Transmission & Distribution
Material & Installation Specification

Elbow Surge Arrester- 200 Amp

I. Quantity
The base bid shall include the indicated number of 200A, “Elbow Surge Arresters” and appropriate accessories included but not limited to silicon lubricant, grounding kits, assembly tools, abrasives, cleaners, and all necessary items for complete and operational Elbow Surge Arrester System.

II. Material
A. The material shall be equal in quality, design, performance, and appearance to the items specified on drawing TDMIS-1104. All components shall be Elastimold or Engineer approved equal.
B. All steel hardware to be 302 Stainless Steel.
C. Connector body shall be a molded rubber or epoxy housing with semi-conductive outer coating compatible with 200A load break apparatus bushings. Connector shall be capable of load-make and load-break switching. Connector system shall be rated for operation at 200 Amps continuous at 14.4kV Grd Y/8.3kV. Surge arrester shall be rated for 12 kV (10.2kV MCOV RMS).

III. Installation
A. The installation shall be as appropriate on drawing TDMIS-1104 as related to and called out on TDMIS unit assembly drawings or as needed to complete the circuit or circuit extension and/or circuit taps.
B. Size and type of elbow arresters shall not be substituted without express approval of engineer.
C. Only qualified personnel with at least 5 years’ experience with high voltage terminations, or certificate from a certified training school as approved by COC-DOP may be assigned to terminate MV cables. A resume of personnel’s experience shall be submitted to DOP for approval 30 days prior to beginning terminations.
D. Cables and cable accessories shall be kept clean and dry at all times during termination process. Suitable tents and heaters shall be employed as needed. Person performing cable termination shall clean hands frequently with MEK or other approved solvent to assure semi-conductive materials are not transferred from component to component.
E. Silicone lubricants shall be applied liberally to separable components. It is recommended that additional tubes of lubricant be on hand as kits are not furnished with adequate lubricant.
F. Arrester components shall be cleaned and prepped according to the connector manufacturers’ directions.
G. Arrester components shall be considered complete when in final position and energized at operating voltage.

IV. Method of measurement
Shall be included with the unit for each ground mounted equipment or apparatus assembly requiring same and shall include all materials, accessories, lubricants, abrasives, tools, labor, equipment, and supervision required for a complete and operational module.

V. Basis of payment
Shall be included with the unit price for associated ground mounted equipment or apparatus.
CONNECT GROUNDING EYE TO GROUND LOOP WITH A PIECE OF NEUTRAL WIRE OR A PIECE OF BARE #14 COPPER WIRE. CONNECT WITH THE SAME CONNECTOR THAT IS USED FOR THE ARRESTER GROUND LEAD.

CONNECT #4 COPPER FLEXIBLE GROUND LEAD, 38 INCHES LONG (PROVIDED WITH ARRESTER) TO GROUND LOOP AS CLOSE TO THE TAPE SHIELD AS POSSIBLE.