

home products Polymer Housing Surge Arrester Metal-oxide Surge Arrester (YH10W 24kV)

Material: polymer

Rated voltage:3-24KV

Type: YH5W&YH10W Polymer type surge arrester

code No.	Rated voltage	MCOV	Current impulse residual voltage			long impulse withstand current 2000μs		4/10μs high current impulse withstand	
			1/10μs steep	8/20μs lightning	30/60μs switching				
	KV(rms)	KV(rms)	KV(crest)	KV(crest)	KV	5KA	10KA	5KA	10KA
YH10W-3	3	2.55	11.3	9	8.9	150	250	65	100
YH10W-6	6	5.1	22.6	18	16.8	150	250	65	100
YH10W-9	9	7.65	33.7	27	23.8	150	250	65	100
YH10W-12	12	10.2	42.2	36	27	150	250	65	100
YH10W-15	15	12.7	51	45	38.5	150	250	65	100
YH10W-18	18	15.3	61.5	54	46.2	150	250	65	100
YH10W-21	21	17	71.8	63	54.2	150	250	65	100
YH10W-24 E2	24	19.5	78.4	68.6	58.1	150	300	65	100
YH10W-24 E1	24	19.5	80.5	70	59.5	150	300	65	100

Note: 5KA Polymer surge arrester code No.YH5W

Technical Performance

The technical performance of metal-oxide surge arrester is accord with IEC60099-4 and IEEE(ANSI)C62.11. The product certification through **KEMA** Nederland B.V. T&D Testing Services.

Structural Design

The module core design was developing in the early 80s and has over 15 years service experience, with the housing material changing in the early 90s.

The modular single column polymer housing metal-oxide surge arrester design is available up to 220kV systems.

The essential feature of the internal patented construction is the permanent homogenous resin and fiberglass bond over the complete insulating service of the metal-oxide varistor, the arrester module has an inherently high mechanical strength and provides a uniform dielectric at the insulating surface of the metal-oxide varistor.

Advantage (CANTOR)

- Low residual voltage
- Long protection distance
- High energy input capacity
- Stable U-I characteristics even after multiple strokes
- Proof against ageing
- Explosion and shatter-resistant design
- Pollution resistant and UV-stable
- Housing resistant to rough handling
- Stable against shock and vibration
- High mechanical resistance

Metal-oxide Surge Arrester (YH10W-24kV E2)

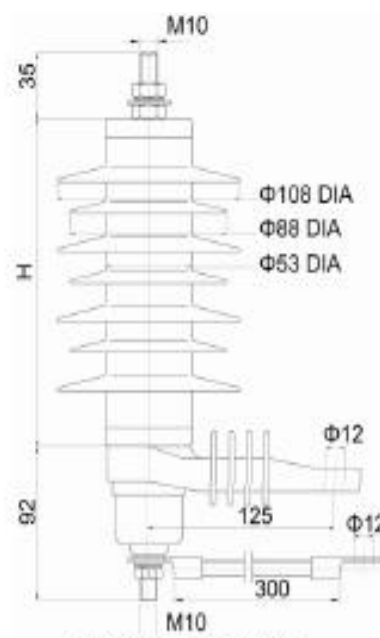
Rated voltage (Ur) :	24 kV
Nominal discharge current (In):	10 kA
Maximum continuous operating voltage (Uc)	19.5 kV
Rated frequency (Hz):	50/60
Housing insulation withstand	
-Lightning impulse :	135 kV
-Power frequency (wet):	60 kV
Residual voltage at	
-Lightning impulse 8/20us:	68.6 kV
-Steep current impulse 1/10 us:	78.4 kV
-Switching impulse 30/60 us:	58.1 kV
Switching surge(Peak current):	300A
High current impulse withstand value (4/10us):	100kA
Total creepage distance (Minimum):	610 mm
Creepage distance/ Rated voltage ratio	25 mm\kV



YH10W-24kV E1

Metal-oxide Surge Arrester (YH10W-24kV E1)

Rated voltage (Ur) :	24 kV
Nominal discharge current (In):	10 kA
Maximum continuous operating voltage (Uc)	19 kV
Rated frequency (Hz):	50/60
Housing insulation withstand	
-Lightning impulse :	135 kV
-Power frequency (wet):	60 kV
Residual voltage at	
-Lightning impulse 8/20us:	70 kV
-Steep current impulse 1/10 us:	80.5 kV
-Switching impulse 30/60 us:	59.5 kV
Switching surge(Peak current):	300A
High current impulse withstand value (4/10us):	100kA
Total creepage distance (Minimum):	840 mm
Creepage distance/ Rated voltage ratio	35 mm\kV



