Introduction
Silicone-housed metal oxide surge arresters are used for overvoltage protection of high voltage equipment, either indoor or outdoor. These surge arresters meet all NEMA, ANSI, and IEC standards. These instructions are for surge arresters rated 5 through 45 kV.

Description
A master nameplate located on the surge arrester lists the style number, serial number, voltage rating, MCOV (maximum continuous operating voltage) rating and the year of manufacture. The complete surge arrester will include the line terminal bracket and ground terminal.

Line and ground terminals: POLIM-K are suitable for copper or aluminum conductors (cable size #12 to #6).

Receipt
On receipt of the surge arrester, carefully inspect the shipping packaging and units for any visible signs of damage. Check nameplates to be sure the desired ratings have been received and check parts against the packing list. If damage or shortage exists, save the shipping packaging and packing materials, file a claim immediately with the carrier and promptly notify the nearest ABB Sales Office.

Installation
Locate surge arresters such that they are not accessible to people. Surge arresters have dangerous high voltage, terminal to terminal, under normal operating conditions. Surge arresters should be installed above reach of people and behind safety fences. The arrangement should be such that the maximum arrester mechanical loading from conductor pull, wind load and earthquakes does not exceed the maximum design cantilever static strength (see ABB Product Bulletin).

Testing of In-Service Surge Arresters
No simple field test will verify the complete characteristics of a surge arrester unit. This requires extensive, rather specialized test facilities.

Notes
1. Voltage ratings per latest revision of ANSI C62.11.
2. Silicone-housed surge arresters are designed to be operated at voltages equal to or less than the MCOV rating shown on the master nameplates.
3. Increase clearances 3% for each 1000 ft. over 6000 ft.
4. Dimensions can be obtained from the outline drawing.
5. Minimum phase-to-ground and phase-to-phase spacing for surge arresters are specified on the outline. Other apparatus standards, other specifications or local codes may supersede distances specified on the outline.

Maintenance
Under normal conditions, the silicone-housed surge arrester requires no maintenance. In locations where the environment is hazardous to insulating structures, periodic inspection of the surge arresters may disclose the need to remove contaminants of dirt, soot, salt and other conducting materials.

Correspondence
Inquiries pertaining to silicone-housed surge arresters should be directed to the nearest ABB Sales Office, giving all information stated on the master nameplate.
For more information please contact:

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