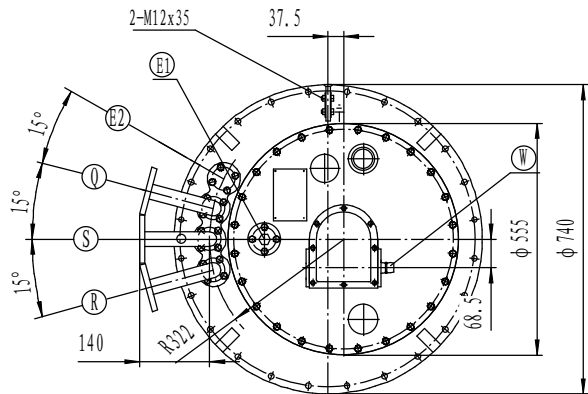
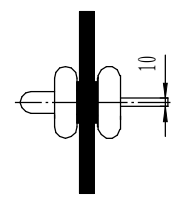
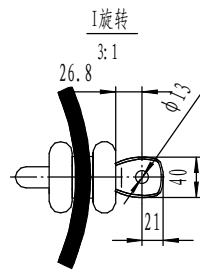
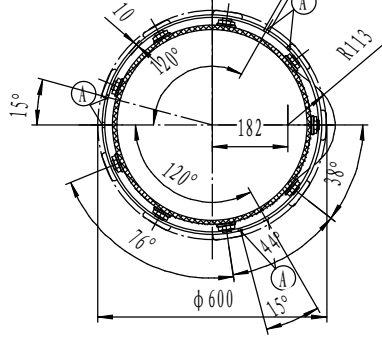
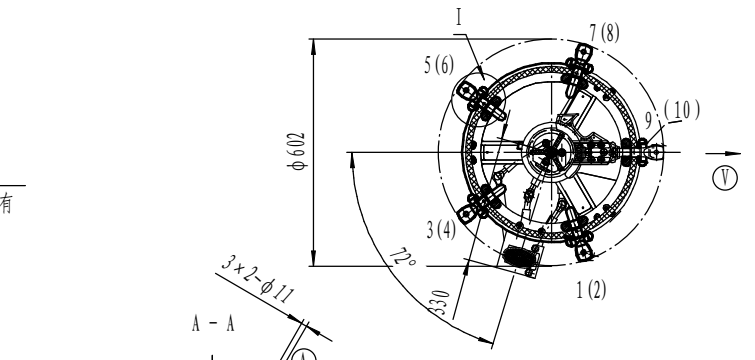
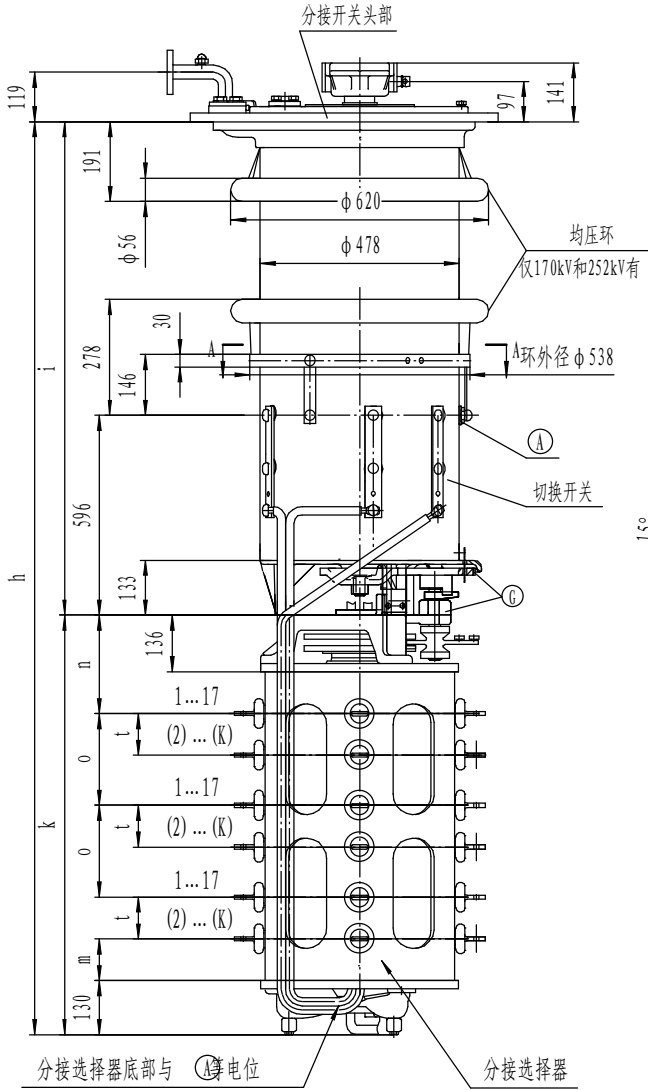
- Ⓐ-分接开关电流引出端(中性点)
- Ⓔ-分接开关头部溢油孔
- Ⓕ-变压器油箱溢油孔
- Ⓖ-分接选择器传动装置(与Ⓐ等电位)
- Ⓘ-回油联结法兰(不带槽)
- Ⓡ-保护继电器联结法兰(不带槽)
- Ⓢ-吸油管联结法兰(不带槽)
- Ⓦ-电动机输入传动轴



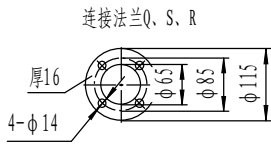
选择器编号	B				C				D				
	72.5	126	170	252	72.5	126	170	252	72.5	126	170	252	
最高工作电压(kV)	72.5	126	170	252	72.5	126	170	252	72.5	126	170	252	
尺寸mm	h	2008	2138	2268	2368	2183	2313	2443	2543	2368	2498	2628	2728
	i	1111	1241	1371	1471	1111	1241	1371	1471	1111	1241	1371	1471
	k					897		1072					1257
	n					233		258					323
	o					190		240					280
	t					95		120					95
	m					197		247					287
	油积dm ³	168	188	203	223	168	188	203	223	168	188	203	223
排油量dm ³	240	265	280	300	240	265	280	300	240	265	280	300	
重量kg			300				305					315	

图1 ZVMD III 400/III 500/III 600线性调

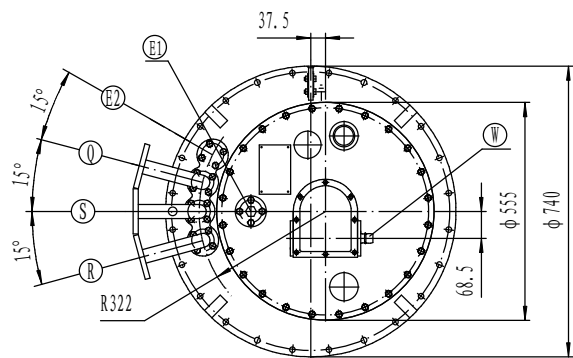
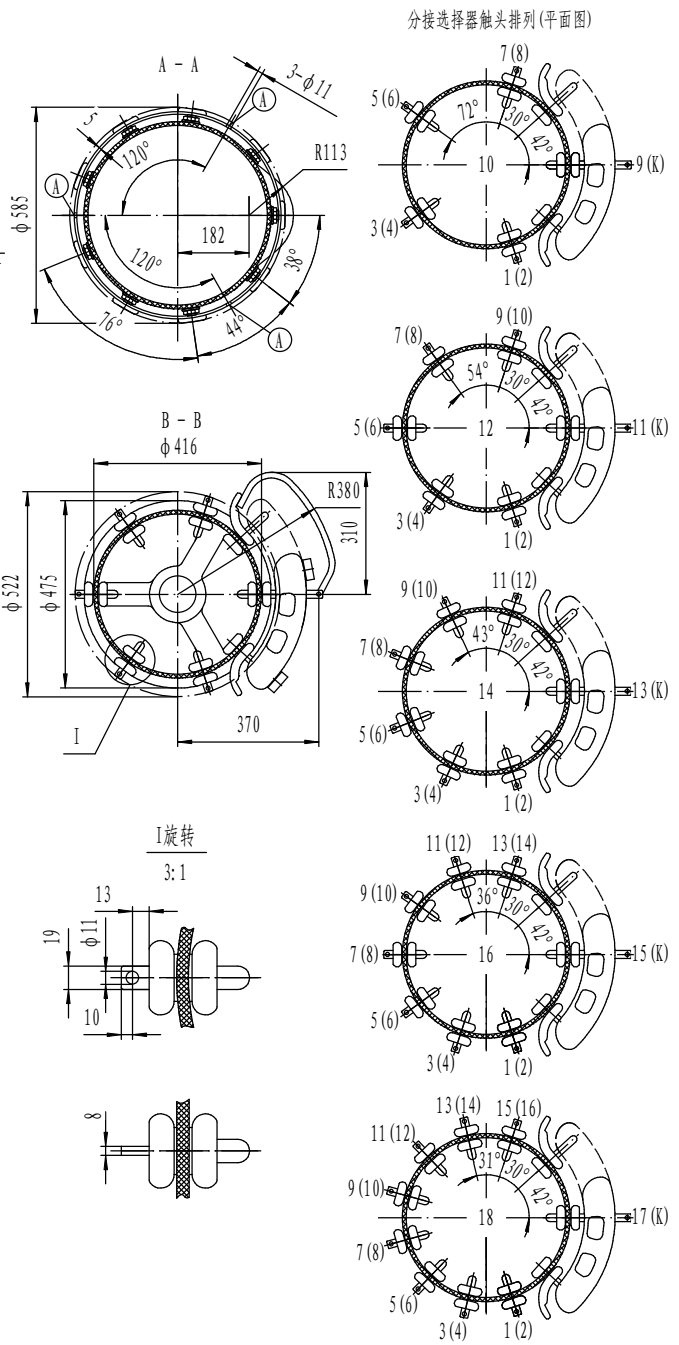
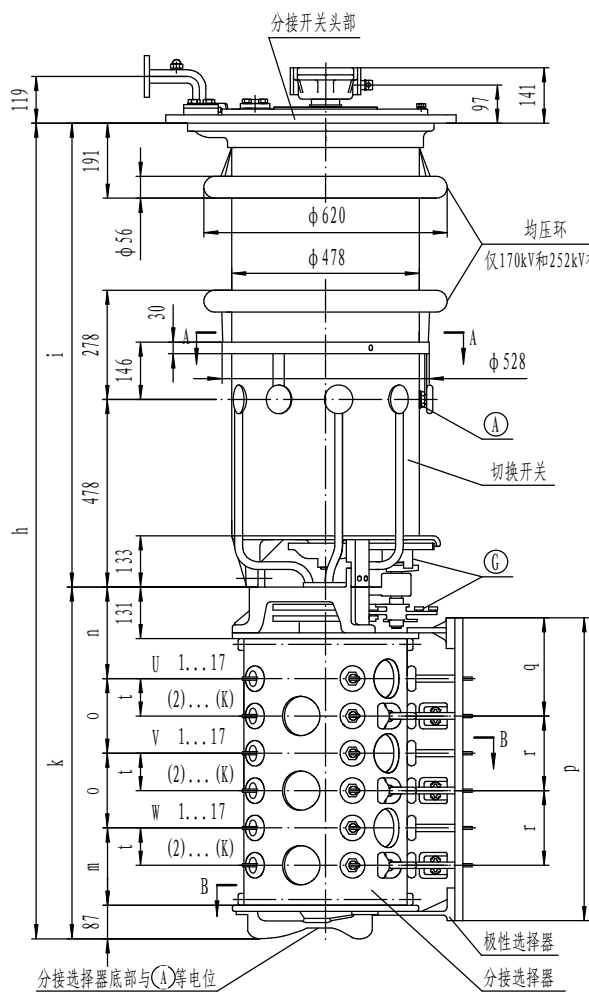
分接选择器触头排列(平面图)(10100)



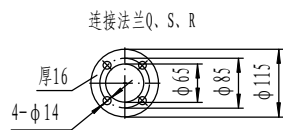
- Ⓐ-分接开关电流引出端(中性点)
- Ⓔ1-分接开关头部溢油孔
- Ⓔ2-变压器油箱溢油孔
- Ⓒ-分接选择器传动装置(与 Ⓓ电位)
- Ⓖ-回油联结法兰(不带槽)
- Ⓖ-保护继电器联结法兰(不带槽)
- Ⓖ-吸油管联结法兰(不带槽)
- Ⓖ-传动轴
- Ⓖ-选择器驱动侧



选择器编号	B				C				D				
最高工作电压(kV)	72.5	126	170	252	72.5	126	170	252	72.5	126	170	252	
尺寸mm	h	2141	2271	2401	2501	2303	2433	2563	2663	2738	2868	2998	3098
	i	1111	1241	1371	1471	1111	1241	1371	1471	1111	1241	1371	1471
	k	1030				1192				1627			
	n	263				282				342			
	o	204				254				384			
	t	102				127				192			
	m	127				145				195			
油积dm ³	168	188	203	223	168	188	203	223	168	188	203	223	
排油量dm ³	266	291	306	326	266	291	306	326	266	291	306	326	
重量kg	550				600				650				



- Ⓐ-分接开关电流引出端(中性点)
- Ⓔ1-分接开关头部溢油孔
- Ⓔ2-变压器油箱溢油孔
- Ⓒ-分接选择器传动装置(与Ⓐ等电位)
- Ⓕ-回油联结法兰(不带槽)
- Ⓖ-保护继电器联结法兰(不带槽)
- Ⓖ-吸油管联结法兰(不带槽)
- Ⓖ-传动轴

