



February, 1986
New Information
Mailed to: E, D, C/38-000A, 44-900A

Outdoor
0-10000 Ft Altitude
9-27 KV

Metal Oxide Riser Pole Surge Arrester Type RMX

Application

The RMX arrester is a gapless metal oxide arrester with intermediate class protective characteristics for use on the distribution system. Its special moxide disks make it suitable for special applications such as the overhead to underground transition point (riser pole).

Construction

The Type RMX gapless arrester consists of moxide metal oxide disks in an extra creep hermetically sealed enclosure. The RMX arrester is offered in four standard variations. It is offered with and without the ground lead disconnect. It is also offered with a NEMA crossarm bracket or with just a mounting clamp. Standard ratings are offered from 9 through 27 kV.

Service Conditions

RMX arresters are designed for indoor or outdoor applications at altitudes from 0 to 10,000 feet. They are also designed for an ambient temperature of -40°C to $+40^{\circ}\text{C}$. Temporary ambients exceeding 40°C are permissible – up to 60°C . However, it is recommended that Westinghouse be consulted for proper arrester selection for applications where ambient conditions will exceed 40°C .

Standard Design Features

Low front of wave and impulse sparkover due to gapless construction.

Low discharge characteristics due to moxide disk formulation.

Tested per the latest draft of "Standards for Metal Oxide Surge Arresters for Alternating-Current Power Circuits" as prepared by Working Group 3.3.11 Surge Protective Devices Committee, IEEE Power Engineering Society. A complete design test report is available from your Westinghouse Bloomington representative at any time.

High-current short duration capability; 100,000 amps, 2 shots.

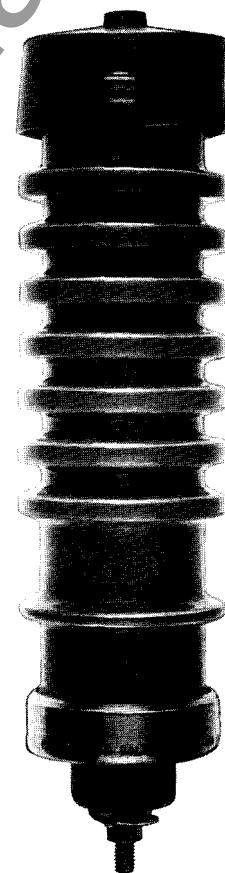
Low-current long duration capability; 250 amps for 2000 μSec .

Elastomer gasket sealing system on both ends of the arrester.

100% helium mass spectrometer production leak test.

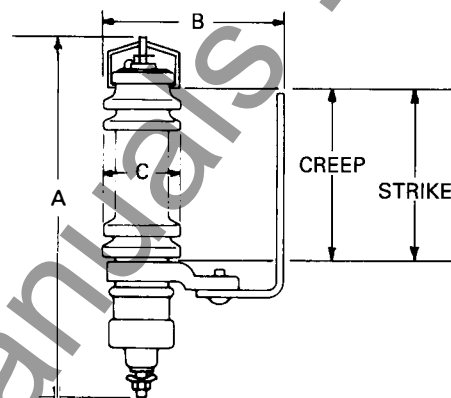
Extra creep wet process high strength porcelain housing.

Standard distribution class arrester mounting provisions.



Weights and Dimensions (Approximate)

Arrester Rating	MCOV KV RMS	Dimensions in Inches for Direct Connected Styles					
		A	B	C	Creep	Strike	Weight Lbs.
9	7.65	14.3"	7.92"	3.60"	10.50"	7.13"	11.3
10	8.4	14.3"	7.92"	3.60"	10.50"	7.13"	11.9
12	10.2	17.7"	7.92"	3.60"	13.00"	8.94"	13.0
15	12.7	19.8"	7.92"	3.60"	16.00"	10.84"	14.6
18	15.3	23.3"	7.92"	3.60"	18.00"	11.94"	16.0
21	17.0	26.3"	7.92"	3.60"	21.00"	14.81"	19.1
24	19.5	29.0"	8.75"	3.95"	31.10"	15.00"	24.6
27	22.0	30.0"	8.75"	4.50"	35.00"	16.63"	25.0



