Surge arrester

3-electrode arrester

Series/Type: T83-C600X
Ordering code: B88069X8530B502
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Surge arrester  
3-electrode arrester  

Features  | Applications
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- Standard size  | Line protection  
- Extremely fast response time  | Station protection  
- Very high current rating  | Brach exchange (MDF)  
- Stable performance over life  
- Very low capacitance  
- High insulation resistance  
- RoHS-compatible  

Electrical specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
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<tbody>
<tr>
<td>DC spark-over voltage ¹ ² ⁴</td>
<td>420 ... 702 V</td>
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</table>
| Impulse spark-over voltage ⁴  
  at 100 V/µs - for 99 % of measured values | < 900 V |
|  - typical values of distribution | < 800 V |
| at 1 kV/µs - for 99 % of measured values | < 1100 V |
|  - typical values of distribution | < 1000 V |
| Service life  
  10 operations 50 Hz, 1 s ⁵ | 10 A |
|  1 operations 50 Hz, 0.18 s (9 cycles) ⁵ | 40 A |
|  10 operations 8/20 µs ⁵ | 10 kA |
|  1 operation 8/20 µs ⁵ | 30 kA |
|  1 operation 10/350 µs ⁵ | 2 kA |
| Insulation resistance at 50 V ¹ ² ⁴ | > 10 GΩ |
| Capacitance at 1 MHz ⁴ | < 1.5 pF |
| Transverse delay time ³ | < 0.2 µs |
| Arc voltage at 1 A | ~ 30 V |
| Glow to arc transition current | ~ 1 A |
| Glow voltage | ~ 200 V |
| Weight | ~ 2 g |
| Operation and storage temperature | -40 ... +90 °C |
| Climatic category (IEC 60068-1) | 40/ 90/ 21 |
| Marking, red negative | EPCOS  
  600 YY O  
  600 - Nominal voltage  
  YY - Year of production  
  O - Non radioactive |
1) At delivery AQL 0.65 level II, DIN ISO 2859
2) In ionized mode
3) Test according to ITU-T Rec. K.12
4) Tip or ring electrode to center electrode
5) Total current through center electrode, half value through tip respectively ring electrode.
Terms in accordance with ITU-T Rec. K.12 and DIN 57845/VDE0845

Cautions and warnings
- Surge arresters must not be operated directly in power supply networks.
- Surge arresters may become hot in case of longer periods of current stress (danger of burning).
- Surge arresters may be used only within their specified values. In case of overload, the head contacts may fail or the component may be destroyed.
- Damaged surge arresters must not be re-used.
The following applies to all products named in this publication:

1. Some parts of this publication contain statements about the suitability of our products for certain areas of application. These statements are based on our knowledge of typical requirements that are often placed on our products in the areas of application concerned. We nevertheless expressly point out that such statements cannot be regarded as binding statements about the suitability of our products for a particular customer application. As a rule we are either unfamiliar with individual customer applications or less familiar with them than the customers themselves. For these reasons, it is always ultimately incumbent on the customer to check and decide whether a product with the properties described in the product specification is suitable for use in a particular customer application.

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