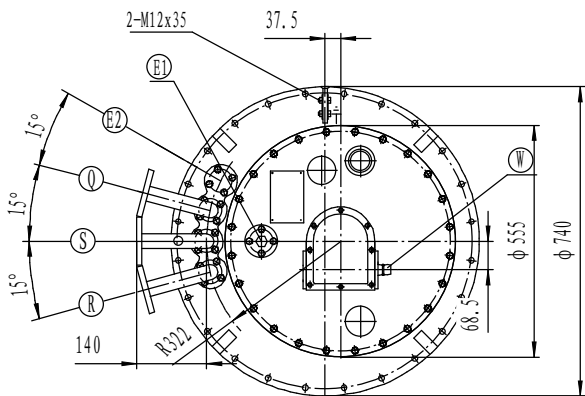
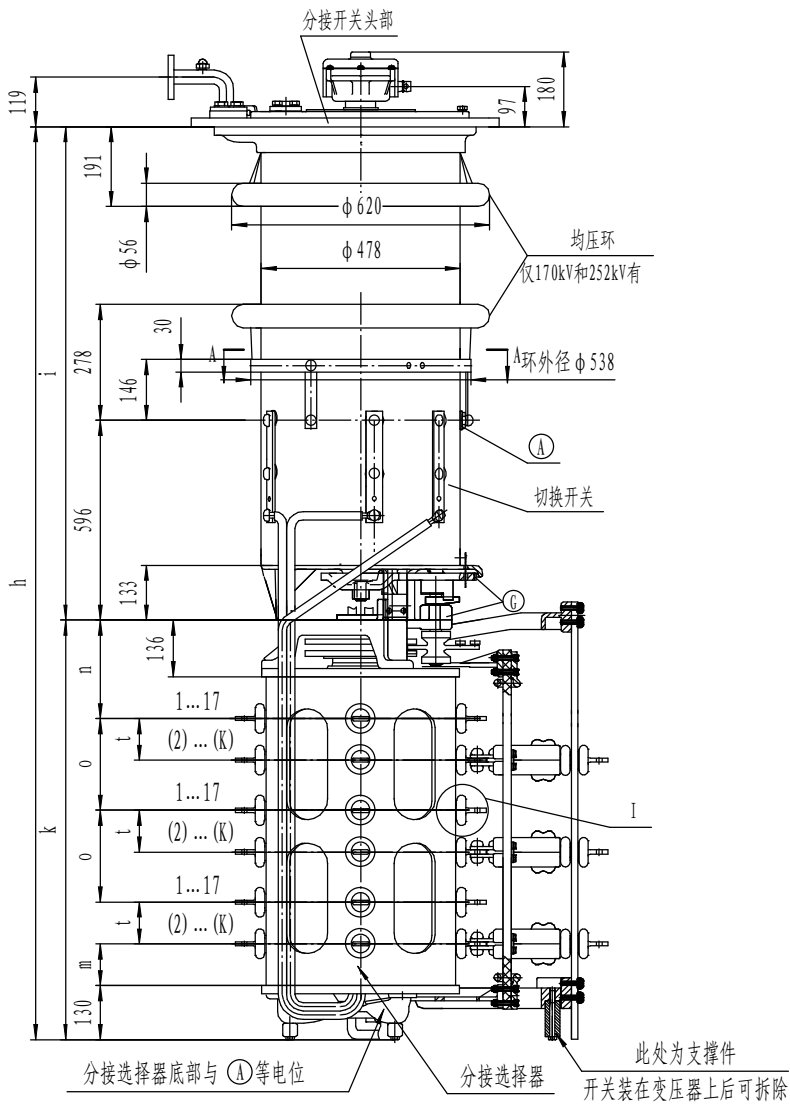
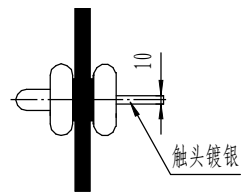
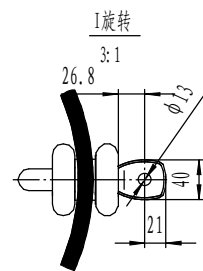
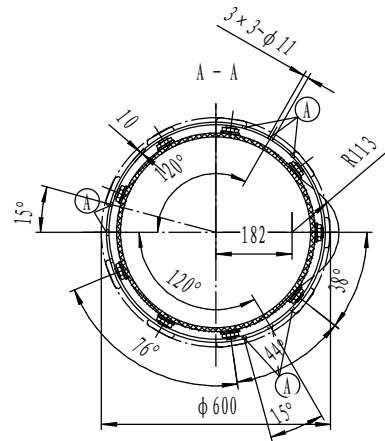
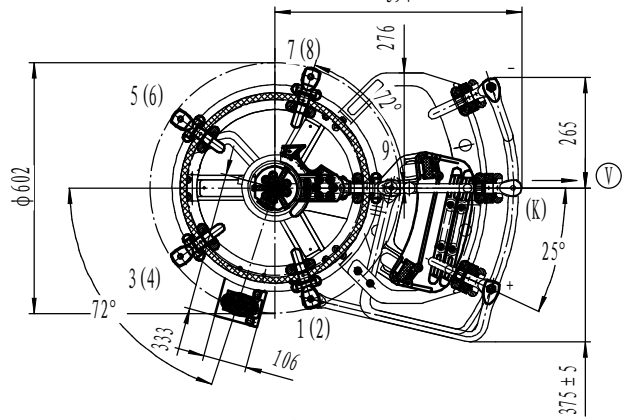


选择器编号	B				C				D			
最高工作电压(kV)	72.5	126	170	252	72.5	126	170	252	72.5	126	170	252
h	2008	2138	2268	2368	2183	2313	2443	2543	2638	2768	2898	2998
i	1111	1241	1371	1471	1111	1241	1371	1471	1111	1241	1371	1471
k	897				1072				1527			
n	233				258				323			
o	190				240				370			
t	95				120				185			
m	197				247				377			
r	190				240				370			
q	255				305				435			
p	783				958				1413			
油积dm ³	168	188	203	223	168	188	203	223	168	188	203	223
排油量dm ³	240	265	280	300	240	265	280	300	240	265	280	300
重量kg	315				325				350			

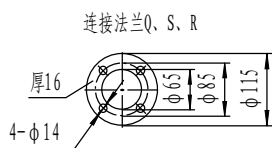
图3 ZVMD III 400/III 500/III 600正反调

分接选择器触头平面图 (10193W)

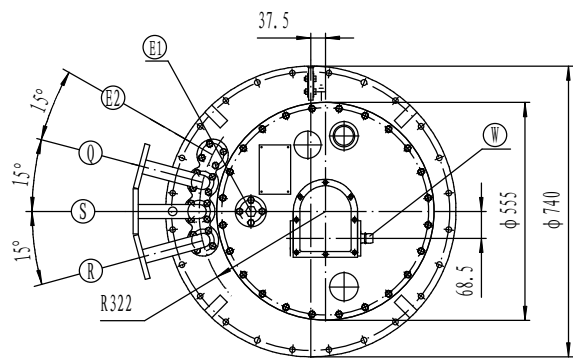
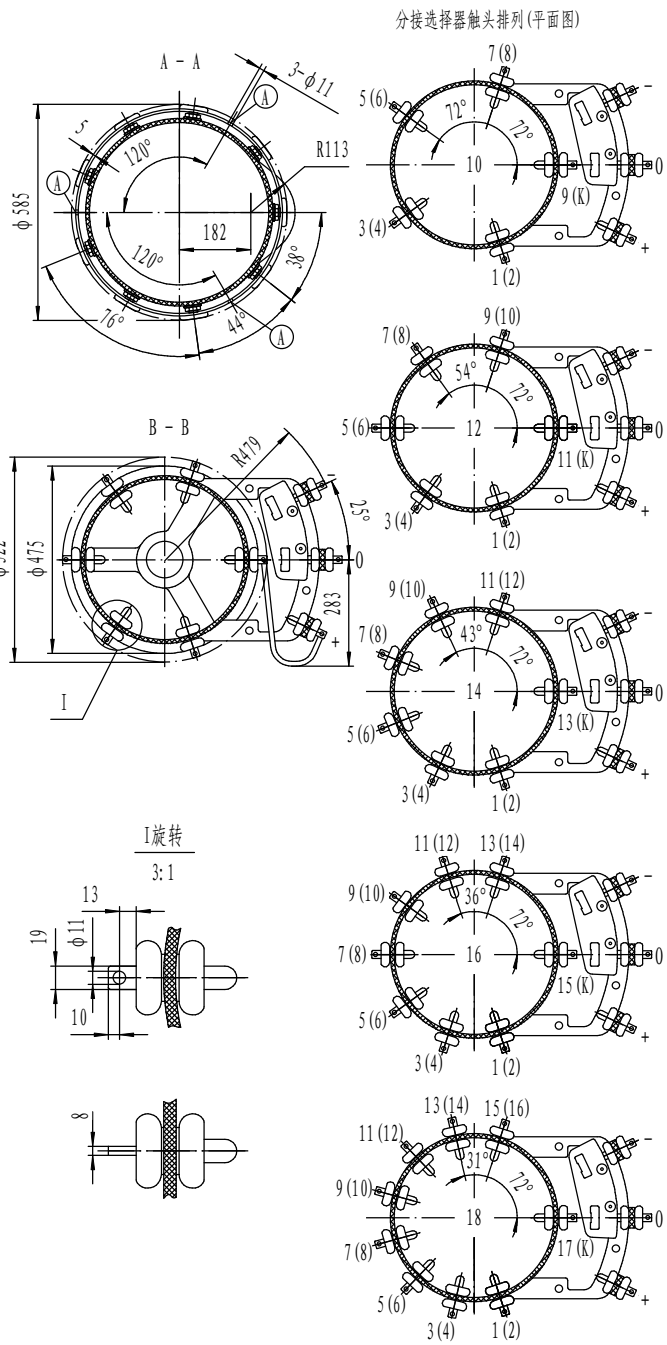
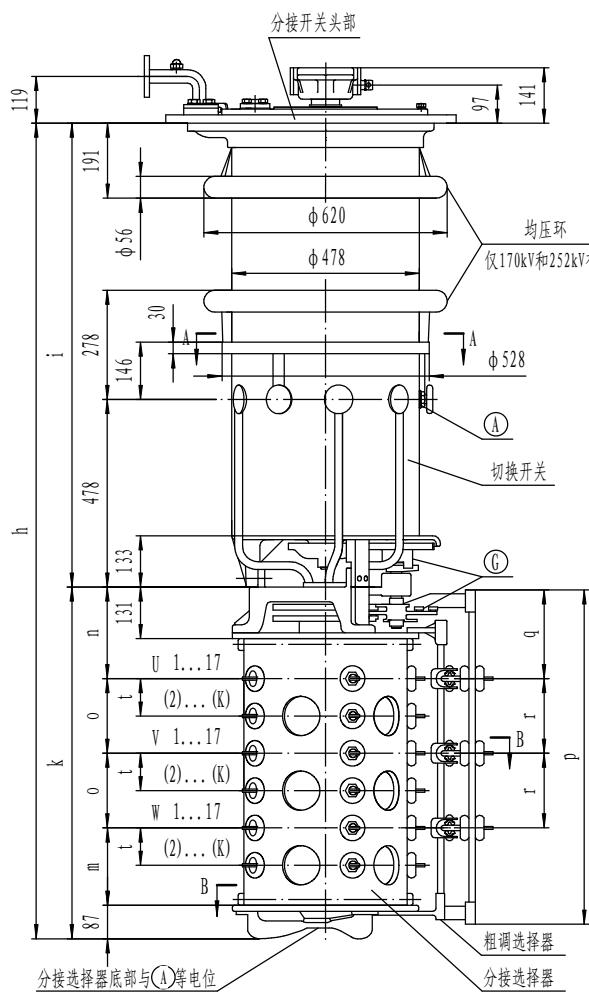
594



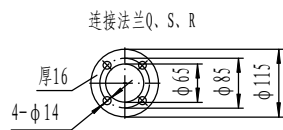
- Ⓐ-分接开关电流引出端(中性点)
- Ⓔ1-分接开关头部溢油孔
- Ⓔ2-变压器油箱溢油孔
- Ⓒ-分接选择器传动装置(与 Ⓐ 等电位)
- Ⓚ-回油联结法兰(不带槽)
- Ⓡ-保护继电器联结法兰(不带槽)
- Ⓢ-吸油管联结法兰(不带槽)
- Ⓦ-传动轴
- Ⓥ-选择器驱动侧



选择器编号	B				C				D				
最高工作电压(kV)	72.5	126	170	252	72.5	126	170	252	72.5	126	170	252	
尺寸mm	h	2141	2271	2401	2501	2303	2433	2563	2663	2738	2868	2998	3098
	i	1111	1241	1371	1471	1111	1241	1371	1471	1111	1241	1371	1471
	k	1030				1192				1627			
	n	263				282				342			
	o	204				254				384			
	t	102				127				192			
	m	127				145				195			
	油积dm ³	168	188	203	223	168	188	203	223	168	188	203	223
	排油量dm ³	266	291	306	326	266	291	306	326	266	291	306	326
	重量kg	550				600				650			



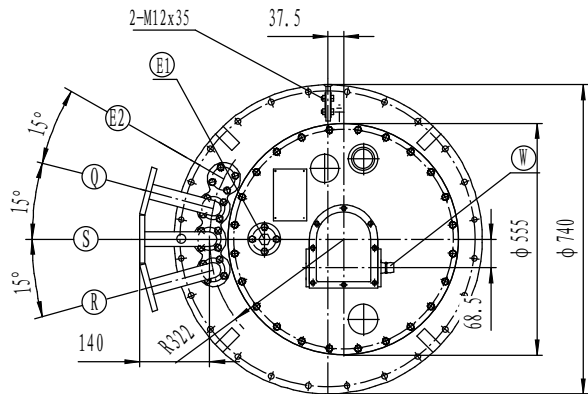
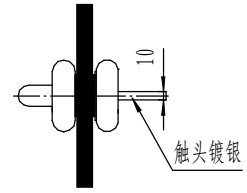
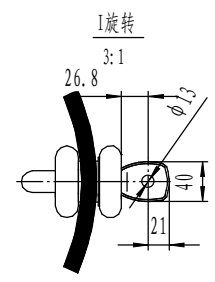
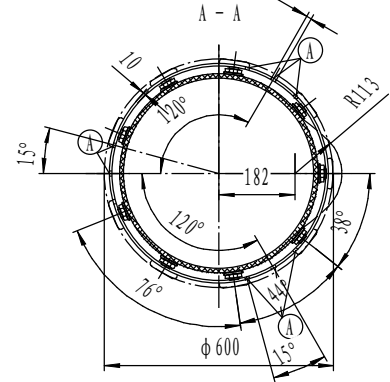
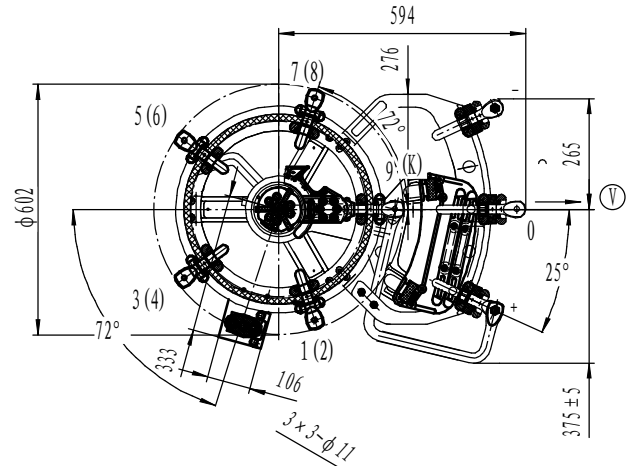
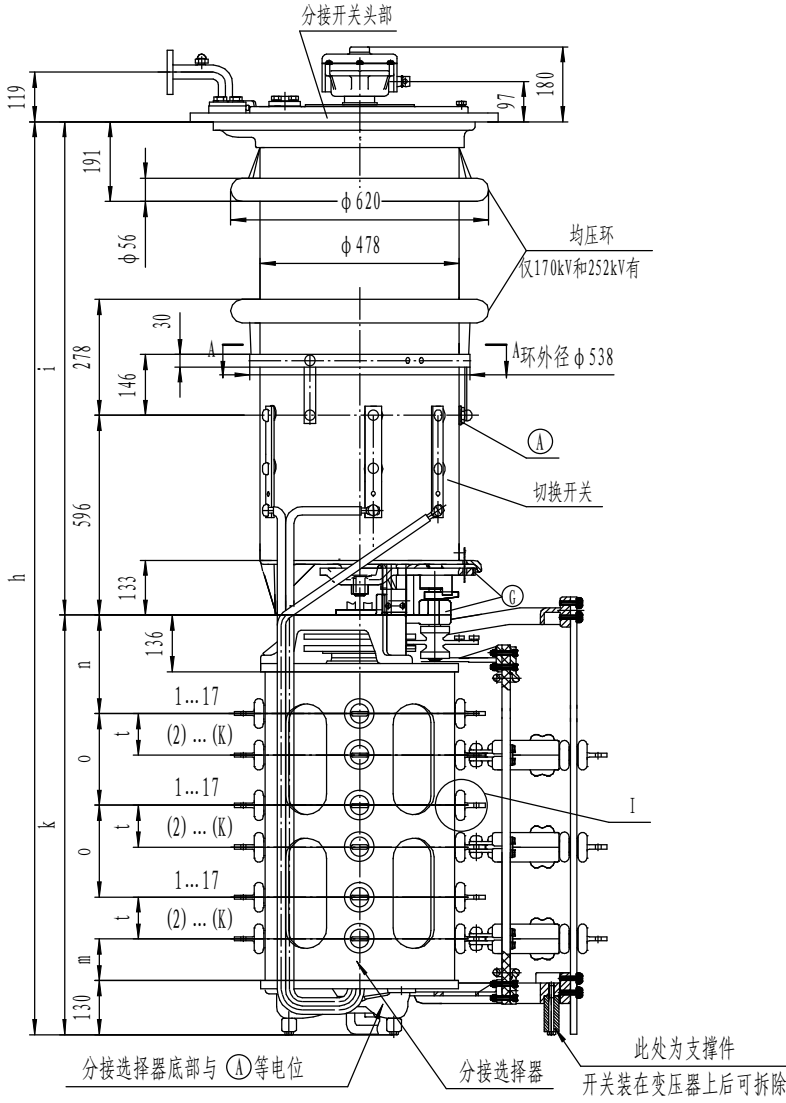
- Ⓐ-分接开关电流引出端(中性点)
- Ⓔ1-分接开关头部溢油孔
- Ⓔ2-变压器油箱溢油孔
- Ⓒ-分接选择器传动装置(与Ⓐ等电位)
- Ⓚ-回油联结法兰(不带槽)
- Ⓡ-保护继电器联结法兰(不带槽)
- Ⓢ-吸油管联结法兰(不带槽)
- Ⓦ-传动轴



