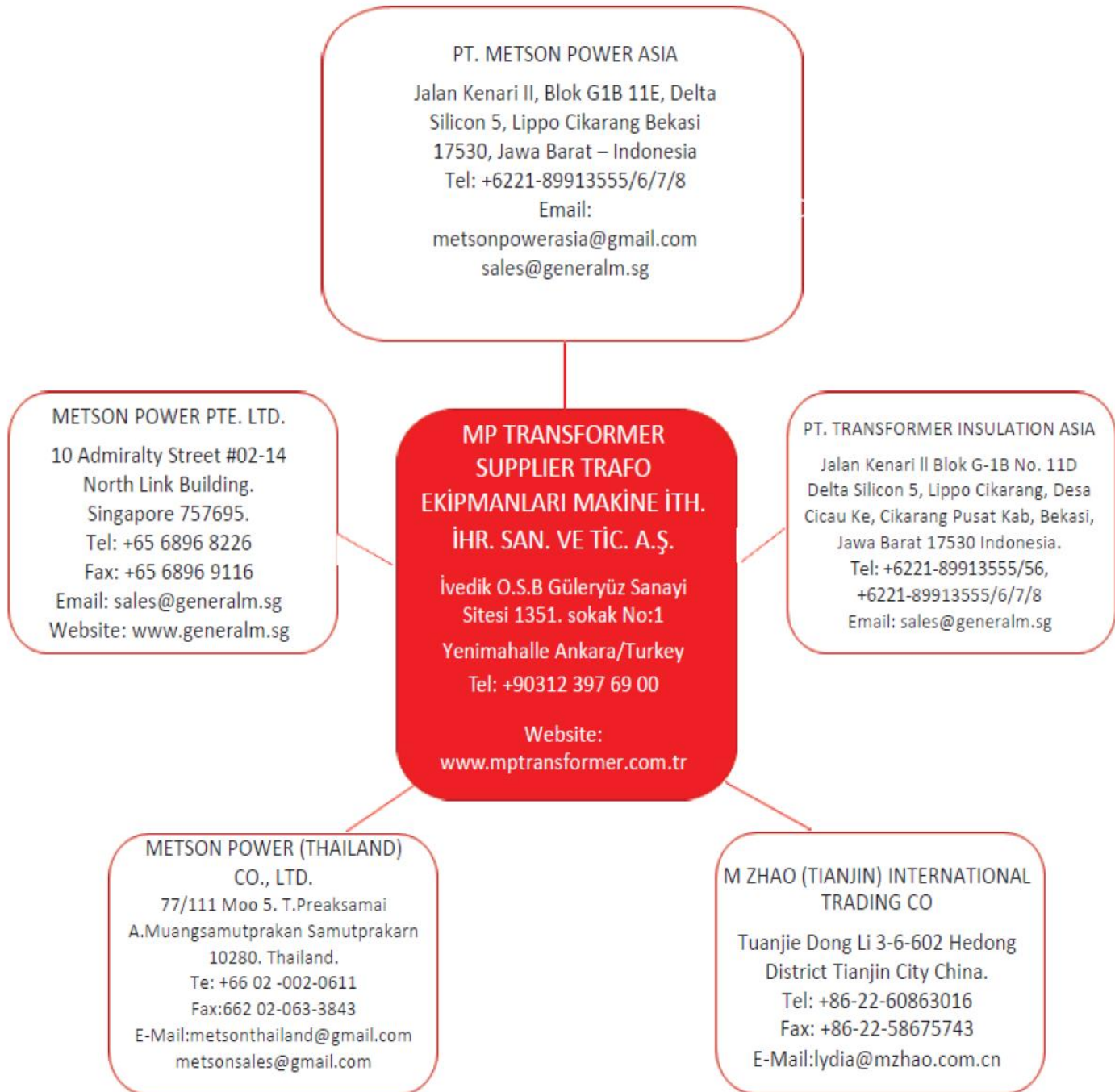




mp transformer

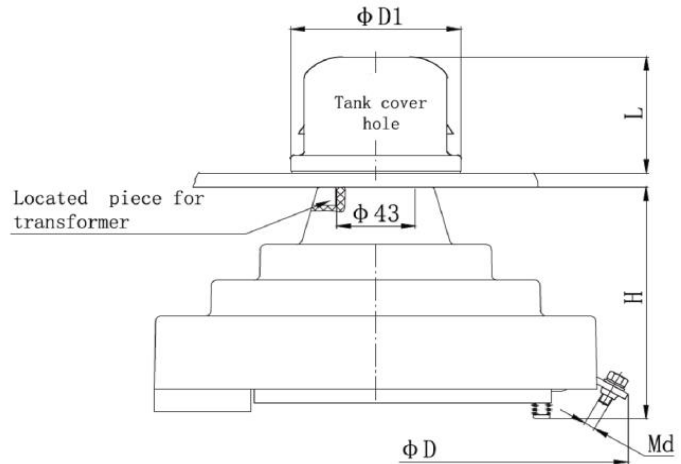
**TRANSFORMER
TAP CHANGER**

OUR SISTER COMPANIES

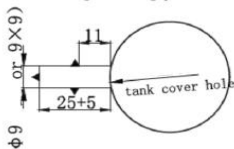


OFF-CIRCUIT ROUND/DISC TAP CHANGER

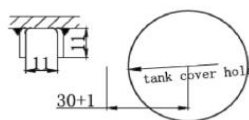
Used in mineral oil or silicon oil
Rated voltage 10KV-35KV
Rated current from 63A - 250A
Tapping position:3-7
Regulation 2.5% per position



The transformer location welding assembling diagram of gap location

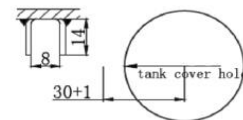


The transformer location welding assembling diagram of pin location



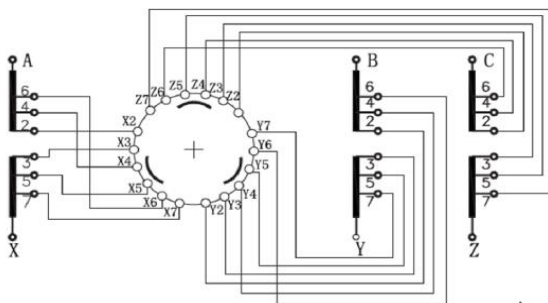
This welding position is 30^{+1} away from the hole center of the open hole

The transformer location welding assembling diagram of round pin location in case of tap changer model with D(double sealing)

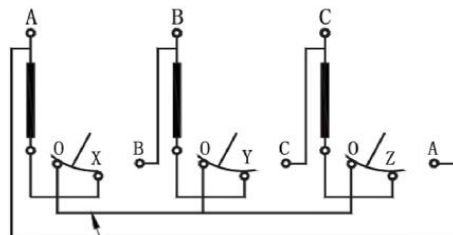


This welding position is 30^{+1} away from the hole center of the open hole

II connection diagram

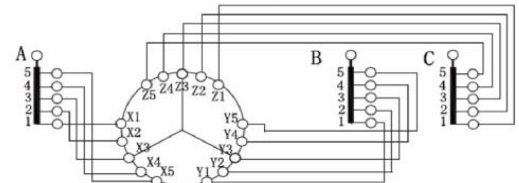


connection
diagram



star-point type connected

III connection diagram



Model No.	A Rated Current	KV Rated Voltage	NO.of phases	mm Install dimension				
				ΦD1	L	H	Md	φD
WSP III 163/10-3 × 3C	63	10	3	80	67	75	M6	110
WSP III 163/10-3 × 3CD	63			80	67	82	M6	110
WSP III 1125/10-3 × 3C	125			80	67	75	M8	120
WSP III 1125/10-3 × 3CD	125			80	67	82	M8	120
WSP III 1250/10-3 × 3	250			80	67	94	M8	154
WSP III 163/10-5 × 5	63			80	67	75	M6	163
WSP III 1125/10-5 × 5	125			80	67	75	M8	168
WSP III 1250/10-5 × 5	250			80	67	96	M8	206
WSP III 163/10-7 × 7	63			80	67	75	M6	215
WSP III 1125/10-7 × 7	125			80	67	75	M8	215
WSP III 163/20-3 × 3	63	20		80	67	95	M6	110
WSP III 1125/20-3 × 3	125			80	67	95	M8	120
WSP III 163/35-3 × 3	63			80	67	126	M6	135
WSP III 1125/35-3 × 3	125	35		80	67	126	M8	135
WSP III 163/35-5 × 5	63			105	75	130	M6	200
WSP III 1125/35-5 × 5	125			105	75	130	M8	200
WSP II 163/10-4 × 3	63	10		80	67	83	M6	162
WSP II 1125/10-4 × 3	125			80	67	83	M8	165
WSP II 1250/10-4 × 3	250			80	67	83	M8	165
WSP II 163/10-6 × 5	63			80	67	83	M6	192
WSP II 1125/10-6 × 5	125			80	67	83	M8	196
WSP II 1250/10-6 × 5	250			80	67	85	M8	280
WSP IV 163/10-3 × 2 (Y-Δ)	63			80	67	83	M6	162
WSP IV 1125/10-3 × 2 (Y-Δ)	125			80	67	83	M8	165
WSP IV 1250/10-3 × 2 (Y-Δ)	250			80	67	83	M8	165
WSP II 163/20-4 × 3	63			20	80	67	98	M6
WSP II 1125/20-4 × 3	125	80			67	98	M8	177
WSP II 163/20-6 × 5	63	80			67	103	M6	232
WSP II 1125/20-6 × 5	125	80			67	103	M8	236
WSP II 163/35-4 × 3	63	80			67	120	M6	225
WSP II 1125/35-4 × 3	125	80			67	120	M8	225
WSP II 1250/35-4 × 3	250	80			67	120	M8	225
WSP II 163/35-6 × 5	63	105			75	120	M6	278
WSP II 1125/35-6 × 5	125	105			75	120	M8	278
WSP II 1250/35-6 × 5	250	105			75	120	M8	278
WDP II 163/10-4 × 3	63	10		80	67	75	M6	110
WDP II 1125/10-4 × 3	125			80	67	75	M8	120
WDP II 163/10-6 × 5	63			80	67	75	M6	110
WDP II 1125/10-6 × 5	125			80	67	75	M8	120
WDP II 163/35-4 × 3	63			80	67	130	M6	176
WDP II 163/35-6 × 5	63			80	67	130	M6	176
WDP II 163/35-8 × 7	63			80	67	130	M6	176
WDP II 163/35-10 × 9	63			80	67	130	M6	176
WDP II 1125/35-4 × 3	125			80	67	130	M8	176
WDP II 1125/35-6 × 5	125			35	80	67	130	M8
WDP II 1125/35-8 × 7	125	80			67	130	M8	176
WDP II 1125/35-10 × 9	125	80			67	130	M8	176
WDP II 1250/35-4 × 3	250	80			67	130	M8	176
WDP II 1250/35-6 × 5	250	80			67	130	M8	176
WDP II 1250/35-8 × 7	250	80			67	130	M8	176
WDP II 1250/35-10 × 9	250	80			67	130	M8	176
WDP II 1250/35-4 × 3	250	80	67		130	M8	176	
WDP II 1250/35-6 × 5	250	80	67		130	M8	176	
WDP II 1250/35-8 × 7	250	80	67		130	M8	176	
WDP II 1250/35-10 × 9	250	80	67	130	M8	176		
※WSP II 163 / 10-8 × 7	63	10	3	105	75	83	M6	277
※WSP II 1125 / 10-8 × 7	125			105	75	83	M8	281

