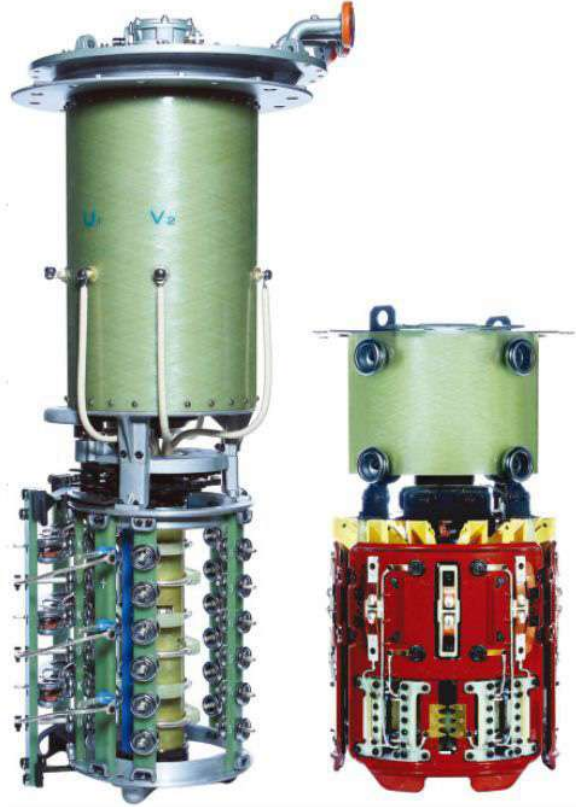


ZM on-load tap-changer

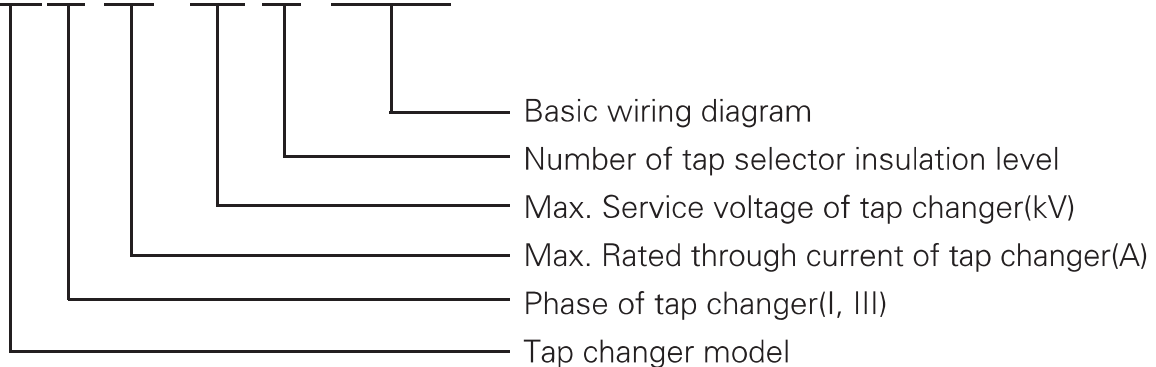
ZM on-load tap-changer applies to the power transformer or industrial transformer with rated voltage 35kV, 66kV, 110kV, 220kV, Max. rated through current three phase 300A, 500A, 600A, single phase 300A, 500A, 600A, 800A, 1200A, 1500A, frequency is 50Hz or 60Hz to change the tap position of voltage regulating coil under load for the aim of voltage regulating. Among them three phase Y connection tap-changer is used for the Y connection neutral point voltage regulating, single phase tap-changer can be used for the random voltage regulating.



ZM on-load tap-changer is combined type on-load tap-changer, and composed of diverter switch and tap selector, its breaking capacity is big, contact service life is long, the operation reliability is high, applicable to a wide range and so on characteristics, especially the multi-step liner regulating and coarse and fine regulating applies to the industrial transformer with wide voltage regulating scope in metallurgy and chemical industry.

Model instruction

ZM III 500 - 72.5 / C - 10193W



ZM on-load tap-changer technical specifications

Item	Specification	III300	III500	III600	I301	I501	I601	I800	I1200	I1500	
1	Max. rated through current(A)	300	500	600	300	500	600	800	1200	1500	
2	Rated frequency (Hz)	50 or 60									
3	Phases and connection mode	Three phase for neutral point of Y connection					Single phase for any selectable winding connection				
4	Max rated step voltage (V)	3300									
5	Rated step capacity (kVA)	1000	1400	1500	1000	1400	1500	2640	3100	3500	
6	Short circuit current(kA)	Thermal (3s)	6	8	8	6	8	8	16	24	24
		Dynamic (peak)	15	20	20	15	20	20	40	60	60
7	Operating positions	Liner regulating 7, 10, 12, 14, 16, 18, 22, 34 Reversal and coarse regulation: $\pm 3 \sim \pm 17$									
8	Insulation level of tap-changer (kV)	Rated voltage	35	66	110	150	220				
		Highest voltage	40.5	72.5	126	170	252				
		Power frequency withstand voltage (50Hz, 1min)	85	140	230	325	460				
		Rated lightning impulse withstand voltage (1.2/50 μ s)	200	350	550	750	1050				
9	Tap selector	4 Grades of A,B,C and D according to the insulation level									
10	Mechanical service life	No less than 800,000 operations									
11	Electrical service life	No less than 200,000 operations									
12	Oil compartment for diverter switch	Service pressure	3×10^4 Pa								
		Leakage test	6×10^4 Pa no leakage in 24h								
		Over pressure protection	Blasting cap blast at $(4 \sim 5) \times 10^5$ Pa								
		Protective relay	QJ4-25 oil flow speed set at 1.0m/s $\pm 10\%$								
13	Oil drainage volume(L)	Approx. 190~270									
14	Oil filling volume (L)	Approx. 125~190									
15	Weight (kg)	Approx. 240~350									
16	Motor-driven unit	MA7B									

Note:

1. Step capacity = step voltage \times load current; Rated step capacity is the continuous permissible max. step capacity.

2. For single-phase tap-changer formed by parallel of three-phase tap-changer contacts; it is necessary to take coil shunting of transformer into consideration. For ZMI800, there are two shunts. For ZMI1200 and I1500, there are three shunts.

3. The tap-changer of single phase liner regulating with 34 operating positions only have: I500A, I800A, I1500A.