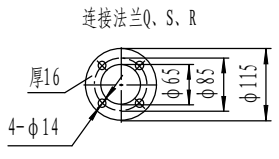
选择器编号	B				C				D				
最高工作电压(kV)	72.5	126	170	252	72.5	126	170	252	72.5	126	170	252	
尺寸mm	h	2008	2138	2268	2368	2183	2313	2443	2543	2638	2768	2898	2998
	i	1111	1241	1371	1471	1111	1241	1371	1471	1111	1241	1371	1471
	k	897				1072				1527			
	n	233				258				323			
	o	190				240				370			
	t	95				120				185			
	m	197				247				377			
	r	190				240				370			
	q	276.5				301.5				366.5			
	p	892				1067				1522			
	油积dm ³	168	188	203	223	168	188	203	223	168	188	203	223
	排油量dm ³	240	265	280	300	240	265	280	300	240	265	280	300
	重量kg	315				325				350			

图5 ZVMD III 400/III 500/III 600粗细调

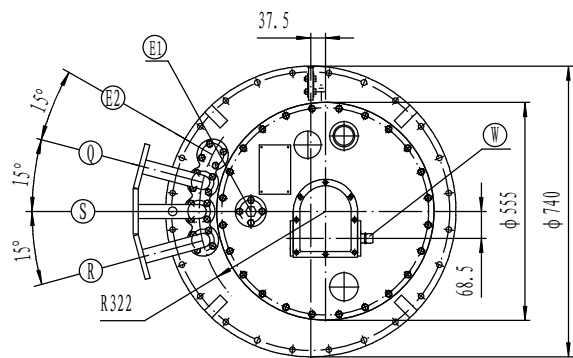
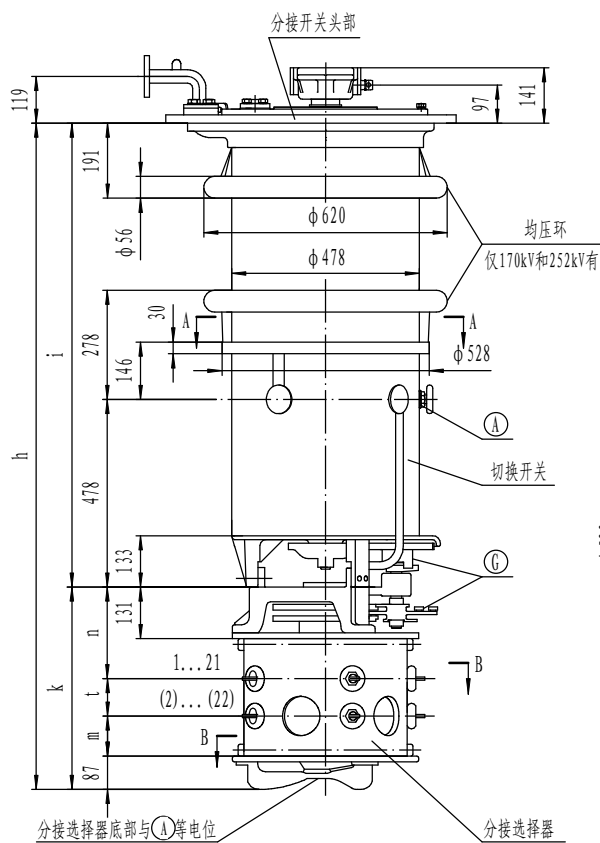
分接选择器触头平面图 (10193G)



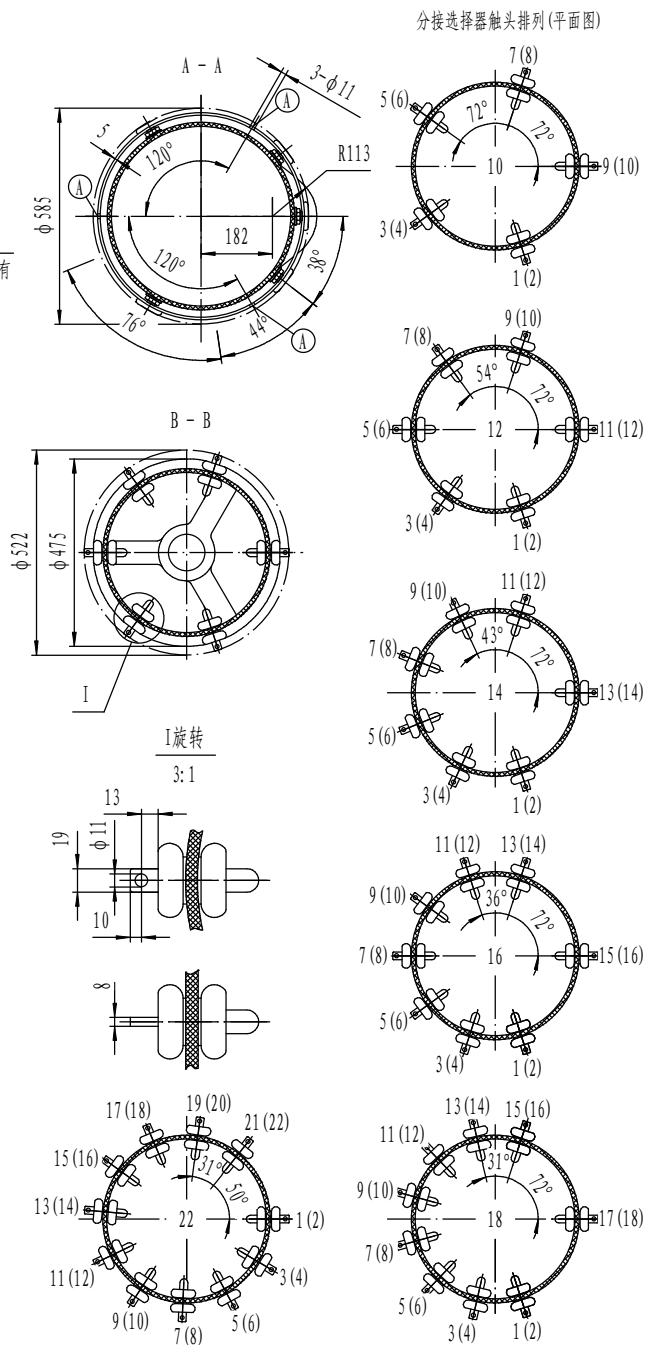
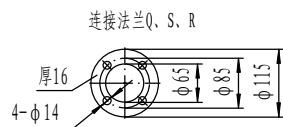
- Ⓐ-分接开关电流引出端(中性点)
- Ⓔ1-分接开关头部溢油孔
- Ⓔ2-变压器油箱溢油孔
- Ⓒ-分接选择器传动装置(与Ⓐ等电位)
- Ⓕ-回油联结法兰(带槽)
- Ⓖ-保护继电器联结法兰(带槽)
- Ⓖ-吸油管联结法兰(带槽)
- Ⓖ-传动轴
- Ⓖ-选择器驱动侧



选择器编号	B				C				D				
最高工作电压(kV)	72.5	126	170	252	72.5	126	170	252	72.5	126	170	252	
尺寸mm	h	2141	2271	2401	2501	2303	2433	2563	2663	2738	2868	2998	3098
	i	1111	1241	1371	1471	1111	1241	1371	1471	1111	1241	1371	1471
	k	1030				1192				1627			
	n	263				282				342			
	o	204				254				384			
	t	102				127				192			
	m	127				145				195			
油积dm ³	168	188	203	223	168	188	203	223	168	188	203	223	
排油量dm ³	266	291	306	326	266	291	306	326	266	291	306	326	
重量kg	550				600				650				

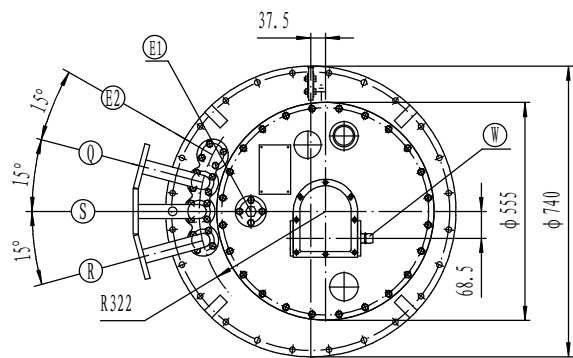
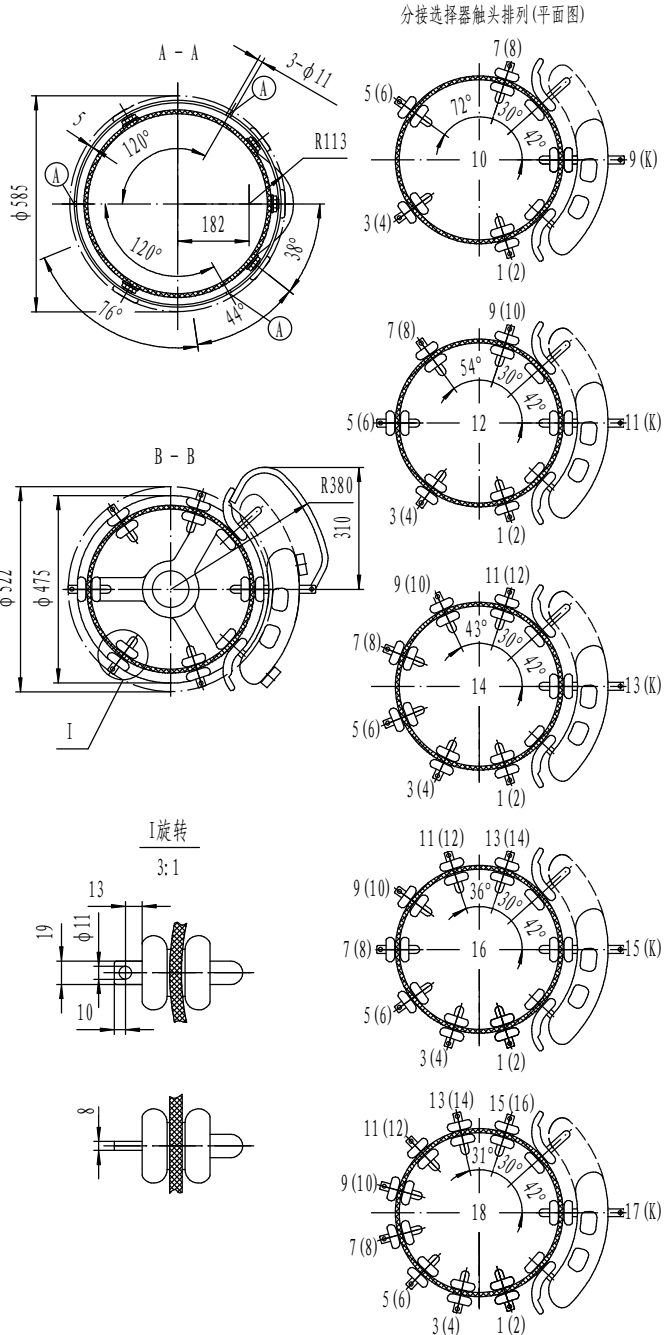
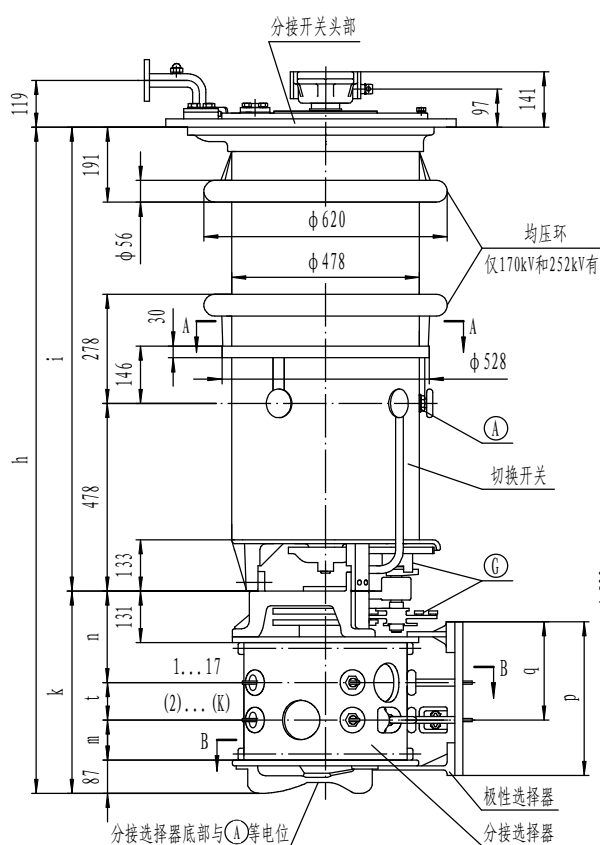


- Ⓐ-分接开关电流引出端(中性点)
- Ⓔ1-分接开关头部溢油孔
- Ⓔ2-变压器油箱溢油孔
- Ⓒ-分接选择器传动装置(与Ⓐ等电位)
- Ⓓ-回油联结法兰(不带槽)
- Ⓔ-保护继电器联结法兰(不带槽)
- Ⓕ-吸油管联结法兰(不带槽)
- Ⓖ-传动轴

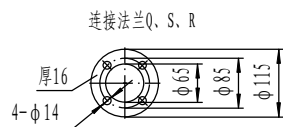


选择器编号	B				C				D				
最高工作电压(kV)	72.5	126	170	252	72.5	126	170	252	72.5	126	170	252	
尺寸mm	h	1628	1758	1888	1988	1703	1833	1963	2063	1898	2028	2158	2258
	i	1111	1241	1371	1471	1111	1241	1371	1471	1111	1241	1371	1471
	k	517				592				787			
	n	233				258				323			
	t	95				120				185			
	m	102				127				192			
油积dm ³	168	188	203	223	168	188	203	223	168	188	203	223	
排油量dm ³	240	265	280	300	240	265	280	300	240	265	280	300	
重量kg	275				275				280				