※ WSP II 163/10-8 × 7 与 WSP II 1125/10-8 × 7

Tank cover hole of WSP II 163/10-8 × 7 and WSP II 1125/10-8 × 7 is Φ61

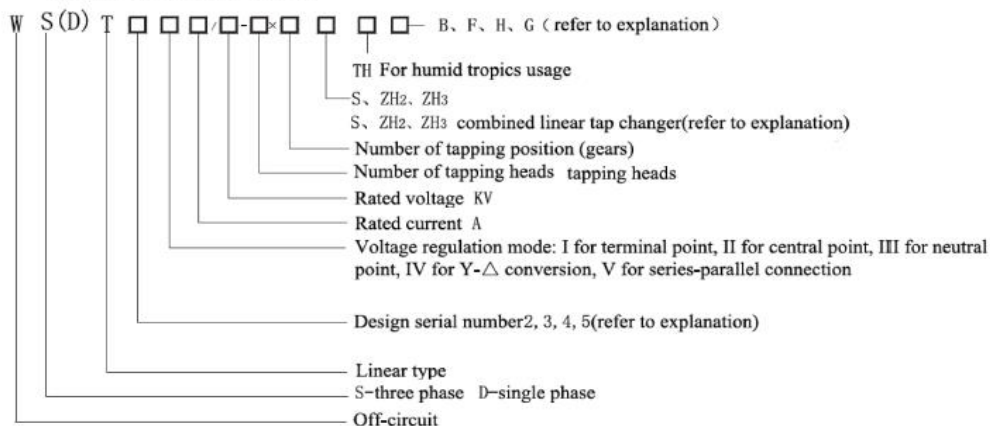


Off circuit round tap-changer

Product Introduction

This kind of switch applies to the single-phase, three phase, combination oil-immersed transformer electrical power with frequency of 50HZ,60HZ, rated voltage of 10KV,35KV, rated current of 30A~500A ; the voltage-regulating mode are: central point, terminal point neutral point, which can be directly fixed on the tank cover of the transformer, exchange under the off-circuit condition.

Model Introduction



Design serial number	Explanation
2	Add "S" to model No.: 1. Tank cover hole Ø21. 2. Operation system is hand wheel.
3	1. Tank cover hole Ø43. 2. Thickness of insulation rod is 10mm.
4	Tank cover hole Ø37.
5	1. Tank cover hole Ø61. 2. Rated current is above 400A.

ZH2 :

Off-circuit three phase combined linear tap changer (combined two units)
(for example): WSTIV 63/10-6 × 5ZH2

This model is composed of one WST II 63/10-6X5 and one WST IV 63/10-3X2 with two operation systems.

ZH3:

Off-circuit three phase combined linear tap changer (combined three units)
(for example): WSTV 63 / 20-6 × 5 ZH3

This model is composed of one WST V 63/20-5X2 and two WST II 63/20-6X5 with two operation systems.

This model is composed of one WST V 63/20-5X2 and two WST II 63/20-6X5 with two operation systems.

---Linear tap changer with operation system of plate tap changer

---Reverse installation linear tap changer

---Linear tap changer with guard plate

---Tap changer used in dry type transformer

Technical Data

Specifications		WST 30	WST 63	WST 125	WST 250	WST 400	WST 500
Phase number		three-phases					
Connection mode		Central point (II)Neutral Point (III)Terminal Point (I)					
Rated through current (A)		30	63	125	250	400	500
Short-circuit capacity	Heat stableness current (KA/2s)	0.7	1.6	2.5	3.75	4	5
	Dynamic stableness current (KA)	1.8	4	6.25	9.375	10	12.5
(Hz) Rated frequency		50~60					
Insulation level (KV)	(KV) Rated Voltage	10KV		20KV		35KV	
	Power-frequency withstand Voltage (50Hz / 1min)	42KV		55KV		95KV	
	(1.2 / 50 μ s) Impulse (1.2 / 50 μ s)	75KV		125KV		250KV	
Sealing Performance (KPa/24h)		60					
Machine life(Thousands of times)		2					

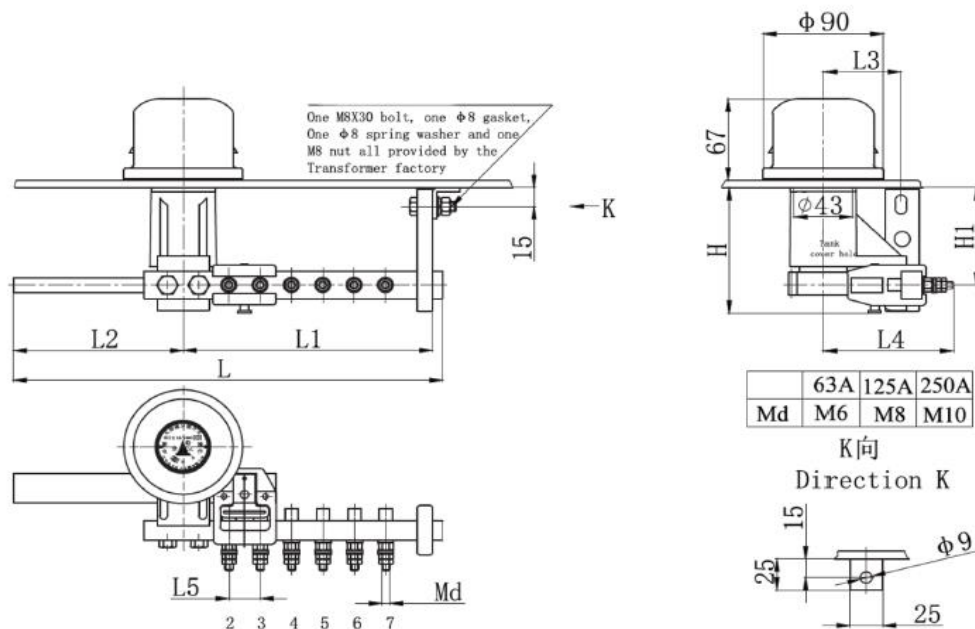
- (1) The tap changer of 30A current applies to the tank cover thickness of 3 ~ 6mm
- (2) The tap changer of 63A current applies to the tank cover thickness of 5 ~ 8mm
- (3) The tap changer of 125A current applies to the tank cover thickness of 6 ~ 10mm
- (4) The tap changer of 250A current applies to the tank cover thickness of 8 ~ 12mm
- (5) Model No. with D stands for double-sealed structural switch (Means there is a sealing ring mounted on and under the tank cover)
- (6) Height below tank cover can be adjusted according to request



Off circuit linear tap-changer

OFF-CIRCUIT SINGLE PHASE LINEAR TAP CHANGER

Used in mineral oil or silicon oil
Rated voltage 10KV-35KV
Rated current from 63A-250A
Tapping position : 3-7
Regulation 2.5% per position

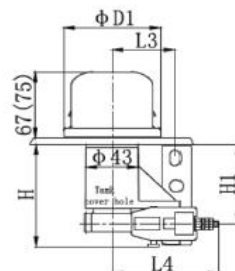
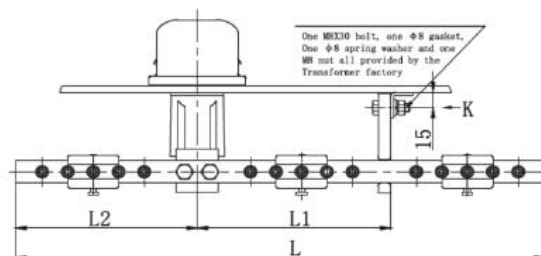
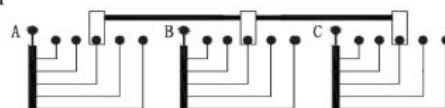


	Model No.	Regulating position	mm Install dimension							
			L	L1	L2	L3	L4	L5	H	H1
1	WDT II 63/10-4×3	Central	270	147	113	67	99	24	100	78
2	WDT II 125/10-4×3		290	162	118	67	107	29	100	78
3	WDT II 250/10-4×3		290	162	118	67	112	29	100	78
4	WDT II 63/35-4×3		338	215	114	67	103	24	120	98
5	WDT II 125/35-4×3		380	228	128	67	107	34	120	98
6	WDT II 250/35-4×3		380	228	128	67	112	34	120	98
7	WDT II 63/10-6×5		366	195	161	67	99	24	100	78
8	WDT II 125/10-6×5		405	221	175	67	107	29	100	78
9	WDT II 250/10-6×5		405	221	175	67	112	29	100	78
10	WDT II 63/35-6×5		441	266	166	67	103	24	120	98
11	WDT II 125/35-6×5		516	296	196	67	107	34	120	98
12	WDT II 250/35-6×5		516	296	196	67	112	34	120	98
13	WDT II 63/10-8×7		462	239	209	78	110	24	100	78
14	WDT II 125/10-8×7		528	279	239	78	118	29	100	78
15	WDT II 250/10-8×7		528	279	239	78	123	29	100	78
16	WDT II 63/35-8×7		532	314	209	78	114	24	120	98
17	WDT II 125/35-8×7		588	329	234	78	123	29	120	98
18	WDT II 250/35-8×7		588	329	234	78	128	29	120	98

