



can operate under 100% relative humidity and other severe ambient conditions and can be switched on without predrying even after a long period of service interruption.

- Excellent short-circuit and lightning impulse strength.
- Thin insulation and good thermal conductivity. Generally, the transformer is cooled naturally by air(AN), but forced air cooling(AF) system can be equipped on any transformer of different protection classes. In order to improve overload capacity in short time and ensure safety.
- Low loss, higher efficiency, reduced energy cost, and maintenance free.
- Smaller dimensions, less weight, and space saving. Oil drainage pits, fire extinguishing devices and emergency supply are not necessary, so the cost of installation is reduced.
- Without fire or explosion danger decentralized installation can be used is possible to place the transformer in the vicinity of consumers and thus reduce the cost of low voltage bus structure.

## APPLICATIONS

SC9-Z glass-fibre reinforced cast resin dry-type transformer, being the best of its kinds, can replace oil immersed transformer in some place specially as following: Power station, High building, shopping centers, theaters, hospitals, laboratories, museums, offshore drilling platforms, ships, ports railway-stations, airports, petrochemical works, subways, tunnels, mines and other important places.

## TECHNICAL SPECIFICATIONS

- Voltage level:10-35kV
- Power capacity:30-20000kVA
- Type of voltage regulation:off-circuit or on-load
- Tapping range:  $\pm 5\%$ ,  $\pm 2 \times 2.5\%$ (or as requested)
- Frequency:50Hz or 60Hz
- Phase:3 phases
- Connection symbol: Y yno; D yn11(or as requested)
- Short-circuit impedance:standard impedance(see attached list)
- Ambience: relative air-humidity 100%, ambient temperature: up to 40 °C
- Maximum temperature rise: 100K
- Cooling method: AN or AF
- Protection class: IP00, IP20(indoor), P23(outdoor)
- Insulation class: Class F
- Insulation level: Rated Voltage p.f. Test BIL: 10kV/35kV 75kV; 20kV/50kV 125kV; 35kV/70kV 170kV



## SPECIAL DESIGNS

Though standard cast resin dry-type transformers can meet the demands of most consumers. We still have to proceed special designing of transformers for special application fields and operating conditions. Such as single phase transformers, double voltage transformers, isolating transformers, rectifier transformers, earthing transformers and transformers with special tapping arrangement etc. We will depend on your requirements to supply the best designs and products.



### Specifications and Dimensions of SC9-Z 10kV Tap-changer Dry-type Transformers

H.V:10kV L.V:0.4kV P.f.test 35kV, 5min

Type	P	Po	Pk (75°C)	Io	UK	con. sym	Noise LpA(AN) dB	GT kg	Outline dimensions (L × W × H mm)	Track mm × mm
	KVA	W	W	%	%					
SCZ9-Z-250/10	250	910	2790	0.8		Y yno	47	1485	1170 × 1477 × 1460	660 × 660
SCZ9-Z-315/10	315	1080	3330	0.7	4		48	1700	1170 × 1477 × 1510	
SCZ9-Z-400/10	400	1215	3920					1900	1230 × 1482 × 1498	
SCZ9-Z-500/10	500	1440	4760	0.6			D yn11	50	2230	
SCZ9-Z-630/10	630	1650	5660			2430			1330 × 1493 × 1660	
SCZ9-Z-630/10	630	1600	5790	0.5	6	52	2520	1440 × 1505 × 1698	820 × 820	
SCZ9-Z-800/10	800	1880	6830				3300	1500 × 1640 × 1860		
SCZ9-Z-1000/10	1000	2190	8090			4070				1590 × 1692 × 2058
SCZ9-Z-1250/10	1250	2580	9740				4900	1690 × 1657 × 2075		
SCZ9-Z-1600/10	1600	3030	11470	54	1690 × 1657 × 2170					
SCZ9-Z-2000/10	2000	4140	14060			55	1990 × 1886 × 2200			
SCZ9-Z-2500/10	2500	4950	16740	D yn11						

### Specifications and Characters of SC9-Z 10kV Dry-type Power Transformers

Rated Capacity kVA	Voltage Combination		Tapping %	Connection Symbol	Po w	Pk(75°C) w	Io %	UK %	Noise LpA (AN) dB
	H.V(kV)	L.V(kV)							
630	6 or 6.3	3	± 5	Y d11	1570	5840	1.2	6	50
800					1800	6830			52
1000					2160	8090	1.0		53
1250					2500	9660			54
1600	10	or	± 2 × 2.5	Y d11	2970	11700	0.9	7	55
2000	10.5	3.15			4050	13970			56
2500	11	6	4770		16500	0.7	57		
3150	10 or 10.5	6.3	5670		19250		58		
4000		6750	23180	0.5	59				
5000		8000	27420		59				
6300	11			9450	32530				



### Specifications and Characters of SC9-Z 35kV Dry-type Power Transformers

Rated Capacity(kVA)	Voltage Combination		Tapping %	Connection Symbol	Po w	Pk(75℃) w	Io %	UK %	LpA (AN) dB
	H.V(kV)	L.V(kV)							
800	35 or 38.5	3.15 or 6 6.3 10 10.5 11	± 5 or ± 2 × 2.5	Y yno or Y d11	2500	8600	1.3	6	52
1000					2970	10000			
1250					3480	11700			
1600					4100	14200	1.0	53	
2000					4700	16600			
2500					5400	20000	0.9	7	54
3150					6700	22500			
4000					7800	27000	0.7	8	56
5000					9300	32000			
6300					11000	37500			
8000		6 or 6.3; 10; 10.5; 11	± 3 × 2.5	Y d11 or Y Nd11	12600	41600	0.4	9	60
10000					14400	51000			
12500					16000	54000	0.3	62	
16000					20000	56000			
20000					23000	64000			

### Specifications and Characters of SC9-Z 35kV Dry-type Distribution Transformers

Rated Capacity(kVA)	Voltage Combination		Tapping %	Connection Symbol	Po w	Pk(75℃) w	Io %	UK %	LpA (AN) dB
	H.V(kV)	L.V(kV)							
30	35 or 38.5	0.4	± 5 ± 2 × 2.5	Y yno or D yn11	360	1050	3.0	6	50
50					450	1310	2.5		50
80					520	1750	2.2		50
100					660	2000	1.8		51
125					760	2440	1.8		51
160					860	2800	1.8		51
200					960	3050	1.8		51
250					1080	3500	1.8		51
315					1300	3840	1.6		51
400					1530	4950	1.6		51
500					1800	6080	1.4		52
630					2070	7090	1.4		52
800					2430	8400	1.2		52
1000					2700	9660	1.0		52
1250					3150	11700	0.8		53
1600					3600	14220	0.8		53
2000					4230	16740	0.7		54
2500					4950	20040	0.7		55

1. Dry-type Distribution Transformer Rated Voltage 12kV, 40.5kV
2. Dry-type On-load Tap-changing Transformer