

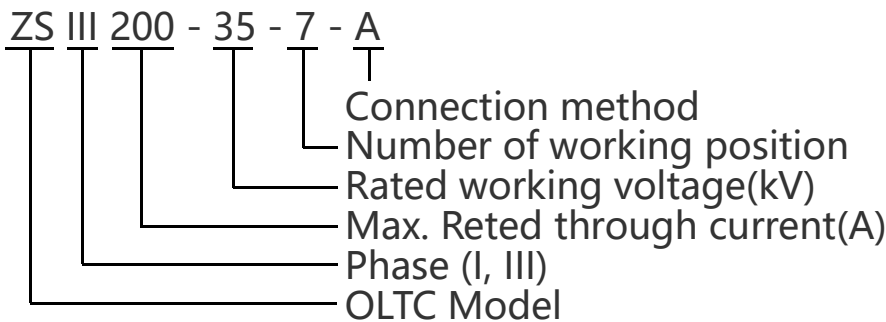
## ◎ Product Introduction

The ZS series on-load tap changer is suitable for the tap connection of oil-immersed power transformers or industrial transformers with rated voltages of 10kV, 35kV, maximum rated through currents of 100A, 200A, 400A, and rated frequency of 50Hz to change the voltage regulating coil under load. The position changes the transformation ratio to achieve the purpose of improving power quality.

The on-load tap-changer is equipped with YK-3A and YK-4A controllers to realize manual, automatic and remote control of the on-load tap-changer.



## ◎ Model Description



Note 1: Pressure regulation method:

- (Neutral point linear regulation, without neutral point output)
- DA (Delta connection linear regulation)
- A1 (Neutral point linear regulation, with neutral point output)
- B (Middle bridge)
- X1, X2 (for arc suppression coil)

Note 2: The simple OLTC has the following models:

- 100A neutral point voltage regulation: ZSIII100-10-9-A
- 200A neutral point voltage regulation: ZSIII200-35-7-A
- 200A jumper voltage regulation: ZSIII200-35-9-B
- 400A jumper voltage regulation: ZSIII400-35-7-B
- 200A corner wiring voltage regulation: ZSIII200-9-35-DA
- 100A corner wiring voltage regulation: ZSIII100-10-9-DA
- 200A jumper voltage regulation: ZSIII200-35-7-B
- 400A neutral point voltage regulation: ZSIII400-35-7-A
- 200A angle wiring voltage regulation: ZSIII200-7-35-DA

## © ZS 10kV Technical Data

Item	Model	ZSIII100-A	ZSIII200-A	ZSIII100-X2	ZSIII100-X1			
1	Max.rated through current (A)	100	200	100	100			
2	Rated frequency (Hz)	50 or 60						
3	Phase	3	3	1	1			
4	Connection method	Y / D	Y	Arbitrary	Arbitrary			
5	Withstand short circuit capacity (kA)	Thermal (3s)	2	4	2	2		
		Dynamic (peak)	50	10	5	5		
6	Max.rated step voltage (V)	300	300	300	1000	600		
7	Max. working positions	9	9	9	9	11, 14		
8	Insulation level kV	Rated voltage	10					
		Max. service voltage	12					
		Impulse withstand voltage (1.2/50 $\mu$ s)	75	75	75	75	75	
		Power frequency withstand voltage (50Hz, 1min)	To the ground	35	35	35	34	35
			Interphase	18	35	18	-	-
		Max and min taps Between adjacent contacts	Max and min taps	18	18	18	35	25
Between adjacent contacts	18		18	18	30	18		
9	Mechanical life	> 500000 times						
10	Electrical life	> 50000 times						
11	Sealing test	Work pressure	0.03MPa					
		Test pressure	No leakage under 0.08 MPa for 24 hours					
12	Weight (without oil) kg	50	80	35	60			
13	With automatic controller	YK-4A						

Note: ZSIII100 is a single-resistance transition method, which is only used for transformers with the same power direction. It is not suitable for connecting transformers. The tap position of tap changer "1" must be connected to the tap with the most turns of the transformer coil.

## © ZS 35kV Technical Data

Item	Model	III200-A	III200-B	III200-DA	I100-X1	I200-X1	
1	Max.rated through current (A)	100	200	200	100	100	
2	Rated frequency (Hz)	50 or 60					
3	Phase	3	3	3	1	1	
4	Connection method	Y(Neutral point)	Y/D (Bridge)	Y/D	Arbitrary	Arbitrary	
5	Withstand short circuit capacity (kA)	Thermal (3s)	4	4	2	4	
		Dynamic (peak)	10	10	5	10	
6	Max.rated step voltage (V)	600		500			
7	Max. working positions	10	9	10	11, 14	14	
8	Insulation level kV	Rated voltage	35				
		Max. service voltage	40.5				
		To the ground	Impulse withstand voltage 1.2/50 $\mu$ s	85			
			Power frequency withstand voltage 50Hz, 1min	200			
		Interphase	Impulse withstand voltage 1.2/50 $\mu$ s	85	-	-	35
			Power frequency withstand voltage 50Hz, 1min	200	-	-	-
		Between max & min tap	Impulse withstand voltage 1.2/50 $\mu$ s	45	-	25	18
			Power frequency withstand voltage 50Hz, 1min	105	-	-	-
Between adjacent contacts	Impulse withstand voltage 1.2/50 $\mu$ s	10	-	18	18		
	Power frequency withstand voltage 50Hz, 1min	30	-	-	-		
9	Mechanical life	> 500000 times					
10	Electrical life	> 50000 times					
11	Sealing test	Work pressure	0.03MPa				
		Sealing test	No leakage under 0.08 MPa for 24 hours				
		Overpressure protection	Blasting cap blast at 300KPa $\pm$ 20%				
		Protection relay	oil flow speed set at 1.0m/s $\pm$ 10%				
12	Weight (without oil) kg	150		60			
13	With automatic controller	YK-3A					