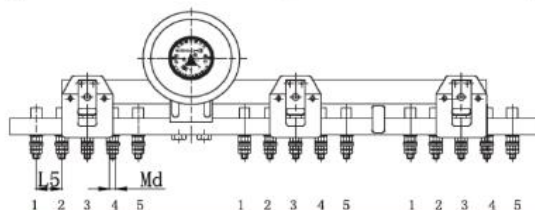
OFF-CIRCUIT THREE PHASE LINEAR TAP CHANGER

Used in mineral oil or silicon oil
Rated voltage 10KV-35KV
Rated current from 63A -300A
Tapping position : 3-9
Regulation 2.5% per position

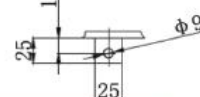
connection
diagram



	63A	125A	250A	300A
Md	M6	M8	M10	M12



K向
Direction K



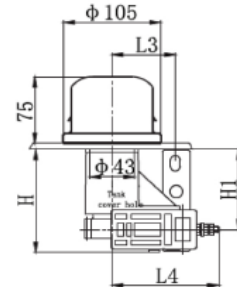
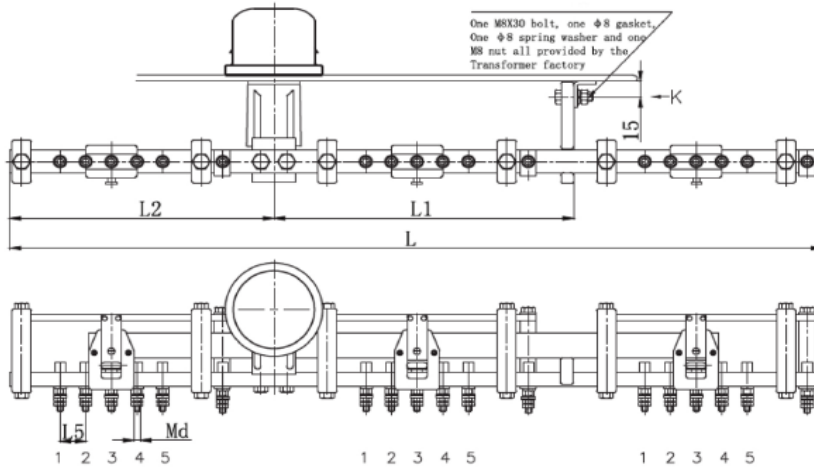
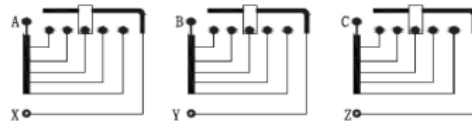
Off circuit linear tap-changer

	Model No.	Regulating position	mm Install dimension								
			L	L1	L2	L3	L4	L5	H	H1	Φ D1
1	WSTIII63/10-3×3	Neutral point	362	139	122	59	99	24	100	78	90
2	WSTIII125/10-3×3		394	149	133	59	107	29	100	78	
3	WSTIII250/10-3×3		394	149	133	59	112	29	100	78	
4	WSTIII63/20-3×3		362	139	122	59	99	24	120	98	
5	WSTIII125/20-3×3		394	149	133	59	107	29	120	98	
6	WSTIII250/20-3×3		446	169	144	59	112	34	120	98	
7	WSTIII63/35-3×3		362	139	122	59	103	24	140	118	
8	WSTIII125/35-3×3		424	159	143	59	107	34	140	118	
9	WSTIII250/35-3×3		424	159	143	59	112	34	140	118	
10	WSTIII63/10-5×5		506	187	170	59	99	24	100	78	
11	WSTIII125/10-5×5		568	207	191	59	107	29	100	78	
12	WSTIII250/10-5×5		568	207	191	59	112	29	100	78	
13	WSTIII300/10-5×5		628	227	211	69	112	34	106	78	105
14	WSTIII63/20-5×5		506	187	170	59	100	24	120	98	
15	WSTIII125/20-5×5		568	207	191	59	107	29	120	98	
16	WSTIII250/20-5×5		628	227	211	59	112	34	120	98	
17	WSTIII63/35-5×5		506	187	170	59	103	24	140	118	
18	WSTIII125/35-5×5		628	227	211	59	107	34	140	118	
19	WSTIII250/35-5×5		628	227	211	59	112	34	140	118	
20	WSTIII63/10-7×7		650	235	218	70	110	24	100	78	90
21	WSTIII125/10-7×7		742	265	249	70	118	29	100	78	
22	WSTIII250/10-7×7		742	265	249	77.5	123	29	100	78	
23	WSTIII63/10-9×9		796	283	267	70	110	24	100	78	

OFF-CIRCUIT THREE PHASE LINEAR TAP CHANGER

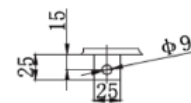
Used in mineral oil or silicon oil
Rated voltage 10KV-35KV
Rated current from 63A -250A
Tapping position: 3-7
Regulation 2.5% per position

connection
diagram



	63A	125A	250A
Md	M6	M8	M10

K向
Direction K



	Model No.	Regulating position	mm Install dimension mm							
			L	L1	L2	L3	L4	L5	H	H1
1	WST I 63/10-3×3	Terminal point	617	232	199	59	99	24	100	78
2	WST I 125/10-3×3		665	248	215	59	107	29	100	78
3	WST I 250/10-3×3		665	248	215	59	112	29	100	78
4	WST I 63/35-3×3		686	266	211	59	103	24	120	98
5	WST I 125/35-3×3		735	284	228	59	107	34	120	98
6	WST I 250/35-3×3		735	284	228	59	112	34	120	98
7	WST I 63/10-5×5		760	280	247	59	99	24	100	78
8	WST I 125/10-5×5		839	306	273	59	107	29	100	78
9	WST I 250/10-5×5		839	306	273	59	112	29	100	78
10	WST I 63/35-5×5		830	314	259	59	103	24	120	98
11	WST I 125/35-5×5T		939	346	296	--	107	34	120	98
12	WST I 250/35-5×5T		939	346	296	--	112	34	120	98
13	WST I 63/10-7×7		912	331	300	70	110	24	100	78
14	WST I 125/10-7×7T		1048	375	336	--	118	29	100	78
15	WST I 250/10-7×7T		1048	375	336	--	118	29	100	78

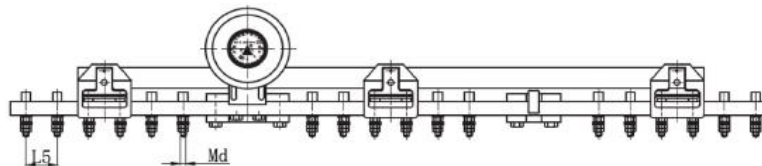
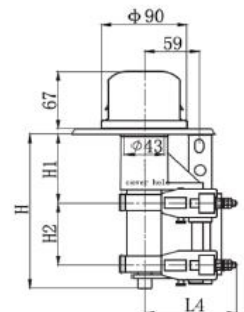
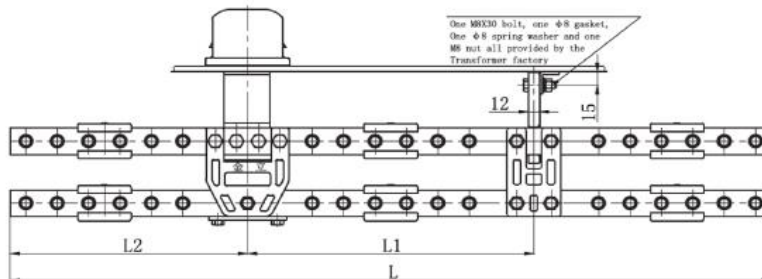
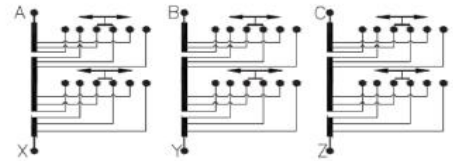


Off circuit linear tap-changer

OFF-CIRCUIT COMBINATION LINEAR TYPE(ZH2) THREE PHASE TAP CHANGER

Used in mineral oil or silicon oil
Rated voltage 10KV-35KV
Rated current from 63A -250A
Tapping position : 3-5
Regulation 2.5% per position

connection
diagram



	63A	125A	250A	300A
Md	M6	M8	M10	M12

Off circuit linear tap-changer

	Model No.	Regulating position	Install dimension mm							
			L	L1	L2	L4	L5	H	H1	H2
1	WST II 63/10-4×3ZH2	Central	450	174	145	99	24	180	78	70
2	WST II 125/10-4×3ZH2		519	201	172	107	29	180	78	70
3	WST II 250/10-4×3ZH2		519	201	172	112	29	180	78	70
4	WST II 300/10-4×3TZH2		620	242	189	112	34	185	78	70
5	WST II 63/35-4×3ZH2		486	194	145	103	24	210	98	80
6	WST II 125/35-4×3ZH2		571	222	177	107	29	210	98	80
7	WST II 250/35-4×3ZH2		571	222	177	112	29	210	98	80
8	WST II 63/10-6×5ZH2		594	222	193	99	24	180	78	70
9	WST II 125/10-6×5ZH2		693	259	230	107	29	180	78	70
10	WST II 250/10-6×5ZH2		693	259	230	112	29	180	78	70
11	WST II 300/10-6×5TZH2		824	310	257	112	34	185	78	70
12	WST II 63/35-6×5ZH2		630	240	195	103	24	210	98	80
13	WST II 125/35-6×5ZH2		745	280	235	107	29	210	98	80
14	WST II 250/35-6×5ZH2		745	280	235	112	29	210	98	80