图7 ZVMDI401/I501/I601线性调

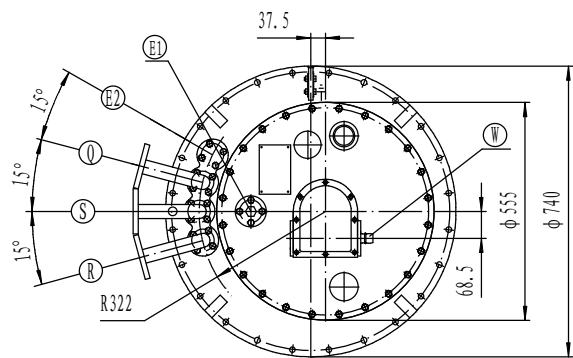
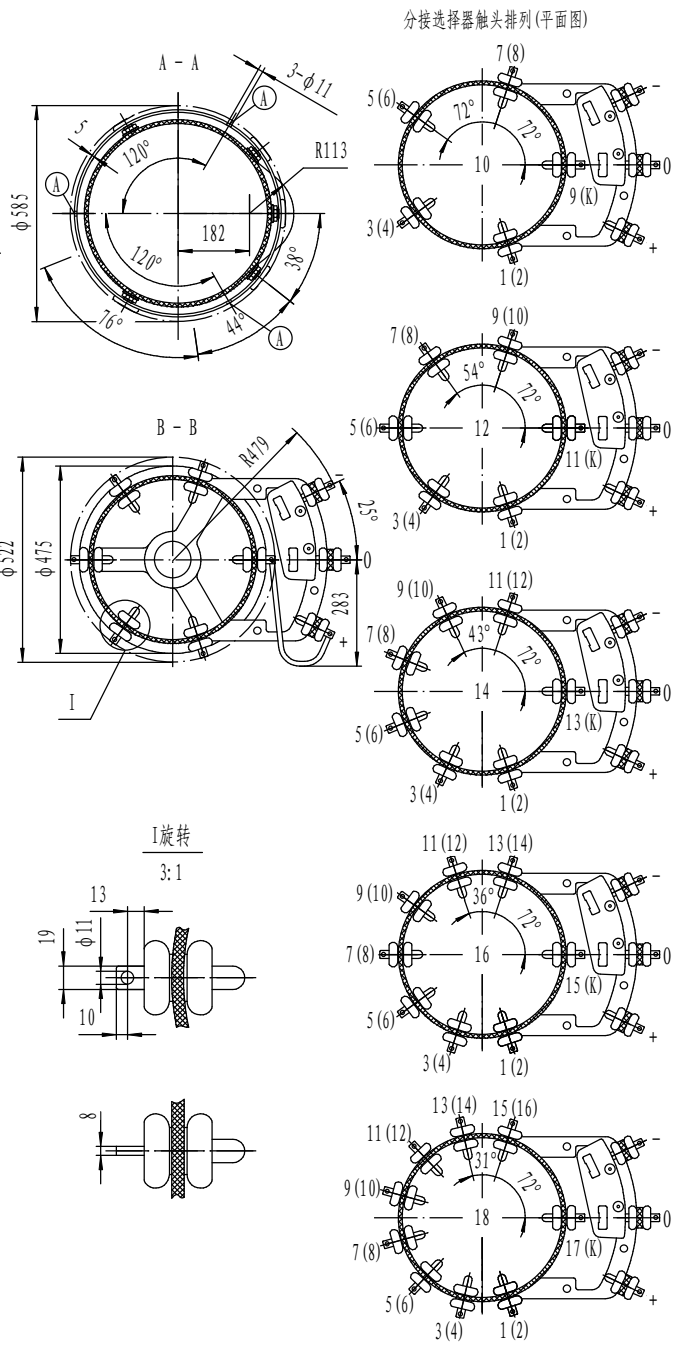
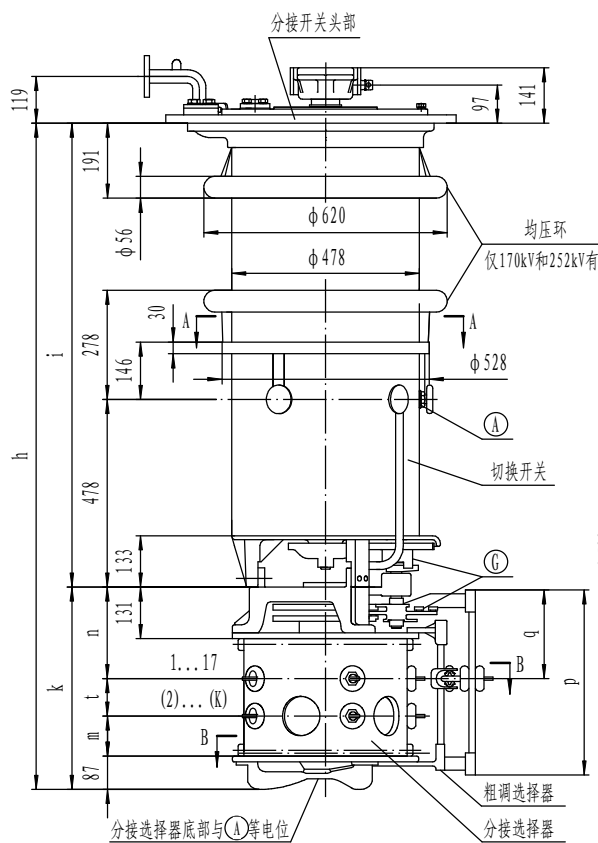


- Ⓐ-分接开关电流引出端(中性点)
- Ⓔ1-分接开关头部溢油孔
- Ⓔ2-变压器油箱溢油孔
- Ⓒ-分接选择器传动装置(与Ⓐ等电位)
- Ⓕ-回油联结法兰(不带槽)
- Ⓖ-保护继电器联结法兰(不带槽)
- Ⓖ-吸油管联结法兰(不带槽)
- Ⓜ-传动轴

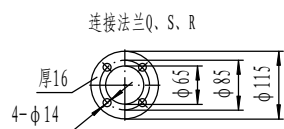


选择器编号	B				C				D				
最高工作电压(kV)	72.5	126	170	252	72.5	126	170	252	72.5	126	170	252	
尺寸mm	h	1628	1758	1888	1988	1703	1833	1963	2063	1898	2028	2158	2258
	i	1111	1241	1371	1471	1111	1241	1371	1471	1111	1241	1371	1471
	k	517				592				787			
	n	233				258				323			
	t	95				120				185			
	m	102				127				192			
	q	255				305				435			
	p	403				478				673			
	油积dm ³	168	188	203	223	168	188	203	223	168	188	203	223
	排油量dm ³	240	265	280	300	240	265	280	300	240	265	280	300
	重量kg	285				290				295			

图8 ZVMDI401/I501/I601正反调

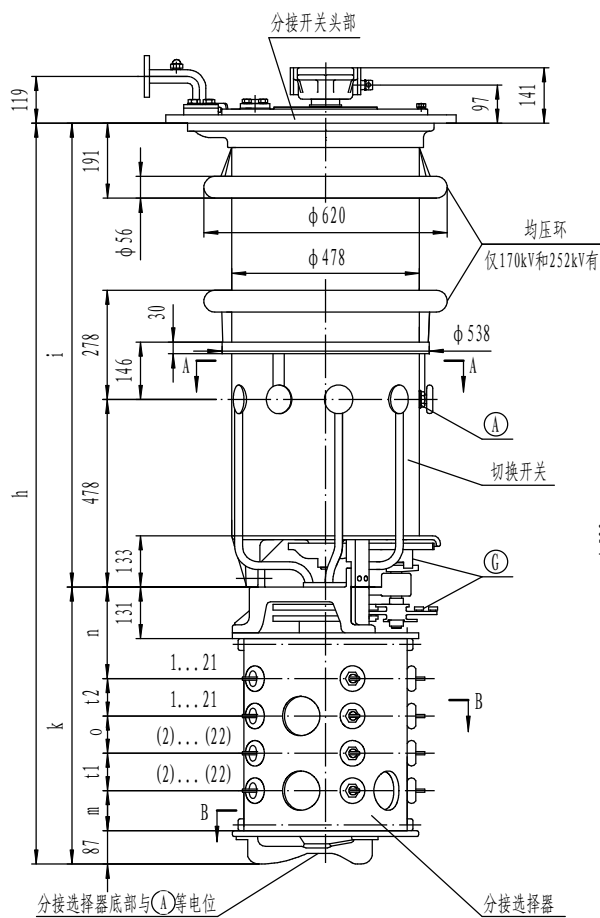


- Ⓐ-分接开关电流引出端(中性点)
- Ⓔ1-分接开关头部溢油孔
- Ⓔ2-变压器油箱溢油孔
- Ⓒ-分接选择器传动装置(与Ⓐ等电位)
- Ⓚ-回油联结法兰(不带槽)
- Ⓡ-保护继电器联结法兰(不带槽)
- Ⓢ-吸油管联结法兰(不带槽)
- Ⓦ-传动轴

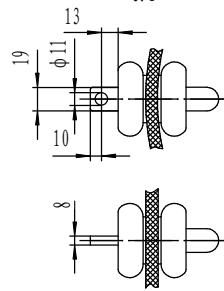
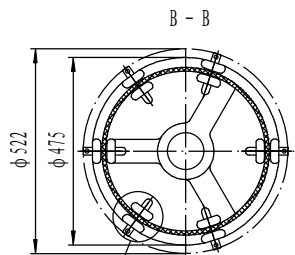
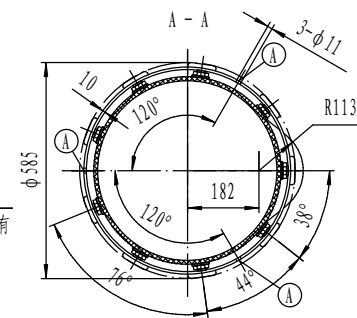


选择器编号	B				C				D				
最高工作电压(kV)	72.5	126	170	252	72.5	126	170	252	72.5	126	170	252	
尺寸mm	h	1628	1758	1888	1988	1703	1833	1963	2063	1898	2028	2158	2258
	i	1111	1241	1371	1471	1111	1241	1371	1471	1111	1241	1371	1471
	k	517				592				787			
	n	233				258				323			
	t	95				120				185			
	m	102				127				192			
	q	276.5				301.5				366.5			
	p	512				587				782			
	油积dm ³	168	188	203	223	168	188	203	223	168	188	203	223
	排油量dm ³	240	265	280	300	240	265	280	300	240	265	280	300
	重量kg	285				290				295			

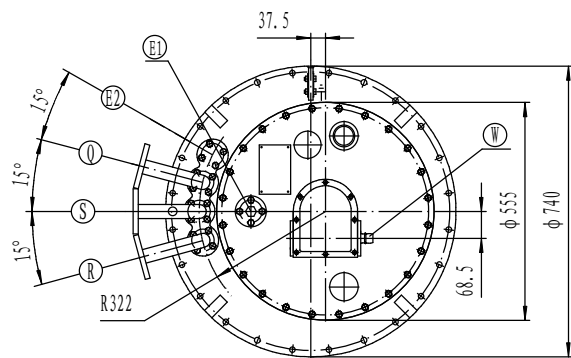
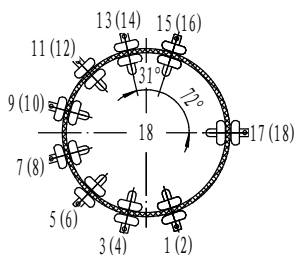
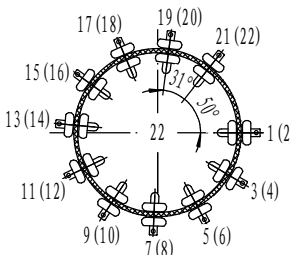
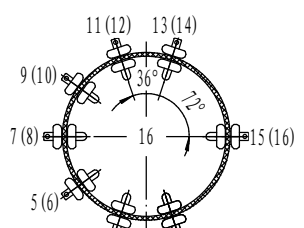
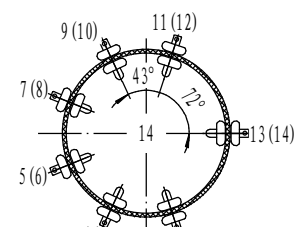
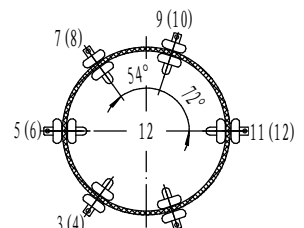
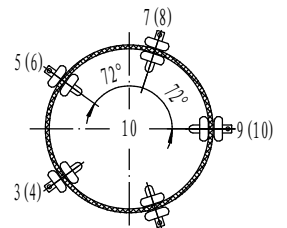
图9 ZVMDI401/I501/I601粗细调



分接选择器底部与(A)等电位 分接选择器

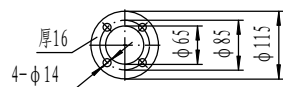


分接选择器触头排列(平面图)



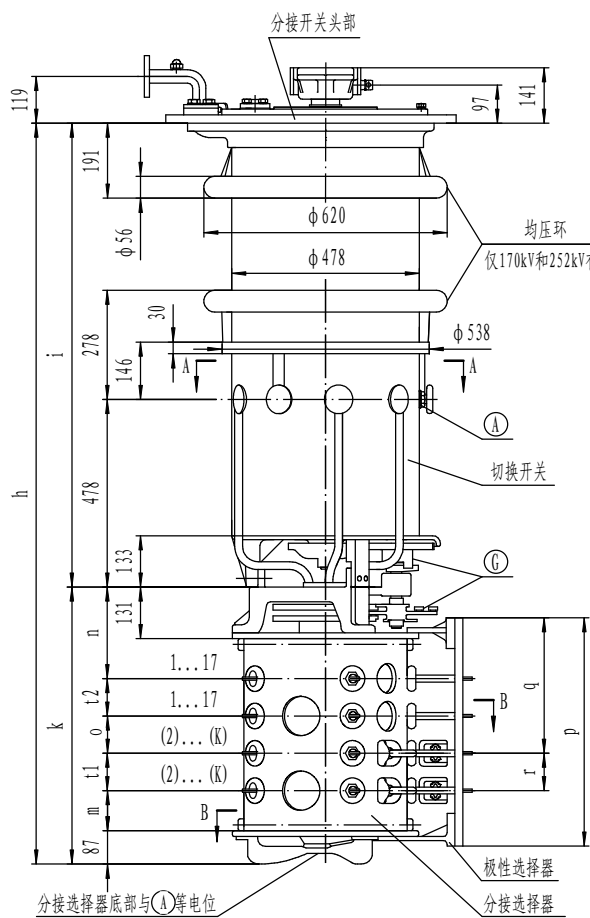
- (A) 分接开关电流引出端(中性点)
- (E1) 分接开关头部溢油孔
- (E2) 变压器油箱溢油孔
- (C) 分接选择器传动装置(与(A)等电位)
- (Q) 回油联结法兰(不带槽)
- (R) 保护继电器联结法兰(不带槽)
- (S) 吸油管联结法兰(不带槽)
- (W) 传动轴

连接法兰Q、S、R

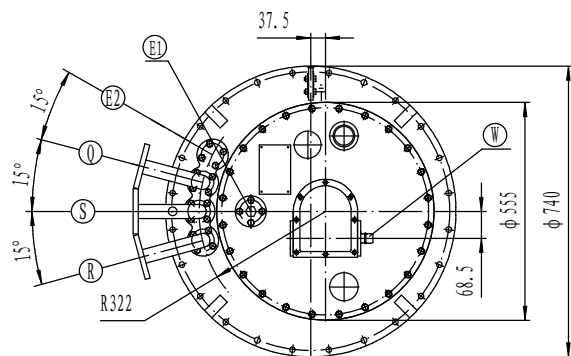
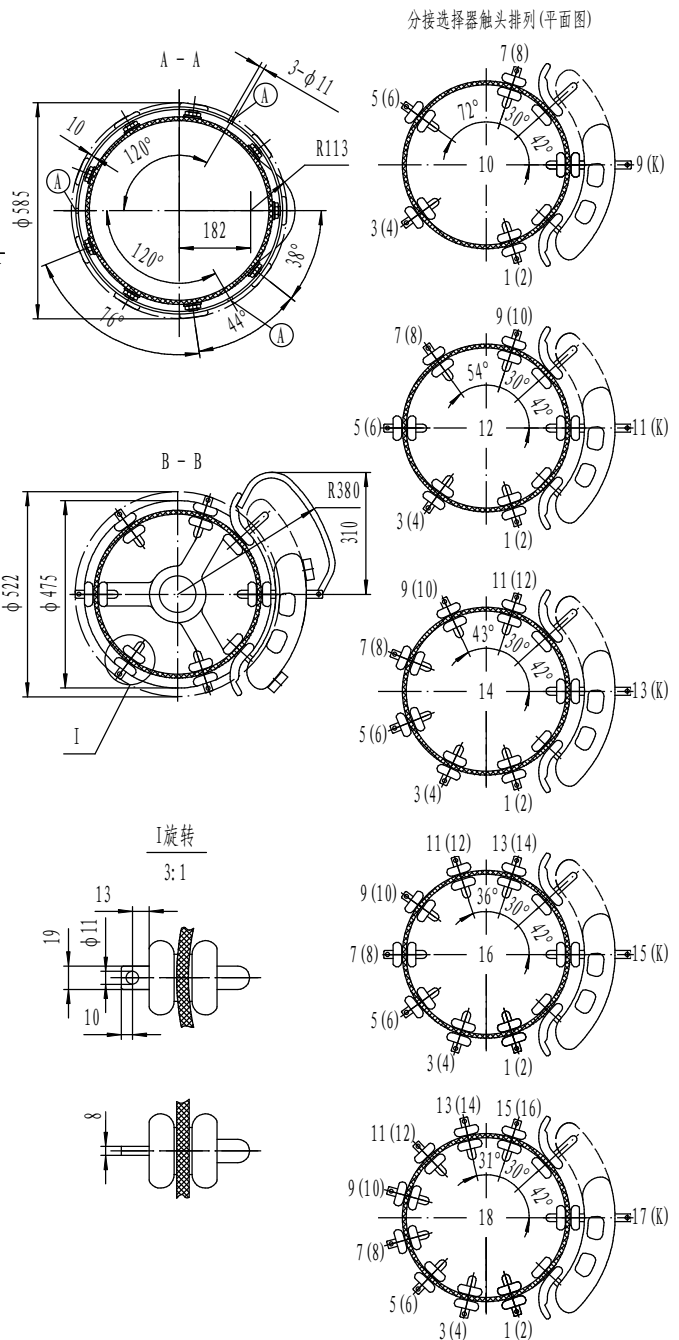


