

## ■ KBSG | Mining Explosion Proof Dry-type Transformer

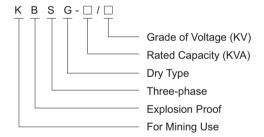


#### Use

KBSG mining dry type transformer is a kind of electricity supplying and distribution equipment in the coal mine, which is equipped with explosion-proof enclosure, independent high and low voltage cable connection cavity, devices of input / output cables and movable supporting bracket and wheels.

KBSG mining explosion-proof dry type transformer is used as the power supply device for comprehensive coal machine, transportation machine, pump station, fan and so on, in three phase neutral point ground disconnected power supply system of AC50Hz, first side rated voltage is 10KV or 6KV, second side rated voltage of transformer is 3450V/1200V/693V/400V in the places of coal mine color metal mine and tunnel project where are filled with methane mixture, coal dust and powder dust.

## **Meaning of Type**



#### **Technical Descriptions**

- 1. Adopts ripple rectangle cylinder type explosion proof enclosure to realize excellent explosion proof performance, enough mechanical strength and good heat diffusion. Dust on the top cover is easy to be cleared. Transformer iron core is made of high quality cold rolling Grain-Oriented thin silicon steel plates which adopt no punching hole colligation processing craft to decrease empty load loss and empty load current of iron core. The transformer has the features of low loss and low noise. The enclosure is designed with no hang core structure to avoid inside looseness during transportation.
- 2. Adopts Dupont Nomex-T410 insulating paper between windings and layers to ensure winding electric performance efficiently. So the transformer has strong heat impact resistance, high overload capability, excellent short-circuit resistance, good insulation performance to stabilize the overload capacity of transformer in a short time.
- 3. Adopts international advanced VPI vacuum pressure dipping lacquer equipment and craft to dip it in grade H with no solvent insulation lacquer to avoid the aging breakdown caused by long-playing discharge. Winding teams will improve its mechanical strength and damp -proof performance after dipping, drying and solidifying.
- 4. The enclosure adopts grade H or C insulation material which has characteristics of fire-proof, no harmful gas and pollution.
- 5. There is a small temperature relay on the top of the enclosure to realize over-temperature alarming function for the transformer.



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### **Technical Data**

Rated capability (kVA)	High voltage (kV)	Low voltage (kV)	Connection mark	Loss (W)		Empty load	Impedance	Dimension	Weight	Rail
				Empty load	Load	current (%)	voltage (%)	W×H×D (mm)	(kg)	distance (mm)
50	6	0.693 (0.4)	Yy0(d11)	350	550	2.5	4	2336×1049×815	1280	_
100				520	920	2.5	4	2336×1049×815	1400	
200				820	1550	2	4	2446×1193×835	2100	
315		1.2 (0.693)		1100	2150	1.8	4	2526×1276×875	2550	
400				1300	2600	1.8	4	2581×1325×895	3000	
500				1500	3100	1.5	4	2696×1405×950	3300	
630				1800	3680	1.5	4	2696×1405×950	3900	
800		3.45 1.2 (0.693)	Yy0(d11) Dyn11	2050	4500	1.0	4	2893×1633×1165	5200	
1000				2350	5400	1.0	4	2893×1633×1165	6000	
1250		3.45 1.2		2750	6500	1.0	4	3088×1771×1165	6850	
1600				3350	8000	0.8	4	3206×1851×1175	8410	
2000				3800	9500	0.6	4.5	3316×1934×1260	9800	
2500				4500	10600	0.6	5	4110×1692×1350	13350	
50	. 10	0.693 (0.4)	Yy0(d11)	390	680	2.5	4	2366×1049×815	1380	
100				560	1050	2.5	4	2476×1193×835	1800	
200				950	1800	2	4	2556×1276×875	2450	
315		1.2 (0.693)		1300	2500	1.8	4	2726×1405×950	2930	
400				1500	3000	1.8	4	2726×1405×950	3200	
500				1750	3500	1.5	4	2796×1530×965	3700	
630				2000	4100	1.5	4	2796×1530×965	4500	
800		3.45 1.2(0.693)	Yy0 (d11) Dyn11	2300	5100	1.2	4	3118×1771×1165	5400	
1000				2600	6100	1.2	4.5	3118×1771×1165	6000	
1250		3.45 1.2		3100	7400	1.0	4.5	3118×1771×1165	7350	
1600				3800	8500	1.0	5	3376×1934×1260	9330	
2000				4500	9700	0.7	5	3346×1934×1260	9750	
2500				5200	10800	0.7	5.5	4810×1692×1350	17500	
3150		3.45		6100	12800	0.7	5.5	4810×1692×1350	19800	
4000				7000	15000	0.7	6	4810×1692×1350	20500	

Remark: The parameters above are for reference only. The load loss is the value at temperature 145°C (the reference value when the insulation heat-resistant temperature class is H ), Dimension of KBSGZY depends on specific switch.