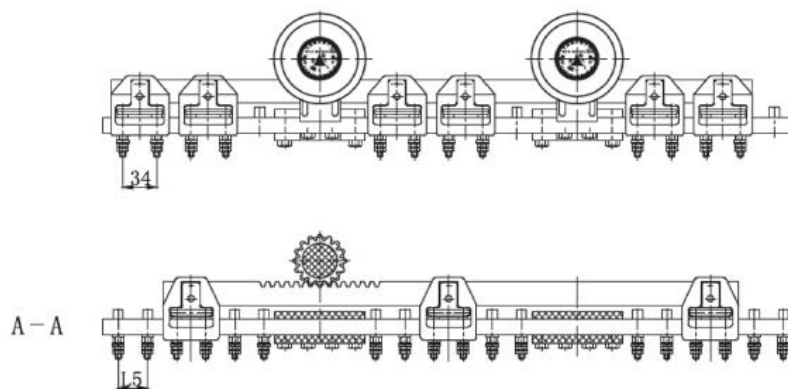
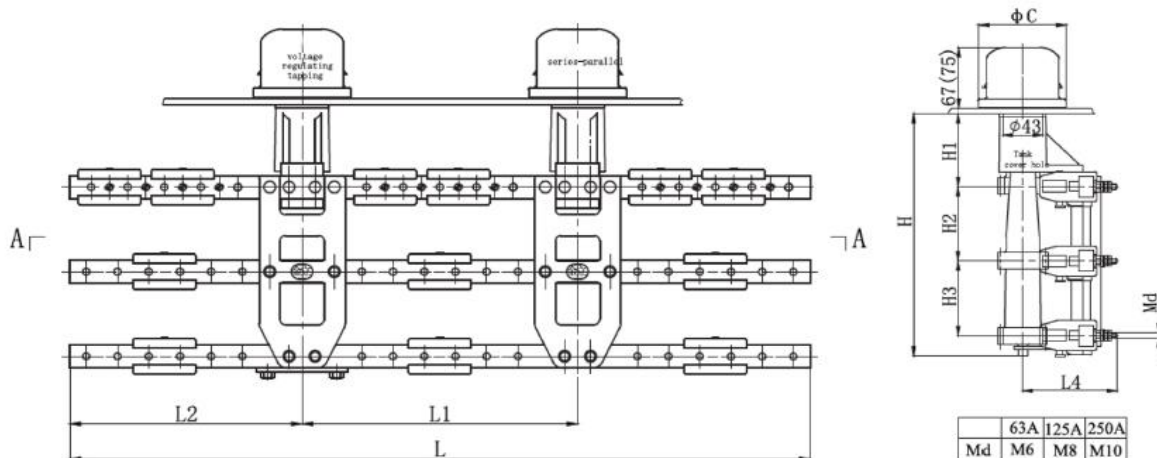
Used in mineral oil or silicon oil

Rated voltage 20KV

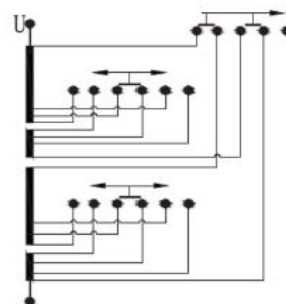
Rated current from 63A -250A

Tapping position: 3-5

Regulation 2.5% per position



connection diagram



	Model No.	Regulating position	Install dimension mm									
			L	L1	L2	L4	L5	H	H1	H2	H3	Φ C
1	WST V 63/20-4×3ZH3	Series-parallel Central	688	256	216	99	29	230	78	70	60	90
2	WST V 125/20-4×3ZH3		688	256	216	107	29	275	78	80	80	90
3	WST V 250/20-4×3ZH3		766	284	241	112	34	275	78	80	80	105
4	WST V 63/20-6×5ZH3		688	256	216	99	29	230	78	70	60	90
5	WST V 125/20-6×5ZH3		688	256	216	107	29	275	78	80	80	90
6	WST V 250/20-6×5ZH3		766	284	241	112	34	275	78	80	80	105

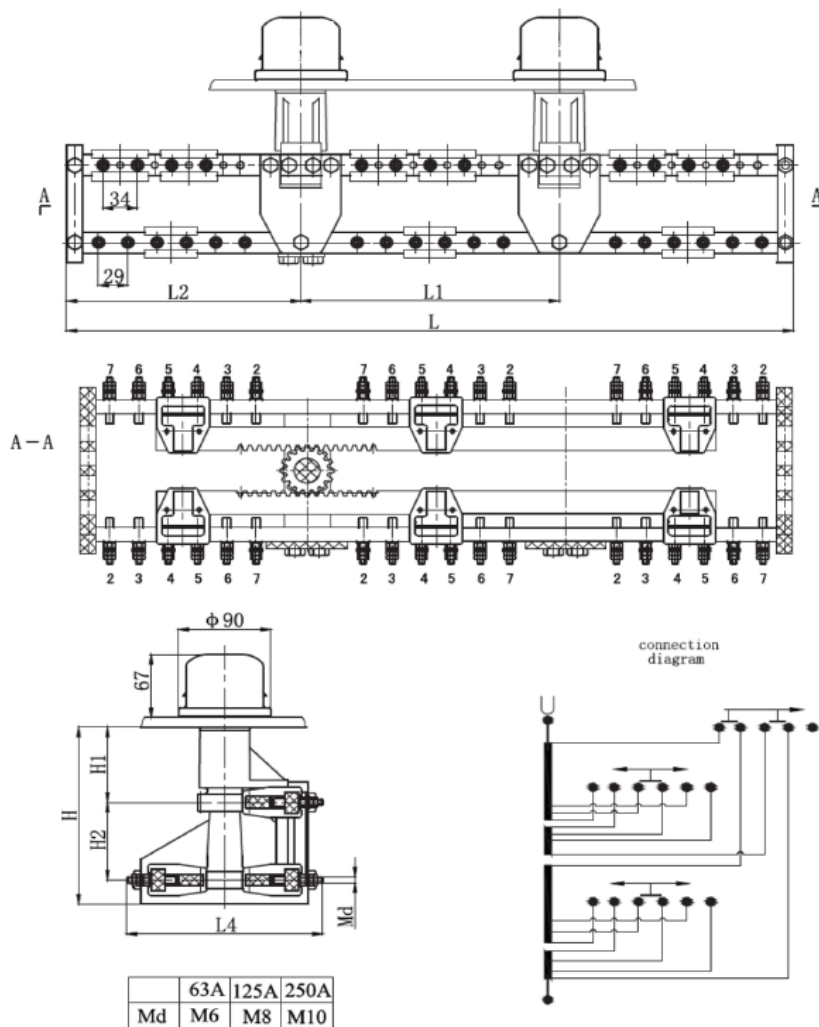
Used in mineral oil or silicon oil

Rated voltage 20KV

Rated current from 63A -125A

Tapping position: 3-5

Regulation 2.5% per position

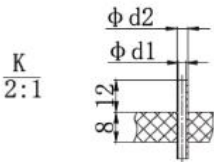
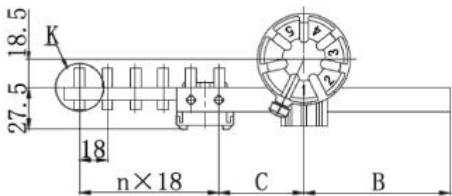
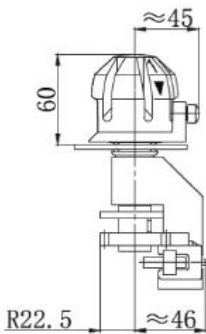
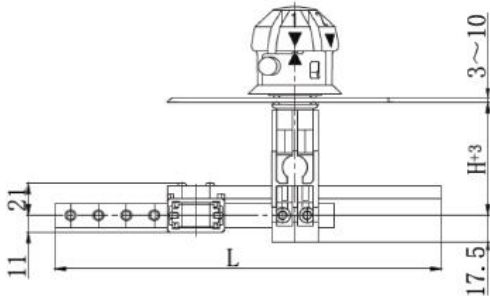
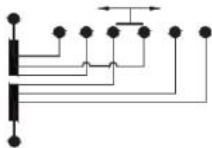


	Model No.	Regulating position	Install dimension mm						
			L	L1	L2	L4	H	H1	H2
1	WST V 63/20-4×3ZH3	Series-parallel Central	706	256	225	194	183	78	80
2	WST V 125/20-4×3ZH3		720	256	232	214	183	78	80
3	WST V 63/20-6×5ZH3		706	256	225	194	183	78	80
4	WST V 125/20-6×5ZH3		720	256	232	214	183	78	80

OFF-CIRCUIT SINGLE PHASE LINER TAP CHANGER

Used in mineral oil or silicon oil
Rated voltage 10KV-24KV
Rated current from 30A- 63A
Tapping position : 3-7
regulation 2.5% per position

connection
diagram

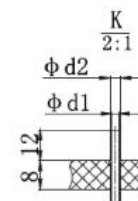
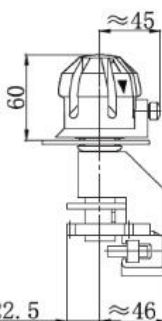
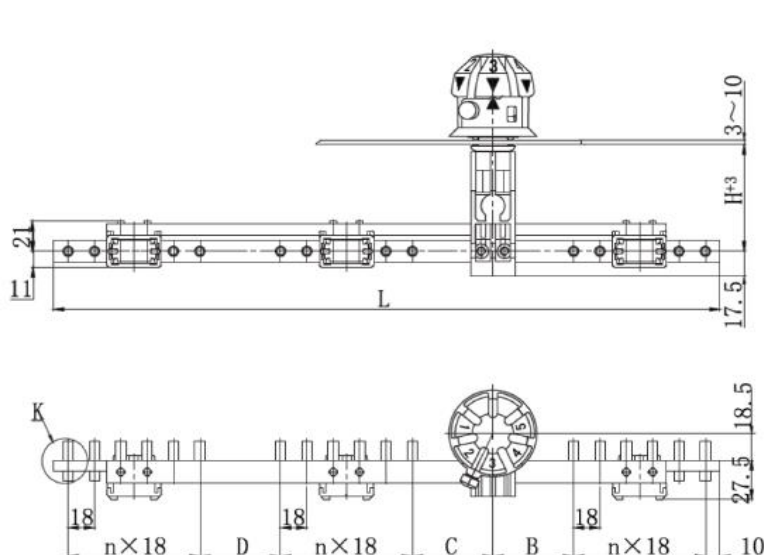
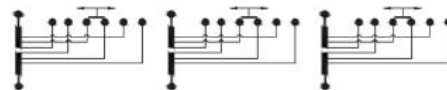


