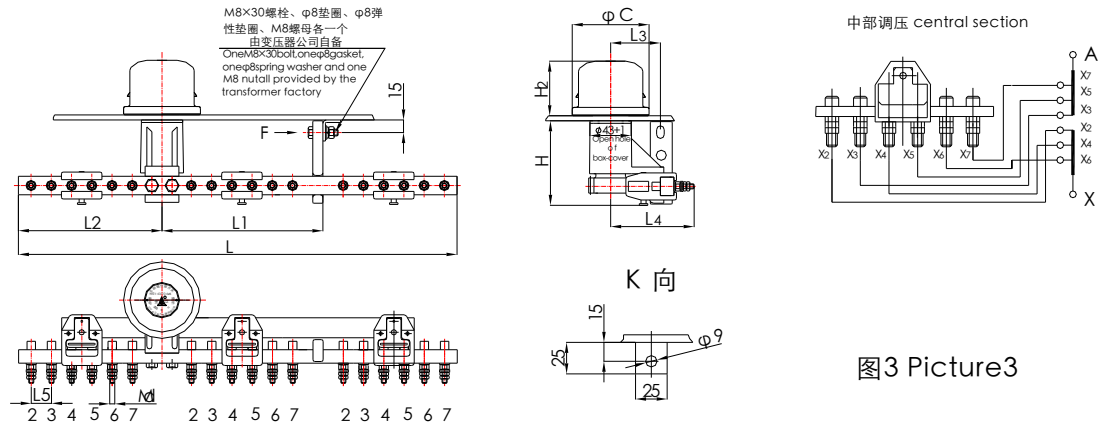


10. 中部调压条型分接开关外形、安装尺寸图 Outline Diagram and Mounting Dimension List of the Central Voltage Regulating Strip tap changer



WST系列无励磁分接开关

OFF-CIRCUIT BAR-FORM TAP-CHANGE

安装使用说明书

OPERATION INSTRUCTION

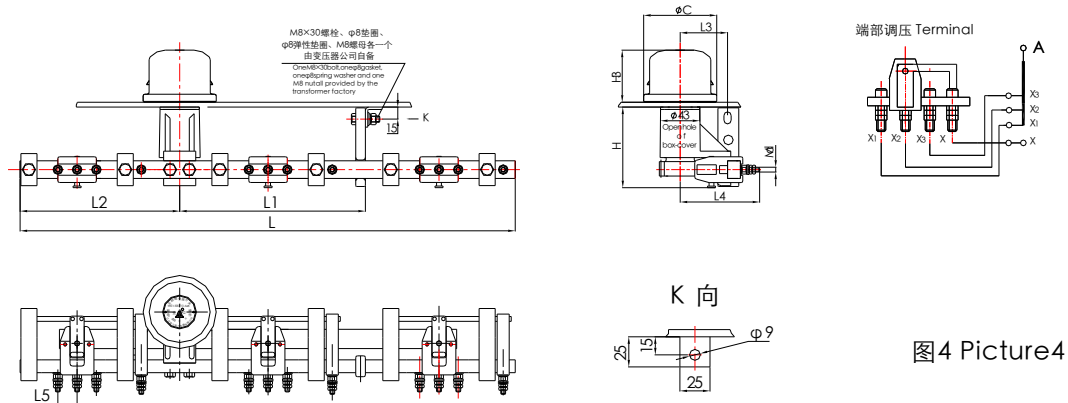
11. 端部调压条型分接开关外形图、安装尺寸图

The outline Diagram and Mounting Dimension List of Terminal Voltage Regulating Strip Tap changers

