

**Transmission & Distribution
Material & Installation Specification**

Distribution Arrester Applications

I. Quantity

The base bid shall include the indicated number of Lightning Arresters of this type furnished and installed as hereinafter specified.

II. Material

- A. The material shall be equal in quality, design, performance, and appearance to the items specified on drawing TDMIS-27.
- B. Arresters shall be fully compliant with ANSI/IEEE C62.11 Standard, or engineer Approved Equal.
- C. Maximum discharge voltage for a 10-kA impulse current wave which produces a voltage wave cresting in 0.5 μ s.
- D. Single position bracket shall be McClain # 7106A0025 Type "C", or engineer approved equal.
- E. Arresters supplied shall be provided for 14.4 kV circuits as shown in accordance with the following:
 - 1. Heavy Duty; DOP #20371

Rated Voltage kV	MCOV kV	Unit Catalog Number	0.5 usec 10 kA Maximum IR-kV (1)	500 A Switching Surge Maximum IRKV (2)	8/20 Maximum Discharge Voltage - kV					
					1.5 kA	3 kA	5 kA	10 kA	20 kA	40 kA
12	10.2	217560	40.8	27.8	30.4	32.6	34.5	37.6	42.7	50.3

2. Riser Pole; DOP #20374

Rated Voltage kV	MCOV kV	Unit Catalog Number	0.5 usec 10 kA Maximum IR-kV (1)	500 A Switching Surge Maximum IRKV (2)	8/20 Maximum Discharge Voltage - kV					
					1.5 kA	3 kA	5 kA	10 kA	20 kA	40 kA
12	10.2	213710	35.5	23.6	25.9	27.9	29.4	32.5	37.3	44.0

- F. Arresters supplied shall be provided for 7200V circuits as shown in accordance with the following:
 - 1. Heavy Duty; DOP #20369

Rated Voltage kV	MCOV kV	Unit Catalog Number	0.5 usec 10 kA Maximum IR-kV (1)	500 A Switching Surge Maximum IRKV (2)	8/20 Maximum Discharge Voltage - kV					
					1.5 kA	3 kA	5 kA	10 kA	20 kA	40 kA
9	7.65	213708	31.4	21.5	23.5	25.1	26.6	29.0	32.9	38.8

2. Riser Pole; DOP #20367

Rated Voltage kV	MCOV kV	Unit Catalog Number	0.5 usec 10 kA Maximum IR-kV (1)	500 A Switching Surge Maximum IRKV (2)	8/20 Maximum Discharge Voltage - kV					
					1.5 kA	3 kA	5 kA	10 kA	20 kA	40 kA
9	7.65	221608	26.8	17.8	19.5	21.0	22.2	24.5	28.1	33.2

III. Installation

- A. The installation shall be as shown on drawing TDMIS-27.
- B. Arresters shall be connected to pole ground using #6, soft drawn solid bare copper wire.
- C. Arresters shall be connected to vibrating equipment and overhead lines with #4 Soft Drawn Stranded XHHW-2, hot line clamp and stirrup.

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IV. Method of measurement

Shall be included with various modules as required for a complete and operational module, or, when installed on an existing structure for independent use such as for line protection, shall be per each and shall include all hardware, risers, jumpers, connectors, hot line clamps, labor, equipment and miscellaneous required for a complete and operational devi