Performance Characteristics: Type RMX Riser Pole Arresters

Arrester Rating	MCOV KV RMS	.5 μ SEC 10KA Max. IR KV	500A Switching Surge Max. KV	Discharge Voltage KV Crest 8 x 20 μ SEC Current Waves KV					
				1.5 KA	3.0 KA	5.0 KA	10.0 KA	20.0 KA	40.0 KA
9	7.65	28.1	19.6	20.1	21.4	22.4	24.0	25.8	27.8
10	8.4	30.2	21.0	21.6	22.9	24.1	25.8	27.7	29.8
12	10.2	37.5	26.1	26.8	28.5	29.9	32.0	34.4	37.1
15	12.7	46.8	32.6	33.5	35.6	37.4	40.0	43.0	46.3
18	15.3	56.2	39.2	40.2	42.7	44.8	48.0	51.6	55.6
21	17	63.1	44.0	45.1	48.0	50.4	54.0	58.0	62.4
24	19.5	72.5	50.5	51.8	55.1	57.8	62.0	66.6	71.7
27	22	81.9	57.0	58.5	62.2	65.3	70.0	75.2	81.0

Arrester Energy Capability

Metal oxide arresters have much higher energy absorption capability than conventional arresters of the same class and rating. For most applications, the energy requirements of the application are well within the energy capability of the arrester selected on the basis of continuous operating voltage and short time overvoltage. The Westinghouse RMX gapless surge arrester can absorb 2.2 kilojoules per kilovolt of arrester rating either in one single discharge or smaller multiple discharges within seconds of each other. After allowing sufficient time to cool, the maximum energy discharge can be repeated many times.

Figure 1 shows the short time overvoltage capability of the RMX Arrester.

For further information, refer to Price List 38-120.

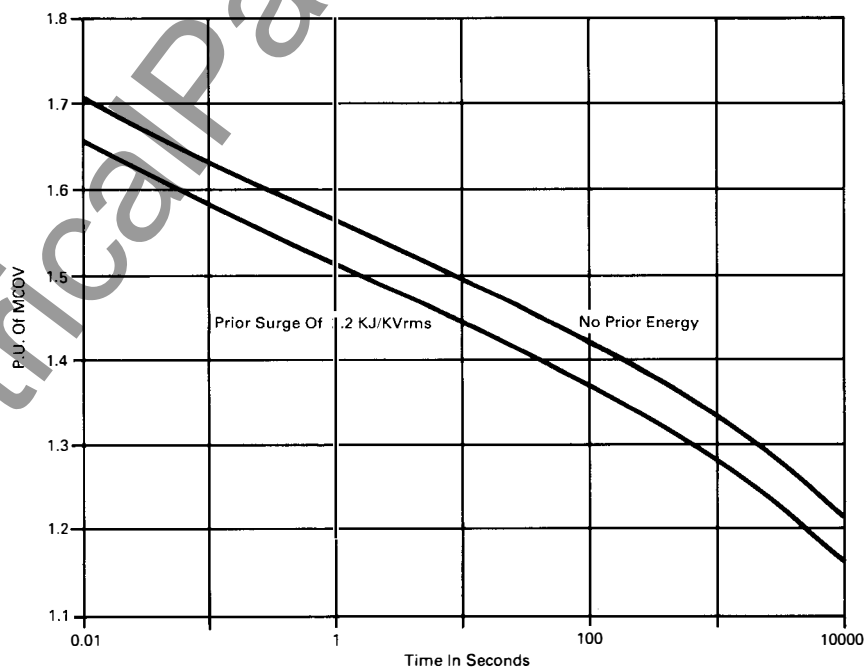


Figure 1 – Westinghouse Overvoltage Capabilities Riser Pole Arrester (RMX)

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