选择器编号	B				C				D			
最高工作电压(kV)	72.5	126	170	252	72.5	126	170	252	72.5	126	170	252
h	1813	1943	2073	2173	1888	2018	2148	2248	2083	2213	2343	2443
i	1111	1241	1371	1471	1111	1241	1371	1471	1111	1241	1371	1471
k			702				777				972	
n			233				258				323	
o		95				120				185		
i1		105				105				105		
i2		80				80				80		
m			102				127				192	
油积dm ³	168	188	203	223	168	188	203	223	168	188	203	223
排油量dm ³	240	265	280	300	240	265	280	300	240	265	280	300
重量kg	310				310				320			

图11 ZVMDI800线性调

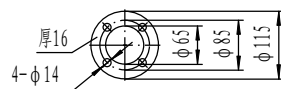


分接选择器底部与(A)等电位



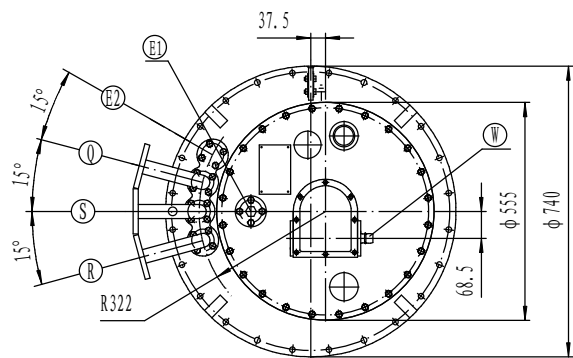
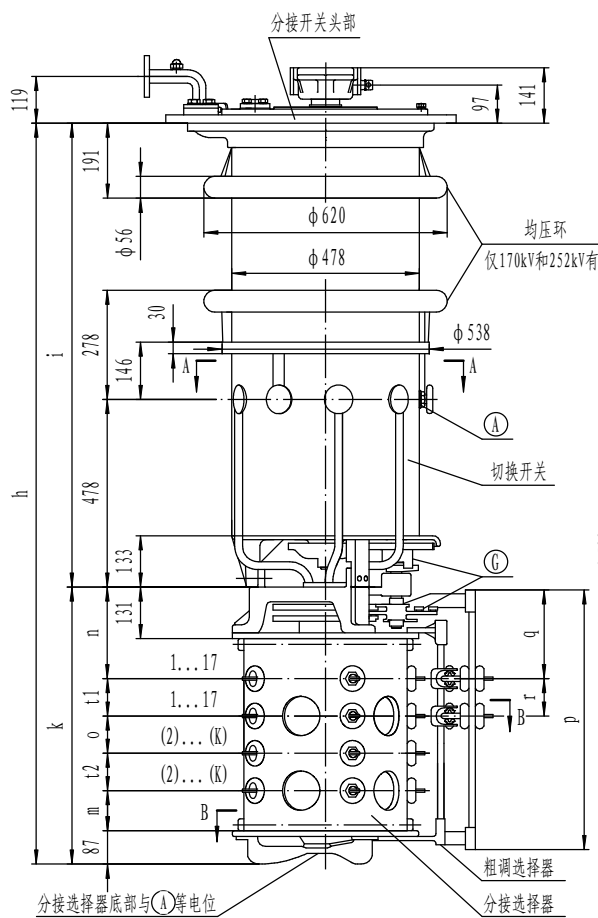
- (A) 分接开关电流引出端(中性点)
- (E1) 分接开关头部溢油孔
- (E2) 变压器油箱溢油孔
- (C) 分接选择器传动装置(与(A)等电位)
- (Q) 回油联结法兰(不带槽)
- (R) 保护继电器联结法兰(不带槽)
- (S) 吸油管联结法兰(不带槽)
- (W) 传动轴

连接法兰Q、S、R

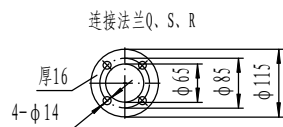


选择器编号	B				C				D				
	72.5	126	170	252	72.5	126	170	252	72.5	126	170	252	
最高工作电压(kV)	72.5	126	170	252	72.5	126	170	252	72.5	126	170	252	
尺寸mm	h	1813	1943	2073	2173	1888	2018	2148	2248	2083	2213	2343	2443
	i	1111	1241	1371	1471	1111	1241	1371	1471	1111	1241	1371	1471
	k		702				777				972		
	n		233				258				323		
	o		95				120				185		
	t1		105				105				105		
	t2		80				80				80		
	m		102				127				192		
	r		105				105				105		
	q		335				385				515		
	p		588				663				858		
	油积dm ³	168	188	203	223	168	188	203	223	168	188	203	223
	排油量dm ³	240	265	280	300	240	265	280	300	240	265	280	300
重量kg		305				310				315			

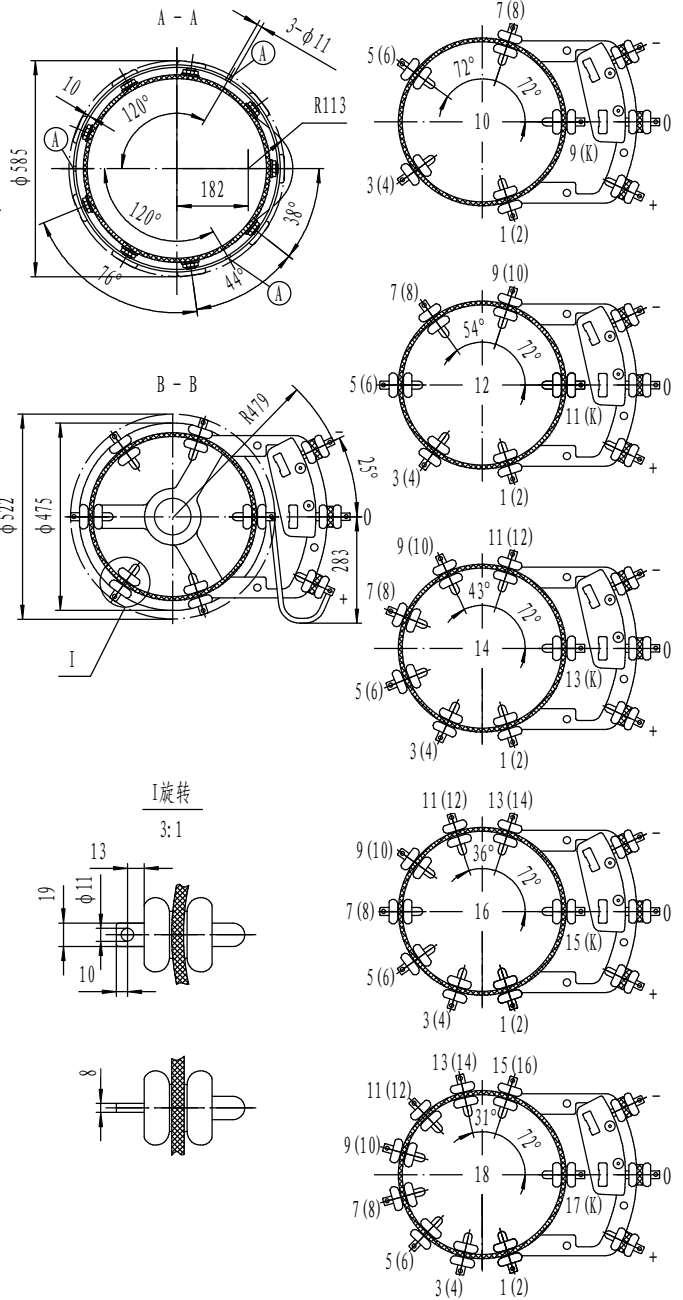
图15 ZVMDI800正反调



- (A) 分接开关电流引出端(中性点)
- (E1) 分接开关头部溢油孔
- (E2) 变压器油箱溢油孔
- (C) 分接选择器传动装置(与(A)等电位)
- (Q) 回油联结法兰(不带槽)
- (R) 保护继电器联结法兰(不带槽)
- (S) 吸油管联结法兰(不带槽)
- (W) 传动轴

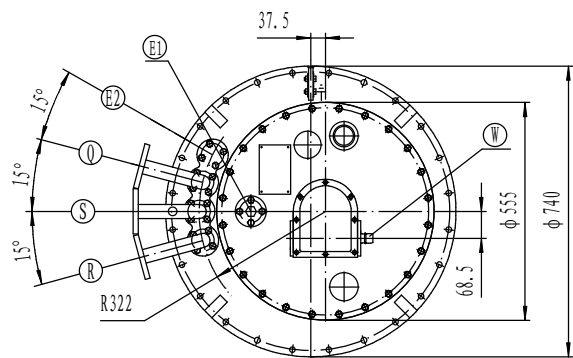
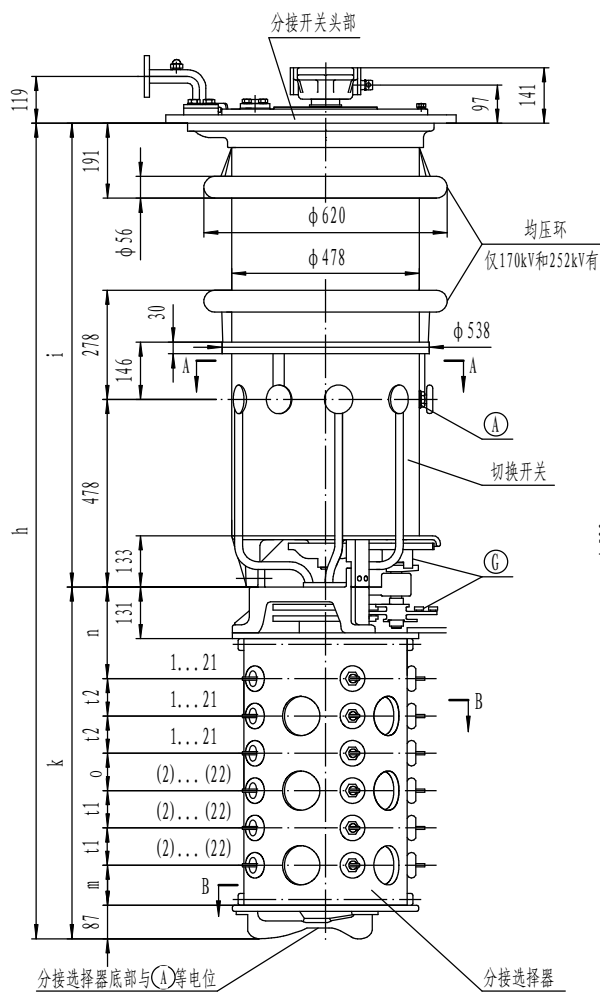


分接选择器触头排列(平面图)

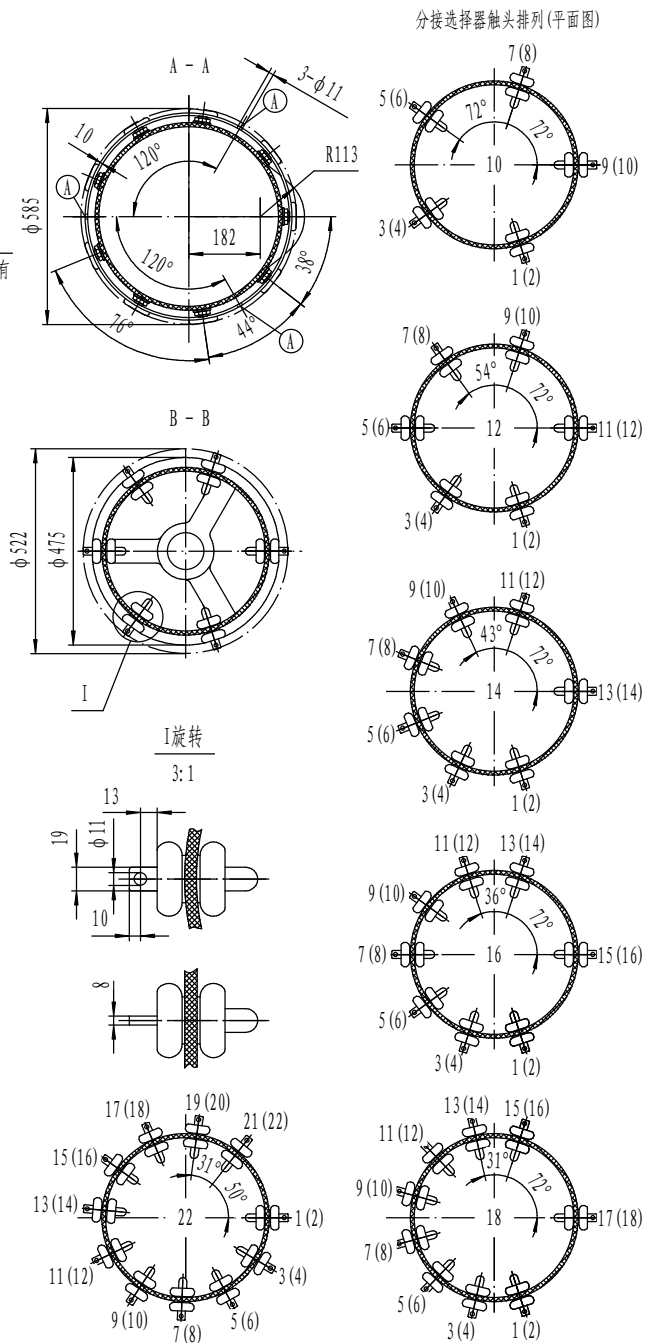
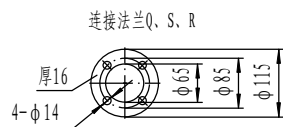


选择器编号	B				C				D				
最高工作电压(kV)	72.5	126	170	252	72.5	126	170	252	72.5	126	170	252	
尺寸mm	h	1813	1943	2073	2173	1888	2018	2148	2248	2083	2213	2343	2443
	i	1111	1241	1371	1471	1111	1241	1371	1471	1111	1241	1371	1471
	k		702				777				972		
	n		233				258				323		
	o		95				120				185		
	t1		105				105				105		
	t2		80				80				80		
	m		102				127				192		
	r		105				105				105		
	q		276.5				301.5				366.5		
	p		697				772				967		
	油积dm ³	168	188	203	223	168	188	203	223	168	188	203	223
	排油量dm ³	240	265	280	300	240	265	280	300	240	265	280	300
	重量kg		305				310				315		