	Model NO.	L	B	C	n	Φ d1	Φ d2	H	Tank cover hole(mm)
1	WDT II 2 30 / 10-4×3S	180.5	61.5	55	3	φ 3.1	φ 5	H=70、100、130、150、200 (Decided by user)	φ 20.5 ^{+0.5}
2	WDT II 2 63 / 10-4×3S					φ 5.1	φ 7		
3	WDT II 2 30 / 20~24-4×3S	180.5	61.5	55	3	φ 3.1	φ 5		
4	WDT II 2 63 / 20~24-4×3S					φ 5.1	φ 7		
5	WDT II 2 30 / 10-6×5S	249.5	94.5	55	5	φ 3.1	φ 5		
6	WDT II 2 63 / 10-6×5S					φ 5.1	φ 7		
7	WDT II 2 30 / 20~24-6×5S	249.5	94.5	55	5	φ 3.1	φ 5		
8	WDT II 2 63 / 20~24-6×5S					φ 5.1	φ 7		
9	WDT II 2 30 / 10-8×7S	319.5	128.5	55	7	φ 3.1	φ 5		
10	WDT II 2 63 / 10-8×7S					φ 5.1	φ 7		
11	WDT II 2 30 / 20~24-8×7S	319.5	128.5	55	7	φ 3.1	φ 5		
12	WDT II 2 63 / 20~24-8×7S					φ 5.1	φ 7		

OFF-CIRCUIT THREE PHASE LINEAR TAP CHANGER

Used in mineral oil or silicon oil
Rated voltage 10KV-24KV
Rated current from 30A -63A
Tapping position: 3-7
Regulation 2.5% per position

connection
diagram



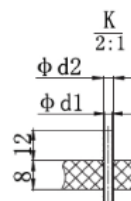
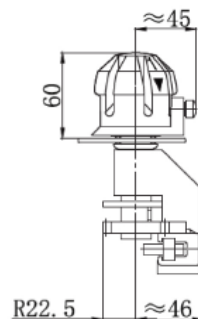
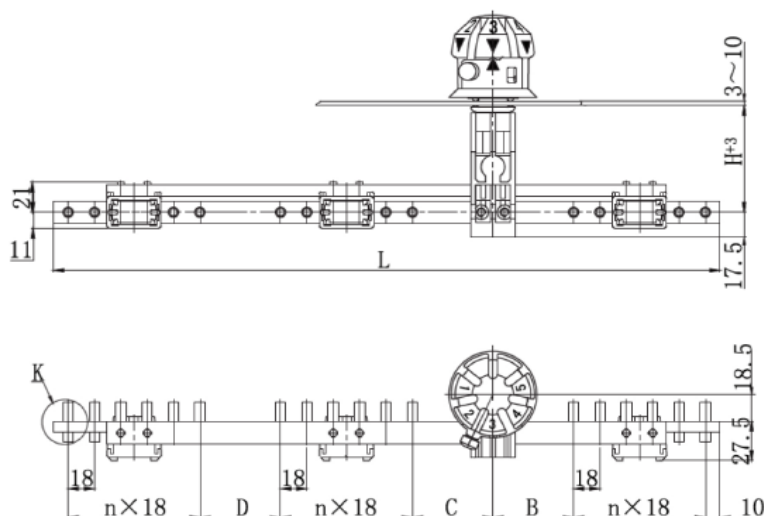
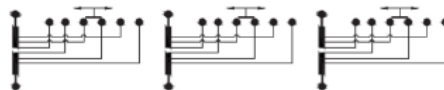
	Model NO.	L	B	C	D	n	Φd1	Φd2	H	Tank cover hole(mm)	
1	WST II 2 30 / 10-4×3S	347	55	55	55	3	Φ 3.1	Φ 5	H=70, 100, 130, 150, 200 (Decided by user)	Φ 20.5 ^{+0.5}	
2	WST II 2 63 / 10-4×3S						Φ 5.1	Φ 7			
3	WST II 2 30 / 20~24-4×3S	347	55	55	Φ 3.1		Φ 5				
4	WST II 2 63 / 20~24-4×3S				Φ 5.1		Φ 7				
5	WST II 2 30 / 10-6×5S	455	55	55	55	5	Φ 3.1	Φ 5			
6	WST II 2 63 / 10-6×5S						Φ 5.1	Φ 7			
7	WST II 2 30 / 20~24-6×5S	455	55	55	55		Φ 3.1	Φ 5			
8	WST II 2 63 / 20~24-6×5S						Φ 5.1	Φ 7			
9	WST II 2 30 / 10-8×7S	563	55	55	55	7	Φ 3.1	Φ 5			
10	WST II 2 63 / 10-8×7S						Φ 5.1	Φ 7			
11	WST II 2 30 / 20~24-8×7S	563	55	55	55		Φ 3.1	Φ 5			
12	WST II 2 63 / 20~24-8×7S						Φ 5.1	Φ 7			

Off circuit linear tap-changer

OFF-CIRCUIT THREE PHASE LINEAR TAP CHANGER

Used in mineral oil or silicon oil
Rated voltage 10KV-24KV
Rated current from 30A -63A
Tapping position: 3-7
Regulation 2.5% per position

connection
diagram

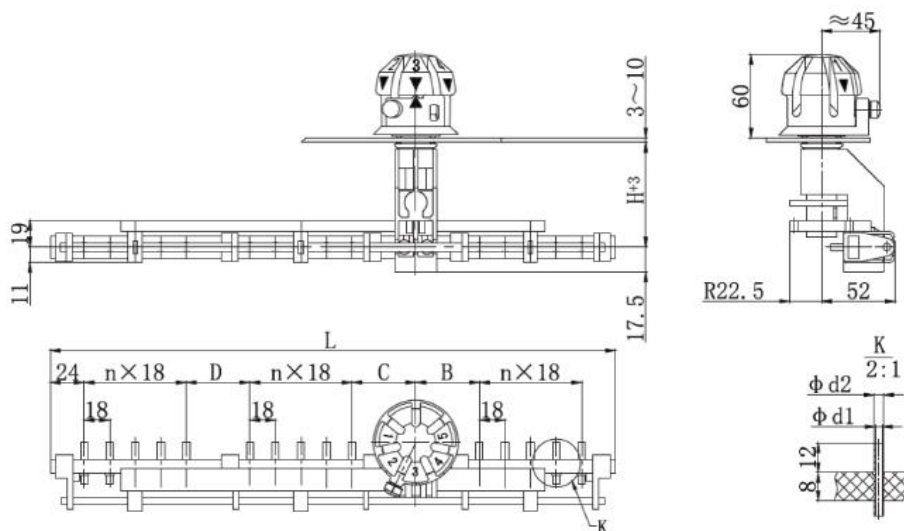
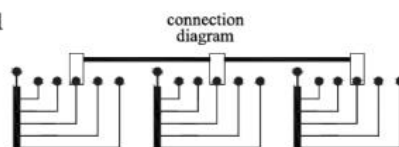


	Model NO.	L	B	C	D	n	Φd1	Φd2	H	Tank cover hole(mm)	
1	WST II 2 30 / 10-4×3S	347	55	55	55	3	Φ 3.1	Φ 5	H=70、100、130、150、200 (Decided by user)	Φ 20.5 ^{+0.5}	
2	WST II 2 63 / 10-4×3S						Φ 5.1	Φ 7			
3	WST II 2 30 / 20~24-4×3S	347	55	55	Φ 3.1		Φ 5				
4	WST II 2 63 / 20~24-4×3S				Φ 5.1		Φ 7				
5	WST II 2 30 / 10-6×5S	455	55	55	55	5	Φ 3.1	Φ 5			
6	WST II 2 63 / 10-6×5S						Φ 5.1	Φ 7			
7	WST II 2 30 / 20~24-6×5S	455	55	55	55		Φ 3.1	Φ 5			
8	WST II 2 63 / 20~24-6×5S						Φ 5.1	Φ 7			
9	WST II 2 30 / 10-8×7S	563	55	55	55	7	Φ 3.1	Φ 5			
10	WST II 2 63 / 10-8×7S						Φ 5.1	Φ 7			
11	WST II 2 30 / 20~24-8×7S	563	55	55	55		Φ 3.1	Φ 5			
12	WST II 2 63 / 20~24-8×7S						Φ 5.1	Φ 7			

Off circuit linear tap-changer

OFF-CIRCUIT THREE PHASE LINEAR TAP CHANGER

Used in mineral oil or silicon oil
Rated voltage 10KV-24KV
Rated current from 30A - 63A
Tapping position: 3-7
Regulation 2.5% per position