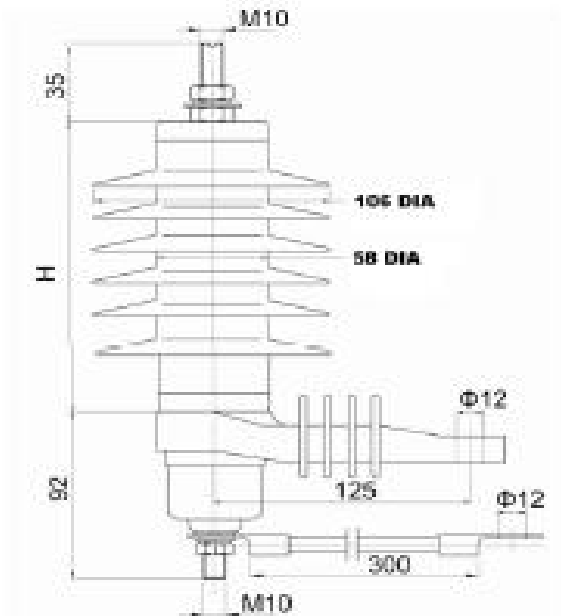
YH10W-24kV E1 drawing

Specifications of Metal-oxide Surge Arrester (YH10W 24kV)

Characteristics		Guaranteed Data	
Rated Voltage	kV	24	
Nominal discharge current	kA	10	
General Feature			
Type designation	YH10W-24kV E2		YH10W-24kV E1
Housing material	Polymeric		Polymeric
With(out) gqps	Without		Without
Ratings characteristics			
Rated frequency	Hz	50/60	
Residual voltage at			
-lightning impulse 8/20μs	kV	68.4	70
-steep current impulse 1/10μs	kV	78.4	80.5
-switching impulse 30/60μs(10kA up)		58.1	59.5
-switching wave(class 1 up)		0.5	0.5
Continuous operating voltage	kV	19.5	19
Power freqncy reference voltage	kV	24	24
Long duration current impulse withstand			
-line discharge class(10kA up)		1	1
Operating duty			
-4/10μs high current impulse withstand	kA	100	90/100
-2ms rectangular current withstand	A	300	200
Housing insulation level			
-lightning impulse	kV	135	135
-power frequency,wet 1 min	kV	60	60
Partial discharge	pC	" 10	" 10
Rated short-circuit withstand current			
Measurements dimensions			
Creepage distance		610 mm	840 mm
Mechanical section length (Drawing "H")		260 mm	295 mm
Insuation distance (electrical section length)		265 mm	300 mm
Mechanical strength			
-cantilever		147 N	147 N
Blocks (Zinc oxide varistor)			
-diameter		Φ42±0.5 mm	φ38±0.5 mm
-height		24.5±0.5 mm	24.5±0.5 mm
-number of blocks		7	7
Arrester dimension			
-diameter (big shed)		106 mm	108 mm
-diameter (small shed)		106 mm	88
-number of sheds		9	14
-core diameter		58 mm	53 mm
-arrester height (with fittings)		437±10 mm	422±10 mm



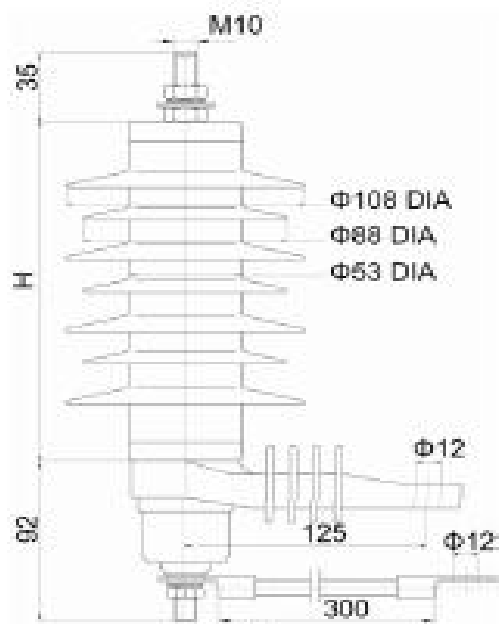
YH10W-24 E2



YH10W-24 E2 drawing



YH10W-24 E1



YH10W-24 E1 drawing