Plug-in gapless metal-oxide surge arresters
Protection for medium-voltage gas-insulated switchgear

Separable gapless metal-oxide surge arresters (MO-arresters) in a screened metal housing provide effective protection against overvoltages in MV GIS.

ABB plug-in MO-arresters are designed to secure the functioning of the switchgear, by absorbing the excess stress caused by lightning and switching operations, while keeping the system screened.

ABB’s surge arresters come with compact design to fit standard and customized gas-insulated switchgear. They are designed and tested according to IEC 60099-4 and fulfill the requirements of GB 11032. The plug-in design ensures fast and easy installation.

Key features
- Two cone designs to ensure the best connection according to EN 50181
- Designs available for indoor and outdoor use
- Maximum safety (touch proof design for reduced health and safety risk)
- Integrated spring provides continuous compression load for assured contact
- Isolated ground bolt allows for connection of surge counters or monitoring systems
- Optimized cone design to avoid air pockets between the surge arrester and switchgear

Customer benefits and savings
- Fast and easy installation, as the surge arrester is delivered with a precompressed spring that eliminates the need for excessive compression force
- Maintenance-free
- Slower ageing of insulation of other equipment in the network
- Compact solution for overvoltage protection
- Minimal distance between the arrester and the protected device

ABB for your competitive edge
- More than 100 years of experience in overvoltage protection
- More than 30 years of experience with silicone insulation
- Global supplier with local support teams
- Proven track record with many customer references worldwide
- In-house metal-oxide resistors production
- All equipment manufactured internally by ABB with full monitoring and control of the entire design, production and delivery process
Plug-in MO surge arrester range available for MV GIS

<table>
<thead>
<tr>
<th>Type</th>
<th>POLIM-D..PI-2</th>
<th>POLIM-D..PI-3</th>
<th>POLIM-D..PI-3 Outdoor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical data</td>
<td></td>
<td></td>
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<tr>
<td>Maximum system voltage $U_s$, kV</td>
<td>52</td>
<td>52</td>
<td>52</td>
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<tr>
<td>Continuous voltage $U_c$, kV$_{rms}$</td>
<td>14 – 41</td>
<td>34 – 42</td>
<td>24 – 42</td>
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<tr>
<td>Rated voltage $U_r$, kV$_{max}$</td>
<td>17.5 – 51.3</td>
<td>42.5 – 52.5</td>
<td>30 – 52.5</td>
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<td>IEC 60099-4 class (Ed. 3.0)</td>
<td>DH</td>
<td>DH</td>
<td>DH</td>
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<tr>
<td>Installation</td>
<td>Indoor</td>
<td>Indoor</td>
<td>Outdoor</td>
</tr>
</tbody>
</table>

Inner cone plug
MO resistors
Polymeric insulation
Screened metal housing
Spring system

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