

METAL OXIDE VARISTOR



Product Feature:

Using self-developed excellent formula and advanced manufacturing technology, the zinc oxide non-linear varistor block with excellent performance has been developed.



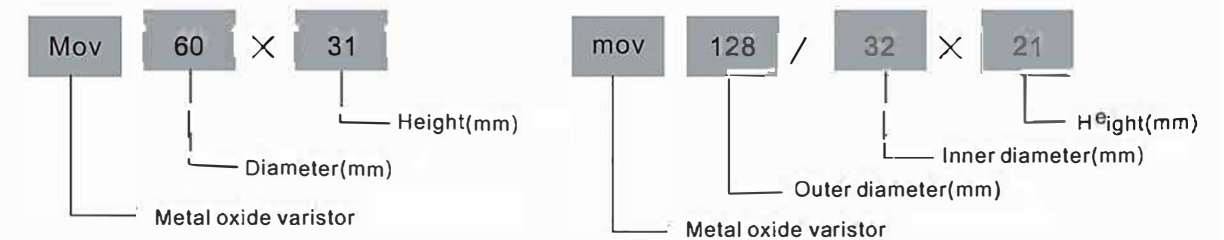
- Low residual pressure, excellent protection performance
- No freewheeling, can be made into a gapless zinc oxide arrester
- Small action delay, good steep wave response characteristics
- High gradient, large current capacity, strong ability to absorb overvoltage
- Customized parameter is available.



Main Type and Technical Parameter of Metal Oxide Varistor

Type	Overall Dimension (mm)			D. C. reference voltage U_{1mA} (reference current is $1mA$) U_{1mA} (A)	(U _{1kA} /U _{1mA} DC) Max. ratio of residual voltage (U _{1kA} /U _{1mA} DC) (at 8/20 μ s)	Current impulse withstand capability		Recommended rated voltage (kV)	Qrs (C)	Recommended Max. continuous operating voltage (MCOV) and peak value of resistive current under MCOV			
	Outer Dia.	Inner Dia.	Height			4/10 μ s (kA)	2ms (A)			MCOV (kV)	IR (μ A)		
MOV35×30	35±1	/	30±1	6.2-6.9	1.85(5kA)	65	150	U _{1mA} $\sqrt{2}$	0.3	U _r *0.8	130		
MOV42×24	42±1	/	24±1	5.0-5.5	1.66(5kA)	65	400					0.5	150
MOV52×28	52±1	/	28±1	5.8-6.4	1.7(10kA)	100	600					1.2	170
MOV60×28	60±1	/	28±1	5.8-6.4	1.69(10kA)	100	800					1.6	220
MOV71×22.5	71±1	/	22.5±1	6.7-7.4	1.71(10kA)	100	600					1.2	250
MOV75×22.5	75±1	/	22.5±1	6.7-7.4	1.63(10kA)	100	600					1.2	250
MOV83×22.5	83±1	/	22.5±1	4.7-5.1	1.63(10kA)	100	1300					2.6	500
MOV85/26×22.5	85±1	26±1	22.5±1	4.7-5.1	1.63(10kA)	100	1300					2.6	500
MOV105×22.5	105±1	/	22.5±1	4.7-5.1	1.65(20kA)	100	2200					4.4	650
MOV105/32×22.5	105±1	32±1	22.5±1	4.7-5.1	1.68(20kA)	100	1800					3.6	650
MOV115×22.5	115±1	/	22.5±1	4.7-5.1	1.65(20kA)	100	2500					5.2	650
MOV128/32×22.5	128±1	32±1	22.5±1	4.7-5.1	1.6(20kA)	100	2500					5.2	800

Product model description



METAL OXIDE SURGE ARRESTER

We design and manufacture the whole voltage metal oxide lightning arrester from 0.22kv -1100kv with porcelain clad or polymeric housing. Customized products from the technical specification of client are welcome.

Polymer Housing Metal Oxide Surge Arrester



Product Feature:

- The polymer housing surge arrester is made of high-quality silicone rubber which has good electrical insulation performance, hydrophobic property and aging resistance.
- The external insulation meets the requirements of insulation coordination of high voltage transmission and distribution equipment.
- The product has features such as operation reliability, no power-flowing current, anti-contamination ability, anti-explosion performance, light weight, easy transportation, installation and simple maintenance etc.
- It is widely used in low and middle voltage electric systems.