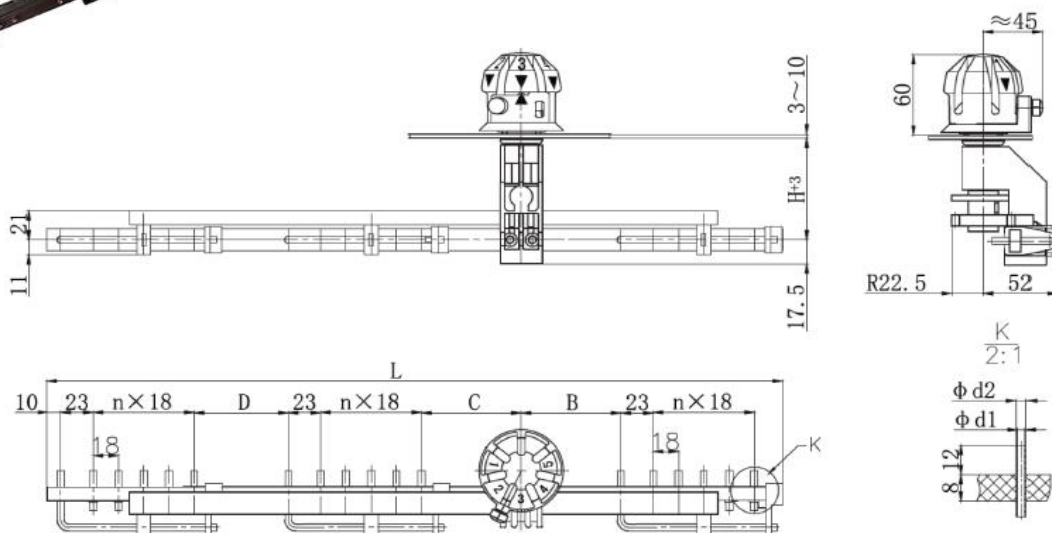
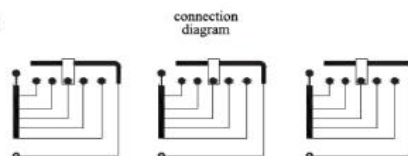
Off circuit linear tap-changer

	Model NO.	L	B	C	D	n	φ d1	φ d2	H	Tank cover hole(mm)
1	WSTIII2 30 / 10-3×3S	291	45	45	45	2	φ 3.1	φ 5	H=70, 100, 130, 150, 200 (Decided by user)	φ 20.5 ^{±0.5}
2	WSTIII2 63 / 10-3×3S						φ 5.1	φ 7		
3	WSTIII2 30 / 20~24-3×3S	291	45	45	45		φ 3.1	φ 5		
4	WSTIII2 63 / 20~24-3×3S						φ 5.1	φ 7		
5	WSTIII2 30 / 10-5×5S	399	45	45	45	4	φ 3.1	φ 5		
6	WSTIII2 63 / 10-5×5S						φ 5.1	φ 7		
7	WSTIII2 30 / 20~24-5×5S	399	45	45	45		φ 3.1	φ 5		
8	WSTIII2 63 / 20~24-5×5S						φ 5.1	φ 7		
9	WSTIII2 30 / 10-7×7S	507	45	45	45	6	φ 3.1	φ 5		
10	WSTIII2 63 / 10-7×7S						φ 5.1	φ 7		
11	WSTIII2 30 / 20~24-7×7S	507	45	45	45		φ 3.1	φ 5		
12	WSTIII2 63 / 20~24-7×7S						φ 5.1	φ 7		

OFF-CIRCUIT THREE PHASE LINEAR TAP CHANGER



Used in mineral oil or silicon oil
Rated voltage 10KV-24KV
Rated current from 30A- 63A
Tapping position:3-7
Regulation 2.5% per position



	Model No	L	B	C	D	n	φ d1	φ d2	H	Tank cover hole(mm)
1	WST I 2 30 / 10-3×3S	423	71	71	71	2	φ 3.1	φ 5	H=70, 100, 150, 200 (Decided by user)	φ 20.5 ^{+0.5}
2	WST I 2 63 / 10-3×3S						φ 5.1	φ 7		
3	WST I 2 30 / 20~24-3×3S	423	71	71	71	2	φ 3.1	φ 5		
4	WST I 2 63 / 20~24-3×3S						φ 5.1	φ 7		
5	WST I 2 30 / 10-5×5S	531	71	71	71	4	φ 3.1	φ 5		
6	WST I 2 63 / 10-5×5S						φ 5.1	φ 7		
7	WST I 2 30 / 20~24-5×5S	531	71	71	71	4	φ 3.1	φ 5		
8	WST I 2 63 / 20~24-5×5S						φ 5.1	φ 7		
9	WST I 2 30 / 10-7×7S	639	71	71	71	6	φ 3.1	φ 5		
10	WST I 2 63 / 10-7×7S						φ 5.1	φ 7		
11	WST I 2 30 / 20~24-7×7S	639	71	71	71	6	φ 3.1	φ 5		
12	WST I 2 63 / 20~24-7×7S						φ 5.1	φ 7		



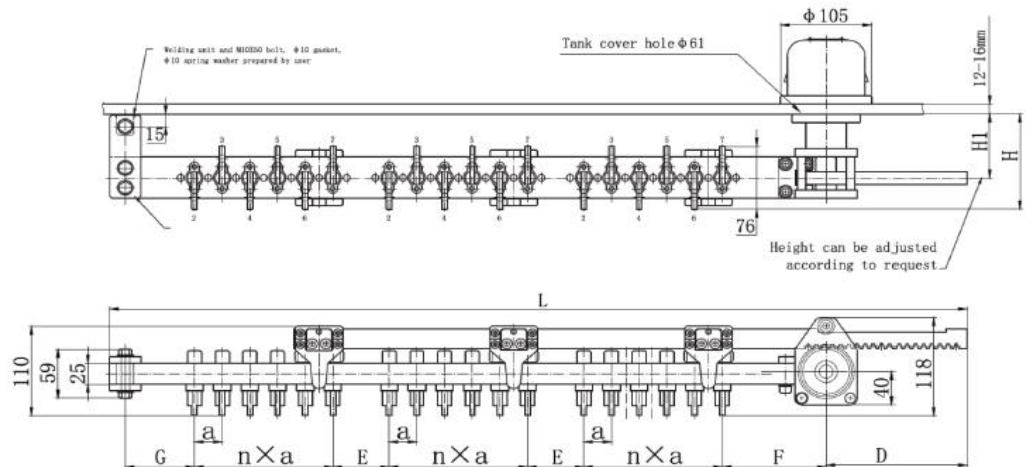
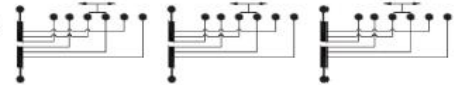
Off circuit linear tap-changer

OFF-CIRCUIT THREE PHASE LINEAR TAP CHANGER

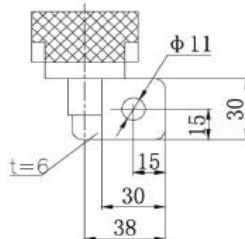


Used in mineral oil or silicon oil
Rated voltage 10KV-35KV
Rated current from 400A-500A
Tapping position :3-5
Regulation 2.5% per position

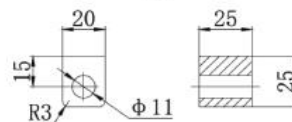
connection
diagram



Size of
connection terminal
2:1



Size of welding unit
2:1

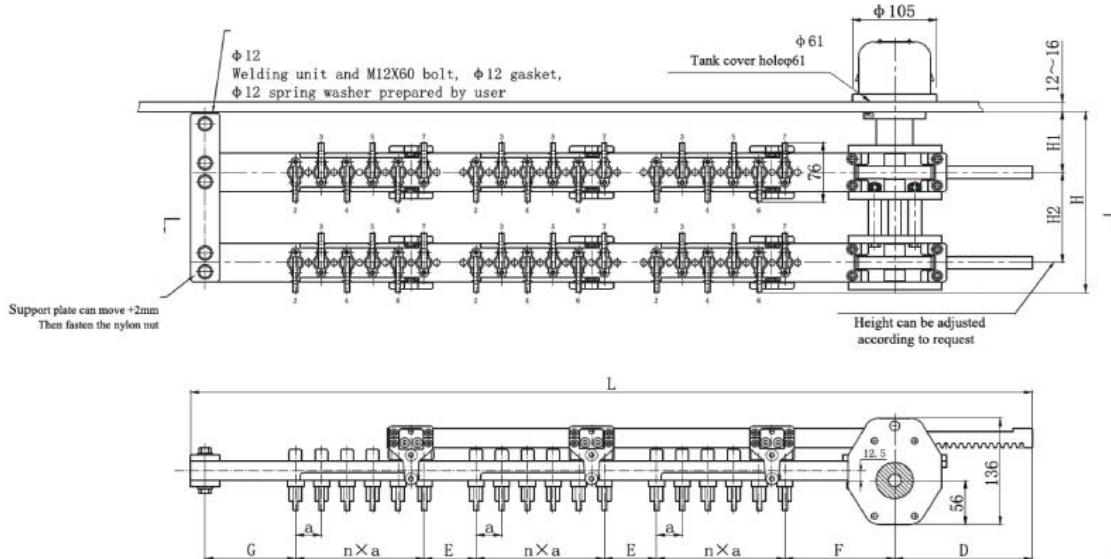
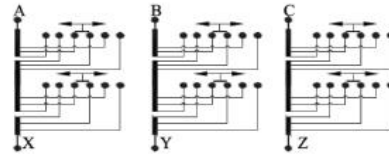


Off circuit linear tap-changer

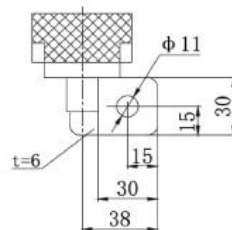
Model No	Unit: mm								
	L	E	F	G	a	n	D	H	H1
WST II 5 400~500 / 10-4×3	746	65	120	80	32	3	110	115	78
WST II 5 400~500 / 10-6×5	990	65	120	80	32	5	162	115	78
WST II 5 400~500 / 20-6×5	1191	80	155	100	38	5	188	156	118
WST II 5 400~500 / 35-4×3	1006	120	170	100	38	3	137	156	118
WST II 5 400~500 / 35-6×5	1286	120	170	100	38	5	188	156	118

OFF-CIRCUIT COMBINATION LINEAR(ZH2) CHANGER

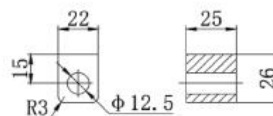
Used in mineral oil or silicon oil
Rated voltage 10KV-35KV
Rated current from 400A -500A
Tapping position :3-5
Regulation 2.5% per position