图12 ZVMDI800粗细调

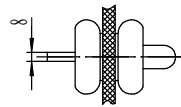
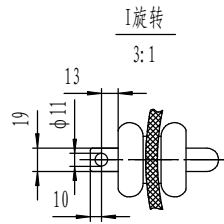
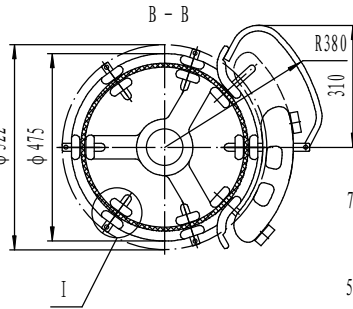
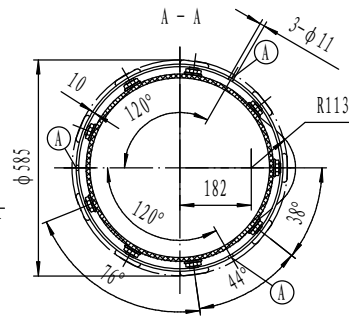
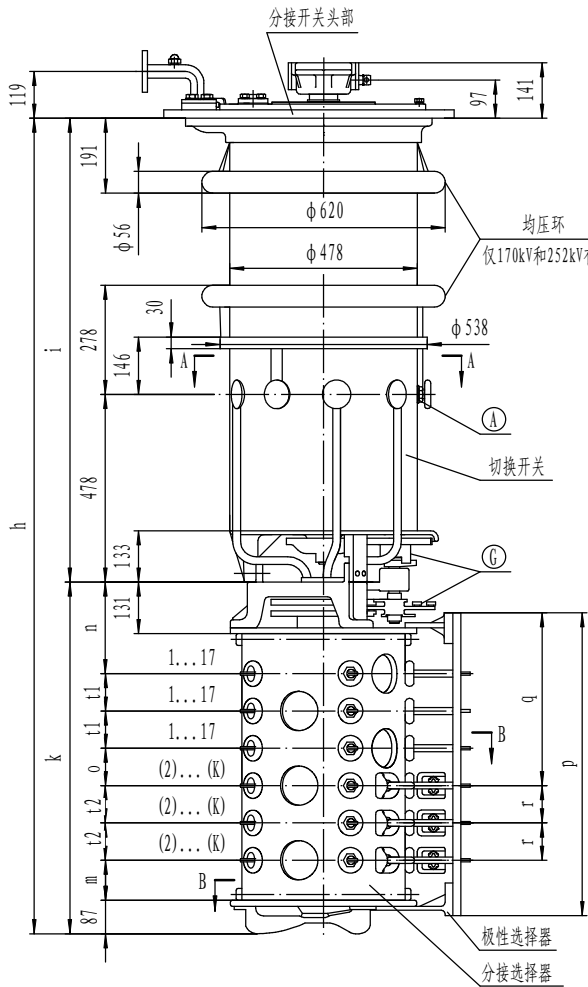


- Ⓐ-分接开关电流引出端(中性点)
- Ⓔ1-分接开关头部溢油孔
- Ⓔ2-变压器油箱溢油孔
- Ⓒ-分接选择器传动装置(与Ⓐ等电位)
- Ⓖ-回油联结法兰(不带槽)
- Ⓖ-保护继电器联结法兰(不带槽)
- Ⓖ-吸油管联结法兰(不带槽)
- Ⓖ-传动轴

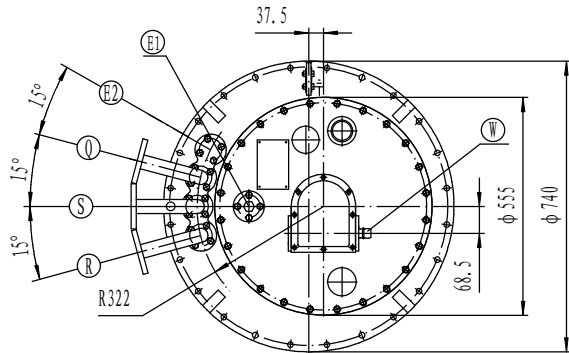
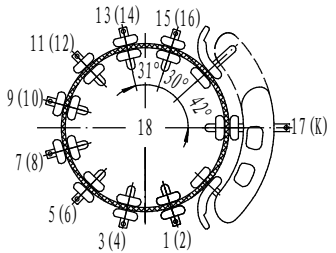
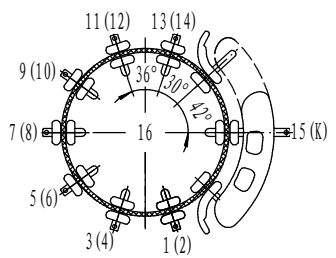
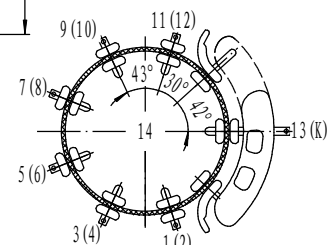
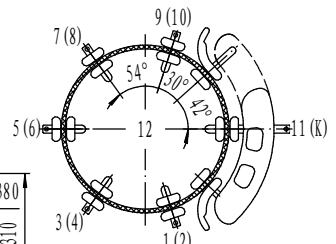
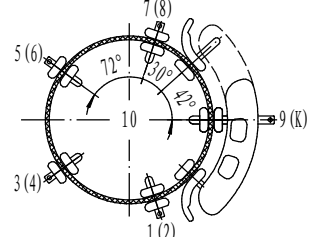


选择器编号	B				C				D			
最高工作电压(kV)	72.5	126	170	252	72.5	126	170	252	72.5	126	170	252
h	1998	2128	2258	2358	2073	2203	2333	2433	2268	2398	2528	2628
i	1111	1241	1371	1471	1111	1241	1371	1471	1111	1241	1371	1471
k	887				962				1157			
n	233				258				323			
o	95				120				185			
t1	105				105				105			
t2	80				80				80			
m	102				127				192			
油积dm ³	168	188	203	223	168	188	203	223	168	188	203	223
排油量dm ³	240	265	280	300	240	265	280	300	240	265	280	300
重量kg	300				305				315			

图13 ZVMDI1200/I1500线性调

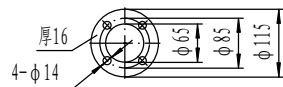


分接选择器触头排列(平面图)



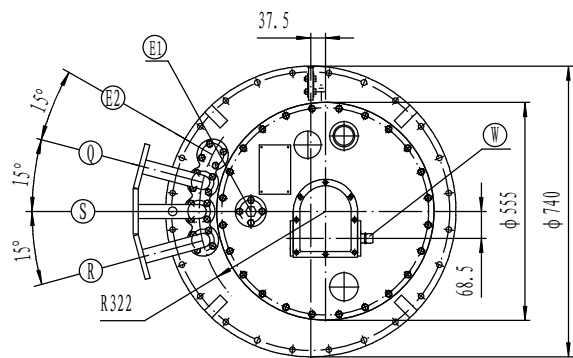
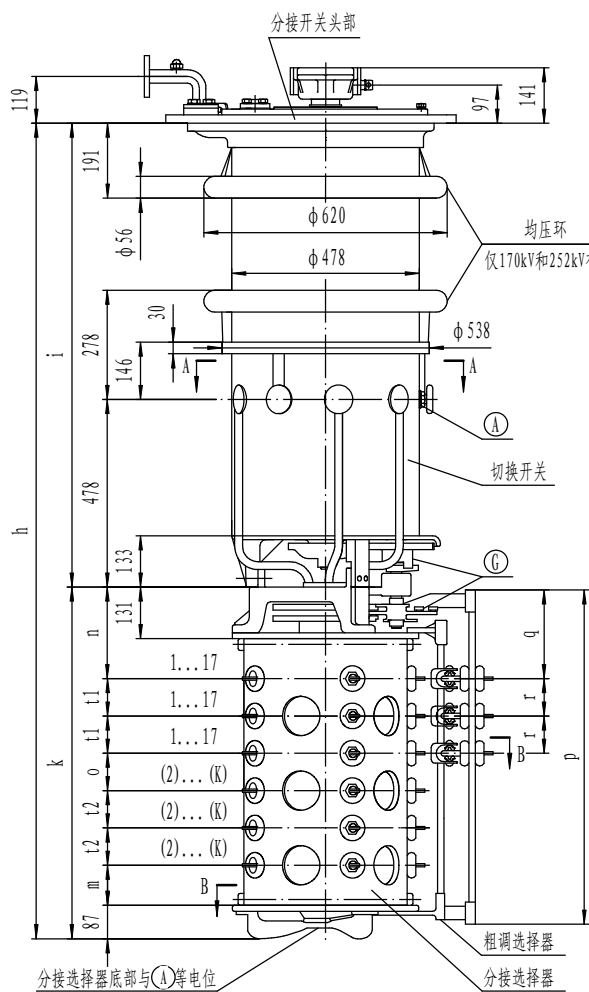
- Ⓐ-分接开关电流引出端(中性点)
- Ⓔ1-分接开关头部溢油孔
- Ⓔ2-变压器油箱溢油孔
- Ⓒ-分接选择器传动装置(与Ⓐ等电位)
- Ⓚ-回油联结法兰(不带槽)
- Ⓜ-保护继电器联结法兰(不带槽)
- Ⓝ-吸油管联结法兰(不带槽)
- Ⓜ-传动轴

连接法兰Q、S、R

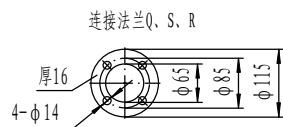


选择器编号	B				C				D				
	最高工作电压(kV)	72.5	126	170	252	72.5	126	170	252	72.5	126	170	252
尺寸mm	h	1998	2128	2258	2358	2073	2203	2333	2433	2268	2398	2528	2628
	i	1111	1241	1371	1471	1111	1241	1371	1471	1111	1241	1371	1471
	k	887				962				1157			
	n	233				258				323			
	o	95				120				185			
	t1	105				105				105			
	t2	80				80				80			
	m	102				127				192			
	r	105				105				105			
	q	415				465				595			
	p	773				848				1043			
	油积dm ³	168	188	203	223	168	188	203	223	168	188	203	223
	排油量dm ³	240	265	280	300	240	265	280	300	240	265	280	300
重量kg	315				325				350				

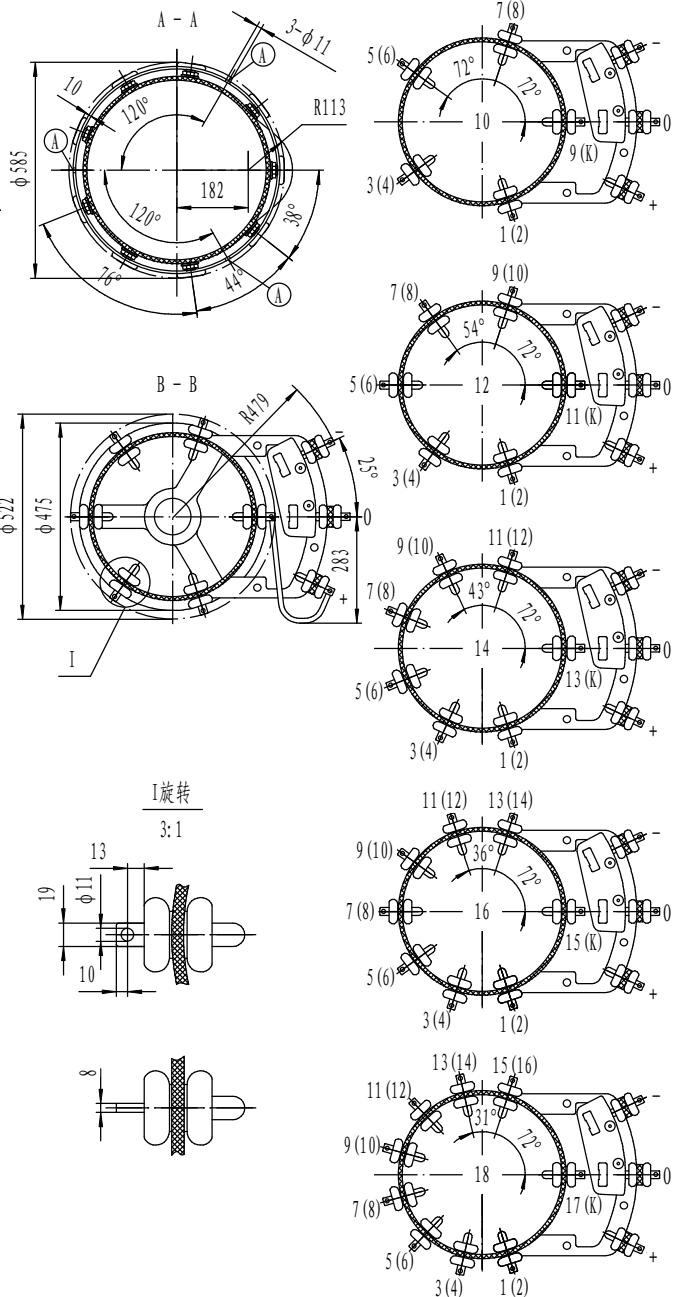
图14 ZVMDI1200/I1500正反调



- Ⓐ-分接开关电流引出端(中性点)
- Ⓔ1-分接开关头部溢油孔
- Ⓔ2-变压器油箱溢油孔
- Ⓒ-分接选择器传动装置(与Ⓐ等电位)
- Ⓔ-回油联结法兰(不带槽)
- Ⓕ-保护继电器联结法兰(不带槽)
- Ⓖ-吸油管联结法兰(不带槽)
- Ⓖ-传动轴



分接选择器触头排列(平面图)



选择器编号	B				C				D				
	72.5	126	170	252	72.5	126	170	252	72.5	126	170	252	
最高工作电压(kV)	72.5	126	170	252	72.5	126	170	252	72.5	126	170	252	
尺寸mm	h	1998	2128	2258	2358	2073	2203	2333	2433	2268	2398	2528	2628
	i	1111	1241	1371	1471	1111	1241	1371	1471	1111	1241	1371	1471
	k	887				962				1157			
	n	233				258				323			
	o	95				120				185			
	t1	105				105				105			
	t2	80				80				80			
	m	102				127				192			
	r	105				105				105			
	q	276.5				301.5				366.5			
	p	882				957				1152			
	油积dm ³	168	188	203	223	168	188	203	223	168	188	203	223
	排油量dm ³	240	265	280	300	240	265	280	300	240	265	280	300
重量kg	315				325				350				

