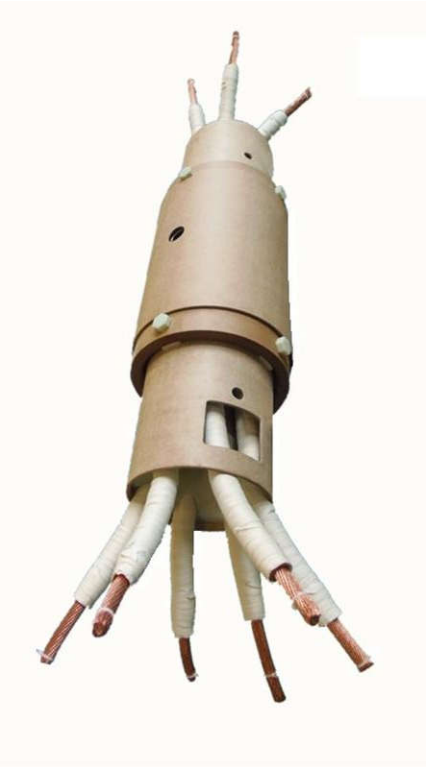
ZWG OFF CIRCUIT TAP CHANGER

◎ Product Introduction

ZWG Off circuit drum tap changer is independently developed by Guizhou Changzheng Electric Co., Ltd. The maximum working voltage of this product is 252kV, the maximum rated through current is 3000A, and the partial discharge is ⩽ 10pc. With multiple patented technologies, it is especially suitable for non-excitation voltage regulation of traction transformers, and also used for voltage regulation of various oil-immersed power transformers and industrial transformers.

ZWG Off circuit tap changer breaks through the defects of drum switch contacts over dead point shifting for many years, adopts dynamic and static contact automatic unloading force technology, removes the moving contact pressure when shifting, and increases the moving contact pressure when working , The moving contacts are disengaged during the shifting process, the closing feel is very strong, and the shifting torque is small; this product also solves the technical problems of inconvenient and inaccurate installation of the non-excited drum switch for many years, and it is easy to maintain.

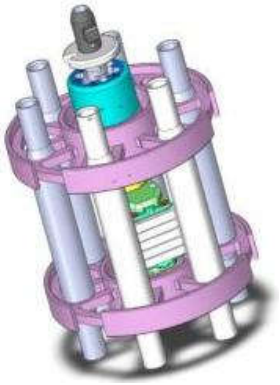


◎ Model Description

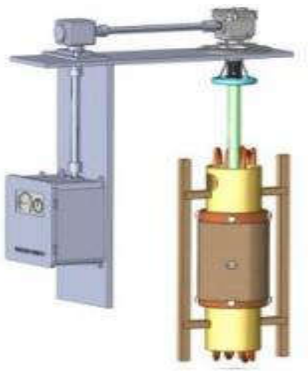
ZWG Ⅰ 630-252-6×5-B 1 2-D1 J X-P

- P: Fully shielded structure
- X: Operating mechanism with remote position display contact
- J : Operating mechanism with safety lock contact
- Operation method:
  (D1 Side manual, D2 Side motor, No mark - head manual)
- Tap changer insuallation method: 1 clip type, 2 floor type
- Wiring method:
  1 axial single outlet, 2 axial double outlet, 3 radial single outlet
- Voltage regulating method:
  A neutral point linear regulating, B single bridge connection,
  DA angle wiring sex regulating, C double bridge connection,
  D series-parallel connection, E star-delta conversion,
  F neutral point reversing regulating, DF Delta connection reversing regulating
- Number of tap position
- Number of winding taps
- Maximum voltage of tap changer (kV): 12, 40.5, 72.5, 126, 252
- Maximum rated through current (A): 300, 630, 800, 1000, 1600
- Tap changer phase (Ⅰ, Ⅱ, Ⅲ, 1+2)
- Structure (G: Drum type)
- CZ's OCTC

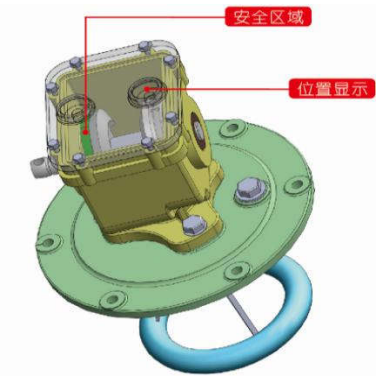
◎ Product features



Use dynamic and static contact automatic unloading technology. Remove the pressure of the moving contact when shifting and increase the pressure of the moving contact when working. The moving contact feels very strong when the moving contact is disconnected and closed during the shift.



Using self-locking technology for installation and positioning. Solve the installation problems, reliable, accurate and simple installation and connection, effectively prevent inaccurate installation of the transformer factory, ensure the reliable operation of the tap changer, and improve its reliability.



Adopt incomplete bevel gear transmission technology of operating mechanism The output angle is accurate to ensure the reliable operation of the tap changer; the input angle tolerance range is wide, and the input safety position area display is set, which is convenient for installation, connection and operation with high reliability.

◎ZWG Technical Data Performance parameters (subject to contract technical requirements)

1	Tap changer model		ZWG Ⅰ 630	ZWG Ⅰ 1000	ZWG Ⅰ 1600	ZWG Ⅰ 2000	ZWG(1+2)630	ZWG(1+2) 1000	ZWGⅢ 630	ZWGⅢ 1000
2	Phase		Single phase				1+2phase		3phase	
3	Working frequency (Hz)		50/60							
4	Rated through current (A)		630	1000	1600	2000	630	1000	630	1000
5	Short circuit capacity (kA)	Thermal (3s)	6.3	10	16	20	6.3	10	6.3	10
		Dynamic (peak)	15.75	25	40	50	15.75	25	15.75	25
6	Insulation level	Voltage level (kV)	10	35		66	110		220	
		Max. working voltage (kV)	12	40.5		72.5	126		252	
		Power frequency voltage (50Hz, 1min) To ground	45	100		160	230		460	
		Power frequency voltage (50Hz, 1min) Between moving & fixed contacts	20	30		45	55		90	
		Power frequency voltage (50Hz, 1min) Interphase	45	100		160	230		/	
		Impulse withstand voltage (1.2/50μs) To ground	100	230		350	550		1050	
		Impulse withstand voltage (1.2/50μs) Between moving & fixed contacts	70	90		150	175		285	
		Impulse withstand voltage (1.2/50μs) Interphase	100	230		350	550		/	
7	Drying temperature (℃)		Vacuum drying 110, Air phase drying 125							
8	Wiring		B Single bridge connection, F Neutral point reversing regulating, DF Delta connection reversing regulating							
9	Operation method		D1 Side manual, D2 Side motor, Head manual							
10	Number of tap positions (max)		9							
11	Contact resistance between moving and fixed contacts		≤350μΩ							
12	Partial discharge (pC)		≤50							
13	Sealing performance		6×10^4 Pa 24h No leakage							
14	Mechanical life		>100000 times							

Note: 1. The insulation distance of the tap changer to the ground, coil and other accessories is considered by the user, and sufficient insulation distance should be ensured during design;
2. The partial discharge of the switch with a fully shielded structure can be lower (less than 10pC);
3. Please contact us if you need other performance parameters.