Size of
connection terminal
2:1



Size of welding unit
2:1



Off circuit linear tap-changer

Model No	mm Unit Dimension									
	L	E	F	G	a	n	D	H	H1	H2
WST II 5 400~500 / 10 -4×3 ZH2	803	65	137	113	32	3	117	232	78	116
WST II 5 400~500 / 10 -6×5 ZH2	1050	65	137	113	32	5	172	232	78	116
WST II 5 400~500 / 35 -4×3 ZH2	1060	120	188	148	38	3	124	320	118	156
WST II 5 400~500 / 35 -6×5 ZH2	1362	120	188	148	38	5	198	320	118	156

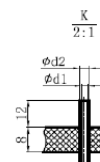
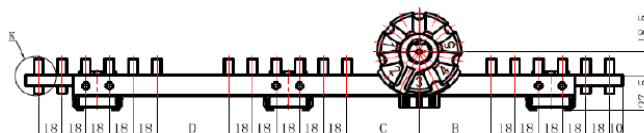
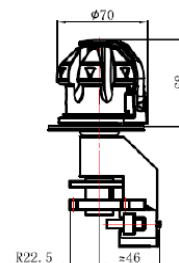
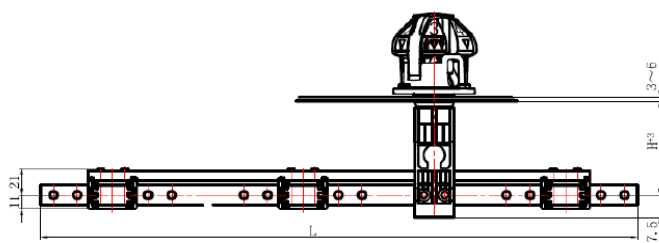
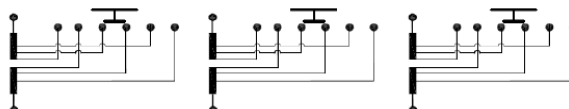
OCTC Drawing: 24KV 30A 5POS 3PH L=100 MM

THREE-PHASE TAP CHANGER

- off-circuit operation
- used in mineral oil or silicon oil
- 10KV-35KV
- from 30A to 63A
- from 5 positions
- regulation 2.5% per position
- operating material is engineering plastics

Rated Voltage KV	Power-frequency withstand Voltage Imin KV		
	To earth	Inter phase	Inter contact
10	42	42	18
20~24	55	55	20
30~35	70	70	25

Skeleton Diagram of Voltage Regulating



Type of tap changer	L	B	C	D	Ød1	Ød2	H	Holes on tank cover(mm)
24KV 30A 5POS 3PH L=100MM	455	55	55	55	Ø3.1	Ø5	H=100. (Designed by user)	Ø20.5 ^{+0.5}

OCTC Drawing: 24KV 63A 5POS 3PH L=70 MM

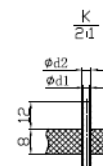
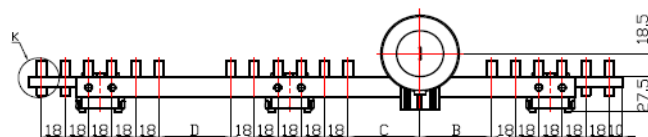
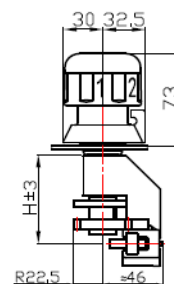
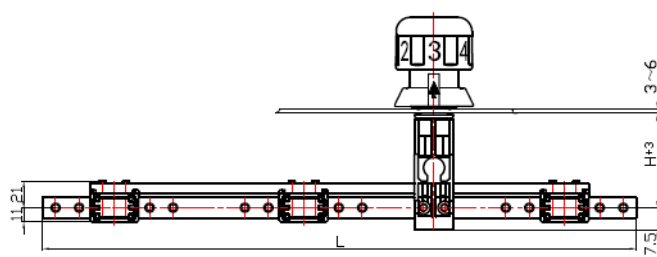
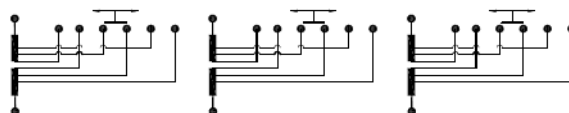
THREE-PHASE TAP CHANGER

off-circuit operation
used in mineral oil or silicon oil
63A, 20KV, 5 positions (aluminum handwheel)
regulation 2.5% per position

material of operation is Aluminum alloy used for outdoor transformer

Rated Voltage KV	Power-frequency withstand Voltage 1min KV		
	To earth	Inter phase	Inter contact
10KV	42	42	18
20KV	55	55	20
30KV	70	70	25

Skeleton Diagram of Voltage Regulating



Type of tap changer	L	B	C	D	Ød1	Ød2	H	Holes on tank cover(mm)
24KV 63A 5POS 3PH L=70MM	455	55	55	55	Ø5.1	Ø7	H=70、 (Designed by user)	Ø20.5 ^{+0.5}

OCTC Drawing: 30KV 30A 5POS 3PH L=70 MM

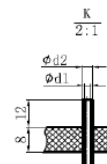
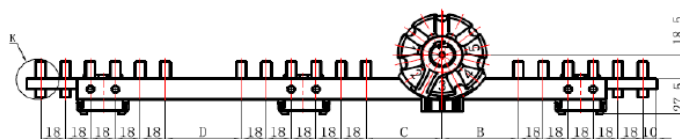
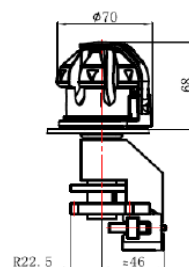
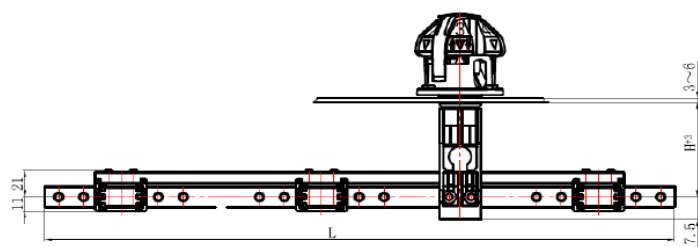
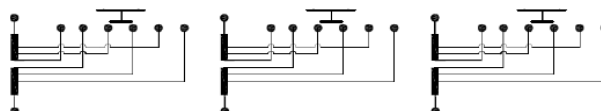
Rated Voltage KV	Power-frequency withstand Voltage 1min KV		
	To earth	Interphase	Inter contactor
30~36	70	70	25

THREE-PHASE TAP CHANGER

- off-circuit operation
- used in mineral oil or silicon oil
- 30KV-36KV
- 30A
- 5 positions
- regulation 2.5% per position

-operating material is engineering plastics

Skeleton Diagram of
Voltage Regulating



Type of tap changer	L	B	C	D	Ød1	Ød2	H	Holes on tank cover(mm)
30KV 30A 5POS 3PH L=70MM	530	80	80	80	Ø3.1	Ø5	70	Ø20.5 ^{+0.5}

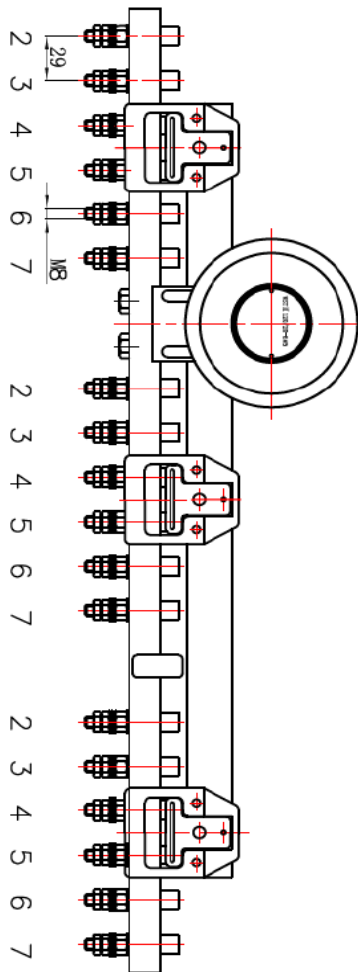
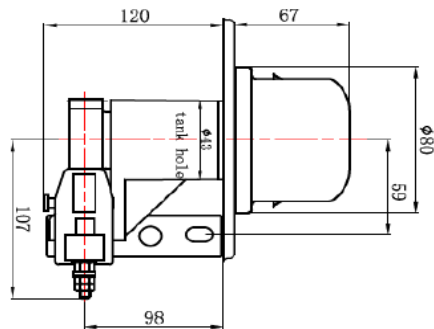
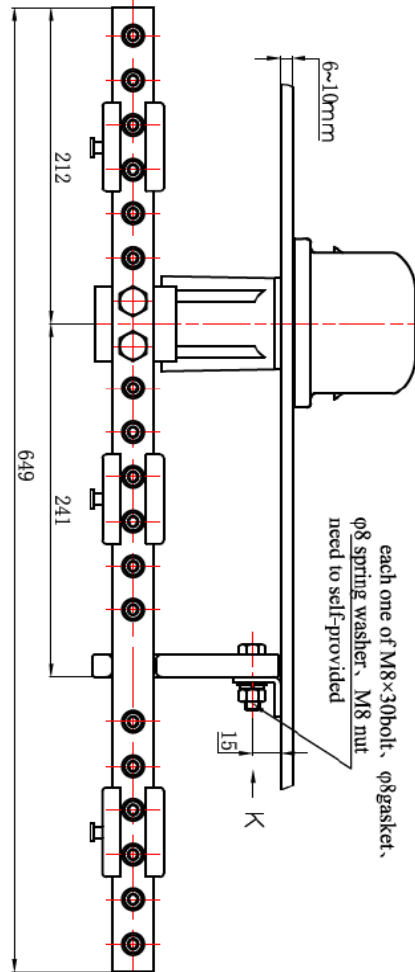
OCTC Drawing: 24KV 120A 5POS 3PH L=120 MM

