

KBSGZY | Mining Explosion Proof Movable Transformer Substation

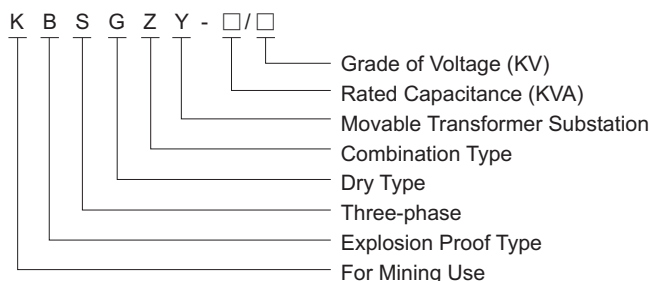


Use

KBSGZY mining explosion proof movable transformer substation consists of dry type transformer, cable connector for mining explosion proof movable transformer substation, low voltage feeding switch (or low voltage protection box) for mining explosion proof movable transformer substation. The substation has protection performance such as electric leakage, leakage latch, overload, short circuit, over-voltage, under-voltage, etc.

KBSG mining explosion proof movable transformer substation is a kind of movable whole set supplying and transforming power equipment in coal mine. It is used in the coal mine where is filled with methane mixture gas and dust, it also can be used in the environment where is filled with gas and vapor which do not corrode metal and damage insulation property.

Meaning of Type



Technical Descriptions

1. Transformer's iron core is made of high quality cold rolling Grain-Oriented thin silicon steel plate which adopt no punching hole colligation processing craft to decrease empty load loss of iron core and current of empty load. 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. The enclosure adopts grade H or C insulation material which has characteristics of fire-proof, no harmful gas and pollution.
2. Adopts Dupont Nomex-T410 insulation paper between winding teams and layers to ensure winding teams electric performance efficiently. So the transformer has strong heat impact resistance, high overload capability, excellent short-circuit resistance, good insulation performance to ensure transformer overload capability in a short time.
3. Adopts international advanced VPI vacuum pressure dipping lacquer equipment and craft to dip it in H grade 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. High and low voltage switches use reliable and stable LCD intelligent protector to realize simple operation, wide setting range, short step size, high control precision.
5. High voltage switch has complete protection functions of overload, short circuit, under voltage, over-voltage, over-temperature; It also has the functions of remote monitor , remote surveillance and fault checking.
6. Low voltage switch has complete protection functions of overload, short-circuit, electric leakage, leakage latch, phase imbalance protection, wind and electricity gas latch, etc.; it also has the indication functions of system real-time voltage and current parameters.
7. The malfunctions on low voltage side drive high voltage side breaker to break through signal cable, decreases break-down current, overcomes breaking malfunctions due to big current of switch on the low voltage side of substation, also overcomes dead zone problem that is electric leakage in circuit can't break malfunction point from transformer low voltage winding group to low voltage feeding switch.
8. High and low voltage switches have memory function of permanently stores various data and transmits recorded data.
9. Standard RS-485 communication interface is available for data transmission.

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Technical Data

Rated capability (kVA)	High voltage (kV)	Low voltage (kV)	Connection mark	Loss (W)		Empty load current (%)	Impedance voltage (%)	Dimension W × H × D (mm)	Weight (kg)	Rail distance (mm)
				Empty load	Load					
50	6	0.693 (0.4)	Yy0(d11)	350	550	2.5	4	3485×1087×1165	2090	600 900
100				520	920	2.5	4	3485×1167×1165	2210	
200				820	1550	2	4	3565×1254×1165	2910	
315				1100	2150	1.8	4	3645×1338×1165	3360	
400		1.2 (0.693)	Yy0(d11)	1300	2600	1.8	4	3700×1356×1165	3810	
500				1500	3100	1.5	4	3815×1405×1165	4110	
630				1800	3680	1.5	4	3815×1405×1165	4710	
800		3.45 1.2 (0.693)	Yy0(d11)	2050	4500	1.0	4	4142×1633×1165	6010	
1000				2350	5400	1.0	4	4142×1633×1165	6810	
1250		3.45 1.2	Yy0(d11) Dyn11	2750	6500	1.0	4	4337×1633×1165	7660	
1600				3350	8000	0.8	4	4455×1851×1175	9180	
2000				3800	9500	0.6	4.5	4575×1934×1260	10610	
2500				4500	10600	0.6	5	5550×1692×1350	14400	
50		10	0.693 (0.4)	Yy0(d11)	390	680	2.5	4	3595×1142×1165	
100	560				1050	2.5	4	3675×1220×1165	2620	
200	950				1800	2	4	3755×1350×1165	3270	
315	1300				2500	1.8	4	3925×1420×1165	3750	
400	1.2 (0.693)		Yy0(d11)	1500	3000	1.8	4	3925×1405×1165	4020	
500				1750	3500	1.5	4	3995×1530×1165	4520	
630				2000	4100	1.5	4	3995×1530×1165	5320	
800	3.45 1.2(0.693)		Yy0(d11)	2300	5100	1.2	4	4377×1771×1165	6220	
1000				2600	6100	1.2	4.5	4377×1771×1165	6820	
1250	3.45 1.2		Yy0(d11) Dyn11	3100	7400	1.0	4.5	4377×1771×1165	8170	
1600				3800	8500	1.0	5	4635×1934×1260	10150	
2000				4500	9700	0.7	5	4615×1934×1260	10470	
2500				5200	10800	0.7	5.5	5650×1692×1350	18450	
3150	3.45		Yy0(d11)	6100	12800	0.7	5.5	5950×1692×1350	20800	
4000				7000	15000	0.7	6	5650×1692×1350	21500	

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.