图15 ZVMDI1200/I1500粗细调

六、ZVMD安装尺寸图

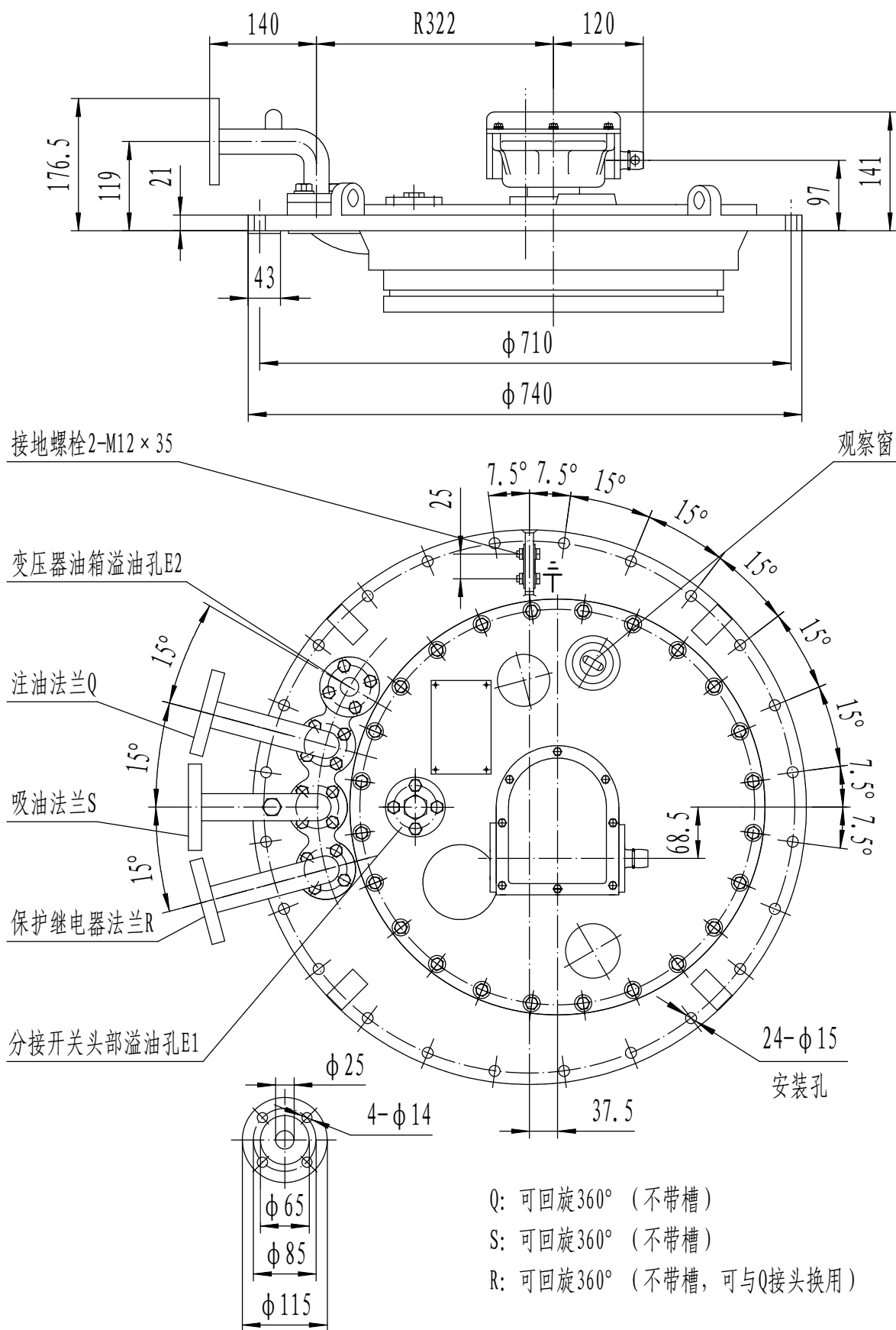


图16 ZVMD头部安装尺寸图

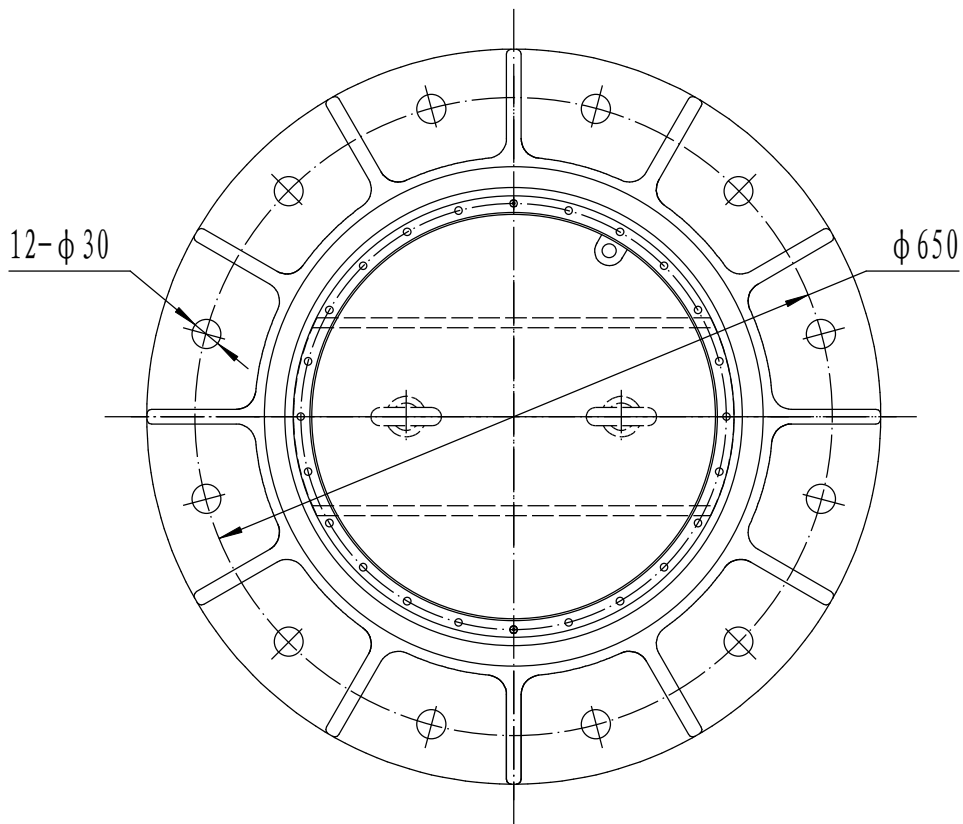
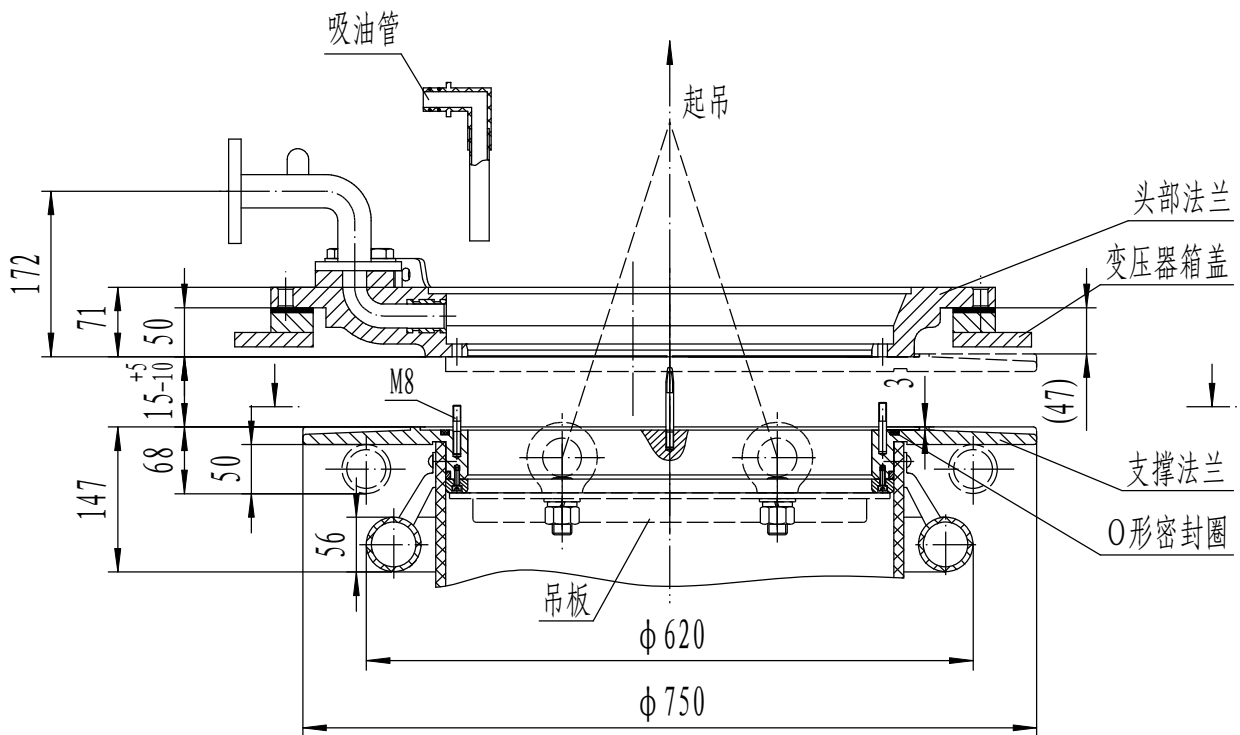


图17 ZVMD钟罩式安装尺寸

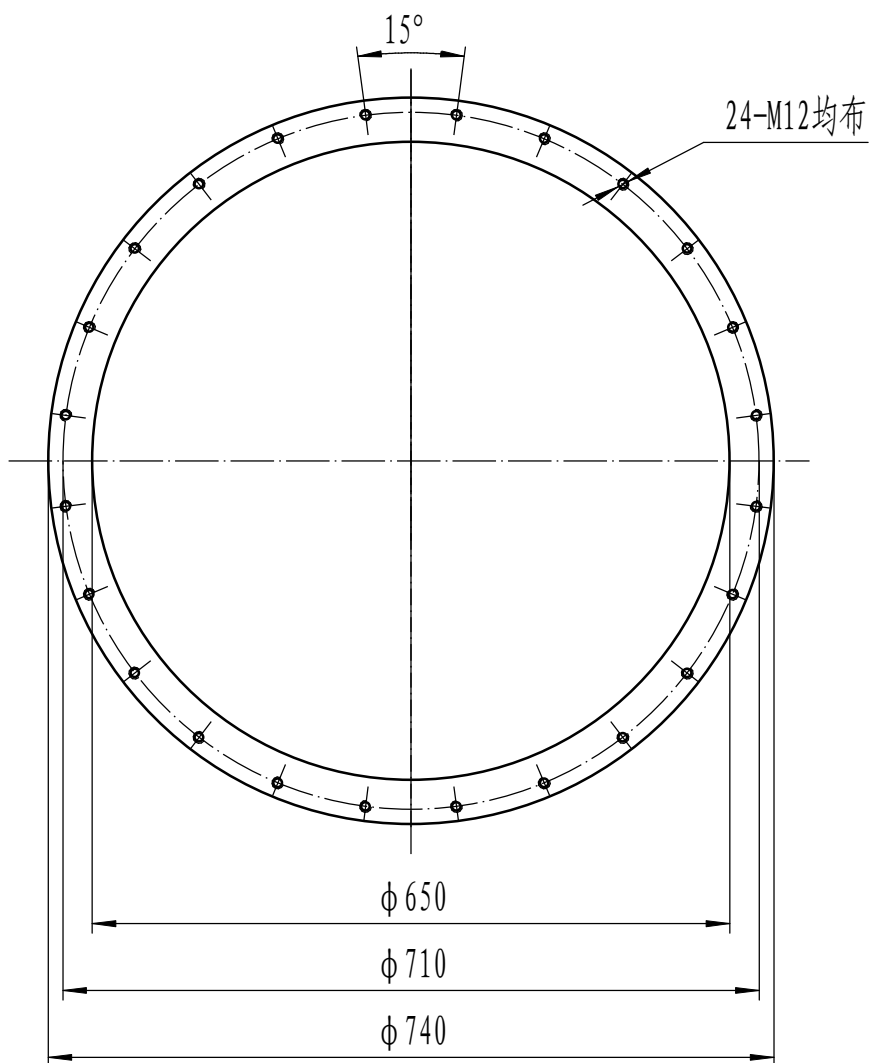
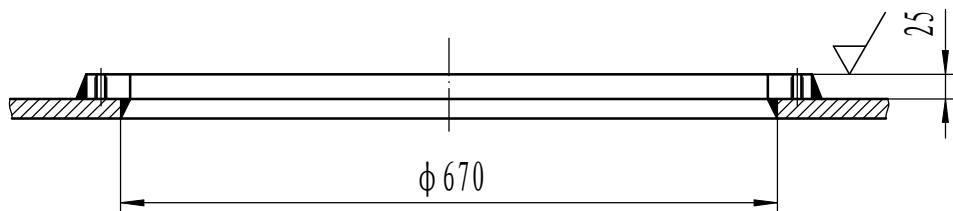
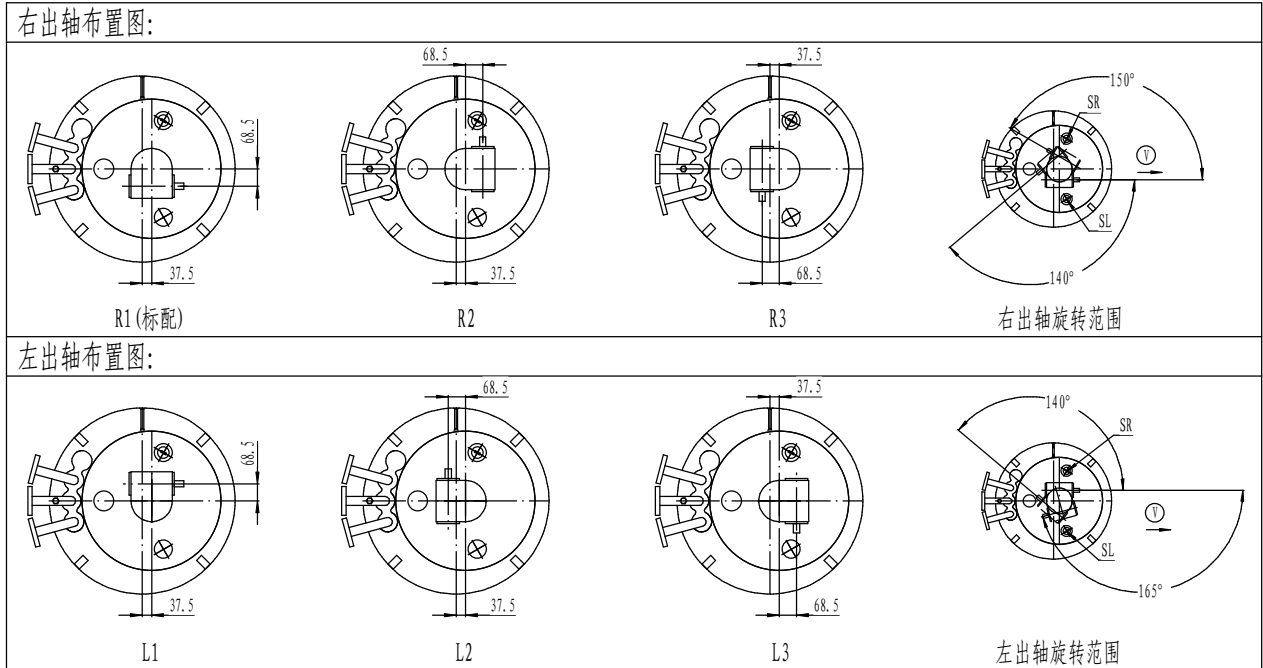


图18 ZVMD变压器箱盖安装法兰尺寸图

七、ZVMD头盖布置

1 不配压力释放阀头盖布置选配图

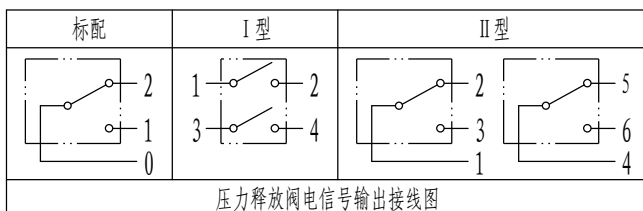
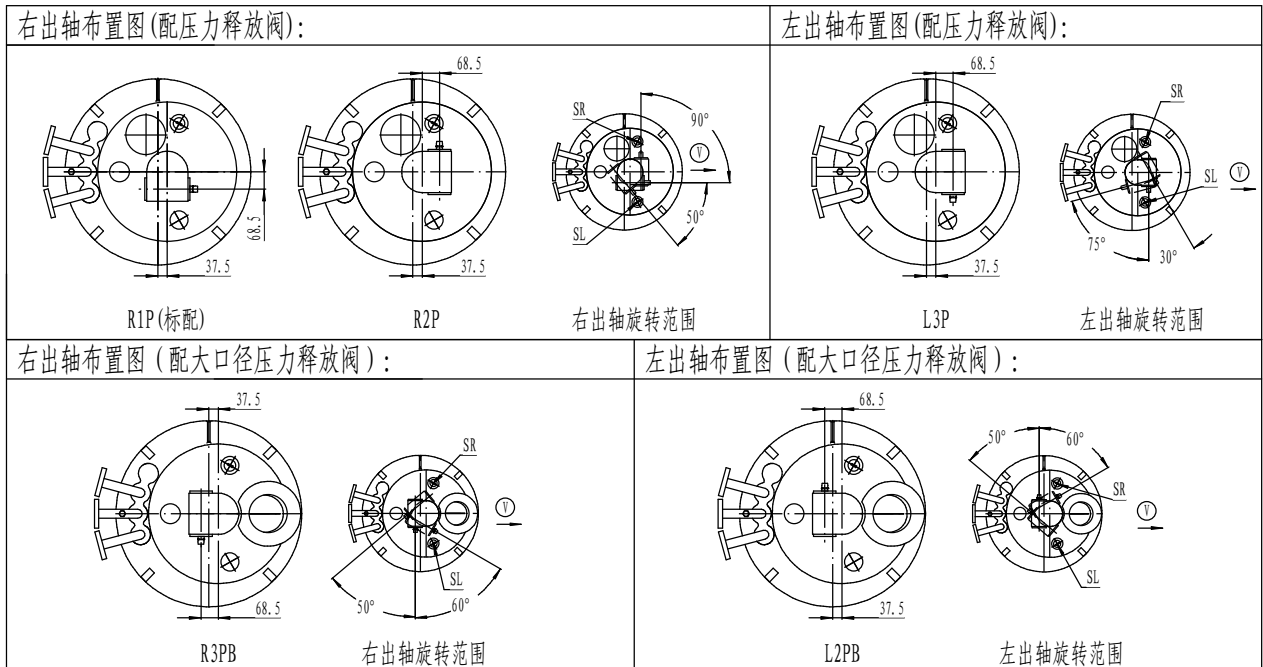
ZVMD开关在定货时, 请选择头盖的生产方式, 若不选择按标配图R1生产。特殊角度情况请定货时提出要求。