开关型号
Product Type

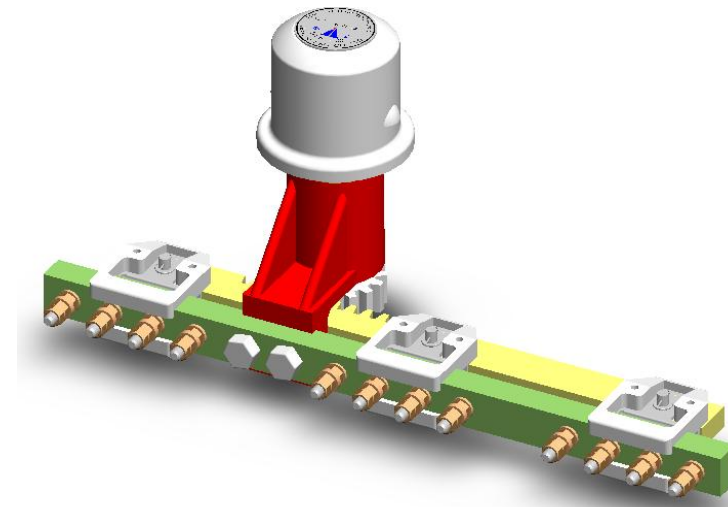
Phase

Voltage Regulating Place	number	调压部位		安装尺寸mm							H	ΦC	H2	
		number	调压部位	L	L1	L2	L3	L4	L5					
WST II 63/10-4×3 (D)			中部	63	10	3								
Middle part	376	143	122	59	99	24	96	80	67					
WST II 3 63/10-4×3				376	143	122	54	89	24	96				
WST II 125/10-4×3	125			431	163	142	59	107	29	100				
WST II 3 125/10-4×3				431	163	142	54	97	29	100				
WST II 250/10-4×3	250			431	163	142	59	112	29	100				
WST II 63/20-4×3 63	20			426	168	137	59	99	24	120				
WST II 125/20-4×3	125			475	183	154	59	107	29	120				
WST II 250/20-4×3	250			530	203	169	59	112	34	120				
WST II 63/10-6×5 (D)	63	10		520	191	170	59	99	24	96				
WST II 3 63/10-6×5				520	191	170	54	89	24	96				
WST II 125/10-6×5 (D)	125			605	221	200	59	107	29	102				
WST II 3 125/10-6×5				605	221	200	59	97	29	100				
WST II 250/10-6×5Z	250			800	316	282	67	112	29	102	105	75		
WST II 63/20-6×5 63	20			570	216	185	59	99	24	120	80	67		
WST II 125/20-6×5	125			649	241	212	59	107	29	120				
WST II 250/20-6×5Z	250			856	331	298	67	112	34	120	105	75		
WST II 63/10-8×7 63	10			674	244	223	70	110	24	100	80	67		
WST II 125/10-8×7	125			783	279	258	70	123	29	100				
WST II 63/10-10×9 63				818	292	271	70	110	24	100				
WST II 63/35-4×3 35				526	218	157	59	103	24	120				
WST II 125/35-4×3 125				580	228	179	59	107	34	120				
WST II 250/35-4×3 250				580	228	179	59	112	34	120				
WST II 63/35-6×5 63				670	266	205	59	103	24	120				
WST II 63/40.5-6×5 40.5				670	266	205	59	103	24	120				
WST II 125/35-6×5 125	35			784	296	247	59	107	34	120				
WST II 250/35-6×5Z 250				1042	426	367	67	112	34	120	105	75		
WST II 63/35-8×7 63				814	314	253	70	119	24	120	80	67		
WST II 125/35-8×7 125				883	329	278	70	128	29	120				



开关型号
Product Type

额定电流
A
Rated



辽宁金立电力电器有限公司

LIAONING JIN LI ELECTRIC POWER EQUIPMENT CO.LTD

地址：辽宁省丹东市振安区同兴镇

Address: Tongxing Zhen'an District Dandong City Liaoning Province

电话Tel: 0415-6134555 (Telephone exchange) 传真Fax: 0415-6131000

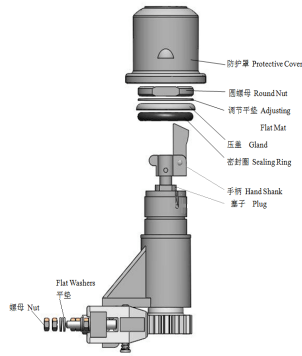
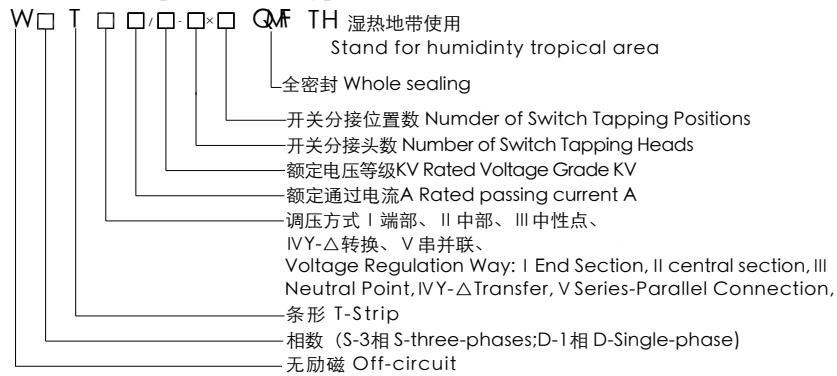
1. 用途及使用范围Application and operating principle

