



TYPE WDG/WLG/WSG OFF-CIRCUIT TAP CHANGER

Shanghai Huaming Power Equipment Co., Ltd.



TYPE WDG/WLG/WSG OFF-CIRCUIT TAP CHANGER

Type designation A-- Leads from middle; B-- Leads from two ends C--Without fixed leads Number of operation position Contact pitch in circle The highest voltage for equipment (kV) Maximum rated through current (A) Connection method (refer to table 1) Drum structure D--Single phase; L--Two phases; S--Three phases Off-circuit tap changer

Table 1 Tap Changer Basic Connection Method and Mark

Mark	IV	V	VI	VII	VIII	II
Connection	Linear	Single-bridging	Y-D change-over	Double-bridging	Series-parallel Change-over	Reversing



Type A 1 phase/2 phases/3 phases Leads from middle of radial



Type B Single phase Leads from axial



Type C 3 phases Without fixed leads

Features

- Compact structure, easy connection, save the transformer space.
 The moving contact support frame equips with guides, make the tap changing smoothly and reliably.
 The transmission components of the tap changer is made of Low-magnetic materials, to avoid any magnetic flux leakage effect.
- Reliable orientation, better feeling for manual operating.
 Adopt epoxy glass fiber insulation cylinder, to ensure the better mechanical characteristics and electric strength.
- Suitable for both standard tank and bell-type tank transformer.
 Operation method including top manual, side manual from top transmission or from bottom transmission, motor driving at side.

Technical Parameter

Table 1-1 Drum Series Off-Circuit Tap Changer Technical Data

Item		WDG (single phase), WLG (2-phases), Type A											
1	No. of Phase			1-phase / 2-phase									
2	Max. rated through current(A)			250	300	400	500	600	800	1000	1250	1600	2000
	Short circuit current test (kA) Thermal (3s) Dynamic (Peak)		5	5.4	6	7	8	10	12	14	16	20	
3			12.5	13.5	15	17.5	20	25	30	35	40	50	
4		Connect	ion	Linear (IV), single-bridging (V), Y-D change-over (VI), Double-bridging (VII), series-parallel (VIII) ,reversing (II)									
5	Rated frequency (Hz)			50 or 60									
6		Maximum operati	on positions		5(IV) 7(V,VII) 2(VI,				, VIII)	VIII) 7(II)			
	g The hig		oltage for equipment		12		40.5		72.5		126		
7	Insulation to earth(kV)		urce AC withstand voltage 0Hz, 1min)		3	35	88	5	1	40	23	0	
	e e	Rated lightning impulse withstand voltage (1.2/50)			75		20	0	350		550		
8	Internal insulation			Refer to clause 4.4 of technical data									
9	Operation method				Manua	al opera	ition on	top or	at side,	motor	driving	at side	

- Remark: 1. For linear (IV) and single-bridging (V), the max. rated through current can be up to 2000A and the highest voltage for equipment can be reached to 126kV
 - 2. For Y-D change-over (VI) and series-parallel (VIII), the max.rated through current can be up to 1000A and the highest voltage for equipment is 40.5kV
 - 3. For double-bridging (VII), the max.rated through current can be up to 1000A and the highest voltage for equipment can be reached to 126kV
 - 4. For reversing (II), the max.rated through current can be up to 1600A and the highest voltage for equipment can be reached to 126kV

Table 1-2 Drum Series Off-Circuit Tap Changer Technical Data

Item		Туре	WSG (3 phases), Type A										
1		No. of Ph	3-phase										
2		Max. rated throug	250	300	400	500	600	800	1000				
3	Short circuit current test (kA) Thermal (3s) Dynamic (Peak)		5	5.4	6	7	8	10	12				
			12.5	13.5	15	17.5	20	25	30				
4	Connection				Linear (IV), single-bridging (V), reversing (II)								
5	Rated frequency (Hz)				50 or 60								
6		Maximum operation	on positions	5(IV) 7(V,II)									
	to _	The highest v	oltage for equipment		12	40.5		72.5	126				
7	Insulation t earth(kV)	'	urce AC withstand voltage DHz, 1min)		35	85		140	230				
	lns e	Rated lightning impulse withstand voltage (1.2/50)			75	200		350	550				
8	Internal insulation				Refer to clause 4.4 of technical data								
9		Operation m	Manual operation on top or at side, motor driving at side										



Technical Parameter

Table 1-3 Drum Series Off-Circuit Tap Changer Technical Data

Item		WDG (single phase), Type B											
1		Single phase											
2	Max. rated through current(A)					250 300 400 500 600 80						1600	2000
	Short circuit current test (kA) Thermal (3s) Dynamic (Peak)		5	5.4	6	7	8	10	12	14	16	20	
3			12.5	13.5	15	17.5	20	25	30	35	40	50	
4	Connection			Linear (IV), single-bridging (V)									
5	Rated frequency (Hz)			50 or 60									
6	Maximum operation positions			5									
	The highest voltage for equipment			12	40.5		7	2.5	126		25	2	
7	Insulation to earth(kV)		urce AC withstand voltage DHz, 1min)	;	35		85 14		40	230		46	0
	Insu	Rated lightning impuls	se withstand voltage (1.2/50)	75 20		00	325		550		105	0	
8	Internal insulation				Refer to clause 4.4 of technical data								
9	Operation method				Manua	al opera	ition on	top or	at side,	motor	driving	at side	

Table 4 Table 1-4 Drum Series Off-Circuit Tap Changer Technical Data

	Itam Tuno WSC /2 phages) Tuno C													
Item		Туре			WSG (3 phases), Type C									
1	No. of Phase				3-phase									
2	Max. rated through current(A)			250	300	400	500	600	800	1000	1250	1600		
	Short circuit current test (kA) Thermal (3s) Dynamic (Peak)		5	5.4	6	7	8	10	12	14	16			
3			Dynamic (Peak)	12.5	13.5	15	17.5	20	25	30	35	40		
4	Connection			reversing (II)										
5	Rated frequency (Hz)				50 or 60									
6	Maximum operation positions				7									
	g The highest voltage for equipment			12		40.5		72.5	72.5 126					
7	Insulation t earth(kV)		urce AC withstand voltage OHz, 1min)		35		85		140 2		30			
	Rated lightning impulse withstand voltage (1.2/50)		75		5	200	200 350		550					
8	Internal insulation			Refer to clause 4.4 of technical data										
9	Operation method				Manual operation on top or at side, motor driving at side									

Shanghai Huaming Power Equipment Co., Ltd.

Address: No 977 Tong Pu Road, Shanghai 200333, P.R.China Tel: +86 21 5270 3965 (direct)

+86 21 5270 8966 Ext. 8688 / 8123 / 8698 / 8158 / 8110 / 8658 Fax: +86 21 5270 2715 Web: www.huaming.com E-mail: export@huaming.com