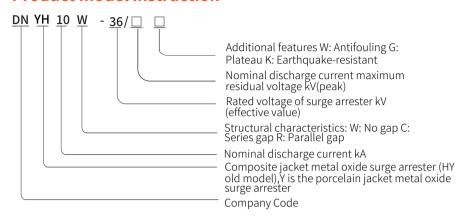
## Metal-oxide Surge arresters



#### **Product model instruction**



## **Application scope**

The surge arrester is an overvoltage protector, which is mainly used to protect various electrical equipment (transformers, switches, capacitors, chokes, mutual inductors, generators, motors, power cables, etc.) in power systems, railway electrification systems, and communication systems from damage such as atmospheric overvoltage, operating overvoltage, and power frequency transient overvoltage. It is the basis of insulation coordination of power systems.

The core component (resistor) of the metal oxide surge arrester adopts an advanced formula based on zinc oxide, which has excellent nonlinear (volt-ampere) characteristics, that is, under normal operating voltage, the current passing through is only microamperes. When it is subjected to over voltage, the current passing through instantly reaches several thousand amperes, making the surge arrester in a conducting state and releasing overvoltage energy, there by effectively limiting the damage of overvoltage to power transmission and transformation equipment.

Traditional silicon carbide surge arresters have the disadvantages of high steep wave discharge voltage caused by steep wave discharge delay, and high operating wave discharge voltage caused by large operating wave discharge dispersion. The oxide surge arrester has good steep wave response characteristics, no delay for steep wave voltage, low operating residual voltage, no discharge dispersion, etc. The protection margin of steep waves and operating waves is greatly improved, and in terms of insulation coordination, the protection margin of steep waves, lightning waves, and operating waves can be nearly consistent, thus providing the best protection for power equipment.

### Structural features

>Small size, light weight, collision resistance, no damage during transportation, flexible installation, suitable for use in switch cabinets;>Special structure, integral molding, no air gap, good sealing performance, moisture-proof and explosion-proof; >Large creepage distance, good hydrophobicity, strong pollution resistance, stable performance, and reduced operation and maintenance:

>Unique formula of zinc oxide resistor, small leakage current, slow aging speed, and long service life.

>The actual DC reference voltage, square wave current capacity and large current tolerance are all higher than the national standard.

## According to the standard

The product production is carried out according to the standards of GB11032 (eqvIEC60099-4:), JB/8952

### **Conditions of Use**

- >Ambient temperature: -45 degrees Celsius ~ +45 degrees Fahrenheit
- >Relative humidity (maximum): 100%
- >Installation location: no more than 1000 meters.
- >Wind speed (maximum): 165 km/h
- >Climate: suitable for tropical climate.
- >Earthquake intensity: no more than 8 levels.
- >It is not suitable for use in places with danger of combustion or explosion, places with severe vibration or impact, areas with conductive gas and

#### **User Notice**

>Before installation and use, the surge arrester should be stored in a clean and dry room and should not be corroded by corrosive gases or liquids.

Before the surge arrester is put into operation, a preventive test should be conducted. After it is put into operation, the following tests should also be conducted regularly (once every 5 years for surge arresters of 10kV and below, and once every 2 years for surge arresters of 35kV and above) and compared with the data before operation by referring to the attached table:

- a. Measure the insulation resistance of the surge arrester;
- b. Measure the DC 1mA voltage of the surge arrester;
- c. Measure the leakage current at 0.75 times the DC 1mA.

# Metal-oxide Surge arresters

## Silicone Rubber Housed Arrester without Gaps

	Rated Voltage	Nominal Discharge Current	MCOV	1/4μs Lightning Current	8/20 µ s Lightning Current Impulse	30/60 μs Switching Current Impulse	2ms Rectangular Current Impulse Withstand	4/10 μs High Current Impulse Withstand
	kV	А	kV (rms)	kV(rms)	kV(Crest)	kV(Crest)	А	kA(Crest)
DNYH5W-3	3	5	2.55	11.3	9	8.9	150	65
DNYH10W-3	3	10	2.55	11.3	9	8.9	250	100
DNYH5W-6	6	5	5.1	22.6	18	16.8	150	65
DNYH10W-6	6	10	5.1	22.6	18	16.8	250	100
DNYH5W-9	9	5	7.65	33.7	27	23.8	150	65
DNYH10W-9	9	10	7.65	33.7	27	23.8	250	100
DNYH5W-10	10	5	8.4	36	30	26.4	150	65
DNYH10W-10	10	10	8.4	36	30	26.4	250	100
DNYH5W-11	11	5	9.4	40	33	30	150	65
DNYH10W-11	11	10	9.4	40	33	30	250	100
DNYH5W-12	12	5	10.2	42.2	36	31.7	150	65
DNYH10W-12	12	10	10.2	42.2	36	31.7	250	100
DNYH5W-15	15	5	12.7	51	45	38.5	150	65
DNYH10W-15	15	10	12.7	51	45	38.5	250	100
DNYH5W-18	18	5	15.3	61.5	54	46.2	150	65
DNYH10W-18	18	10	15.3	61.5	54	46.5	250	100
DNYH5W-21	21	5	17	71.8	63	54.2	150	65
DNYH10W-21	21	10	17	71.8	63	54.5	250	100
DNYH5W-24	24	5	19.5	82	72	62	150	65
DNYH10W-24	24	10	19.5	82	72	62	250	100
DNYH5W-27	27	5	22	92	81	69.8	150	65
DNYH10W-27	27	10	22	92	81	69.8	250	100
DNYH5W-30	30	5	24.4	102	90	79	150	65
DNYH10W-30	30	10	24.4	102	90	79	250	100
DNYH5W-33	33	5	27.5	112	99	86.7	150	65
DNYH10W-33	33	10	27.5	112	99	86.7	250	100
DNYH5W-36	36	5	29	123	108	92.4	150	65
DNYH10W-36	36	10	29	123	108	92.4	250	100