Important Safety Notice
- Keep these instructions available for the proper installation, maintenance, and operation of this product.
- Follow your company's safety procedures.
- Read these instructions before attempting to install, operate, or maintain this device. Failure to follow these instructions could cause personal injury, death, or property damage.
- Apparatus covered by this instruction leaflet should be operated and serviced by competent personnel familiar with good safety practice. These instructions are written for such personnel and are not intended as a substitute for proper training and experience in safety procedures for this type of equipment.

Introduction
Surge arresters are used for over voltage protection of high voltage equipment, either indoor or outdoor. Type POLIM-S Surge Arresters are polymer housed arresters using metal oxide varistor (MOV) technology. These surge arresters meet all NEMA, IEEE, and IEC Standards.

Description
A master nameplate located on the surge arrester lists the style number, serial number, voltage rating, MCOV (Maximum Continuous Operating Voltage) rating, pressure-relief class, date of manufacture, and other important information. The complete surge arrester includes a line terminal, a ground terminal, and line and ground terminal pads with hardware. A grading ring is supplied for styles requiring it.

Line and ground terminals can accommodate CU or AL cable size No. 2 to 1000 MCM (.25" to 1.15") diameter. The ground terminal assembly can be attached to any bottom mounting bolt. Insulating base units and discharge counters may be purchased separately and provide a means to record surge arrester activity.

Receipt
On receipt of the surge arrester, 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
Type POLIM-S Surge Arresters can be safely lifted from the line terminal or base.

Type POLIM-S Surge Arresters come fully assembled for styles not requiring a grading ring. Simply attach ground terminal assembly to any base mounting bolt. (See outline drawing.)

For styles requiring a grading ring, as shown on outline drawing and named on master nameplate, follow these assembly instructions:
1. Position grading ring on top of arrester and line up holes with .5" holes on top of arrester.
2. Place line terminal on top of grading ring and line up holes with .5" holes on top of arrester.
3. Secure both grading ring and line terminal with .5" - 13 x 1.750" Hex bolts and Lock washers (supplied). Torque bolts to 70 ft-lbs.

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

Notes
1. Type POLIM-S Surge Arresters are designed to be operated at voltages equal to or less than the MCOV rating shown on the master nameplate. For the short time over voltage capability, consult the product bulletin.
2. Dimensions, drilling plan, and other important details are included on the enclosed outline drawing.
3. For minimum phase-to-ground and phase-to-phase clearances with Type POLIM-S Surge Arresters, refer to the POLIM-S product bulletin. Other apparatus standards, other specifications, or local codes may supersede distances specified.
4. If an insulating base is installed without a counter, the insulating base should be shorted by a shunt wire.

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 Type POLIM-S Surge Arresters should be directed to the nearest ABB Sales Office, giving all information stated on the master nameplate.

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