2 配压力释放阀头盖布置选配图

ZVMD开关在定货时, 请选择头盖(配压力释放阀)的布置方式, 若不选择则按标配图R1P生产。特殊角度情况请定货时提出要求。

注: 电流大于600A时, 只能选配大口径压力释放阀。R1P、R2P、L3P为带压力释放阀又带爆破盖。

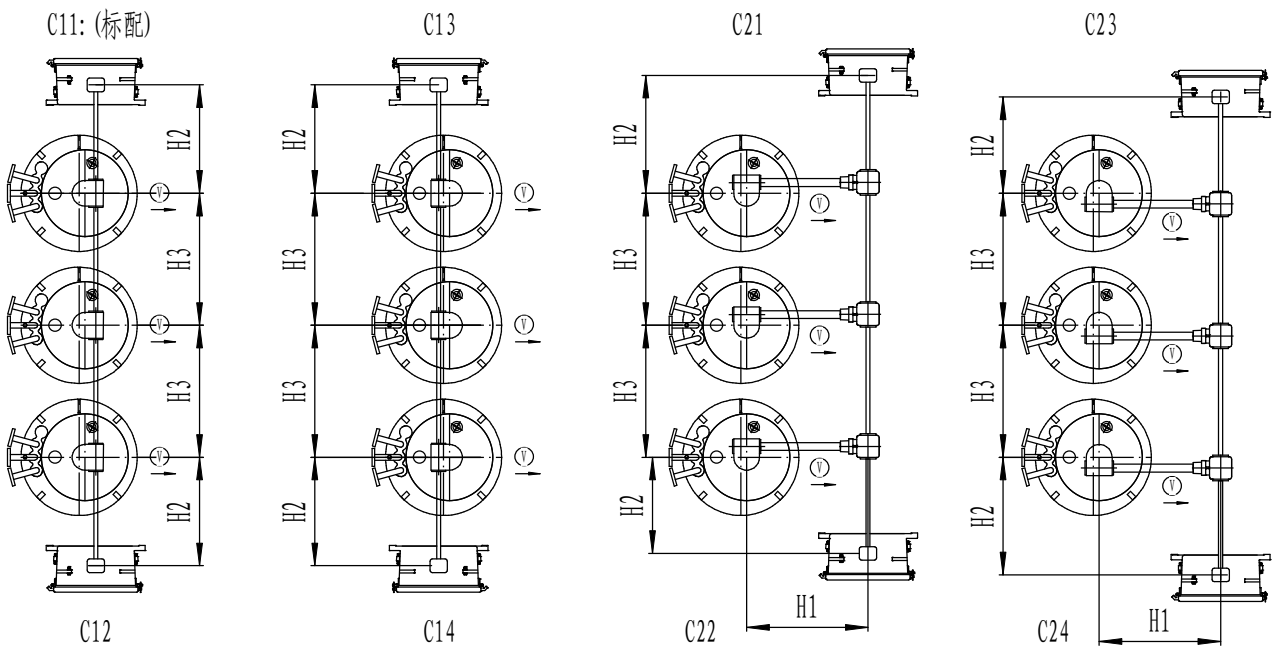


SR: 右侧观察窗(标配)
 SL: 左侧观察窗(选配)
 (V): 分接选择器驱动侧

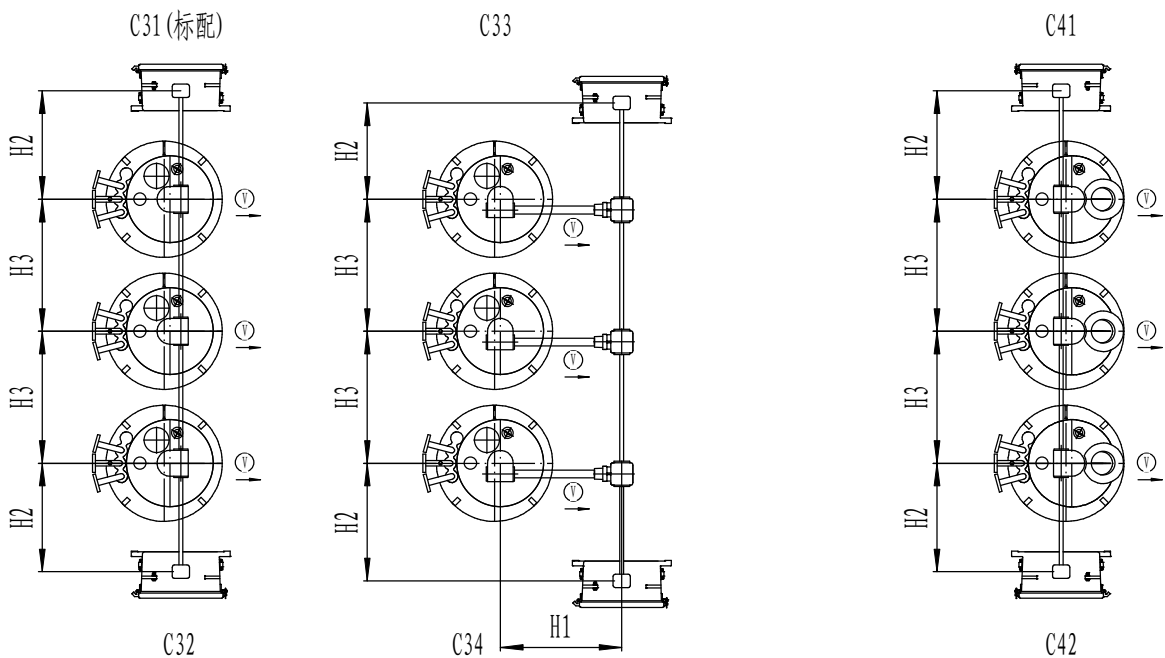
R: 右出轴
 L: 左出轴
 P: 配压力释放阀
 PB: 配压力释放阀(大口径)

八、ZVMD三台机械连动布置图

ZVMD三台机械连动开关在定货时, 请选择三台机械连动头盖布置的生产方式, 若不选择按标配图C11生产。特殊布置方式请定货时提出要求。



ZVMD三台机械连动开关在定货时, 请选择三台机械连动头盖布置的生产方式(配置压力释放阀), 若不选择按标配图C31生产。特殊布置方式请定货时提出要求。

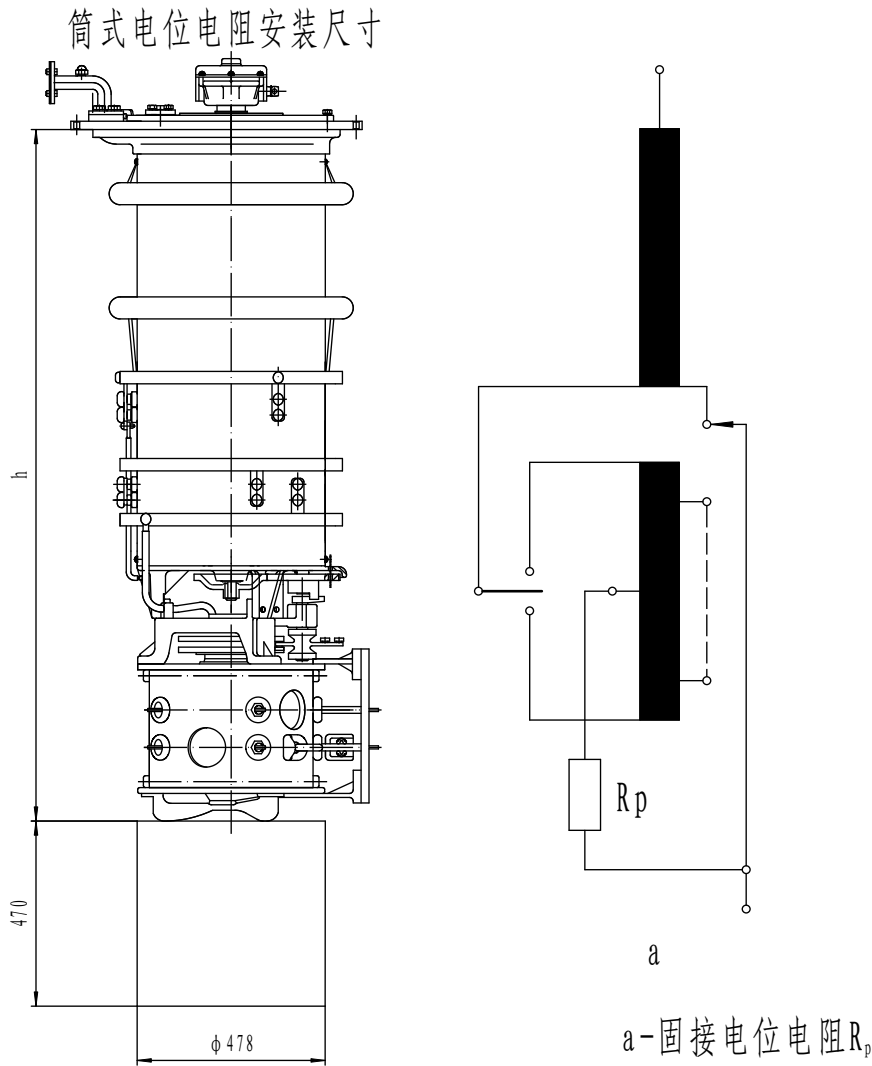


尺寸H	H1 ≥	H2 ≥	H3 ≥
最小尺寸 (mm) 机械最小尺寸	535	515	840

⊕ : 分接选择器驱动侧

九、ZVMD电位电阻

当分接开关转换选择器动作期间时，分接绕组处于“悬浮”状态。由于主绕组与分接绕组存在耦合电容 C_w ，分接绕组与箱壳存在一耦合电容 C_c 的缘故，转换选择器产生火花放电。为减少火花放电气体，采用固接电位电阻或由电位开关来联接电位电阻的方式。

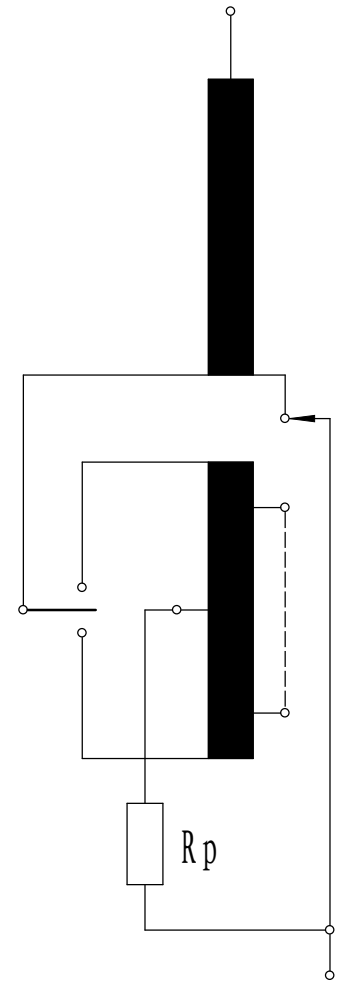
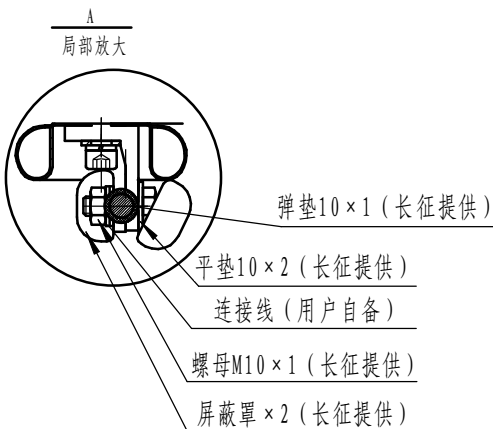
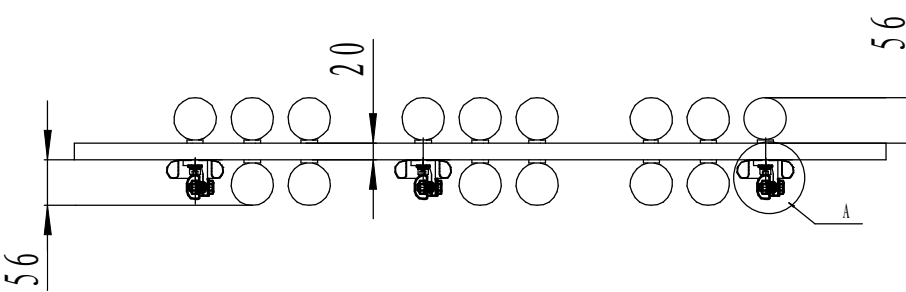
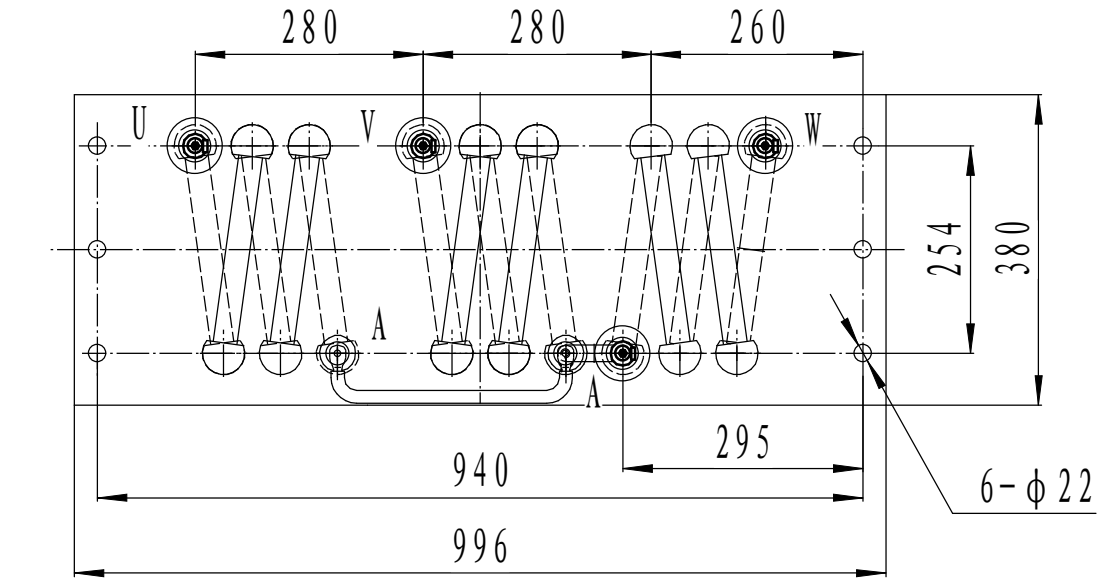


说明:

1. 筒式电位电阻不适用于Ⅲ1000A, 板式电位电阻适用所有开关;
2. 电位电阻为带电体, 应注意与箱壁和线圈的距离;

板式电位电阻安装尺寸

安装说明：板式电位电阻连线由用户自备，导线一端连接到选择器中间档位（如10193W为5位置）触头上（M10螺栓），另一端分别连接电位电阻的U/V/W端子，自备导线将电位电阻A端子与切换开关A端子连接（M10螺栓）。



接线原理图

1. 电位电阻为带电体，应注意与变压器箱壁的距离。
2. 电位电阻与分接开关底部的距离应大于30mm.