

1. Scope

This specification applies to gapped heavy-duty distribution class and gapless riser pole class metal-oxide surge arresters for use on a 12,470 Grd-Y/7,200 volt 60-Hz AC power distribution system. The arresters shall be configured similar to the above illustration.

2. Application

The arresters will be used predominantly on primary underground cable riser poles. To a lesser extent they will be used on selected primary overhead equipment poles.

3. Reference Standards

Except as modified by this specification, the arresters shall be constructed, tested and furnished according to the latest revision of ANSI/IEEE Standard C62.11. If a conflict exists between the referenced standard and this specification, this specification shall prevail.

4. Material ID Number

This specification applies to District Material ID No. 482571.

5. Construction and Materials

Arresters shall be either gapped metal-oxide or gapless metal-oxide type. Arresters shall be suitable for crossarm mounting with a standard NEMA crossarm mounting bracket; however, they shall be supplied without a crossarm mounting bracket. Arrester housings shall be made of a nonfragmenting polymeric material. Arrester studs and end caps shall be stainless steel.

6. Terminals

Arresters shall be equipped with stainless steel line (top) and ground (bottom) terminals. Line terminal hardware shall include a stainless steel wire clamp, stainless steel or silicon bronze terminal nut and polymeric animal guard cover. Ground terminal hardware shall include a stainless steel wire clamp and stainless steel or silicon bronze terminal nut.

7. Ground Lead Isolator

Arresters shall be equipped with a ground lead isolator to effectively disconnect the ground lead from the arrester in the event of arrester failure or damage.

8. Color

Arresters shall be ANSI No. 70 Sky Gray in color.

9. Ratings

The arrester shall have the following ratings:

Duty Cycle Voltage - RMS	10kV
Maximum Continuous Operating Voltage (MCOV) RMS	8.4kV
Impulse Test 1.2/50 msec Full Wave Crest kV BIL (min.)	75kV
Lightning Impulse Classifying Current	500A
Switching Surge Classifying Current	10,000A
Housing Leakage Distance (min.)	14.0 in.

10. Discharge Voltage - Current Characteristics

The discharge voltages of the arrester shall not exceed the maximum values specified below at the test currents shown:

Test Current (kA)	Maximum Discharge Voltage kV Crest Using an 8/20 microsec Current Wave
1.5	24.0
3.0	25.0
5.0	26.0
10.0	27.0
20.0	31.0
40.0	37.0

11. Temporary Over Voltage Capability

The minimum temporary overvoltage (TOV) capability of the arrester, without prior duty, shall be as specified below:

Duration (seconds)	Voltage P.U. of MCOV
1.0	1.38
10	1.29
100	1.24
1000	1.10

12. Identification

An identification nameplate according to ANSI/IEEE C62.11-1999, Section 10.1, shall be made an integral part of each arrester.

13. Packaging

Arresters shall be individually packaged in cardboard cartons with all of their accessories to prevent damage during transporting and handling. The line and ground terminal hardware shall be assembled to the arrester. Each individual carton shall be legibly marked with the manufacturer's name and the arrester type, voltage rating and catalog number.