V. Basis of payment

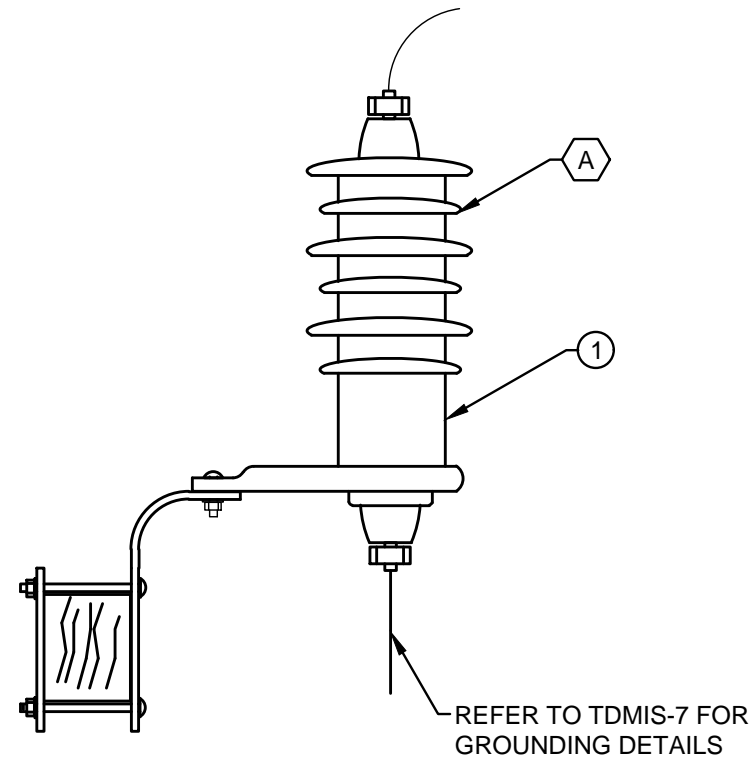
Items	Unit	Description
TDMIS-27	Two	Per single phase circuit
TDMIS-27	Three	Per three phase circuit

The pay items may also be required and included with other various modules.

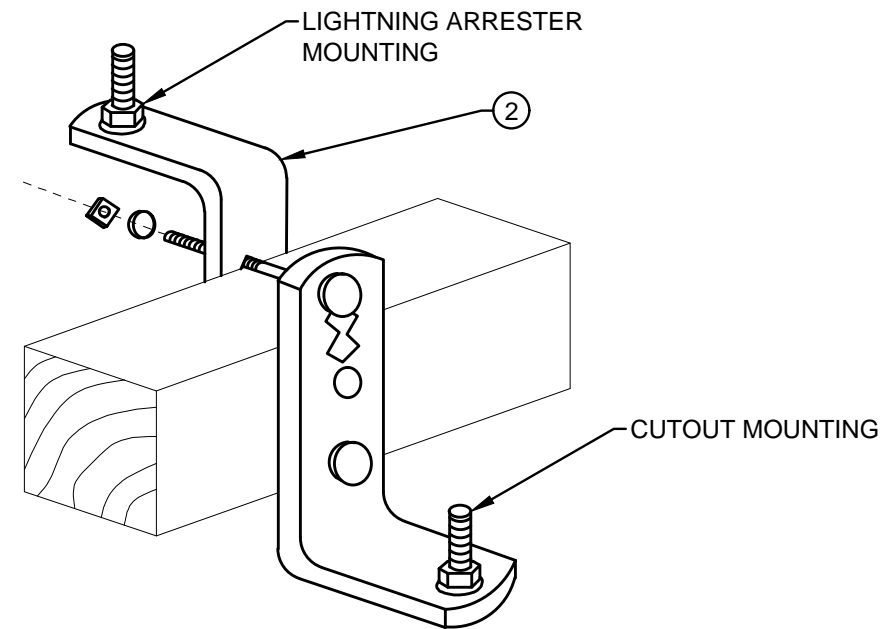
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CODED NOTES:

A JUMPERS, RISERS AND HOT LINE CLAMPS WITH STIRRUPS ARE TO BE INCLUDED WITH EACH ASSEMBLY



**DETAIL 1
LIGHTNING ARRESTER**



**DETAIL 2
CROSSARM MOUNTING**

SCHEDULE

ITEM #	SUFFIX NO.	LENGTH	PART#
1	9	9KV, DISTRIBUTION	20369
1	9R	9KV, RISER	20367
1	12	12KV, DISTRIBUTION	20371
1	12R	12KV, RISER	20374

ITEM LIST

ITEM #	DESCRIPTION	PART #	QTY.
①	ARRESTER, LIGHTNING, CROSSARM MOUNTED	SEE SCH	1
②	BRACKET, LIGHTNING ARRESTER (NUTS, BOLTS, LOCK WASHERS ARE INCLUDED)	*	1

CITY OF COLUMBUS, OHIO
DEPT. OF PUBLIC UTILITIES - DIVISION OF POWER

DISTRIBUTION ARRESTOR APPLICATION

MTLA

DRAWN BY: AEC DATE: 01/01/2018

APPROVED: R. SPRITE

SCALE: NTS SHEET: 3 OF 3

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