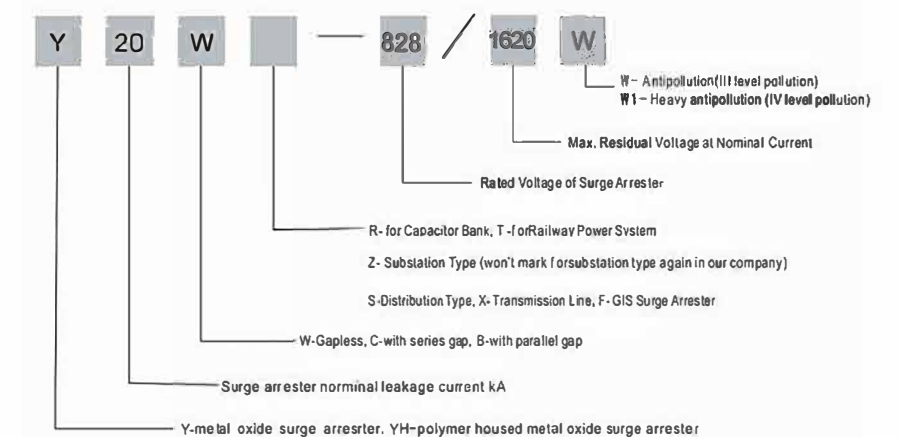
Main Type and Technical Parameter of Polymer Housing Metal Oxide Surge Arrester

Type	Rated Voltage (kV)	Continuous Operation Voltage (kV)	DC Reference Voltage (kV)	Residual Voltage (≅KVpeak)			2ms Rectangular Withstand (A)	4/10 μs high current impulse withstand (kA)
				30/60 μs	8/20 μs	1/10 μs		
YH10W-12/40	12	10.2	17	30	40	40.6	400	65
YH5WR-17/45	17	13.6	24	38.3	45	51.8	600	100
YH5WZ-17/45	17	13.6	24	38.3	45	51.8	200	65
YH5W-26/65	26	20.6	37	55	65	75	400	65
YH10W-36/100	36	28.8	53	80	100	109	600	100
YH5WR-51/134	51	40.8	73	105	134	150	800	100
YH5WR-51/134	51	40.8	73	105	134	150	2500	100
YH5W-51/134	51	40.8	73	114	134	154	400	65
YH10W-60/168	60	48	85	126	168	188	800	100
YH10W-96/250	96	75	140	213	250	280	800	100
YH10W-108/281	108	84	157	239	281	315	800	100
YH10W-120/300	120	96	174	246	300	336	800	100
YH10W-216/562	216	168.5	314	478	562	630	1000	100
YH10W-312/726	312	237	442	643	760	847	1800	100
YH20W-444/1106	444	355	597	907	1106	1238	2000	100
YH20W-648/1491	648	498	845	1226	1491	1639	5400	100
YH20W-828/1620	828	638	1114	1460	1620	1720	8000	100

Kema Type Test Report For Polymer Housing Surge Arrester



Product model description



METAL OXIDE SURGE ARRESTER

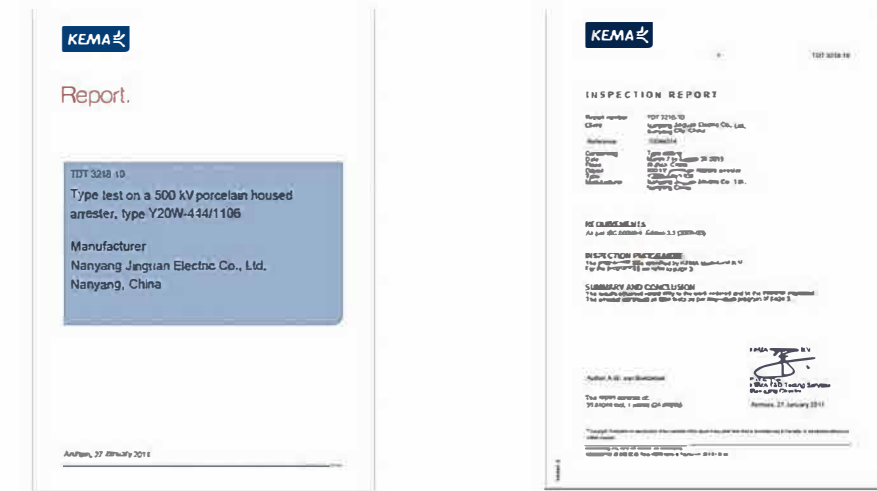
Porcelain Housed Metal Oxide Surge Arrester



Product Feature:

- ◆ This product is made of good volt-ampere characteristic nonlinear metal oxide varistor with the excellent protection performance.
- ◆ The product has large current discharge capacity. 2ms rectangular current discharge capacity of metal oxide varistor (Dia. 115mm) is 2500A, 4/10us high current impulse withstand capacity is 100KA which passed line discharge class 5.
- ◆ Unique design of sheds increases the anti-pollution characteristic. The creepage of the surge arrester for III degree is 28mm/KV.
- ◆ Unique design for pressure release device ensure the product safety.
- ◆ The product adopts a rubber double sealing structure with good performance, and the constant compression and permanent deformation of the sealing ring is less than 15%, which can ensure good sealing performance.

