SC(B) 13/14/18

Resin-insulated dry transformer

Overview

10/20/24kV grade SC(B)13/14/18 epoxy resin cast dry-type transformer, which can be used as a replacement product for oil-immersed distribution transformers. It is the best-performing product among all types of dry-type transformers, especially suitable for urban areas. Power grids, high-rise buildings, business centers, theaters, hospitals, hotels, tunnels, subways, stations, docks, airports, underground power stations, test rooms, combined substations and other important places.

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Model meaning

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Three Phase	Resin insulation	Low-voltage foil winding	Performance Level Code-Name		Rated capacity (kVA)		Voltage grade (kV)

Characteristics of the product

The 10/20/24kV SC(B)13/14/18 power transformers produced by our factory are dry type transformers with low-noise and low-loss resin wound coil with product type certificate. Due to advanced design, high quality materials, scientific formulation, strict process and high standard of testing, the products have the following characteristics:

● The high voltage winding of copper wire, low voltage winding wound of copper wire or copper foil, glass fiber mat is filled with wrapping, vacuum packing of the epoxy used without casting, curing to form a solid cylindrical overall, mechanical high strength, partial discharge of small, high reliability.

● Antiflaming. anti-explosion will not pollute the environment. Glass fibre Coil winding coil such with self-extinguishing properties. and will not produce electric arc for short-circuit, does not produce toxic or harmful gases in high temperature condition.

● The coil does not absorb moisture, core clamps have a speaal corrosion protection layer, 100% relative humidity and other harsh environment. Interrupt driving need not remove tide treatment.

● Short circuit resistant and high level oflightning impulse.

● The resin inside and outside the coil is thin, heat dispersion is good. Cooling air is used air cool in nature (AN). For any degree of protection transformer, equip with air-cooled system (AF), in order to improve overload capacity of short-term, and ensure safe operation.

● Lower consumption, energy-saving. Running for a savings, can be maintenance-free.

● Small volume, light weight, small area, lower installation costs, not need to consider oil tank, rire protection andbackup power, stand-by UPS.

● Because there was no fire and explosion danger, installed in the load center can be distributed and fully close to the power point, thus reduang the line low cost and save the expensive facilities costs.

SC (B) 13 Dry type transformer

Type	Rated Capacity (kVA)	Voltage combinations and tap range			Connection group symbol	No-load loss (W)	Load loss 75℃ (W)	No-load current (%)	Short-circuit impedance (%)
		High pressure (kV)	High pressure tap range (%)	Low pressure (kV)					
SC(B)13-30	30	24 20 10 6.3 6	±5% ±2×2.5 / $\times 2.5_{-1}^{+3}$	0.4	Yyn0 / Dyn11	135	640	2.0	4.0
SC(B)13-50	50					195	900	2.0	
SC(B)13-80	80					265	1240	1.5	
SC(B)13-100	100					290	1410	1.5	
SC(B)13-125	125					340	1660	1.3	
SC(B)13-160	160					385	1910	1.3	
SC(B)13-200	200					445	2270	1.1	
SC(B)13-250	250					515	2480	1.1	
SC(B)13-315	315					635	3120	1.0	
SC(B)13-400	400					705	3590	1.0	
SC(B)13-500	500					835	4390	1.0	
SC(B)13-630	630					965	5290	0.85	
SC(B)13-630	630					935	5360	0.85	6.0
SC(B)13-800	800					1090	6260	0.85	
SC(B)13-1000	100					1270	7310	0.85	
SC(B)13-1250	1250					1500	8720	0.85	
SC(B)13-1600	1600					1760	10500	0.85	
SC(B)13-2000	2000					2190	13000	0.7	
SC(B)13-2500	2500					2590	15400	0.7	

SCB14 dry change level 2 energy efficiency

Rated Capacity (kVA)	No-load loss (W)	Load loss (W)	No-load current (%)	Dimensions（mm）
30	130	640	2.0%	700*360*675
50	180	900	2.0%	770*460*710
80	250	1240	1.5%	770*460*770
100	270	1415	1.3%	790*460*730
125	320	1665	1.3%	870*460*845
160	365	1915	1.1%	860*460*805
200	420	2275	1.1%	940*920*806
250	490	2485	1.0%	960*920*906
315	600	3125	1.0%	980*970*906
400	665	3590	1.0%	1010*970*936
500	790	4390	1.0%	1030*970*956
630	885	5360	0.9%	1220*1120*906
800	1035	6265	0.9%	1270*1170*946
1000	1205	7315	0.9%	1300*117*1016
1250	1420	8720	0.9%	1370*1220*1051
1600	1665	10555	0.9%	1450*1270*1161
2000	2075	13005	0.7%	1470*1270*1295
2500	2450	15445	0.7%	1450*1320*1336

SCB18 dry change level 1 energy efficiency

Rated Capacity (kVA)	No-load loss (W)	Load loss (W)	No-load current (%)	Dimensions（mm）
30	130	640	2.0%	700*360*675
50	185	900	2.0%	770*460*710
80	250	1240	1.5%	770*460*770
100	270	1415	1.3%	790*460*730
125	320	1665	1.3%	870*460*845
160	365	1915	1.1%	860*460*805
200	420	2275	1.1%	940*920*806
250	490	2485	1.0%	960*920*856
315	510	3125	1.0%	980*970*906
400	570	3590	1.0%	1010*970*936
500	670	4390	1.0%	1030*970*956
630	750	5365	0.9%	1220*1120*906
800	875	6265	0.9%	1270*1170*946
1000	1020	7315	0.9%	1300*1170*1016
1250	1205	8720	0.9%	1370*1220*1051
1600	1415	10555	0.9%	1450*1270*1161
2000	1760	13005	0.7%	1475*1270*1295
2500	2080	15445	0.7%	1450*1320*1356