本系列分接开关适用于频率50Hz、60Hz,额定电压等级为10KV~35KV, 额定通过电流63A~250A的油浸式电力变压器。**当需要调整电压时, 必须将变压器从网络上切除。**使变压器在无励磁的情况下改变变压器初级线圈匝数, 以实现变压器电压调整的目的。达到调整次级输出电压的目的。

This series of tapping switches are suitable for the oil immersed transformer with frequency 50HZ、60HZ, rated voltage 10KV~35KV, rated current 63A~250A. **When needing to regulate voltage, must have the transformer cut off from coil of transformer,** be changed under no-load condition so as to realize the purpose to regulate the voltage of the transformer; and reach the purpose to regulate the secondary-grade output voltage.

2. 型号说明 Explanation of types

图1 Picture1



3. 工作The principle of operation

通过手柄往返旋转带动齿条机构运动, 齿条带动动触头水平移动, 以改变开关的分接位置, 从而改变变压器初级线圈的匝数, 达到改变变压器的变化, 调整次级电压的目的。

Driven through the handle from rotating rack body movement, led moving contacts horizontal rack to change the tap position of the switch, thereby changing the transformer primary winding turns, to change the transformer changes, adjust the secondary voltage of purpose.

4. 主要技术参数Major Technical Parameter

规格 Specificatons	WST 63	WST 125	WST 250	WST 300
相数 Phase number	三相 three-phases			
接线方式 Wiring way	中部调压 (II)	中性点调压 (III)	端部调压 (I)	
	Central section(II)Neutral Point(III)End Section(I)			
额定通过电流 (A) Rated through current(A)	63	125	250	300
短路能力 Short-circuit capacity	热稳定 (KA/2s) Heat stableness current(KA/2s)			
	1.26	2.5	3.75	3.9
动态稳定 (KA) Dynamic stableness current(KA)	3.15	6.25	9.375	9.75
额定频率 (Hz) rated frequency	50~60			

绝缘水平 (KV)

Insulation level(KV)	额定电压等级 (KV) Rated Voltage	10KV	20KV	35KV
----------------------	---------------------------	------	------	------

工频耐受电压 (50Hz/1min)
Power-frequency withstand Voltage (50Hz/1min)

42KV	5KV	95KV	冲击 (1.2/50μs)	75KV	125KV	250KV
密封性 (KPa/24h) Sealing Performance (KPa/24h)	60					
机械寿命 (千次) Machine life(Thousands of times)	2					

- WST 63A/10KV~35的分接开关适用于变压器箱盖厚度为5~8mm; 静触头接线螺栓Md=M6。
- WST 125A/10KV分接开关适用于变压器箱盖厚度为6~10mm; 静触头接线螺栓Md=M8。
- WST 250A/10KV~35KV分接开关适用于变压器箱盖厚度为8~12mm; 静触头接线螺栓Md=M10。
- WST 125A/35KV分接开关适用于变压器箱盖厚度为8~12mm。
 - WST 63A/10KV~35KV this type of tan changer applies to the box-cover of the transformer 5~8mm; the static Contact wiring bolt Md=M6
 - WST 125A/10KV this type of tan changer applies to the box-cover of the transformer 6~10mm; the static Contact wiring bolt Md=M8
 - WST 250A/10KV~35KV this type of tan changer applies to the box-cover of the transformer 8~12mm; the static Contact wiring bolt Md=M10
 - WST 125A/35KV this type of tan changer applies to the box-cover of the transformer 8~12mm。