KEMA Type Test Report of 500kV Porcelain Housed Surge Arrester



Main Type and Technical Parameter of Porcelain Housed Metal Oxide Surge Arrester

Type	Rated Voltage (kV)	Continuous Operation Voltage (kV)	DC Reference Voltage (kV)	Residual Voltage (≦Kvpeak)			2ms Rectangular Withstand (A)	4/10 μs high current impulse withstand (kA)
				30/60 μs	8/20 μs	1/10 μs		
Y5WZ-17/45	17	13.6	24	38.3	45	51.8	200	65
Y5W-51/134	51	40.8	73	114	134	154	400	65
Y10W-96/250	96	75	140	213	250	280	600	100
Y10W-108/281	108	84	157	239	281	315	800	100
Y10W-120/300	120	96	174	246	300	366	1000	100
Y20W-120/325	120	96	175	245	325	374	1100	100
Y20W-192/520	192	154	280	395	520	598	1100	100
Y10W-216/562	216	168.5	314	478	562	630	1000	100
Y10W-312/760	312	237	442	643	760	847	2000	100
Y20W-444/1106	444	355	597	907	1106	1238	2000	100
Y20W-648/1491	648	498	845	1226	1491	1639	2500	100
Y20W-828/1620	828	638	1114	1460	1620	1720	8000	100

METAL OXIDE SURGE ARRESTER

Polymer Housed Metal Oxide Surge Arrester for Transmission Line



Product Feature:

- ◆ Polymer Housed Metal Oxide Surge Arrester for Transmission Line is a new type of over-voltage protection device.
- ◆ It has many characteristics extremely small power-flow current, reliable arcing, low weight, good pollution resistance, electrical corrosion resistance, anti UV, anti-aging, small size, and can withstand multiple lightning strikes.
- ◆ It is widely used in the transmission line protecting the line from lightning and reduces the lightning trip rate of the line. It is especially suitable for areas with frequent lightning activities, high soil resistivity, and difficulty in line inspection.

Main Type and Technical Parameter of Polymer Housed Metal Oxide Surge Arrester for Transmission Line

Type	Rated Voltage (kV)	DC Reference Voltage (kV)	Residual Voltage ($\leq K_v$ peak)		2ms Rectangular Withstand (A)	4/10 μ s high current impulse withstand (kA)
			8/20 μ s	1/10 μ s		
YH5CX2-13/40	13	20	40	/	200	65
YH5CX1-51/134	51	73	134	/	400	65
YH5CX2-51/134	51	73	134	/	400	65
YH10CX2-78/203	78	110	203	/	600	100
YH10CX1-102/296	102	148	296	/	600	100
YH10CX2-102/296	102	148	296	/	600	100
YH10CX1-204/592	204	296	592	/	600	100
YH10CX2-204/592	204	296	592	/	600	100
YH20CX1-396/1050	396	561	1050	/	1500	100
YH20CX2-396/1050	396	561	1050	/	1500	100
YH25CX2-540/1490	510	786	1490	1640	1500	100
YH30CX2-768/2150	768	1086	2150	2365	2000	100

METAL OXIDE SURGE ARRESTER

Gas-insulated Metal Oxide Enclosed (GIS) Surge Arrester



Product Feature:

- ◆ GIS surge arrester has the features such as superior protective performance, advanced technical specification, high reliability, little amount of maintenance work and convenient installation.
- ◆ The excellent response characteristic to steep wave, especially the low residual voltage at steep wave is extremely beneficial for the protection of GIS equipment with relatively flat volt-ampere characteristic.
- ◆ Customized products are welcome.

Main Type and Technical Parameter of Gas-insulated Metal Enclosed (GIS) surge Arrester

Type	Rated Voltage (kV)	Continuous Operation Voltage (kV)	DC Reference Voltage (kV)	Residual Voltage ($\leq K_{vpeak}$)			2ms Rectangular Withstand (A)	4/10 μ s high current impulse withstand (kA)
				30/60 μ s	8/20 μ s	1/10 μ s		
Y10WF-108/281	108	84	157	216	281	330	1000	100
Y10WF-120/300	120	96	174	246	300	366	1000	100
Y10WF-204/532	204	159	396	452	532	594	1000	100
Y10WF-216/562	216	168.5	314	435	556	625	1000	100
Y20WF-444/1106	444	355	597	907	1106	1238	2500	100



METAL OXIDE SURGE ARRESTER

Metal Oxide Surge Arrester for Rail Transit System



Surge Arrester CHR2, CHR3 for High Speed Train



Product Feature:

- ◆For railway system, train , high-speed train, subway and other rail transit systems.
- ◆The surge arrester installed on the top of train or high speed train is the important over voltage protection device.
- ◆Our company researched surge arrester CRH3 for high speed train in 2014. We passed the test of installation 300,000 km for high speed train.
- ◆Now, our surge arrester for high train are serving for High Speed Railway Line from Guangzhou to Nanning and from Beijing to Shanghai.
- ◆We passed the qualification to supply for Bombardier Sifang (Qingdao) Transportation Ltd in 2019.