120A, 20KV, 5 positions

Note: 1. this type applies to oil-immersed power transformer
2. transformer top tank installation

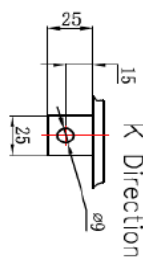
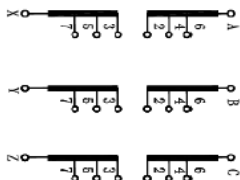
metsonpower

MP Transformer SUPPLIERS EKİPMANLARI MAKİNE İTH. İHR. SAN. VE TİC.
A.Ş. İvedik O.S.B. Mah. 1351 Cad. No:1 YENİMAHALLE/ANKARA TÜRKİY P.0.06978



Rated Voltage KV	KV Range	Power-frequency withstand Voltage 1min KV		
		To earth	Inter phase	Inter contact
20	±2×2.5%	55	55	20

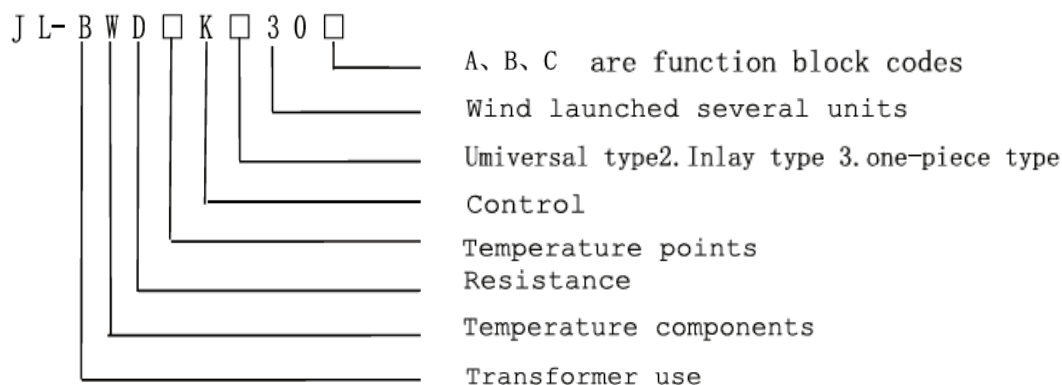
Skeleton Diagram of Voltage Regulating



The Temperature Control Instrument of JL-BLD series transformer belongs to the new generation of intelligent-type of product, specially designed for the safe operation of the dry-type of transformer, it adopts the new type of software anti-interference design, and can make corresponding judgment according to the condition of the rising temperature of the transformer to control turning on or turning off the cooling wind machine to reduce the transformer temperature and improve the transformer load ability. It also can have a warning function when there happens something special, it is essential, it is essential auxiliary equipment for the dry-type transformer to operate safely.

This temperature controller has the display of the temperature of three-phase winding/Top-phase and can make the mutual switch of the two functions; input the open circuit and fault self-check, display and output over-temperature alarm, the functions of indicating value compensation and storage, the automatic/manual control of the on-off of the blower, over-temperature trip display and output, blower's timing start and output function check. For the blower to control the active output can directly parallel 6 one-phase blowers, and can provide RS485/232 serial communication function (communication distance 1200m) according to the requirement of the user, the environment temperature of the machine room of road and control output, or the temperature measurement of iron core of the transformer of road and alarm output.

Type



Main function block

A: 3-phase travel/max. phase temperature display and both shift reciprocally; input open loop and default self-detective display and output; over temperature alarm display and output; value compensation and "black box" function. Ventilator automatic/manual ON/OFF control; over temperature trip display and output; Ventilator timer ON and output function detection; Ventilator control active output can directly connect with 6 single phase ventilator.

B: RS485/232 ;

B: RS485/232 serial communication function (communication distance 1200m);

C: 三 4-20mA

C: 3-phase synchronous 4-20mA analog current independent output;

The screen adopts LED, which shows temperature of three phase winding separately.

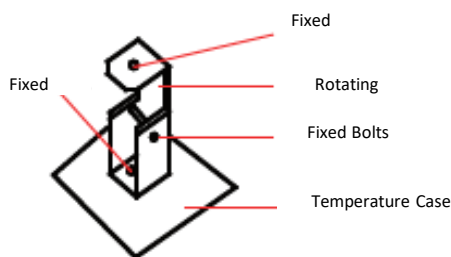
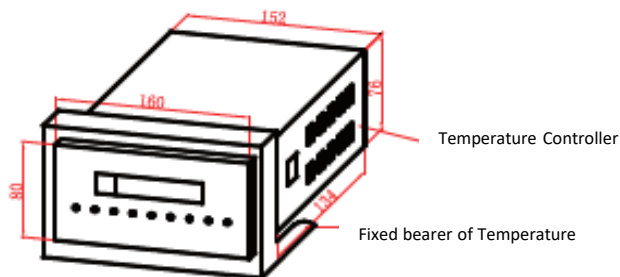
Universal type

(External dimension) : 80×160×145

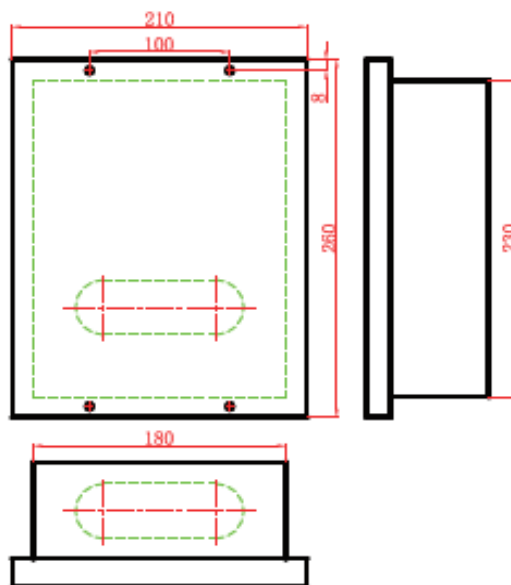
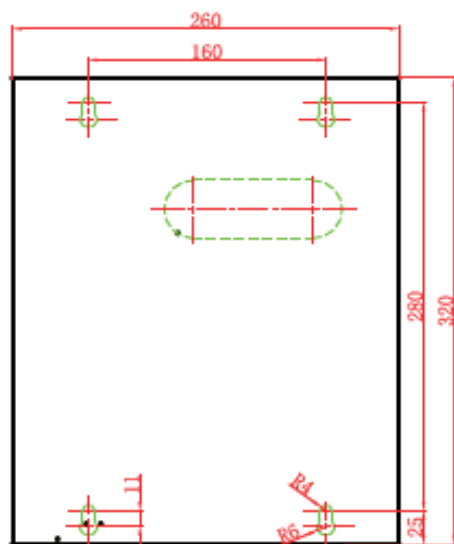
(Bore dimension) : 77×153

(Application): medium and small dry-type transformer

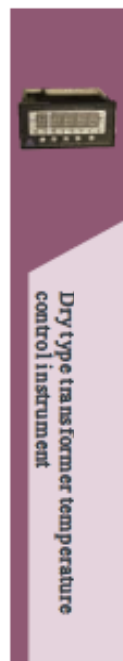
Dry type transformer temperature control instrument



One-piece type
External dimension : 320 x 260 x 65
Application : Large and medium dry-type transformer



Inlay type
External dimension : 210 x 260 mm
Bore dimension : 185 x 235 x 70 mm
Application : Large and medium dry-type transformer



Our Promising About the Quality

Our company promises that we will provide products of good quality to customers and satisfy all requirements from customers. The details are as follow;

1. Our products will meet the relevant standards of nation and line of business, the requirement in drawing submitted by buyer and technological documents, which will not be changed by us, any change should be agreed by buyer in written form.
2. If our products do not meet the standards of nation or the requirement submitted by buyer, the buyer has the right to refuse to accept the products or return the products to us.
3. The guarantee period is one year from the day when the products are sold. In the guarantee period, we provide three guarantees. If the quality problem is caused by the producing reasons of our company, we will burden the expense on returning the products, exchanging the products.
4. In the guarantee period, if the quality Problem of the products is caused by the producing reasons of our company and the products should be repaired at working field, we will send person to repair them. The repair persons will arrive at the working field within 48 hours, and the cost will be on our company. We will burden the loss to the buyer too.
5. If the quality problem happens out of the guarantee period, or caused by improper operation and the products should be repaired at working field, we can send person to repair them. The repair persons will arrive at the working field within 48 hours, but we will charge some breakeven cost in accordance with the practical situation.

Order rubes

1. When ordering the non-excitation tap changers, please provide the needed type, name, code specification, quantity of the product, date of delivery, wiring area(square), length, outgoing lines number, dimension of open hole and height of paper roll.
2. If the insulating requirement is not given, we shall supply the goods according to the stipulation in GB10230.1-2007 《Non-excitation Tap changer》.
3. When ordering the load tap changer, please provide:
 - a) Capacity of Transformer (KVA), Number of Tapping places
 - b) Rated Voltage (KV) Rated current (A)
 - c) Method of Voltage Regulation (Neutral point, Central, Terminal);
 - d) Range of voltage Regulation ($\pm 2.5\%$, $\pm 5\%$);
 - e) Length of Cable wire (Giving 15m for the switch, if wanting to lengthen, please give an explanation)

If ordering the tap changer for a special use, please provide: the related technical parameter, including type, name of transformer, rated voltage, capacity, grade voltage, range of voltage Regulation, wring method, mounting method and the related connecting diagram etc., for us to design specially and ensure the quality and delivery period.

Every Customer is Welcome to Come Ordering

Our company gravely gives our customers the promise: Quality first, Customer Supreme, Non unqualified product is allowed to leave the factory. If there is any problem in quality in the products left the factory, we guarantee to exchange, we seek to live on relying on quality and seek to develop depending on variety. Our company will advance together with vast customers hand in hand with our first rate service.