

## SC(B9),SC(B)10 Resin Casting Dry Type Power Transformer

### MALCO Transformers

#### General :

SC(B9),SC(B)10 Resin casting dry type power transformer product by our company is a new generation of product in low loss and noise. Base on the FRVT processing technology imported from ABB-Micafil Co. in 90's, advanced technology of vacuum resin casting and L.V. foiled winding as well as the updated equipment such as GEORG cutting line, Stollberg winding machine and HUBR vacuum resin casting equipment all imported from Germany, and foiled winding machine imported from Italy, product performance is up to IEC726, GB6450, GB/T10228-1997 Standard.

The product owns its advantage such as low loss and noise, small size, less weight, moisture-proof, anti-dirty, crack-proof, withstanding impulse, flameproof, overload capability, smaller partial discharge (less than 10 PC).

It has reasonable structure and convenient operation & maintenance. When the BWK series temperature controlling system is provided for dry type transformer, it has more functions including alarming to faults and abnormal temperature, automatic tripping and automatic starting (stopping) fans to ensure its safe operation.

It is applicable to transmission and distribution system, hotel, restaurant, high building, commercial center, stadium, petrochemical factory, metro, station, airport, drilling form in the sea and so on, particular to the places of load center, or the places where require fireproofing specially.



## SCB9 Transformer    SCB10 Transformer

### Feature :

Adopting advanced technology and high quality raw material, with first class equipment and strict processing, SC-series resin casting dry type transformer owns the following advantages:

1. Copper conductor is used both for H.V. &L.V. coils to strengthen the glass fiber. It is dried and cast by epoxy resin under the high vacuum. After curing, it is a firm cylinder, with high mechanical strength and withstanding short-circuit capability, smaller partial discharge, higher reliability as well as long service life.

2. Flameproof, explosion resistant, no pollution to environment. Because the imported epoxy resin and glass fiber compound insulation materials are used and certain silicon powder is contained in the epoxy resin. Heat conduction co-efficient and flameproof ability is greatly improved in comparison with old type materials. There would be no toxin and harmful gas caused by resin under high temperature.

3. The moist cannot be absorbed by coils. The core clamp is coated with the special anti-corrosive materials so it can do as usual under the severe conditions. It is unnecessary to get rid of moisture for interval operation.

4. Good capabilities of withstanding short-circuit and lightning impulse.

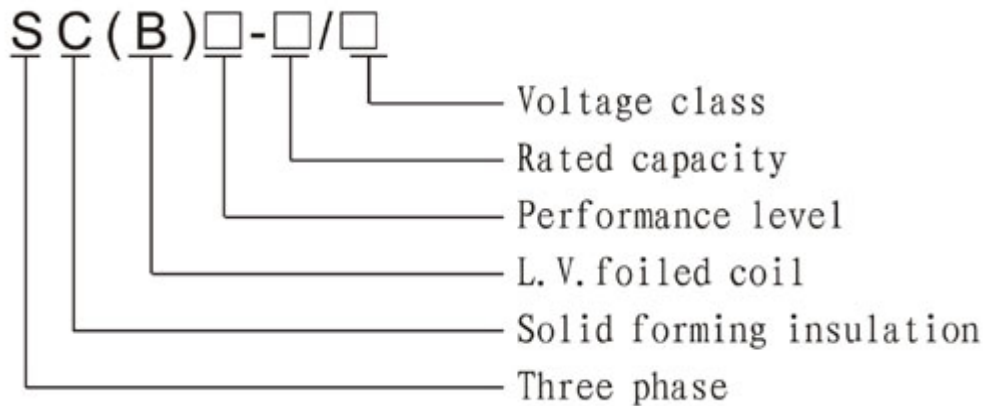
5. Good heating dissipation due to thin resin coated on the outside of coils. Normally, natural air cooling (AN) is taken. Fan cooling system could be provided with the transformer in any protection grade to improve short time overload ability and ensure the safe operation.

6. Low loss and noise, energy saving, economical operation, free from maintenance.

7. Small size, less weight, little occupied area, and few cost for installation. It is unnecessary to take consideration of drainage pool, fire proof and fire fighting facilities, as well as standby power source.

8. Without any risk of fire disaster, explosion, it could also be installed separately around loading center, close to electric consuming place, so the wiring costs can be reduced and more costs can be saved.