5. 安装程序Installation procedure

见图1: 旋下防护罩, 旋下圆螺母, 取下调节平垫、压盖、密封圈, 将以上零件放到一起, 不要丢失。然后将开关手柄竖起来从箱盖下面

向上伸出, 将密封圈, 压盖, 调节平垫, 圆螺母依次装到开关上, 并将开关尾端支板与变压器的固定板用M8螺栓固定住, **注意一定要保证开关的本身与箱盖平行以保证主传动部分的齿轮齿条正确啮合。**

Figure 1: screw off the protective cover, screw off the adjustment ring. And then erected upward switch handle, from the lid out below put seal ring, gland, adjustment ring, round nut loaded into the switch in turn, and switch the transformer end of the support plate and fixed plate with M8 bolted to live, pay attention to make sure the switch body and the lid parallel to the main drive in order to ensure the correct part of the gear rack teeth together.

6. 使用注意事项Caution for operation

警告 Warning

变压器必须处在无励磁状态下, 方能调节分接开关档位。

The transformer should be in the won-excitation condition, can change the tap gears.

- 使用环境温度: 空气中-25℃~40℃, 油中-25℃~100℃。
- 安装场所应无爆炸与腐蚀性气体。

6.8 根据变压器箱盖厚度确定是否需要调节平垫及平垫的个数, 请将调节平垫加安在分接开关圆螺母下。

6.9分接开关干燥后, 必须将静触头与动触头滴上变压器油后方可旋转开关, 组装前应将分接开关来回旋转5~8次。

6.10说明书中的分接开关安装方式为: 箱顶式安装

6.1 Use of environmental temperature: in air -25 °C ~ 40 °C, in oil -25 °C ~ 100 °C.

6.2 Installation places should not be explosive and corrosive gases.

6.3 Before tap-assembled, be sure to check whether the tapping switch could meet the transformer type requirements, so as to avoid unnecessary losses.

6.4 Transformer tap-tap-lead can not be too short, and eliminate the lead tension in the assemble so as to avoid switching operation of the insulating rod deformation lead to poor contact and torque too large.

6.5 Tap should be on the 105 °C ±5 °C oven or dry transformers with the body of 24 to 48 hours to the influx of dry tap before installed and use, such as oil leakage along the shaft, tighten the stopper, if the oil leaks along the transformer lid, tighten the round nut.

6.6 When the switch unit is in the limit is strictly prohibited forced to slid the handle to the direction of limit.

6.7 After completing the exchange of switch, and then fretting about the handle several times, it shall put handle vertical, natural notch into the stall inside the flange, and tighten the protective cover to prevent the transformer burned in operation ran but will switch contact transformer, protective cover is rain-proof device as well as a limit switch protection device, it must be tightened, do not lose.

6.8 According to the thickness of transformer to determine whether the lid needs to adjust the number of flat and flat pad, please add the adjust flat pad under the round nut of the tap changer.

6.9 Tap-dried, must drop the transformer oil on static contact and moving contacts then rotary switches. rotate back and forth the tap 5~8times before assembly.

6.10 In the operation instruction, the installation method of the tap changer is roof type installation

7. 维护Maintain

操作必须在变压器完全从电网上切除, 在变压器无励磁的情况下进行。

7.1 见图1: 旋下防护罩, 竖起手柄, 往返旋转手柄5~8个循环, 然后将手柄旋到需要的分接位置上, 再左右微动手柄几次, 将手柄垂直、自然卡入定位槽中, 再将上述各件复原, 有条件的最好对其接触情况测量, 以验证其接触可靠性。

7.2 开关在正常运行时, 为了防止锈蚀保证转动的灵活性, 每两年至少进行一次维护。方法同7.1。

7.3 一般故障维护方法: 当箱盖密封出现渗油现象时, 应调节圆螺母松紧, 失效时应及时更换 密封圈。当开关轴上出现渗漏油时拧紧调节塞子。

Operation of the transformer must be removed completely from the electricity grid, in the transformer without excitation of the circumstances.

7.1 Figure 1: screw off the protective cover, stick up the handle, rotate the handle from 5 to 8 cycles, and then rotating the handle to the desired tap position, and then fretting about the handle several times, put the handle vertical, natural to card into the slot position, and then recover the above-mentioned pieces, if there is conditions, it is best to its exposure measurements to verify the reliability of their contacts.

7.2 When the switch in normal operation, in order to prevent corrosion to ensure the flexibility of rotation, maintain less than once every two years. Approach with method 5.1.

