

Instruction leaflet for Type HS-PEXLIM Surge Arresters

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 HS-PEXLIM 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.

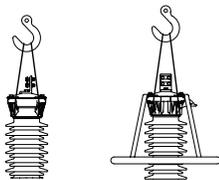
Line and ground terminals can accommodate CU or AL cable size No. 2 to 1000 MCM (.25" to 1.15") diameter. The ground terminal assembly can be attached to any bottom mounting bolt. Insulating base units and discharge counters may be purchased separately and provide a means to record surge arrester activity.

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 HS-PEXLIM Surge Arresters can be safely lifted by placing a sling beneath the upper metal flange and around the neck of the polymer insulator. Caution must be taken so that the arresters do not hit anything during lifting.



Single Housing HS-PEXLIM Surge Arresters come fully assembled. Simply attach ground terminal assembly to any base mounting bolt. (See outline drawing.) Multi-Unit Housing HS-PEXLIM Surge Arresters must be assembled in sequence per the Unit Stacking Order found on the bottom unit Master Nameplate. (See outline drawing.)

Note: Do not remove red vent port covers. Direct ports away from adjacent apparatus.

Please refer to the outline drawing for a detailed assembly diagram of how to mount arrester units and grading ring assemblies. Follow these assembly instructions:

1. Locate the bottom arrester unit that has the master nameplate. Using the procedure above, lift the unit to its mounting location and secure arrester to the base.
2. Locate the 2nd unit arrester that has the correct unit nameplate (Serial No-2). Using the procedure above, lift the unit to the top of the bottom unit and secure arrester using provided mounting hardware. Orient the unit such that the exhaust ports of all the units line up with one another.
3. Continue same procedure for 3rd or 4th units.

For styles requiring a grading ring as noted on the master nameplate, (see outline drawing for grading ring assembly instructions), assembled grading ring can be mounted to top unit prior to lifting into place.

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 HS-PEXLIM 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 HS-PEXLIM Surge Arresters, refer to the HS-PEXLIM 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 polymer 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 HS-PEXLIM Surge Arresters should be directed to the nearest ABB Sales Office, giving all information stated on the master nameplate.

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