### Type designation :



Technical parameter :

Specification :

Voltage class : 6 -35KV

Capacity range : 30 - 10000KVA

Voltage adjustment mode : No-load tap changer or on-load tap changer (fitted with vacuum or on-load tap changer )

Tapping range : +/- 2x2.5%     +/- 4x2.5% (or others)

Frequency : 50Hz or 60Hz

Phase number : Three phase

Vector group : Yyn0; Dyn11; Yd11 or others

Short-circuit impedance : Standard impedance ( requirement by customer)

Working condition : relative humidity 100%, ambient temperature no more than 40 degrees centigrade

Max. temperature rise : 100K

Cooling mode : natural air cooling (AN) or fan cooling (AF)

Protection grade : IP00; IP20(indoor ); IP23(outdoor)

Insulation grade : F grade

Insulation level :

10KV Power frequency withstanding voltage 35KV, impulse withstanding voltage 75KV;

20KV Power frequency withstanding voltage 50KV, impulse withstanding voltage 125KV;

35KV Power frequency withstanding voltage 70KV, impulse withstanding voltage 170KV;

**Technical parameter of 10kV product :**

<b>SC(B)9 Series</b>						
H-V: 10(10.5,11,6,6.3,6.6) +/- 2X2.5%kV						
Vector group: Y,yn0 or D,yn11						
L-V: 0.4kV      Insulation level: LI75AC35/LI0AC3						
Type	No-load loss	Load loss (120 degrees centigrade)	Impedance voltage	No-load current	Noise	Outline dimension (proper body)
	W	W	%	%	dB(A)	L x W x H x track gauge
SC9-30/10	200	745	4	2.2	43	700x460x750x400
SC9-50/10	300	1050	4	2.0	43	945x750x950x550
SC9-80/10	380	1450	4	1.8	43	945x750x945x550
SC9-100/10	430	1660	4	1.8	44	945x750x965x550
SC9-125/10	520	1950	4	1.6	44	1040x860x1045x660
SC9-160/10	600	2250	4	1.4	44	1040x860x1085x660
SC9-200/10	700	2670	4	1.4	45	1040x860x1115x660
SC9-250/10	800	2800	4	1.4	45	1170x860x1120x660
SC9-315/10	940	3660	4	1.2	47	1240x760x1305x660
SCB9-400/10	960	4210	4	1.2	48	1320x760x1390x660
SCB9-500/10	1150	5150	4	1.2	48	1360x760x1455x660
SCB9-630/10	1320	6180	4	1.0	50	1460x760x1500x660
SCB9-630/10	1280	6300	6	1.0	50	1460x760x1480x660
SCB9-800/10	1500	7330	6	1.0	52	1520x920x1590x820
SCB9-1000/10	1760	8590	6	0.8	54	1600x920x1720x820
SCB9-1250/10	2060	10190	6	0.8	54	1660x920x1895x820
SCB9-1600/10	2400	12370	6	0.8	56	1800x920x1985x820
SCB9-2000/10	3200	15230	6	0.6	57	1800x920x2135x820
SCB9-2500/10	3800	18090	6	0.6	57	2070x1170x2180x1070

SC£"B£©10 Series						
H-V: 10(10.5,11,6,6.3,6.6) +/- 2X2.5%kV ii						
Vector group: Y,yn0 or D,yn1						
L-V: 0.4kV Insulation level: LI75AC35/LI0AC3						
Type	No-load loss W	Load loss (120 degrees centigrade) W	Impedance voltage %	No-load current %	Noise dB(A)	Outline dimension (proper body) Lx W x H x track gauge
SC10-30/10	200	700	4	2.2	43	700x460x750x400
SC10-50/10	285	985	4	2.0	43	945x750x950x550
SC10-80/10	365	1375	4	1.8	43	945x750x945x550
SC10-100/10	405	1570	4	1.8	44	945x750x965x550
SC10-125/10	480	1830	4	1.6	44	1040x860x1045x660
SC10-160/10	560	2120	4	1.4	44	1040x860x1085x660
SC10-200/10	650	2520	4	1.4	45	1040x860x1115x660
SC10-250/10	760	2750	4	1.4	45	1170x860x1120x660
SC10-315/10	880	3455	4	1.2	47	1240x760x1305x660
SCB10-400/10	960	3985	4	1.2	48	1320x760x1390x660
SCB10-500/10	1150	4875	4	1.2	48	1360x760x1455x660
SCB10-630/10	1320	5870	4	1.0	50	1460x760x1500x660
SCB10-630/10	1280	5950	6	1.0	50	1460x760x1480x660
SCB10-800/10	1500	6950	6	1.0	52	1520x920x1590x820
SCB10-1000/10	1760	8120	6	0.8	54	1600x920x1720x820
SCB10-1250/10	2060	9685	6	0.8	54	1660x920x1895x820
SCB10-1600/10	2400	11720	6	0.7	55	1800x920x1985x820
SCB10-2000/10	3200	14430	6	0.5	55	1800x920x2135x820
SCB10-2500/10	3800	17060	6	0.5	56	2070x1170x2180x1070

Ordering Notes :

- 1.Type
- 2.Rated capacity
- 3.Phase number, rated frequency
4. Rated voltage(L.V. &H.V.)
- 5.Vector group
- 6.Short-circuit impedance
- 7.Cooling mode
- 8.Temperature controlling and indicating device ( with computer interface or not)
- 9.Protection degrade and enclosure material ( its color)
- 10.Service condition: elevation height, environmental temperature, etc
- 11.Ordering quantity and delivery time
- 12.Special requirement