METAL OXIDE SURGE ARRESTER

Plug-in Metal Oxide Surge Arrester for A.C. System



Application:

For 33kv & under 33kv C-GIS metal-enclosed switchgear, SF6 insulation RMU and oil immersed transformer

Excellent Characteristics:

-- Using the unique self-made metal oxide varistor block with excellent non-linear volt-ampere characteristics and good steep wave response characteristics, which can control the overvoltage at a lower level to protect the equipment from the various overvoltages.

- With the most perfect import liquid silicone rubber material
- The unique pressure relief device
- The complete metal enclosed shell
- Solid insulation
- The smallest size among the similar products
- Customized product is welcome

Installation Size: Matched with 2#, 3# of EN50181 & DIN47637 Inner Cone Socket

Main Type and Technical Specification of Plug-in Metal Oxide Surge Arrester

Type	Nominal Voltage of System (Un)		Max. Voltage of System (Um)		Rated Voltage (Ur)	Continuous Operation Voltage (Uc)	DC Reference Voltage (U1mA)	2ms Rectangular Withstand Current
	Voltage Level	Voltage Level						
	kV (Value)				kV	kV	kV	A
CA-15 CA-15Z	10	11	/	12	15	12.0	23.0	250
CA-17 CA-17Z					17	13.6	25.0	250
CA-24 CA-24Z	20	22	/	24	26	20.8	37.0	400
CA-34 CA-34Z					34	27.2	48.0	400
CA-24 CA-42Z	25		/	27.5	42	34.0	65.0	400~600
CA-34 CA-33Z	30	33	34.5	36.0	36	29.0	51.0	400
					45	36.0	65.0	600~1000
CA-42 CA-42Z	35	/	/	40.8	42	34.0	65.0	400~600
CA-51 CA-51Z					51	40.8	73.0	400~600

METAL OXIDE SURGE ARRESTER

Monitor & Counter for Surge Arrester



Product Feature:

- ◆ The series of products are combined the surge counting unit and leakage current measuring unit in one body.
- ◆ These products are fully enclosed in metal shells which have good sealing performance and are free from external influences. The internal components have good aging resistance and are suitable for long-term electric system operation.
- ◆ The products can monitor leakage current change of surge arresters and record the numbers of arrester action in real-time online. And according to the change of leakage current, we can determine the abnormal conditions such as internal moisture, mechanical damage, ageing of zinc oxide varistors and etc. in order to prevent accidents and improve the reliability of power systems operation.
- ◆ Some type with remote communication function can realize remote and online monitoring.

Main Type and Technical Specification of Monitor & Counter for Surge Arrester

Type	Nominal Discharge Current(KA)	Residual Voltage \leq (KV)	2ms rectangular current (A)	4/10 μ S High Current Impulse Withstand (KA)	Current Scale (mA)	Counter Method
JCQ-3E	10	1.3	1000	100	0-3	Digital
JCQ-3AE	20	2.5	2500	100	0-6	Digital
JSY-5	5	1.3	800	65	/	Pointer-type
JSY-10	20	2.5	2500	100	/	Pointer-type
JCQ-3Y	10	1.3	1000	100	0-3	Digital
JCQ-3AY	20	2.5	2500	100	0-10	Digital
JCQ-3S	10	1.3	1000	100	0-3	Digital



ELECTRIC POWER DISTRIBUTION EQUIPMENT

Ring Main Unit & High/Low Voltage Switchgear



Ring Main Unit



High Voltage Switchgear



SF6 Insulated Ring Main Unit



SF6 Insulated Ring Main Unit



SF6 Insulated Ring Main Unit

ELECTRIC POWER DISTRIBUTION EQUIPMENT

Pre-fabricated Substation



US Type Fabricated Substation

Application:

Pre-fabricated Substation is called box-type substation. It is wild used for mining & factory, residential quarter, school, hospital high-speed way, port, station and business center or shopping center, and wind power plant(40.5/0.69kV) etc..

Product Feature:

- Advantage in technology with stable and reliable performance
- Flexible combined way, Pre-fabricated and small area covered
- Easy to coordinated with environment as the handsome appearance.



GRC EU Type Fabricated Substation