7.3 General maintenance methods

When the lid seal oil leakage phenomenon occurs that there should be regulation round nut, elastic, failure should be timely replace the seal ring. When the switch leakage of oil occurs on the switch axis should tighten the regulation stopper.

8. 贮存、运输Storage、transportation

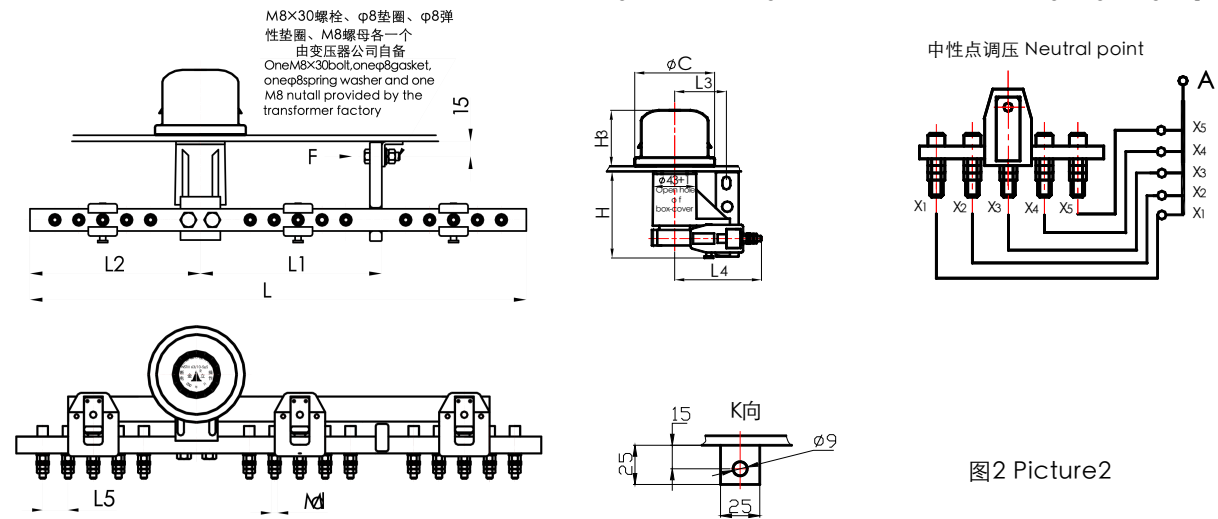
8.1 存放在空气流通, 阴凉, 干燥, 无腐蚀性气体的环境中。

8.2 在运输途中应小心轻放, 严禁冲击, 防水防潮。

8.1 Deposited in the air circulation, cool, dry, non-corrosive gas environment.

8.2 In transit should be handled be care, non-impact, waterproof and anti-moisture.

9. 中性点调压条形分接开关外形、安装尺寸图Outline Diagram and Mounting Dimension of Neutral Point Voltage Regulating Strip tap changer



开关型号	Product Type	额定电流
A	Rated Current	额定电压KV
	Rated Voltage	相数
	Phase number	调压部位
	Voltage Regulating Place	安装尺寸mm
	Install dimension	mm

	L	L1	L2	L3	L4	L5	H	ΦC	H3
WST III 63/10-3×3	63	10	3						

中性点

Neutral point	362	139	122	59	99	24	96	80	67
WST III 125/10-3×3	125			394	149	133	59	107	29
WST III 250/10-3×3	250			394	149	133	59	112	29
WST III 63/20-3×3	63	20		362	139	122	59	99	24
WST III 125/20-3×3	125			394	149	133	59	107	29
WST III 250/20-3×3	250			446	169	144	59	112	34
WST III 63/10-5×5	63	10		506	187	170	59	99	24
WST III 125/10-5×5	125			568	207	191	59	107	29
WST III 63/20-5×5	63	20		506	187	170	59	99	24
WST III 125/20-5×5	125			568	207	191	59	107	29
WST III 63/10-7×7	63	10		650	235	218	70	99	24
WST III 125/10-7×7	125			742	265	249	70	123	29
WST III 63/35-3×3	63	35		362	139	122	59	103	24
WST III 125/35-3×3	125			424	159	143	59	107	34
WST III 250/35-3×3	250			424	159	143	59	112	34
WST III 63/35-5×5	63			506	187	170	59	103	24